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ONTHLY BULLETIN

OPEAN CENTRAL B

# MONTHLY BULLETIN





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JULY 2008

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## **ABBREVIATIONS**

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

#### **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
HWWI Hamburg Institute of International Economics

ILO International Labour OrganizationIMF International Monetary FundMFI monetary financial institution

NACE Rev. 1 Statistical classification of economic activities in the European Community

NCB national central bank

OECD Organisation for Economic Co-operation and Development

PPI Producer Price Index

SITC Rev. 4 Standard International Trade Classification (revision 4)

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 3 July 2008, the Governing Council of the ECB decided, on the basis of its regular economic and monetary analyses, to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 25 basis points to 4.25%, with effect from the start of the new reserve maintenance period on 9 July 2008. It was also decided to increase the interest rates on the marginal lending facility and the deposit facility by 25 basis points, to 5.25% and 3.25% respectively. These decisions also became effective at the start of the new reserve maintenance period on 9 July 2008.

The Governing Council's decision was taken to prevent broadly based second-round effects and to counteract the increasing upside risks to price stability over the medium term. HICP inflation rates have continued to rise significantly since the autumn of last year. They are expected to remain well above the level consistent with price stability for a more protracted period than previously thought. Moreover, continued very vigorous money and credit growth and the absence thus far of significant constraints on bank loan supply in a context of ongoing financial market tensions confirm the Governing Council's assessment of upside risks to price stability over the medium term. At the same time, while the latest data confirm the expected weakening of real GDP growth in mid-2008 after exceptionally strong growth in the first quarter, the economic fundamentals of the euro area are sound. Against this background and in full accordance with its mandate, the Governing Council emphasises that maintaining price stability in the medium term is its primary objective and that it is its strong determination to keep medium and long-term inflation expectations firmly anchored in line with price stability. This will preserve purchasing power in the medium term and continue to support sustainable growth and employment in the euro area. On the basis of the Governing Council's current assessment, the monetary policy stance following its decision to raise interest rates on 3 July will contribute to achieving the ECB's objective. The Governing Council will continue

to monitor very closely all developments over the period ahead.

Starting with the economic analysis, the information that has become available since 5 June 2008 confirms the Governing Council's previous expectation of rather weak real GDP growth in the second quarter of 2008, in part as a technical counter-reaction to the strong quarter-on-quarter increase of 0.8% in the first quarter. As the Governing Council has stressed previously, the quarterly growth rates for the first half of this year have been subject to strong temporary and compensatory factors, notably weather-related effects on the profile of construction activity. Therefore, in order to assess the underlying momentum of euro area economic activity and to avoid being misguided by highly volatile quarterly outturns, it is necessary to evaluate the first two quarters of 2008 together. Interpreted on this basis, the information available remains broadly in line with the Governing Council's expectation of moderate ongoing growth.

Looking ahead, both domestic and foreign demand are expected to support real GDP growth in the euro area in 2008, albeit to a lesser extent than during 2007. While moderating, growth in the world economy is expected to remain resilient, benefiting in particular from continued robust growth in emerging economies. This should support euro area external demand. As regards domestic developments, the fundamentals of the euro area economy remain sound and the euro area does not suffer from major imbalances. In this context, investment growth in the euro area should continue to support economic activity, as rates of capacity utilisation remain elevated and profitability in the non-financial corporate sector has been sustained. Moreover, employment rates and labour force participation have increased significantly in recent years, and unemployment rates have fallen to levels not seen for 25 years. However, these developments, which support household disposable income and consumption, are unlikely to fully compensate the loss of purchasing power caused by higher energy and food prices.

In the view of the Governing Council, the uncertainty surrounding this outlook economic activity remains high, owing not least to the very high levels of commodity prices, and downside risks prevail. In particular, risks stem from the dampening impact on consumption and investment of further unanticipated increases in energy and food prices. Moreover, downside risks continue to relate to the potential for the ongoing financial market tensions to affect the real economy more adversely than anticipated. Concerns about the emergence of protectionist pressures and the possibility of disorderly developments owing to global imbalances also imply downside risks to the outlook for economic activity.

With regard to price developments, annual HICP inflation has remained well above the level consistent with price stability since last autumn, reaching 3.7% in May 2008 and – according to Eurostat's flash estimate – 4.0% in June. This worrying level of inflation rates results largely from sharp increases in energy and food prices at the global level in recent months.

Looking ahead, on the basis of current futures prices for these commodities, the annual HICP inflation rate is likely to remain well above 2% for quite some time, moderating only gradually in 2009. The euro area is thus currently experiencing a protracted period of high annual rates of inflation, which is likely to be more persistent than anticipated some months ago.

Risks to price stability at the policy-relevant medium-term horizon remain clearly on the upside and have increased further over the past few months. These risks include notably the possibility of further increases in energy and food prices. There is also a very strong concern that price and wage-setting behaviour could add to inflationary pressures via broadly based second-round effects. The Governing Council is monitoring price-setting behaviour and wage negotiations in the euro area with particular

attention. Furthermore, there are potential upside risks from unanticipated rises in indirect taxes and administered prices.

Against this background, it is imperative to ensure that medium to longer-term inflation expectations remain firmly anchored at levels in line with price stability. The shift in relative prices and the related transfer of income from commodity-importing countries to commodityexporting countries have to be accepted. They require a change in the behaviour of companies and households. Therefore, broadly based second-round effects stemming from the impact of higher energy and food prices on price and wage-setting behaviour must be avoided. All parties concerned, in both the private and the public sector, must meet their responsibilities in this regard. In this context, the Governing Council is concerned about the existence of schemes in which nominal wages are indexed to consumer prices. Such schemes involve the risk of upward shocks in inflation leading to a wage-price spiral, which would be detrimental to employment and competitiveness in the countries concerned. The Governing Council therefore calls for such schemes to be avoided.

The monetary analysis confirms the prevailing upside risks to price stability at medium to longer-term horizons. In line with its monetary policy strategy, the Governing Council takes the view that the sustained underlying strength of monetary and credit expansion in the euro area over the past few years has created upside risks to price stability. Over recent quarters, these risks appear to have become manifest as inflation has trended upwards. Against this background, the continued strength of monetary dynamics represents an important signal of the risks to price stability over the medium term that the Governing Council has been addressing through its actions since end-2005, including the decision to raise the key ECB interest rates on 3 July.

More specifically, annual M3 growth has remained very vigorous in recent months, supported by the continued strong growth of MFI loans to the private sector. Although annual M3 growth of still above 10% overstates the underlying pace of monetary expansion, owing to the impact of the flat yield curve and other temporary factors, nonetheless, even after taking such effects into account, a broad-based assessment of the latest data confirms that the underlying rate of money and credit growth remains strong.

The current structure of yields has triggered substitution both within and into the broad monetary aggregate M3, leading pronounced decline in annual M1 growth and very rapid increases in time deposits. At the same time, higher short-term interest rates have served to moderate the growth of household borrowing, although cooling housing markets in several parts of the euro area have also played a substantial role in this regard. However, the growth of bank loans to nonfinancial corporations has remained very robust despite the rises in short-term rates. While some moderation can be expected in the future in the light of tightening financing conditions and more moderate economic growth, bank borrowing by euro area non-financial corporations grew at an annual rate of 14.2% in May 2008, and the flow of loans in recent months has been strong.

Not least in the face of the ongoing tensions in financial markets, the monetary analysis helps to support the necessary medium-term orientation of monetary policy by focusing attention on the upside risks to price stability prevailing at medium to longer horizons. Moreover, a thorough assessment of the money and credit data has provided an important insight into bank behaviour and financing conditions. In particular, the strength, maturity and sectoral composition of bank borrowing suggest that, at the level of the euro area as a whole, the availability of bank credit has, as yet, not been significantly affected by the tensions.

To sum up, a cross-check of the outcome of the economic analysis with that of the monetary analysis clearly confirms the assessment of increasing upside risks to price stability over the medium term, in a context of very vigorous money and credit growth and the absence thus far of significant constraints on bank loan supply. At the same time, the economic fundamentals of the euro area are sound, and incoming macroeconomic data continue to point to moderate ongoing real GDP growth when the high volatility of growth rates in the first half of this year is taken properly into account. Against this background and in full accordance with its mandate, it is imperative that the Governing Council act to prevent broadly based secondround effects and counteract the increasing risks to price stability. The Governing Council emphasises that maintaining price stability in the medium term is its primary objective and that it is its strong determination to keep medium and long-term inflation expectations firmly anchored in line with price stability, thereby preserving purchasing power in the medium term and supporting sustainable growth and employment in the euro area. On the basis of the Governing Council's current assessment, the monetary policy stance following its decision to increase interest rates on 3 July will contribute to achieving the ECB's price stability objective. The Governing Council will continue to monitor very closely all developments over the period ahead.

Regarding fiscal policy, budgetary consolidation targets are at risk in a number of euro area countries. Moreover, the risk of countries' budget deficits coming close to or even exceeding the 3% of GDP reference value has increased. The Governing Council therefore reiterates its strong support for a rigorous implementation of euro area governments' 2008 budgets and a prudent design of fiscal policy plans for 2009, in line with the agreement in the Eurogroup in May 2008. Achieving and maintaining sound structural fiscal positions is essential to ensure the sustainability of public finances as well as to create scope for the free working of automatic stabilisers in all euro area countries and thereby contribute to the smoothing of cyclical fluctuations.

As regards structural reforms, the Governing Council reiterates its full support for all efforts to

enhance competition, increase productivity and foster market flexibility. In view of the marked increase in international food commodity prices, removing impediments to competition at the various stages of the food supply chain in the retail and distribution sectors would benefit European consumers through lower prices. As regards labour markets, the ECB's 2008 Structural Issues Report, which was recently submitted to the European Parliament, emphasises the generally favourable labour market developments in the euro area over the last decade but equally points out the urgent need to counter the ageing-related reduction in the labour force, in particular by increasing employment in all groups of society, by making labour markets more flexible and by enhancing investment in education and training.

This issue of the Monthly Bulletin contains three articles. The first article underlines the advantages of conducting monetary and fiscal policy within a rules-based framework and takes an empirical perspective as regards the overall performance of monetary policy and fiscal policies in the euro area over the period 1999-2007. The second article examines the key stylised facts pertaining to euro area trade in services. The third article provides an overview of the Eurosystem's provision of technical assistance to EU neighbouring regions.

# ECONOMIC AND MONETARY DEVELOPMENTS

The external environment of the euro area

# ECONOMIC AND MONETARY DEVELOPMENTS

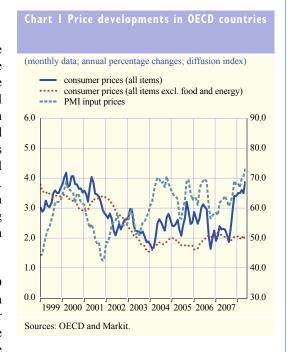
# I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

Global economic activity continues to be dampened by the economic weakness in the United States, by the global repercussions of the financial turmoil and increasingly by high oil and non-oil commodity prices. The slowdown in economic growth concerns mainly developed economies, as economic growth remains robust in emerging markets. At the same time, headline consumer price inflation in OECD countries remains high, boosted by sharp rises in oil and non-energy commodity prices. On balance, the risks to the outlook for global growth continue to lie on the downside.

#### I.I DEVELOPMENTS IN THE WORLD ECONOMY

Global economic activity continues to be dampened by the economic weakness in the United States, by the global repercussions of the financial turmoil and increasingly by high oil and non-oil commodity prices. The slowdown in economic growth concerns mainly developed economies, as economic growth remains robust in emerging markets. In May the global all-industry output PMI stood at 52.2, i.e. slightly above the 50-point threshold between economic expansion and contraction, indicating that global economic activity might remain subdued in the coming months.

Headline consumer price inflation in OECD countries remains high, boosted by sharp rises in oil and non-energy commodity prices. In the year to May consumer prices in OECD countries rose by 3.9% compared with 3.5% in the month before



(see Chart 1). Consumer price inflation excluding food and energy remained broadly unchanged at an annual rate of 2.1%. Survey evidence on global input prices suggests that cost inflation remains at elevated levels, which implies continued upward pressure on prices in the near term.

#### **UNITED STATES**

In the United States, the pace of economic expansion remained below trend in the first quarter of 2008. According to final estimates, real GDP increased at a quarterly annualised rate of 1%, compared with 0.6% in the final quarter of 2007 (see Chart 2). Final domestic demand slowed, reflecting a decline in the growth rate of personal consumption expenditure (to an annualised rate of 1.1%, down from 2.3% in the previous quarter) and a further significant decline of 24.6% in residential investment. The largest contribution to GDP growth came from net exports, which added 0.8 percentage point. The contribution from inventory investment was neutral, having been a major strain on growth in the final quarter of 2007. Recent data suggest that economic activity remained subdued in the second quarter of 2008.

As regards price developments, annual CPI inflation rose to 4.2% in May, up from 3.9% in April. On average, annual headline inflation has been 4.1% since the beginning of 2008, reflecting upward pressure from energy and food price increases. The annual rate of inflation excluding energy and food remained unchanged at 2.3% in May relative to April, which is 0.1 percentage point lower

than its average since the beginning of the year.

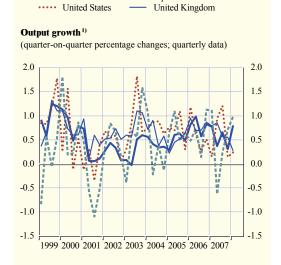
On 25 June the US Federal Open Market Committee decided to keep the target for the federal funds rate unchanged at 2.0%, following a series of significant interest rate reductions between September 2007 and April 2008. The accompanying statement noted growing upside risks to inflation and inflation expectations, but at the same time highlighted somewhat diminished downside risks to growth.

#### **JAPAN**

According to revised data from Japan's Cabinet Office, GDP growth rose by 1.0% quarter on quarter in the first quarter of 2008. This upward revision from the preliminary estimate of 0.8% was driven primarily by business investment, for which the quarterly growth rate now stands at 0.2%, significantly higher than the -0.9% in the first release of data. Net exports accounted for half of the first-quarter growth rate, with exports and imports (both revised downwards) expanding by 4.0% and 1.4% respectively. The rebound in residential investment, which had plummeted last year following the revision of the Building Standard Law, was confirmed at 4.6%. Activity may have slowed somewhat in the second quarter due to a decline in household expenditure in April, while business indicators are pointing to a drop in confidence. The June Tankan survey points to a deterioration in firms' assessment of current business conditions, with the surveyed firms expecting a further decline over the coming quarter, especially in the case of small companies. At the same time, the export sector remains dynamic, with export values expanding by 3.7% year on year in May.

# Chart 2 Main developments in major ndustrialised economies

euro area



--- Japan

#### 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.

Consumer price inflation has picked up since the beginning of the year as a result of increases in the prices of imported raw materials. Annual CPI inflation increased to 1.3% in May from 0.8% in April. This increase was largely due to the reintroduction of a temporarily suspended gasoline tax. At the same time, the CPI excluding food and energy declined by 0.1% year on year in May, unchanged from April.

At its meeting on 13 June 2008, the Bank of Japan decided to leave its target for the uncollateralised overnight call rate unchanged at 0.5%.

# ECONOMIC AND MONETARY DEVELOPMENTS

The external environment of the euro area

#### **UNITED KINGDOM**

In the United Kingdom, quarterly real GDP growth moderated to 0.3% in the first quarter of 2008 from 0.6% in the previous quarter. Investment spending declined and the contribution of changes in inventories was negative, while household consumption grew strongly (by 1.1% quarter on quarter). Strong retail sales in May suggested that momentum in consumption might be sustained in the second quarter of 2008. However, this is at variance with the weak and falling consumer and retail confidence indicators in recent months. In May 2008 annual HICP inflation rose considerably to 3.3% (from 3.0% in April), owing largely to food and energy prices. In the same month producer prices also reached new highs, driven to a large extent by higher petroleum product and food prices.

On 5 June 2008 the Bank of England's Monetary Policy Committee decided to leave its main policy rate unchanged at 5.0%.

#### **OTHER EUROPEAN COUNTRIES**

In most of the other large EU countries outside the euro area, GDP growth moderated in the first quarter of 2008 and inflation increased in May.

In the first quarter of 2008 quarterly real GDP growth was -0.6% in Denmark and 0.4% in Sweden. Consumer, retail, services and construction confidence indicators have declined in both countries in recent months. In May annual HICP inflation increased sharply in Sweden to 3.9% (up from 3.2% in April) and in Denmark to 3.6% (up from 3.4%). In both countries, the increase was attributable mainly to rising food and energy prices. In July Danmarks Nationalbank and Sveriges Riksbank raised their main policy rates by 25 basis points to 4.6% and 4.5% respectively.

In the Czech Republic and Poland, quarterly real GDP growth declined somewhat in the first quarter of 2008 (to 0.9% and 1.4% respectively). By contrast, quarterly GDP growth in Hungary increased slightly to 0.3%, but it still remained weak. In Romania, real GDP growth rose to a very high level (8.2% year on year). Consumer and industrial confidence indicators are not pointing to any major changes in growth patterns in the near term in these countries. Inflation rates remained at elevated levels in all four countries. In May annual HICP inflation picked up slightly in the Czech Republic to 6.8% (mainly due to unprocessed food prices) and in Hungary to 6.9% (mainly due to energy prices). In Poland, HICP inflation remained unchanged at 4.3% as rising energy prices were offset by falling goods and unprocessed food prices. In Romania, annual consumer price inflation decreased to 8.5%, largely as a result of lower inflation in services. On 25 June 2008 Narodowy Bank Polski increased its reference rate by 25 basis points to 6.0% and on 26 June Banca Naţională a României raised its key policy rate by the same amount to 10.0%.

#### **EMERGING ASIA**

Despite weakening global demand conditions, economic activity remained strong in emerging Asia. However, consumer prices continued to increase further in most countries, driven by rising food and other commodity prices. Real interest rates turned negative, and in many emerging economies high inflation is exacerbating the policy dilemma between price and exchange rate stability objectives.

In China, economic activity remained robust in the first five months of the year despite weaker external demand. Annual CPI inflation eased from 8.5% to 7.7% in May due to a decline in meat prices, which had previously recorded unprecedented spikes. The recent hike in wholesale prices of oil and electricity is likely to exert some – albeit limited – upward pressure on consumer prices.

#### **LATIN AMERICA**

In Latin America, the pace of economic activity moderated in the first quarter of 2008, but nevertheless remained at an elevated level. Consumer price inflation picked up across the region in the first five months of the year. In Brazil, real GDP grew by 5.8% on an annual basis in the first quarter of 2008, after 6.1% in the previous quarter. In May the annual inflation rate stood at 5.5%. On 5 June the Banco Central do Brasil raised its key interest rate by 50 basis points to 12.25%. In Argentina, real GDP expanded by 8.1% on an annual basis in the first quarter. Consumer price inflation increased further in May to 9.1%. In Mexico, the pace of economic activity moderated in the first quarter of 2008 and high frequency indicators suggest that this moderation extended into the second quarter. Annual inflation picked up to 5% in May.

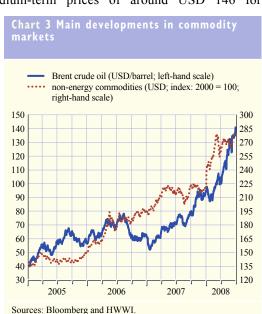
#### 1.2 COMMODITY MARKETS

Over recent weeks, oil prices have reached new historical peaks, standing at USD 142.1 on 2 July (see Chart 3). Oil prices are now around 51% higher than at the beginning of the year (in euro terms the increase is around 40%). Overall, markets have been extremely volatile and reactive to news and rumours concerning the underlying fundamentals. On the demand side, the slowdown in OECD imports is being offset by robustly growing demand from emerging economies. Higher prices have led some emerging countries, including China and India, to ease their subsidy policies, but this has not produced any significant short-term effects on global oil prices and is likely to have an impact on demand only in the medium term.

On the supply side, the summit of producers and importers held on 22 June to discuss the recent oil price developments did not provide any solutions that were able to alleviate the pressure. Saudi Arabia announced an increase in supply and investments to augment capacity, but this did not have a significant impact on markets. Looking ahead, oil prices are likely to remain around their current levels in the near term and to continue to be very sensitive to news concerning the supply-demand balance and the geopolitical environment. Market participants expect medium-term prices of around USD 146 for

December 2009, but there is now much more uncertainty than there was a few months ago.

The prices of non-energy commodities increased in June, reaching levels close to the historical peaks recorded in March. The increase was driven largely by a surge in food prices, with metal markets having been relatively calm. Maize prices, in particular, soared to a new record high due to adverse weather conditions in the United States affecting crop prospects. This spilled over to other commodities as well, in particular soybeans and wheat, due to substitution effects and competition for acreage. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was approximately 27% higher in June than it was a year earlier.



The external environment of the euro area

#### 1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

Notwithstanding relatively robust external trade activity, the global economic slowdown implies that the prospects for external demand for euro area goods and services are weaker. The OECD composite leading indicator (CLI) available up to April suggests that there will be a slowdown in economic activity in OECD countries (see Chart 4). For major OECD non-member economies, the CLI points to a downturn in Brazil and India, and to some moderation in China, but indicates continued expansion in Russia.

The uncertainty surrounding this outlook for global economic growth remains high, owing not least to the very high levels of commodity prices, and downside risks prevail. In particular, risks stem from further unanticipated increases in energy and food prices. Moreover, downside



risks continue to relate to the potential for the ongoing financial market tensions to affect the real economy more adversely than anticipated. Concerns about the emergence of protectionist pressures and the possibility of disorderly developments owing to global imbalances also imply downside risks to the outlook.

## 2 MONETARY AND FINANCIAL DEVELOPMENTS

#### 2.1 MONEY AND MFI CREDIT

The latest monetary data support the view that the underlying pace of monetary and credit expansion in the euro area remains strong, pointing to the persistence of upside risks to price stability over the medium to longer term. The annual growth rate of M3 was unchanged in May at the elevated level of 10.5%. Moreover, despite a slight moderation in the growth rates of loans to both households and non-financial corporations, the annual growth of MFI loans to the private sector remained robust. At the same time, the impact of the flat yield curve particularly suggests that M3 growth currently overstates the underlying pace of monetary expansion. The annual growth of M1 continued to decline in May, reflecting the impact of higher interest rates. In line with the assessments made in previous months, tensions in the financial markets do not appear to have materially affected the growth of broad money and credit aggregates, at least not beyond their effects on the determinants of money and credit demand. However, there is clear evidence that financial tensions have directly affected specific counterparts of M3 that are closely related to the nature of the tensions in the financial markets, in particular MFI credit to other financial intermediaries.

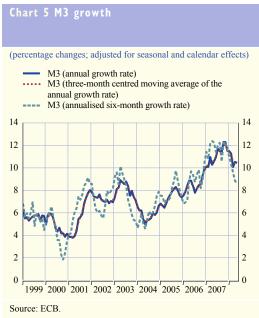
#### THE BROAD MONETARY AGGREGATE M3

The annual rate of growth of M3 stood at 10.5% in May, unchanged from the previous month (see Chart 5). A month-on-month growth rate of 0.8% was recorded, implying that the short-term dynamics of M3, as measured by the annualised three-month and six-month growth rates, remained strong at around 9%. Thus the tentative signs of moderation in M3 growth suggested in the data for the first quarter of 2008 have not been confirmed by M3 outturns for the past two months.

Underlying monetary developments remain strong, although they are overstated to some extent by the current annual growth rate of M3. This is explained in large part by the flat yield curve, which renders the remuneration of shorter-term monetary assets attractive compared with riskier non-monetary assets outside M3. The resulting shifts into monetary instruments tend to inflate M3 growth.

At the same time, the monetary data for May also confirm that the increases in short-term interest rates since late 2005 continue to exert a dampening impact on money and credit developments. This is visible particularly in the further moderation of the annual growth rates of M1 and loans to households. Moreover, in May there were also some tentative signs of moderation in the annual growth of loans to non-financial corporations. This is in line with historical regularities, which suggest that over the credit cycle these loans typically only respond to tighter financing conditions with a lag.

The May data also support the assessment that tensions in the financial markets have had no major impact on the growth of broad money and credit aggregates, although, indirectly, the



Monetary and financial developments

tightening of financing conditions over recent months is now exerting some effect. However, the evolution of specific counterparts of M3, such as credit to other financial intermediaries (OFIs), can clearly be linked to the tensions in the financial markets.

#### MAIN COMPONENTS OF M3

In May the contributions to the annual growth rate of M3 stemming from developments in M1 and short-term deposits other than overnight deposits declined, but the impact of this decline was broadly offset by an increased contribution from marketable instruments.

The annual growth rate of M1 decreased further to 2.3% in May, down from 2.5% in April (see Table 1). The protracted downward trend in M1 growth, which has now been a feature of the data for the past two years, can largely be associated with the increasing opportunity costs of holding currency and relatively poorly remunerated overnight deposits since short-term interest rates started to rise in the euro area in late 2005.

Short-term deposits other than overnight deposits (M2 - M1) continued to account for the bulk of annual M3 growth in the year to end-May. Their annual growth rate declined slightly to 19.4% from 19.8% in April, reflecting a moderation in both main sub-components. The annual growth rate of deposits with an agreed maturity of up to two years (i.e. short-term time deposits) remained extremely strong despite easing to 40.4% in May from 41.6% in April. Deposits redeemable at notice of up to three months (i.e. short-term savings deposits) continued to decline in May at a slightly faster pace than in April. The ongoing strong growth of short-term time deposits is to a large extent a reflection of the fact that, unlike interest rates on overnight and short-term savings deposits, the remuneration on short-term time deposits has followed the rise in the term money market rates relatively closely, possibly reflecting the attractiveness of fixed-term funding also from the MFI perspective. This has led to shifts into short-term time deposits from savings deposits and overnight deposits. Moreover, the flat yield curve suggests that

(quarterly figures are averages, adjusted to	r seasonal and calendar eff	ects)		Annual grow			
	Outstanding						
	amount as a	2007	2007	2007	2008	2008	2008
	percentage of M3 1)	Q2	Q3	Q4	Q1	Apr.	May
M1	42.8	6.2	6.5	5.9	3.8	2.5	2.3
Currency in circulation	7.1	10.0	8.9	8.0	7.8	8.0	7.5
Overnight deposits	35.6	5.5	6.1	5.5	3.1	1.4	1.3
M2 - M1 (= other short-term deposits)	42.0	13.1	15.0	16.8	18.3	19.8	19.4
Deposits with an agreed maturity of up							
to two years	25.0	33.1	37.6	40.6	41.4	41.6	40.4
Deposits redeemable at notice of up to							
three months	17.0	-2.2	-3.2	-3.9	-3.3	-2.2	-2.4
M2	84.8	9.2	10.3	10.7	10.3	10.4	10.1
M3 - M2 (= marketable instruments)	15.2	19.3	18.7	19.6	16.3	11.6	12.6
M3	100.0	10.6	11.5	12.0	11.2	10.5	10.5
Credit to euro area residents		8.0	8.7	9.2	10.0	9.8	9.5
Credit to general government		-4.2	-4.0	-4.1	-2.6	-0.3	-1.8
Loans to general government		-1.2	-0.8	-1.8	-0.9	0.8	0.7
Credit to the private sector		10.9	11.6	12.2	12.7	12.0	11.9
Loans to the private sector		10.5	11.0	11.1	11.0	10.6	10.4
Longer-term financial liabilities							
(excluding capital and reserves)		10.3	10.3	8.5	6.9	4.7	4.2

Source: ECB

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

short-term time deposits are also attractive when compared with longer-maturity assets outside M3, as they offer greater liquidity and less risk at little cost in terms of return.

The annual growth rate of marketable instruments (M3 - M2) increased to 12.6% in May, from 11.6% in the previous month, on account of increases in the growth rates of both money market fund shares/units and short-term MFI debt securities. In the case of the money market fund shares/units, the higher annual growth rate (7.7%, after 6.8% in April) reflects a sizeable monthly inflow after two months of negative, albeit small, outflows. The volatility in the monthly flows into money market fund shares/units has increased markedly since the onset of the tensions in the financial markets to levels higher than seen in recent years. The annual growth rate of debt securities with a maturity of up to two years increased to 20.9% in May, and most of the higher net issuance during the month seems to have been in the one to two-year maturity bracket and thus points to a current preference by MFIs for relatively long-term funding. In the case of repurchase agreements, a negative monthly flow was recorded in May, which drove the annual growth rate for this instrument down to 16.8%, from 17.8% in the previous month.

From a sectoral perspective, the annual growth rate of short-term deposits plus repurchase agreements ("M3 deposits") was unchanged in May, at 11.2%, having fluctuated around that level since mid-2007. Households continue to be the largest contributor to overall M3 deposit growth. The annual growth of households' M3 deposits continued along its upward trend, reaching 9.5% in May after 9.3% in April. This is the highest annual growth rate for this series (available only since the beginning of 2004). By contrast, the annual growth rate of M3 deposits held by non-financial corporations decreased somewhat further in May to 8.9%, having stood at 9.5% in April. The annual growth rate of financial intermediaries' holdings of M3 deposits remained broadly unchanged in May, with a higher contribution from deposit holdings of insurance corporations and pension funds offsetting a weakening of the contribution from holdings of other non-monetary financial institutions.

#### MAIN COUNTERPARTS OF M3

On the counterpart side, the annual growth rate of total credit to euro area residents declined to 9.5% in May, down from 9.8% in April. Contrasting developments were observed for credit to general government and credit to the private sector (see Table 1). On the one hand, the annual rate of decline of credit to general government increased to 1.8% in May, up from 0.3% in the previous month. On the other hand, the annual growth rate of MFI credit to the private sector remained broadly stable at 11.9% in May, after 12.0% in April.

Loans – the largest component of credit to the private sector – continued to grow at a robust but somewhat moderating pace in May, recording an annual growth rate of 10.4% compared with 10.6% in April. At the same time, differences remained in the dynamics of loans to the various areas of the private sector. The annual growth rates of both loans to non-financial corporations and loans to households moderated, albeit from quite different levels, whereas the annual rate of growth of loans to non-monetary financial institutions other than insurance corporations and pension funds increased (see Table 2).

Growth in MFI loans to non-financial corporations was 14.2% in May, lower than in the previous month but still robust. The signs of some moderation in the annual growth of loans to non-financial corporations are in line with the lagging pattern that these loans typically display over the credit cycle in response to tighter financing conditions. They thus appear to reflect developments in loan demand rather than an impairment of loan supply. In terms of the maturity structure, the annual

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growth rate of shorter-term loans (i.e. those with an original maturity of up to one year) remained below that of longer-term loans (i.e. those with an original maturity of over one year). This continues to provide little evidence in support of the view that the overall flow of loans to the non-financial corporate sector during the tensions in the financial markets may, to a large extent, have reflected banks' difficulties in removing short-term bridge loans (related to leveraged buyout and/or merger and acquisition deals) from their balance sheets.

Turning to the household sector, the downward trend in the annual growth rate of MFI loans observed since early 2006 continued in May, with the growth rate edging down to 4.9% from 5.2% in the previous month. This downward trend is in line with the impact of the increases in bank lending rates since late 2005 and the moderation observed in housing market dynamics in a number of euro area countries. At the same time, there continues to be little indication of the supply of bank loans to households having been disrupted or the tensions in the financial markets having had an impact beyond that observed through the usual fundamental determinants, such as interest rates. With regard to the various sub-components, the moderation in the growth of loans to households continued to be driven by lending for house purchase, the annual growth rate of which declined further to 5.5% in the month, down from 5.9% in April. Over the same period, the annual growth rate of consumer credit declined slightly to 4.9%, after 5.2% in April, while the annual growth rate of other lending stood at 2.0%, broadly unchanged from the 2.1% observed in the previous month. Box 1 presents an analysis of different sources of household financing in the euro area and a comparison with the United Kingdom and the United States.

The annual growth rate of loans to OFIs increased to 25.7% in May, up from 22.2% in April. In addition, MFI purchases of private sector securities other than shares, which in recent months have mainly taken the form of purchases of securities issued by OFIs, remained buoyant, growing at an annual rate of 39.1% in May. The strong growth dynamics in both credit categories partly reflect direct effects of the tensions in the financial markets, i.e. a funding of MFIs provided to affiliated financial vehicle corporations that have experienced problems in rolling over commercial paper. They also reflect heavy purchases by MFIs of securities issued by OFIs stemming from ongoing true-sale securitisation programmes that shift loans off MFIs' balance sheets. In early 2008

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

	Outstanding amount	Annual growth rates							
	as a percentage of the total <sup>1)</sup>	2007	2007	2007	2008	2008	2008		
		Q2	Q3	Q4	Q1	Apr.	May		
Non-financial corporations	43.6	12.7	13.8	14.0	14.6	14.9	14.2		
Up to one year	29.0	10.1	12.1	11.9	12.8	13.0	12.4		
Over one and up to five years	19.7	19.0	19.9	21.0	22.5	21.4	19.		
Over five years	51.3	12.0	12.7	12.7	12.9	13.6	13.		
Households <sup>2)</sup>	46.1	7.5	7.0	6.6	5.9	5.2	4.		
Consumer credit <sup>3)</sup>	12.8	6.5	5.7	5.3	5.3	5.2	4.		
Lending for house purchase <sup>3)</sup>	71.6	8.6	8.1	7.6	6.7	5.9	5.		
Other lending	15.5	3.6	3.2	3.1	2.7	2.1	2.		
Insurance corporations and pension funds	1.0	23.7	26.6	22.0	6.5	-2.7	-2.		
Other non-monetary financial intermediaries	9.3	16.0	20.0	23.4	24.6	22.2	25.		

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

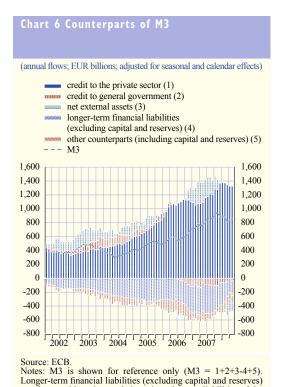
<sup>1)</sup> As at the end of the last month available. Sector loans as a percentage of total MFI loans to the private sector; maturity breakdown and breakdown by purpose as a percentage of MFI loans to the respective sector. Figures may not add up due to rounding.

2) As defined in the ESA 95.

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

the volume of such programmes was close to the all-time high of early 2007. However, the nature of these activities has changed: prior to the tensions in the financial markets these securitised loans were sold in the market. whereas in recent months the MFIs themselves have been purchasing the associated OFI securities. Finally, a restructuring of related financial vehicle corporations (FVCs), i.e. special purpose entities that are used to shift loans off MFIs' balance sheets and that are classified as OFIs, partly explains this surge of credit to euro area resident OFIs (increasing credit to domestic FVCs but decreasing credit to non-euro area FVCs).

Among the other counterparts of M3, the annual growth rate of MFIs' longer-term financial liabilities (excluding capital and reserves) declined further to 4.2% in May, down from 4.7% in April (see Chart 6). This decline reflects weaker growth in both MFIs' holdings of longer-term debt securities and the private sector's holdings of longer-term deposits. The weaker growth in the latter is related to



hown with an inverted sign, since they are liabilities of the

the shifts observed from longer into shorter-term deposits in an environment characterised by a flat yield curve. Indeed, in the 12 months to May, households and non-financial corporations moved €47 billion out of longer-term deposits, very likely into shorter-term deposits included in M3. At the same time, the main contributor to the declining trend in the growth of longer-term deposit holdings remains the OFI sector, whose holdings roughly halved between May 2007 and May 2008, although growth remains at annual rates of above 20%. This development is likely to reflect the moderation of market-placed securitisation activity (including synthetic securitisation).

Finally, the net external asset position of the MFI sector recorded a monthly outflow of €60 billion in May, following an outflow of a similar magnitude in the previous month. On an annual basis, the outflow rose to €229 billion, the largest cumulative 12-month outflow since mid 1999. In part, this outflow is linked to the aforementioned restructuring of the FVCs.

The monetary analysis indicates that the growth of MFI loans to the non-financial private sector in recent quarters largely reflects developments in economic activity and interest rates, with no signs of an additional direct impact resulting from the tensions in the financial markets. Looking ahead, historical regularities, the increases observed in MFI lending rates since the end of 2005 and the tightening of credit conditions reported in the bank lending survey would suggest some moderation of loan growth, in line with the tentative signs seen this month as regards loans to non-financial corporations.

Looking beyond the effects related to the flat yield curve and the tensions in the financial markets, the pace of underlying monetary expansion remains strong, and this continues to point to upside risks to price stability over the medium to longer term.

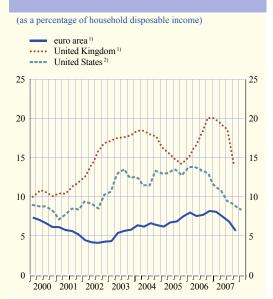
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#### Box

# A COMPARISON OF MFI LOANS AS A SOURCE OF HOUSEHOLD FINANCING IN THE EURO AREA, THE UNITED KINGDOM AND THE UNITED STATES

Since the onset of the tensions in the financial markets in August 2007, the evolution of MFI lending has come under increased scrutiny. Evaluating whether the banking system can provide sufficient financing to households and non-financial corporations has been essential for assessing macroeconomic prospects. In this context, cross-country comparisons of MFI lending developments give a broader perspective to the analysis. However, a comparison of MFI lending across economies. especially when assessing the implications of such developments for the real economy, has to take into consideration the differences in the structures of financial systems, particularly in terms of the importance of the banking sector relative to other sources of external financing. Against this background, this box compares the importance of MFI loans as part of total household financing in the euro area, the United Kingdom and the United States. The analysis takes into account the differences in the accounting and statistical reporting frameworks that affect the relevant data for each economy.

#### Chart A Household financing flows



Sources: ECB, Eurostat, Office for National Statistics and Board of Governors of the Federal Reserve System.

 Ratio of four-quarter-cumulated financing flows to households to households' four-quarter-cumulated gross disposable income.
 Ratio of four-quarter-cumulated financing flows to households to households' four-quarter-cumulated disposable personal income.

To put the relative importance of MFI lending in overall household financing into perspective, Chart A shows the ratio of total household financing flows to household disposable income for the three economies. There are significant differences in the volume of financing that households receive relative to their income, with the United Kingdom being the economy where this ratio is the highest.

Chart B illustrates the extent to which the importance of MFIs in the total financing of households seemingly varies across the three economies. In the euro area, the MFI sector plays a dominant role in the financing of households, accounting for approximately 85% of the total funds disbursed to them in 2007. The direct role of MFIs<sup>2</sup> in the United Kingdom

<sup>1</sup> The delimitation of the household sector in the United States is narrower than in the euro area and the United Kingdom, since the global statistical standard for the compilation of national accounts has not been fully implemented in that country. In particular, sole proprietorships and partnerships are excluded from the household sector and classified as part of the business sector (see the box entitled "Comparability of the national account data of the United States and the euro area" in the February 2004 issue of the Monthly Bulletin).

<sup>2</sup> In the United States, the MFI sector is not defined in the official statistics. In order to ensure comparability with the euro area and the United Kingdom, the MFI sector in the United States was approximated by using commercial banks, savings institutions and credit unions.

(four-quarter-cumulated transactions in billions of local currency units)

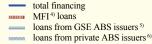
## total financing MFI loans

a) Euro area

loans from non-MFIs other accounts payable 1)



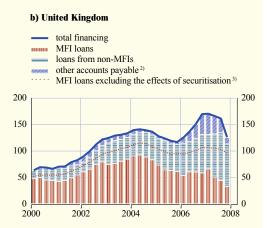
#### c) United States





Sources: a) ECB, b) Office for National Statistics and Bank of England and c) Board of Governors of the Federal Reserve System and ECB calculations.

- 1) Also includes net liabilities of financial derivatives, as well as life insurance and pension fund reserves
- 2) Also includes debt securities issued by non-profit institutions serving households.
- 3) Seasonally adjusted.4) Commercial banks, savings institutions and credit unions.
- 5) Loans from Government-sponsored enterprises (GSEs) and from agency and GSE-backed mortgage pools.
- Loans from private asset-backed security issuers.



and the United States is clearly more modest, with a share of approximately 26% and 31% of total household financing, respectively, in 2007. The smaller role of MFI loans can in part be attributed to differences in financial structure relative to the euro area, particularly the greater prevalence of the "originate and distribute" banking model.3 In the case of the United States, loans originated by MFIs but subsequently securitised are included in Chart B under loans from Governmentsponsored enterprises (GSEs) and private issuers of asset-backed securities (ABS). In the euro area and the United Kingdom, securitised loans are included in the category "loans from non-MFIs". In the United States and the United Kingdom, these categories appear to account for a considerably larger share of household financing than in the euro area. However, the prima-facie varying importance of MFI loans reflects not only

differences in the financial systems but, importantly, also in the accounting treatment of securitised loans, which impacts on how these items are recorded on MFIs' balance sheets.<sup>4</sup>

The crucial aspect in the respective accounting frameworks relates to whether the MFI that originally granted the loans is allowed to remove them from its balance sheet ("derecognise" them) when selling them in the course of a securitisation transaction, in which case the bank lending

- 3 For a discussion of loan origination and securitisation, see the article entitled "Securitisation in the euro area" in the February 2008 issue of the Monthly Bulletin.
- See also the box entitled "The importance of accounting standards for interpreting MFI loan statistics" in the March 2008 issue of the Monthly Bulletin

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statistics will be affected.<sup>5</sup> In the euro area, the application of International Financial Reporting Standards (specifically International Accounting Standard 39, "Financial instrument recognition and measurement") and of certain supervisory policies in some EU Member States, where the "originate and distribute" banking model has become increasingly popular in recent years, has largely prevented credit institutions from removing loans from their balance sheets after a sale to a special purpose vehicle. By contrast, UK and US accounting rules are considerably more favourable towards the derecognition of MFI loans. In the respective statistical reporting frameworks, this has led to a much higher level of outright loan removal in these two economies than in the euro area, even in cases of securitisation operations of a very similar nature and size. As a result, a large share of securitised loans in the euro area are still reported as MFI loans, whereas in the case of the United Kingdom and the United States the volume of loans securitised reduces the MFI loans disbursed and is reported as "loans from non-MFIs" and loans from (private or GSE) ABS issuers respectively.

These considerations show that the role of MFIs in the financing of the household sector is much larger if one focuses on the loan origination process rather than on bank balance sheet statistics. From this perspective, the relative importance of MFIs in providing funds to households is broadly similar in the euro area and the United Kingdom, and to a lesser extent in the United States. In the case of the United Kingdom, this outcome is visible in the development of the series "MFI loans excluding the effects of securitisation", which captures both the loans retained by the MFIs and the loans originated and subsequently securitised. On average, over the period 2000-07, this category accounted for more than 75% of total household financing in the United Kingdom. In the euro area, the sum of MFI loans and loans from non-MFIs,<sup>6</sup> which for this economy can serve as a proxy for loans originated by MFIs, accounted for approximately 90% of total household financing over the same period. In the case of the United States, the volume of loans originated by MFIs was also considerably larger than what is captured by the "MFI loans" series. However, a calculation similar to that made for the euro area for deriving the importance of loans originated by MFIs is not directly possible in the United States, since at least some of the loans held by ABS issuers were originated by entities that would be considered part of the non-MFI sector in the euro area.

When analysing the development of household financing over time, the data for the United States illustrate the increasing role of private ABS issuers in the financing of households from 2004 onwards. Such activity partly replaced funding previously provided by GSEs (such as the Federal National Mortgage Association – Fannie Mae – and the Federal Home Loan Mortgage Corporation – Freddie Mac) and also contributed to the increase in total household financing. However, since mid-2006 the GSEs have again gained in importance, and in the second half of 2007 these institutions became the dominant source of funding for households as financing from private ABS issuers gradually dried up. In the same period, the provision of MFI loans increased in the United States since the offloading of loans through securitisation virtually ceased.

While the overall financing dynamics have been quite similar in all three currency areas since mid-2006, the sharp decline in loans held by private non-bank institutions in the United States has not been observed in the euro area or the United Kingdom. Indeed, in the latter two economies,

<sup>5</sup> Loan sales that imply a full transfer of risks and rewards to a separate entity (e.g. an institutional investor) would imply a complete removal of the loan from the seller's balance sheet. This relates to the case of a "true sale" securitisation. Alternatively, the originator may decide to merely sell (part of) the risks attached to the loans it has provided by conducting a "synthetic" securitisation. In this case, the underlying loans continue to be reported on the originator's balance sheet.

<sup>6</sup> Loans from non-MFIs consist mostly of loans granted by OFIs, but also by insurance corporations and pension funds, and to a much lesser extent of loans granted by other resident sectors and non-residents.

the volume of "loans by non-banks" was relatively stable until the end of 2007, while the volume of loans provided and retained by MFIs declined. In the euro area, in particular, this ongoing securitisation activity hides, however, a change in the character of the process as in late 2007, and particularly in early 2008, MFIs mainly purchased the asset-backed securities themselves rather than the securities being sold on to the market.

This box has shown that a meaningful comparison of household financing across the euro area, the United Kingdom and the United States has to take into account the differences in the respective accounting and statistical frameworks. Moreover, it should be based on a broad view of household financing and accommodate the structural differences in the respective financial systems. This analysis has shown that the overall dynamics in household financing in 2006 and throughout 2007 were actually quite similar across the three currency areas. However, this apparent similarity still masks considerable differences in the importance of and developments in the underlying fundamentals that drive household financing, such as the strength of economic activity, interest rate dynamics, the evolution of house prices and the level of total household indebtedness. The analysis also suggests that, owing to the differences in the accounting treatment of securitisation, the loans reported on MFI balance sheets may not always be indicative of the risk exposure that banks are facing in these economies. Indeed, the tensions in the financial markets have demonstrated that even within the "originate and distribute" model of banking, considerable risks remain – implicitly or explicitly – with MFIs.

### 2.2 SECURITIES ISSUANCE

In April 2008 debt securities issued by euro area residents continued to grow at a robust rate, unchanged from the previous month. This reflected a slight increase in the annual growth rate of debt securities issued by the non-MFI financial sector, which compensated for the moderate deceleration observed for the non-financial corporate and MFI sectors. The growth rate of debt securities issued by the central government sector remained unchanged. Issuance of quoted shares declined marginally, but remained subdued compared with debt issuance.

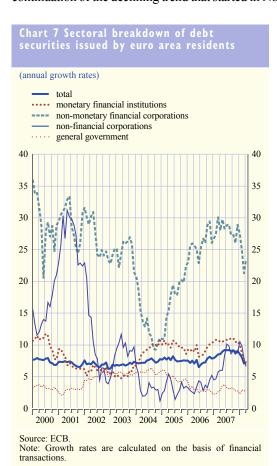
#### **DEBT SECURITIES**

Issuance of debt securities by euro area residents continued to grow at a robust pace in April 2008 (see Table 3). The overall annual growth rate (equal to 7.1%) masks differences across maturities as the annual growth rate of short-term securities issuance declined to 21.4% in April, from 23.5% in the previous month, while that of long-term securities issuance increased somewhat, from 5.3% to 5.5%. Issuance of longer-term securities can be broken down further into securities issued at floating or at fixed rates. On account of demand factors, floating rates tend to be favoured over fixed rates in periods marked by a flat yield curve. The rather flat yield curve in early 2008 may therefore partly explain the fact that the annual rate of growth of floating rate securities in April was again significantly higher, at 12.4%, than the rate of growth of fixed rate securities, which stood at 2.7% in that month.

The annual growth rate of debt securities issued by non-financial corporations declined from 7.8% in March, to 6.6% in April 2008 (see Chart 7). Viewed from a longer-term perspective, growth in debt securities issuance has, however, remained generally buoyant and significantly above preturmoil levels notwithstanding the sharp rise in corporate bond spreads. In terms of the maturity structure, the annual growth rate of long-term debt securities issued by non-financial corporations increased slightly to 4.4% in April, from 4.2% in March.

	Amount outstanding (EUR billions)	Annual growth rates 1)						
	2008	2007	2007	2007	2008	2008	200	
Issuing sector	Apr.	Q2	Q3	Q4	Q1	Mar.	Apr	
Debt securities:	12,282	8.8	9.2	8.9	8.2	7.1	7.	
MFIs	5,126	10.6	10.9	10.7	9.2	7.7	7.	
Non-monetary financial corporations	1,518	29.0	28.5	27.2	25.7	21.3	23.	
Non-financial corporations	692	6.4	9.4	8.9	9.5	7.8	6.	
General government	4,947	3.2	3.3	3.0	2.7	2.7	2.	
of which:								
Central government	4,635	3.0	3.3	2.9	2.6	2.8	2.	
Other general government	313	5.7	3.0	4.6	2.8	1.6	1.	
Quoted shares:	5,738	1.2	1.4	1.4	1.3	1.3	1.	
MFIs	835	2.1	1.8	1.3	0.8	1.1	1.	
Non-monetary financial corporations	519	0.9	0.9	2.7	2.5	2.3	2.	
Non-financial corporations	4,384	1.0	1.3	1.3	1.3	1.2	0.	

According to seasonally adjusted data (which are more suitable for gauging short-term trends) six-month annualised growth rates show a decline in debt issuance for April and therefore point to a continuation of the declining trend that started in November 2007. In terms of the maturity structure, the



six-month annualised growth rate of long-term debt securities issued by non-financial corporations decreased to 2.6% in April from 5.4% in March. The lower issuance activity that is visible in the seasonally adjusted data may be partly related to the financial market turbulence, which has brought about an increase in the cost of market debt financing. This is evident in higher corporate bond spreads and yields, in particular for firms with a low creditworthiness. Evidence from private data providers also suggests that debt financing for high-yield non-financial corporate borrowers has largely dried up.

Turning to the financial sector, in April the annual growth rate of debt securities issued by MFIs was 7.3%, down from 7.7% in March. Consistent with a trend evident since the start of the financial market turmoil, issuance of short-term securities remained strong, recording an annual growth rate of 27.8% in April 2008. The growth rate of MFIs' issuance of long-term debt securities decreased further to 4.1% in the same period, down from 4.3% in the previous month. The shift away from long-term market-based financing reflects the repricing that has affected financial sector issuers since the start of the financial market turmoil. The magnitude of this

effect is better gauged by looking at short-term growth rates. Indeed, six-month seasonally adjusted data for long-term debt securities issues show a six-month annualised growth rate of 2.4% in April, the lowest figure since the beginning of 2003.

The annual growth rate of debt securities issued by non-monetary financial corporations increased from 21.3% in March to 23.5% in April 2008. A large part of the issuance activity in this sector is related to various securitisation activities undertaken by special purpose vehicles (entities usually sponsored by banks to fulfil temporary objectives). The short-term dynamics as evidenced by the six-month annualised growth rate, however, indicate that issuance activity in this sector has slowed down since the summer of 2007, while remaining at high levels.

The annual growth rate of debt securities issued by the general government sector remained almost unchanged, standing at 2.9% in April after 2.8% in March. This broad stability reflected mainly unchanged growth of debt securities issued by the central government sector.

# Chart 8 Sectoral breakdown of quoted shares issued by euro area residents (annual growth rates) total · · · · monetary financial institutions non-monetary financial corporations non-financial corporations 5.0 4.0 40 3.0 2.0 1.0 1.0 0.0 2000 2001 2002 2003 2004 2005 2006 2007 Note: Growth rates are calculated on the basis of financial

#### **QUOTED SHARES**

The annual growth rate of quoted shares issued by euro area residents dropped slightly to 1.1% in April, from 1.3% in March (see Table 3). This reflects the significant decline in the growth rate of quoted shares issuance by non-financial corporations from 1.2% in March to 0.9% in April, while issuance by non-monetary financial institutions decreased only moderately from 2.3% to 2.2% over the same period. The annual growth rate of quoted shares issued by MFIs increased by 0.2 percentage point to stand at 1.3% in April (see Chart 8).

### 2.3 MONEY MARKET INTEREST RATES

Unsecured money market interest rates increased in June, reflecting market participants' expectations of higher key ECB interest rates. Consequently, the money market yield curve steepened in June, with the spread between twelve-month and one-month money market interest rates rising to 97 basis points. Spreads between unsecured and secured money market rates decreased slightly, indicating some tentative signs of moderating money market tensions.

Most unsecured money market rates increased between 4 June and 2 July. Although the one-month EURIBOR rate decreased by 1 basis point to stand at 4.45% on 2 July, the three-month, six-month and twelve-month EURIBOR rates all increased. On 2 July, these rates stood at 4.96%,

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5.15% and 5.42% respectively, i.e. 9, 22 and 31 basis points higher than the levels observed on 4 June (see Chart 9).

As a result of these developments, the spread between the twelve-month and one-month EURIBOR rates increased to 97 basis points on 2 July, compared with 65 basis points on 4 June (see Chart 9). This increase in the slope of the money market yield curve mainly reflected a significant increase in market expectations for the future path of key ECB interest rates. Since this increase in market expectations is more pronounced for late 2008 and 2009 than for the next couple of months, rates at longer maturities have been affected more significantly than those at shorter maturities. Spreads between the unsecured EURIBOR and secured rates (such as those derived from the EONIA swap index or the EUREPO) decreased slightly, revealing some signs of an easing of tensions on money markets. At the three-month maturity, the spread between the EURIBOR and the EONIA swap index decreased from 79 basis points on 4 June to 65 basis points on 2 July. The narrowing of these spreads also influenced the unsecured money market yield curve, tending to reduce its slope, albeit not to an extent sufficient to offset that of the upward revision to market expectations for key ECB interest rates.

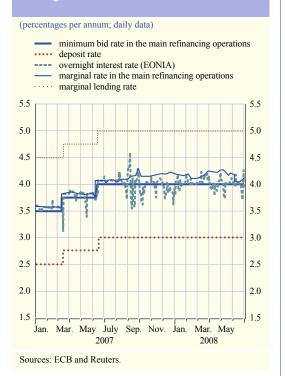
The interest rates implied by the prices of three-month EURIBOR futures maturing in September, December 2008 and March 2009 stood at 5.11%, 5.29% and 5.31% respectively on 2 July. This represents an increase of 18, 28 and 39 basis points respectively compared with 4 June, which again reflects the upward revision to market expectations for key ECB interest rates.

Reflecting the liquidity situation anticipated by the ECB in the last few days of the fifth maintenance period of 2008 (ending on 10 June), a liquidity-absorbing fine-tuning operation with an overnight maturity was launched on the last day of the period. In this operation, the ECB absorbed €14 billion. The EONIA stood at 4.18% on that day (see Chart 10).

## (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) 5.7 5.4 5 1 4.8 4.5 4.2 3.9 3.6 3.3 0.9 3.0 2.7 0.3 0.0 -0.3 July

# Chart 10 ECB interest rates and the overnight interest rate

Sources: ECB and Reuters.



In the first few days of the sixth maintenance period (ending on 8 July), the EONIA stabilised at around 4%. During this maintenance period, in order to accommodate counterparties' wishes to fulfil their reserve requirements early in the maintenance period, the ECB continued its policy of allotting liquidity in excess of the benchmark amount in its main refinancing operations, while still aiming for balanced liquidity conditions at the end of the maintenance period. Consequently, in the Eurosystem's regular weekly main refinancing operations on 10, 17, 24 June and 1 July, the ECB allotted  $\epsilon$ 20 billion,  $\epsilon$ 20 billion,  $\epsilon$ 35 billion and  $\epsilon$ 3 billion in excess of the respective benchmark amounts. The resulting marginal tender rates for these four operations were 4.03%, 4.03%, 4.07% and 4.10% respectively. The unusually high allotment for the third MRO was due to the intention of smoothing the end-of-semester effect. This measure successfully contained the upward spike in the EONIA on the last day of the semester at 26.5 basis points, although the overnight rate did show the heightened volatility over the days surrounding 30 June.

In the Eurosystem's regular longer-term refinancing operations (LTRO) on 11 and 25 June (which were conducted with a fixed allotment amount of  $\[ \in \]$ 50 billion), the marginal rates were 4.6% and 4.5% and the weighted average rates were 4.72% and 4.67% respectively, an increase of 9 basis points above and a decrease of 1 basis point below the level of the marginal rate reached for the previous LTRO on 28 May. The marginal rates in these operations were 36 and 46 basis points lower than the three-month EURIBOR prevailing on those dates.

#### 2.4 BOND MARKETS

Long-term government bond yields continued to increase in the major markets in the first few weeks of June, reflecting market participants' changing expectations for future monetary policy rates. Since

mid-June, however, these increases came to a halt in the euro area, and were even largely reversed in other major markets. Although medium and long-term inflation expectations and related risk premia, as reflected in break-even inflation rates, increased considerably in the euro area, corresponding forward rates remained broadly unchanged.

Developments in long-term government bond yields differed somewhat across the major markets from the beginning of May to early July (see Chart 11). In the euro area, ten-year government bond yields increased by around 30 basis points between end-May and 2 July, to stand at 4.9% on the latter date. By contrast, in the United States, long-term government bond yields decreased slightly and stood at 4.0% on 2 July. As a result, the differential between ten-year government bond yields in the United States and the euro area widened to reach about -90 basis points. In Japan, ten-year government



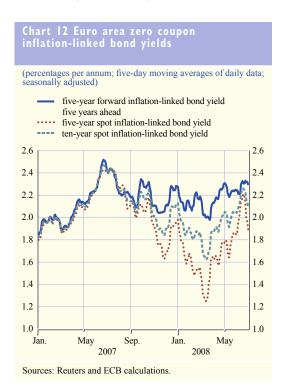
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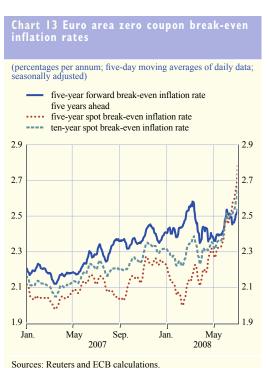
bond yields also decreased somewhat, standing at 1.7% at the end of the review period. Measures of implied bond market volatility increased somewhat in both the euro area and the United States.

In the United States, medium and long-term real yields on inflation-linked government bonds underwent considerable swings in the course of June. At the beginning of the review period, nominal and real yields continued on the upward trend observed since the pronounced market turbulence in mid-March. Upward pressures on real yields resulted to some extent from investors' reassessment of the outlook for monetary policy interest rates in the light of increased market concerns about inflation, not least in the wake of further hikes in oil prices. Since mid-June, however, the increases in real and nominal yields were reversed, possibly in response to the continued declines in the equity markets. While long-term break-even inflation rates – which reflect market participants' inflation expectations and related risk premia – remained broadly unchanged over the review period, break-even inflation rates at medium-term maturities increased somewhat further.

In the euro area, the increase in long-term nominal bond yields in the first few weeks of June was driven mainly by further increases in long-term real yields (see Chart 12). This increase, in turn, reflected a significant upward movement of the real forward yield curve at short to medium-term maturities, which was related to investors' reappraisal of the outlook for monetary policy rates in the euro area. Since mid-June, however, real yields declined rather sharply, reflecting the market assessment of the economic outlook in view of recent euro area data releases as well as renewed turbulence in financial markets more generally.

Break-even inflation rates increased considerably since end-May, especially at short to medium-term maturities (see Chart 13). This led to an inversion of the term structure of break-even inflation





rates, probably mainly reflecting the persistently elevated headline HICP inflation. Against this background, the five-year forward break-even inflation rate five years ahead – a measure of only long-term inflation expectations and related risk premia – remained broadly unchanged at an elevated level of 2.5%. Information contained in inflation-linked swap rates provided a consistent message of elevated break-even inflation rates. Two-year break-even inflation rates increased strongly between end-May and 2 July, and also ten-year break-even inflation rates edged up to reach a level of around 2.8%.

The implied nominal forward overnight interest rate curve in the euro area shifted up somewhat at short and medium-term maturities (see Chart 14). Part of the movement at the short end of the forward curve reflected market participants' reaction to the press conference following the Governing Council's meeting on 5 June.

#### Chart 14 Implied forward euro area overnight interest rates (percentages per annum; daily data) 2 July 2008 ···· 30 May 2008 5.3 5.1 5.1 4.9 4.9 4.7 4.7 4.5 4.5 4.3 43 4.1 4.1 3.9 3.9 3.7 3.7 2008 2012 2014 2018

Sources: ECB, EuroMTS (underlying data) and Fitch Ratings (ratings).

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 is outlined in the "Euro area yield curve" section of the ECB's website. The data used in the estimate are euro area AAA-rated government bond yields.

Euro area credit spreads in the corporate bond market edged up in June and early July. The yield spread of BBB-rated corporate bonds vis-à-vis comparable government bonds increased by about 25 basis points in the period under review. Although the widening of corporate credit spreads was most pronounced for financial firms, non-financial firms also faced some increases in bond market borrowing costs. Spreads of financial corporations thereby remained particularly elevated, standing close to, or above, the highest levels observed since the onset of financial turmoil last summer.

#### 2.5 INTEREST RATES ON LOANS AND DEPOSITS

In April 2008 MFI interest rates on loans to both households and non-financial corporations increased moderately, only partly reflecting rising market interest rates. Since the financial market turmoil began, short-term MFI interest rates have increased somewhat less than money market rates, while developments in long-term MFI interest rates have resulted in widening spreads over yields on government bonds. Between June 2007 and April 2008 long-term spreads over the cost of bank funding as reflected in MFI bond yields increased by almost 100 basis points.

In April MFI short-term rates on deposits and loans increased, against the backdrop of more pronounced increases in money market interest rates (see Table 4 and Chart 15). The interest rates on short-term (up to one year) deposits increased both for deposits from households and from non-financial corporations. As regards short-term loans to households, interest rates on new loans to households for consumption and for house purchase increased by 1 and 3 basis points respectively between March and April. At the same time, MFI interest rates on both small and large new loans to non-financial corporations with floating rates and an initial rate fixation period of up to one year

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increased by around 10 basis points, while rates on bank overdrafts to non-financial corporations remained unchanged. These developments partly reflected the 18 basis point increase in the three-month money market rate in April.

Taking a longer perspective between June 2007 and April 2008, while the three-month money market rate rose by 64 basis points, MFI short-term interest rates on deposits from households and non-financial corporations increased by 49 and 33 basis points respectively. At the same time, rates on loans to households for consumption and house purchase rose by 37 and 25 basis points respectively, while short-term rates on loans to non-financial corporations of up to €1 million increased by 50 basis points. All in all, since the outbreak of the credit market tensions in mid-2007, short-term MFI interest rates have increased somewhat less than money market rates, implying that

(percentages per annum; basis points; weight-adjus	ted 1)								
							Change in basis points up to Apr. 2008 <sup>2)</sup>		
	2007	2007	2007 2007	2007	2008	2008	2007	2007	2008
	Q1	Q2	Q3	Q4	Mar.	Apr.	Sep.	Dec.	Mai
MFI interest rates on deposits									
Deposits from households									
with an agreed maturity of up to one year	3.51	3.77	4.07	4.28	4.14	4.27	20	-1	
with an agreed maturity of over two years	2.71	2.73	3.08	3.09	3.02	3.12	4	3	
redeemable at notice of up to three months	2.38	2.41	2.57	2.61	2.71	2.73	16	12	
redeemable at notice of over three months	3.14	3.31	3.50	3.67	3.78	3.81	31	14	
Overnight deposits from non-financial corporations	1.72	1.79	1.92	1.97	2.03	2.04	12	7	
Deposits from non-financial corporations									
with an agreed maturity of up to one year	3.67	3.93	4.13	4.26	4.19	4.26	13	0	
with an agreed maturity of over two years	3.61	4.09	4.37	4.18	4.21	4.66	29	48	
MFI interest rates on loans									
Loans to households for consumption									
with a floating rate and an initial rate fixation of									
up to one year	7.69	8.09	8.50	8.24	8.45	8.46	-4	22	
Loans to households for house purchase									
with a floating rate and an initial rate fixation of									
up to one year	4.78	4.99	5.23	5.31	5.21	5.24	1	-7	
with an initial rate fixation of over five and up	4.70	4.77	3.23	3.31	3.21	3.24	1	-/	
to ten years	4.69	4.89	5.08	5.06	4.96	4.95	-13	-11	
•									
Bank overdrafts to non-financial corporations	6.06	6.18	6.50	6.63	6.55	6.55	5	-8	
Loans to non-financial corporations									
of up to €1 million									
with a floating rate and an initial rate fixation of									
up to one year	5.29	5.53	5.92	6.08	5.91	6.03	11	-5	
with an initial rate fixation of over five years	4.83	5.00	5.24	5.28	5.22	5.22	-2	-6	
Loans to non-financial corporations									
of over €1 million									
with a floating rate and an initial rate fixation of									
up to one year	4.68	4.90	5.21	5.33	5.18	5.29	8	-4	
with an initial rate fixation of over five years	4.86	5.17	5.43	5.47	5.34	5.42	-1	-5	
Memo items									
Three-month money market interest rate	3.89	4.15	4.74	4.85	4.60	4.78	4	-7	
Two-year government bond yield	3.94	4.45	4.10	4.05	3.54	3.86	-24	-19	
Five-year government bond yield	3.95	4.57	4.19	4.14	3.65	4.00	-19	-14	

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.

# Chart 15 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



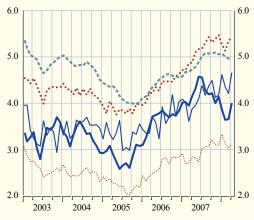
Source: ECB

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 16 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 weightadjusted 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.

the increase in banks' costs for wholesale and securitised funding as a result of persistent distortions in the interbank markets has not been fully passed on.

In April 2008 long-term MFI interest rates on deposits with a maturity of over two years increased by 10 basis points in the case of households and by 45 basis points for non-financial corporations (see Table 4 and Chart 16). These increases in deposit rates should be seen in the context of the 32 and 35 basis point increases in the yields on two and five-year government bonds respectively over the same period. Long-term MFI rates on loans to households for house purchase, as well as on loans of up to €1 million to non-financial corporations, remained broadly unchanged. Long-term rates on loans of over €1 million to non-financial corporations increased moderately, by 8 basis points (see Chart 16), while long-term government bond yields have picked up more strongly.

Looking at developments over a longer horizon, longer-maturity MFI deposit and lending rates have increased since June 2007. MFI interest rates on loans to households for house purchase with an initial rate fixation period of over ten years rose by 35 basis points. With regard to loans to non-financial corporations with an initial rate fixation period of over five years, MFI interest rates

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increased by 22 basis points for loans of up to €1 million, while rates on larger loans rose by 26 basis points. This development contrasts with the sharp decline in government bond yields over the same period, by 57 and 59 basis points for the five-year and the two-year bonds respectively. As a result, spreads between MFI lending rates and government bond yields have widened considerably since the outbreak of the financial turmoil, reflecting the increase in the cost of funding of banks.

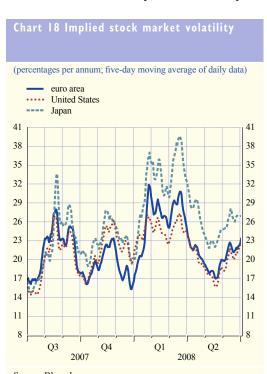
#### 2.6 EQUITY MARKETS

Stock prices in the major markets declined sharply between the end of May and early July. In the euro area and the United States, stock prices declined to the lowest level observed since the outbreak of the financial turmoil last summer, as increases in input prices as well as weakening actual earnings weighed on valuations. Investors' concerns about the economic outlook may also have increased recently. Stock market uncertainty, as measured by implied volatility, increased somewhat in the major markets between the end of May and early July.

Broad-based stock price indices recorded substantial losses in major markets in June and at the beginning of July (see Chart 17). Euro area and US stock prices, as measured by the Dow Jones EURO STOXX index and the Standard and Poor's 500 index, declined by 14% and 10%, respectively, between the end of May and 2 July. Stock prices in Japan, as measured by the Nikkei 225 index, decreased by 7% over the same period. Stock market uncertainty, as measured by the







Source: Bloomberg.

Notes: 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.

implied volatility extracted from stock options, increased somewhat in major markets, but remained well below the peaks observed in March (see Chart 18).

In the United States, stock markets retreated over the review period amid weak actual earnings, in particular those reported by major US banks. The actual annual earnings per share growth for corporations in the Standard & Poor's 500 index declined further in June, and thus remained negative at -4%. At the same time, however, the earnings growth forecast twelve months ahead increased somewhat, suggesting that analysts generally expect the downturn in earnings to be short lived. Long-term expected earnings growth remained at a robust level in June.

In the euro area, the main factors weighing on stock market valuations appeared to be the upward shift of the term structure of interest rates, persistent input price pressures in the corporate sector and further declines in actual earnings growth. In fact, the actual annual earnings growth for firms in the Dow Jones EURO STOXX index declined in June for the sixth consecutive month. However, at a level of 7%, actual annual earnings growth for the constituent firms of this index continued to be strong and is expected to remain so, as implied by analysts' earnings outlook. More specifically, expected earnings growth over both twelve-month and three to five-year horizons inched up in June, both standing at a solid level of about 8%. Although stock prices were notably lower across all sectors of the index in June and early July, a weak performance was particularly pronounced for the financial sector, which exhibited an 18% price decline compared with a 13% decrease for the non-financial sector. The deteriorating outlook for financial firms in the euro area is also reflected in recent estimates of the cost of equity for that sector (see Box 2).

Implied volatility increased in the major markets, indicating that market participants have become somewhat more uncertain about near-term stock price developments. Despite the fact that, during the review period, euro area stocks fell to their lowest level this year, stock market uncertainty remained well below the levels observed during the sharp declines in stock prices in March.

#### Box 2

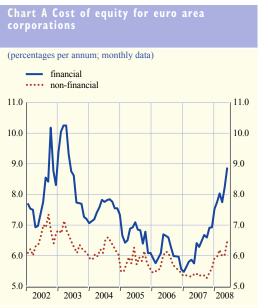
### RECENT DEVELOPMENTS IN THE COST OF EQUITY FOR EURO AREA FIRMS

In order to access external finance, firms can, in principle, either issue equity or take on debt. The choice between equity and debt financing is typically influenced by many different factors, such as taxation or the cost of financial distress, with the relative costs of financing through the alternative source also playing a role. This box presents estimates of the cost of equity for both the non-financial and financial sectors in the euro area, which have been affected by the financial turmoil to a significantly different extent.

In contrast to the cost of most forms of debt (in particular the interest rates applying to bank loans and corporate bonds issued), the cost of equity cannot be directly observed and thus has to be measured on the basis of some quantifiable model. The standard method of pricing stocks is the dividend discount model. According to this model, today's stock price for any firm equals expected dividend payouts discounted by the rate of return which investors require for holding the stock. This rate of return measures the cost of equity. To apply the model in practice, the approach

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suggested by Fuller and Hsia is used in this box. This application of the dividend discount model assumes that corporate earnings growth is expected to develop in three stages. In the first stage, which is assumed to last for four years, earnings are expected to grow at a real rate which is set equal to I/B/E/S (Institutional Brokers' Estimate System) analysts' three-to-fiveyear-ahead ("long-term") earnings-per-share growth forecasts minus average five-year-ahead Consensus Economics inflation forecasts. The second stage is an interim period (assumed to last for eight years) when earnings growth is expected to adjust in a linear fashion to a constant long-term steady-state growth rate of corporate earnings, which is assumed to prevail throughout the third infinite stage. The long-term real earnings growth rate is assumed to be identical for both sectors at a constant level of 2.25%, which is within the range of potential growth estimates for the euro area economy.



Sources: Thomson Financial Datastream, Reuters, Consensus Economics and ECB calculations.

By using the information on dividend yields and analysts' long-term growth expectations which is available at the sectoral level, it is possible to disentangle the cost of equity for financial and for non-financial corporations. Chart A shows the estimated cost of equity for the two sectors over the sample spanning from January 2002 to June 2008. Two features emerge from the chart. First, developments in the cost of equity for the two sectors have broadly moved in tandem, with peaks reached in late 2002 and early 2003 after the bursting of the IT bubble and a general deterioration in investors' risk appetite. Second, while the cost of equity for the financial sector (mainly banks) has systematically hovered at higher levels than for the non-financial sector, the gap diminished between 2004 and 2007. Conversely, the recent rebound in equity financing costs incurred by firms on account of the financial turmoil has been much more pronounced for financial firms than for non-financial firms.

The reasons for the recent increasing spread between the cost of equity for the financial and the non-financial sectors are probably twofold. The first reason concerns relative earnings performance, as profits in the financial sector have been hit harder by the financial market turmoil than the profits of non-financial firms. This has led to a stronger decline in financial stock prices in the wake of the financial turmoil following a prolonged period of sustained outperformance in the preceding years.<sup>2</sup> Second, lingering uncertainty about the extent of write-downs on bank balance sheets may also have contributed to heightened investor uncertainty about future earnings growth, resulting in higher equity risk premia and therefore a higher cost of equity.<sup>3</sup>

<sup>1</sup> See R. J. Fuller and C. C. Hsia (1984), "A simplified common stock valuation model", *Financial Analysts Journal*, September-October, pp. 49-56. See also the box entitled "A three-stage dividend discount model for the euro area" in the article "Extracting information from financial asset prices" in the November 2004 issue of the Monthly Bulletin.

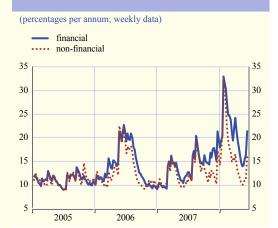
<sup>2</sup> See the box entitled "Recent developments in the earnings of euro area firms" in the June 2008 issue of the Monthly Bulletin.

<sup>3</sup> The cost of equity can be understood as the sum of the risk-free interest rate and the equity risk premium.

Closely linked to relative earnings performance, it should also be noted that in recent months stock prices in the financial sector fluctuated more than non-financial stock prices (see Chart B). To the extent that these fluctuations were driven by systematic risk factors, it cannot be excluded that investors have required a higher expected return for the more volatile financial firms than for the non-financial firms.

All in all, the evidence presented in this box demonstrates the particular importance of distinguishing between sector-specific cost of equity measures in the context of the present financial market turbulence. The financial turmoil brought about a steep increase in the cost of equity for financial firms, reaching levels rather close to the peaks of 2002-03.

# Chart B Stock market volatility for euro area corporations



Sources: Thomson Financial Datastream and ECB calculations. Note: The volatility measures are estimated using a GARCH (1,1) procedure.

However, the increase in the equity financing costs for the non-financial sector has so far been much more moderate, contributing to overall still relatively favourable financing conditions in this sector. In any event, equity issuance by non-financial corporations has remained subdued in recent years, whereas the continued buoyancy of loan financing has boosted leverage levels. By contrast, the financial turmoil has increased pressures to bolster capital levels of financial firms, notwithstanding the presently higher cost of equity for this sector.

## PRICES AND COSTS

In June 2008 euro area HICP inflation is estimated to have further increased to 4.0%, from 3.7% in May, most likely owing to renewed increases in energy prices. Elevated and persistent external price pressures stemming from oil and food commodity price developments, combined with intensifying domestic pipeline pressures and an acceleration of wage dynamics, point to a protracted period of high annual rates of inflation. On the basis of current futures prices for oil and food commodities, euro area HICP inflation is likely to remain well above 2% for quite some time, moderating only gradually in 2009.

Risks to price stability over the medium-term horizon remain clearly on the upside and have increased further over the past few months. These risks include notably the possibility of further increases in energy and food prices. There is also a very strong concern that price and wage-setting behaviour could add to inflationary pressures via broadly based second-round effects. Furthermore, there are potential upside risks from unanticipated rises in indirect taxes and administered prices.

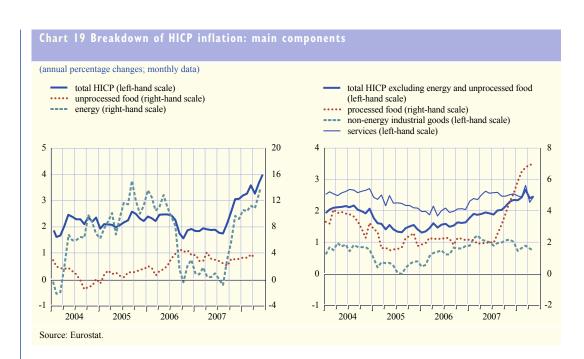
#### 3.1 CONSUMER PRICES

According to Eurostat's flash estimate, euro area HICP inflation reached 4.0% in June 2008, up from an already historically high 3.7% in May (see Table 5). Although a full breakdown of the June HICP is not yet available, evidence at the country level suggests that annual increases in food and, in particular, energy prices continued to be strong.

In May a strong contribution from the energy component was the main driving factor of the increase in euro area annual HICP inflation to 3.7%, from 3.3% in April (see Chart 19). The annual growth rate of HICP energy prices rose significantly in May, to 13.7%, from 10.8% in April, mainly driven by record month-on-month increases in oil-related energy products (i.e. for heating and transport). These developments are attributable to both the recent surge in crude oil prices and a widening of refining margins, especially for diesel products (see Box 3). Moreover, there are emerging signs of an upward movement in the prices of non-oil energy items, in particular gas prices, which tend to react with a lag to oil price developments.

(annual percentage changes, unless otherwise indicated)											
	2006	2006 2007	2008	2008	2008	2008	2008	2008			
			Jan.	Feb.	Mar.	Apr.	May	June			
HICP and its components											
Overall index 1)	2.2	2.1	3.2	3.3	3.6	3.3	3.7	4.0			
Energy	7.7	2.6	10.6	10.4	11.2	10.8	13.7				
Unprocessed food	2.8	3.0	3.3	3.3	3.8	3.1	3.9				
Processed food	2.1	2.8	5.9	6.5	6.8	7.0	6.9				
Non-energy industrial goods	0.6	1.0	0.7	0.8	0.9	0.8	0.7				
Services	2.0	2.5	2.5	2.4	2.8	2.3	2.5				
Other price indicators											
Industrial producer prices	5.1	2.8	5.1	5.4	5.8	6.2	7.1				
Oil prices (EUR per barrel)	52.9	52.8	62.4	64.1	66.1	69.8	80.1	85.9			
Non-energy commodity prices	24.8	9.2	10.4	15.0	10.3	5.8	6.0	9.6			

Sources: Eurostat, HWWI and ECB calculations based on Thomson Financial Datastream data

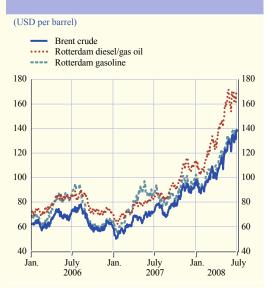


#### Box 3

#### RECENT DEVELOPMENTS IN CONSUMER OIL ENERGY PRICES

Tight demand/supply balances have recently driven oil prices to unprecedented levels, which has given rise to strong increases in consumer prices for oil energy products (in particular car fuel – petrol and diesel – and heating fuel). This box considers the relationship between oil prices on world markets and consumer prices for oil energy products in the euro area. It should be noted that oil prices on world markets are usually quoted in dollar terms. Over the last few years the increase in oil prices in euro terms has been less substantial. There are a number of additional factors which may have an impact on the transmission channel. First, before it can be used by consumers, crude oil must be delivered to refineries and be refined either into gasoline (i.e. petrol) or into gas oil (i.e. for diesel or heating fuel). Second, refined products must be distributed from the refineries to retail outlets. Finally, owing to specific excise and value added taxes, there is

Chart A Crude and Rotterdam refined oil prices



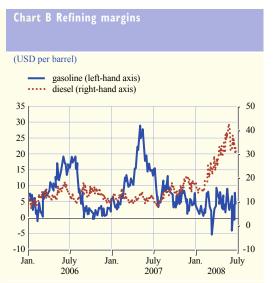
Source: Reuters. Note: From January 2007 "gasoline" refers to the 10 ppm specification.

Prices and costs

a difference between the price the consumer pays and the price the retailer receives. This box focuses mainly on developments in refining margins and the likely implications for HICP inflation in the euro area.

#### **Developments in refining margins**

Examining the relationship between the price for crude oil and the price for refined products, Chart A illustrates that these are generally, although not always, co-moving. However, in the past six months diesel prices have increased at a notably faster rate than the prices of gasoline and of crude oil itself. Indeed, looking at the "refining margin", namely the difference in price of a barrel of refined product and a barrel of crude oil, it becomes apparent that the margin for diesel has strongly increased in recent months,



Sources: Reuters and ECB calculations.

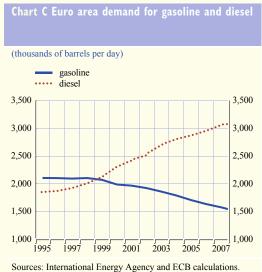
Note: The refining margins are calculated as the difference between the Rotterdam price of refined product and the price of Brent crude oil

reaching a peak in May 2008 (see Chart B). Refining margins have generally been very volatile in the last few years, and a similar phenomenon occurred in April 2007 in the gasoline market.

The market for diesel fuel has been very tight recently. Despite the recently recorded high prices, the demand for diesel has continued to increase, although at a slower pace than that witnessed over the past ten years, when the demand for diesel fuel in euro area countries steadily increased at a much faster rate than the demand for gasoline (see Chart C). Demand for diesel has also been affected by the sharp increase in diesel cars, which now account for more than half of the newly registered passenger cars in the euro area. Diesel is also the primary fuel used in the road transport sector. Furthermore, demand for diesel has been very strong in emerging economies, in particular China, where the International Energy Agency projects that diesel demand will grow by 10% in 2008.

This strong demand has put pressure on the supply side, which has been exacerbated by strikes and other disruptions, and European refineries have not managed to catch up with demand. In June 2008, for example, more than 900,000 tonnes of gas oil were shipped to Europe. Although such pressure could ease in the coming months as temporary factors unwind, market tightness has been an important factor affecting the recent evolution of refining margins.

Another factor that may have had an impact on the developments in diesel refining margins is the increasing quality, i.e. lower sulphur



content, of diesel fuel sold in European markets. The fact that low-sulphur diesel can be produced from sour (high-sulphur) crude oil only in appropriately specialised refineries, and that the spread between the prices of sweet and sour crude oil has increased, may have put additional pressure on the refining margins.

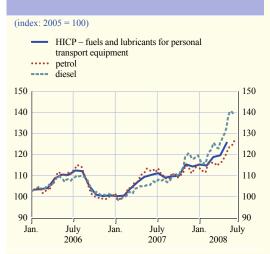
#### Impact on consumer energy prices

The impact of the differing developments in the refining margins for gasoline and those for diesel on consumer energy prices is illustrated in Chart D, which shows the evolution of the HICP series for transport energy, together with petrol and diesel prices obtained from the European Commission's weekly Oil Bulletin. Unlike the period between mid-2006 and mid-2007, when petrol prices increased more rapidly than diesel prices (owing to the rise in gasoline refining margins – see Chart B), since the end of 2007 diesel prices have increased at a significantly higher rate than petrol prices. This has resulted in the near closing of the previously existing gap between the prices of petrol and diesel, notwithstanding an average difference of approximately 20 cent per litre in taxes on the two products.

The data from the weekly Oil Bulletin provide information on prices before and after taxes, which makes it possible to calculate an indicator of the distribution and retail margins. It is calculated as the difference between consumer prices excluding taxes and the price of refined oil products. Chart E suggests that, although there has been some short-term volatility in the distribution and retail margins, they generally have not exhibited any strong trend over the recent period. As there tends to be some lag (of approximately three to five weeks) in the full pass-through of developments in refined prices to consumer prices, this suggests that retail margins to some extent buffer the increase in "upstream" prices (i.e. crude and refined oil prices).

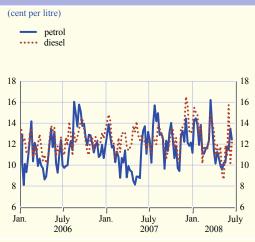
1 For more information, see the box entitled "Recent developments in oil and petrol prices" in the November 2006 issue of the Monthly Bulletin.

#### Chart D Consumer prices for transport energy



Sources: Eurostat, the European Commission's weekly Oil Bulletin and ECB calculations.

## Chart E Indicators of distribution and retail margins



Sources: Reuters, European Commission and ECB calculations.

#### **ECONOMIC** AND MONETARY **DEVELOPMENTS**

Prices and costs

Another factor which affects final consumer prices is taxes, which comprise a very significant portion of final consumer prices (currently accounting for around 60% and 50% respectively of final petrol and diesel consumer prices).<sup>2</sup> However, taxes appear to have played a minor role in recent energy price developments at the consumer level, mainly owing to the fact that there have not been any significant changes in average excise or value added taxes on fuel across the euro area in recent years. That said, value added taxes move automatically with pre-tax prices as they are levied as a percentage. Thus, although the overall absolute tax content of consumer oil energy prices has increased somewhat in recent years as a result of value added taxes, the share of final consumer prices accounted for by taxes has declined as the price of crude and refined oil has risen owing to relatively stable excise taxes.

In summary, the renewed surge observed in consumer oil energy prices is primarily due to developments in both crude and refined petroleum products. In particular, diesel prices have increased by more than petrol prices owing to a significant increase in the diesel refining margin. Further down the pricing chain, there is little evidence that distribution and retail margins have contributed significantly to the increase in consumer prices on average across the euro area.

2 On average across the euro area, taxes on diesel have been lower than those on petrol. Thus, although refined diesel has generally been more expensive to produce, the consumer prices of diesel had until recently been notably lower than those of petrol. In 2007, on average, taxes accounted for approximately 60% of petrol prices, while crude and refined oil inputs together accounted for 30%, and distribution and retail margins represented approximately 10%. For diesel, the percentages were 50%, 35% and 12% respectively.

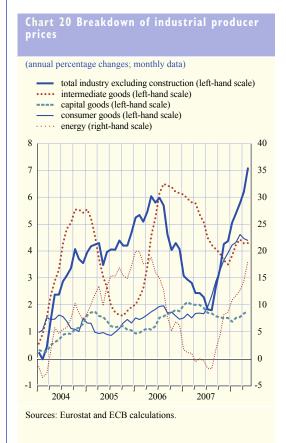
The annual rate of change in unprocessed food prices also increased strongly in May (to 3.9%, from 3.1% in April). The rise observed in this component is largely attributable to volatile developments in fruit and vegetable prices. Furthermore, a slight upward trend in meat price inflation has been observed over the past few months, reflecting to some extent the increased input cost pressure from higher animal feed prices. The annual rate of change in processed food prices decreased slightly in May, following nine successive months of increase. This reflected to a large extent a decline in the annual growth rate of dairy product prices. While the short-term dynamics (as measured by month-on-month rates of growth) of the prices of several processed food items have followed a downward path over the last few months, processed food price inflation has nevertheless remained at historically high rates in year-on-year terms. In the absence of a further shock, it is expected to decline gradually in the second half of the year, owing to large favourable base effects from last year's strong increases.

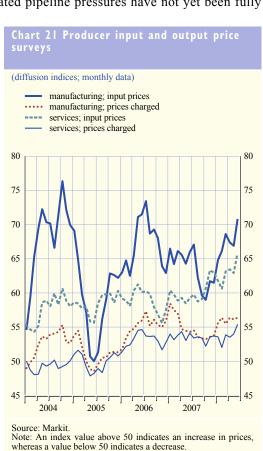
Excluding energy and total food (which together represent around 30% of the HICP basket), HICP inflation rose slightly to 1.7% in May, reflecting a renewed increase in services price inflation. The annual growth rate of services prices edged back up to 2.5%, a level around which it has generally been hovering since early 2007. This rise was partly attributable to calendar effects related to the early timing of Easter, which have affected specific items such as package holidays and air transport services over the past few months. Looking beyond this short-term volatility, developments in the prices of some categories of services seem to indicate some pass-through of increasing cost pressures from rising oil and food prices. Most notably, annual inflation in total transport services rose sharply in May, reaching its highest rate since December 2001, and the annual growth rate of the prices of café and restaurant services was the highest recorded since December 2002. By contrast, non-energy industrial goods prices edged further down to 0.7% in annual terms. Developments in this component remain moderate, notwithstanding a significant build-up of non-wage pipeline pressures in the industrial goods sector.

#### 3.2 INDUSTRIAL PRODUCER PRICES

In May 2008 the annual rate of change in total industrial producer prices (excluding construction) surged to 7.1%, the highest rate since November 1982, from 6.2% in April (see Chart 20). As in the previous month, this increase was almost entirely driven by a strong annual increase in energy producer prices (to 18.2%), as the surge in crude oil prices and the depreciation of the euro vis-à-vis the dollar in May caused an unprecedented 4.1% increase on a month-on-month basis.

Excluding energy (and construction), producer price inflation edged up to 3.8% in May, reflecting a slight increase in capital goods prices for the second month in a row, which stood at 1.8%, the average rate observed in 2007. The annual rate of change in intermediate goods prices remained stable in May. However, short-term dynamics in this component suggest mounting upward pressures at early stages of the production chain, stemming from increasing prices for industrial raw materials, mainly metals, as well as rising freight costs owing to higher oil prices. Further down the production chain, the annual rate of change in the producer prices of consumer goods recorded a further modest decrease in May, reflecting some easing in the annual growth rate of food producer prices, to 9.6%, from 9.9% in April. This second consecutive decrease in food price inflation in annual terms, following a continuous surge from 2.9% in June 2007 to a peak of 10.1% in March 2008, points to a gradual fading of food price pressure at the retail level. Nevertheless, the annual growth rate of HICP food prices may remain high for some time as existing accumulated pipeline pressures have not yet been fully





Prices and costs

passed on to consumer food prices. Excluding tobacco and food, the annual rate of change in consumer goods producer prices increased marginally but remains close to the rates observed since early 2007, suggesting that the pass-through of strong energy and intermediate goods prices has so far remained contained.

The latest data on firms' price-setting behaviour from the NTC Economics Purchasing Managers' Index (PMI) point to a strengthening of inflationary pipeline pressures in both the manufacturing and the services sectors (see Chart 21). In June 2008 input cost indicators increased significantly from already high levels, reaching levels unseen for around two years for manufacturing and for more than seven years for services. These increases were reported to be driven by increasing commodity prices, in particular for oil, energy and metal. Pressure on output prices also appears to be sustained. In the manufacturing sector, the index of prices charged remained at a high level by historical standards in June. In the services sector, after having fluctuated around an elevated level for about two years, the output price index rose further in June to the highest value recorded since November 2000. In both sectors, the more moderate rise in prices charged compared with the surge in input costs since mid-2007 still suggests that not all input price increases have yet been passed on to consumers.

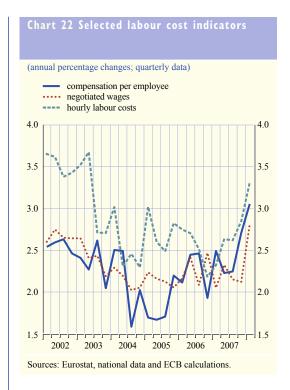
#### 3.3 LABOUR COST INDICATORS

Following contained developments in all labour cost indicators at the euro area level in most of 2007, with some signs of acceleration in the last quarter, the most recent information confirms a further pick-up in wage growth in the first quarter of 2008 (see Table 6).

Confirming the picture suggested by earlier information on negotiated wages, the annual growth rate of hourly labour costs rose by 3.3% in the first quarter of 2008. This represents a significant increase compared with the rate of 2.8% recorded in the previous quarter and the average rate of 2.6% observed in 2007 (see Chart 22). The pick-up in hourly labour cost growth is largely explained by the rise in the annual growth rate of wage costs, which reached 3.7%. The growth rate of other labour costs (mainly social security contributions) also increased, albeit to a lesser extent.

The annual growth rate of compensation per employee also increased in the first quarter of 2008, to 3.1%, from 2.7% in the fourth quarter of 2007. Compared with the previous release, the growth rates of compensation per employee have been revised upwards, pointing to a slightly more rapid pick-up in wage growth in the last quarter of the year (with a substantial upward revision of around 0.2 percentage point). This increase in compensation per employee was only partly offset by a

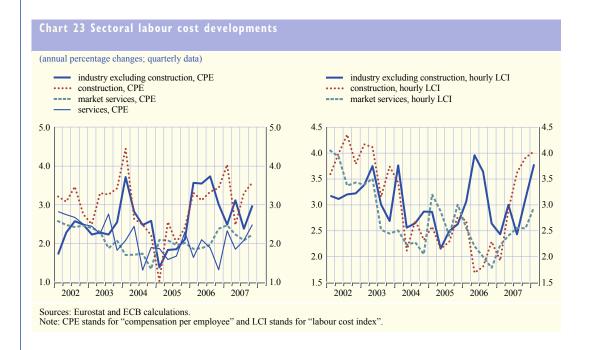
(annual percentage changes, unless o	therwise indicated	l)					
	2006	2007	2007	2007	2007	2007	2008
			Q1	Q2	Q3	Q4	Q
Negotiated wages	2.3	2.2	2.0	2.3	2.2	2.1	2.
Total hourly labour costs	2.5	2.6	2.3	2.6	2.6	2.8	3.
Compensation per employee	2.2	2.4	2.5	2.2	2.2	2.7	3.
Memo items:							
Labour productivity	1.2	0.9	1.4	0.9	0.8	0.4	0.
Unit labour costs	1.0	1.5	1.0	1.3	1.5	2.3	2.



slight rebound in productivity growth in the first quarter of 2008 (to 0.6%, from 0.4% in the previous quarter). Overall, therefore, annual unit labour cost growth reached 2.4%, the highest rate recorded in five years. At the sectoral level, the increase in hourly labour cost growth in the first quarter of 2008 took place mostly in industry (rising to 3.7% in year-on-year terms, from 3.1% in the previous quarter), and to a more moderate extent in both construction and market services (see Chart 23).

Rising wage pressures appear to reflect a combination of factors, including tighter labour markets, the existence of nominal wage indexation schemes, which link wages to past price developments, and some unwinding of past wage moderation. Accelerating wage growth is another sign of intensifying domestic inflation pressures and should be carefully monitored. The risk of an inflationary wage-price spiral is particularly acute in the few euro area countries where some form of automatic

price indexation of private sector wages exists. Looking ahead, the increase in labour cost growth is expected to continue in 2008, stemming from both a phasing-out of policies aimed at reducing social security contributions and a rise in actual wage growth. At the same time, weak productivity growth is expected to lead to higher unit labour cost growth.



Prices and costs

#### 3.4 EURO AREA RESIDENTIAL PROPERTY PRICES

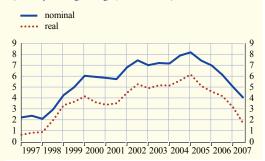
As reported in detail in Box 4, the latest estimates available at the euro area level suggest that the general moderation in residential property prices from the peak reached in mid-2005 continued up until the end of 2007.

#### RECENT HOUSING MARKET DEVELOPMENTS IN THE EURO AREA

Housing market developments in the euro area have been moderating fairly steadily since mid-2005, following a strong expansion over the preceding years. This box reviews the recent evolution of euro area residential property prices, then relates these developments to housing demand and supply factors.1

The most recent data on euro area residential property prices suggest that a general moderation beginning in mid-2005 continued until the end of 2007. In annual terms, house price growth declined steadily from a peak of 8.2% in the first half of 2005 to 4.0% in the second half of 2007 (see Chart A). Thus, the growth rate observed recently is much lower than the average annual growth rate of 6.0% witnessed over the period 1997-2005

(annual percentage changes; biannual data)



Source: ECB calculations based on national data Notes: Real residential property price growth is obtained by subtracting annual HICP inflation from nominal residential property price growth. The euro area residential property price is calculated from national series covering more than 90% of euro area GDP for the whole period.

(see the table). Available data for the beginning of 2008 indicate a likely continuation of this downward trend. Adjusted for HICP inflation, the recent slowdown in euro area house prices has been even more marked, with real house price inflation having fallen from 6.1% in the first half of 2005 to 1.6% in the second half of 2007.

Considerable country heterogeneity has continued to underlie the evolution of aggregate euro area house prices (see the table). Examining recent developments, available country data suggest that the ongoing moderation in euro area house price inflation has generally been most visible among those countries which have recorded relatively high residential property price rises in recent years. In particular, there has been a marked slowdown in residential property price growth rates since 2006 in Ireland (where house prices have been falling in annual terms since mid-2007) and, to a lesser extent, in Spain, France, Malta, Finland, Belgium, Italy and Austria. By contrast, house prices in 2007 were roughly unchanged or even increased compared with those recorded in 2006 for Germany, Cyprus, the Netherlands and Portugal.

The general slowdown in euro area house price inflation appears to stem to a large extent from a cooling in housing demand. One factor behind this development is the tightening in borrowing

<sup>1</sup> For a detailed analysis of indicators of housing demand and supply, see the article entitled "Assessing house price developments in the euro area" in the February 2006 issue of the Monthly Bulletin

(annual percentage changes)

	Weight	Average annual change,	hange, 2006	2007	2007				2008
		1997-2005			Q1	Q2	Q3	Q4	Q1
Belgium <sup>1)</sup>	3.7	8.9	11.1	9.2	9.1	9.4	10.3	7.9	
Germany <sup>2)</sup>	27.4	-0.7	0.3	0.3					
Ireland2)	2.1	14.7	13.4	0.9	9.2	2.9	-1.8	-6.0	-8.6
Greece2)	2.5	10.0	12.2						
Spain <sup>2)</sup>	11.6	12.0	10.4	5.8	7.2	5.8	5.3	4.8	3.8
France 1)	21.1	9.4	12.1	6.6	8.1	6.8	5.7	5.7	
Italy <sup>2),4)</sup>	17.4	6.5	6.7	5.7	6.6		4.8	3	
Cyprus <sup>2)</sup>	0.2		10.0	15.0					
Luxembourg2)	0.4	9.5							
Malta <sup>2)</sup>	0.1	9.1	3.5	1.1	3.1	0.2	1.1	0.1	-0.7
Netherlands 1)	6.3	9.6	4.5		4.6	4.3	4.9		
Austria <sup>2),3)</sup>	3.0	-0.3	4.0	4.1	3.5	4.4	4.8	3.6	2.1
Portugal <sup>2)</sup>	1.8	3.9	2.1	1.3	1.3	1.1	1.3	1.7	2.3
Slovenia1)	0.4								
Finland1)	2.0	6.4	7.4	5.9	6.4	6.4	6.0	4.9	3.1
Euro area4)	100.0	6.0	6.5	4.5	5.0		4.0	)	

Sources: National sources and ECB calculations Notes: Weights are based on nominal GDP in 2006.

1) Existing dwellings (houses and flats); whole country.
2) All dwellings (new and existing houses and flats); whole country.
3) Data up to 2000 for Vienna.

4) Biannual data for the euro area and Italy

conditions since late 2005. Interest rates applied to loans to households for house purchase have generally risen over the last two years, following several years of decline. According to the latest ECB bank lending survey, a further increase in the net tightening of credit standards for loans to households for house purchase took place in the first quarter of 2008.<sup>2</sup> At the same time, as a result of years of strong house price increases, housing affordability out of actual income has fallen steadily over the past decade, which is also likely to have contributed to a softening in housing demand. As indicated in Chart B, it was only in 2007 that cooling house price inflation contributed to a broad stabilisation in the ratio of household disposable income to the house price index - a "crude" or simple measure of affordability - following many years of decline.

The softening of house price growth has also been associated with a cooling in housing supply. Over the course of 2007, annual real housing investment growth in the euro area moderated considerably, from a peak of 6.3% in annual terms at the beginning of 2007 to nearly zero by the end of the year (see Chart C). This has also contributed to some moderation in the share of resources devoted to housing in the economy, illustrated by the fall in the ratio of housing investment to GDP. Considerable heterogeneity is, however, evident across euro area countries in terms of housing investment, largely reflecting country heterogeneity in house price developments.

Looking ahead, the ongoing softening in euro area housing market growth is likely to persist, following the strong expansion over the last decade. House price inflation is likely to remain at more moderate levels in the euro area than the vigorous rates recorded in the years leading up to 2005. In such a context, there is a strong likelihood that the real activity counterpart to house

<sup>2</sup> See the box entitled "The results of the April 2008 bank lending survey for the euro area" in the May 2008 issue of the Monthly Bulletin.

Prices and costs



(index: 2005=100; percentages; annual data)

disposable income-to-house price ratio (left-hand side)real lending rates for house purchase (right-hand side)



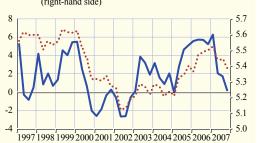
Sources: Eurostat and ECB calculations.

Notes: The narrow measure of housing affordability is defined as the ratio of nominal disposable income to the nominal house price index. Real lending rates are calculated as the rate on loans to households for house purchase with over five and up to ten years' initial rate fixation minus annual HICP inflation.

#### Chart C Residential investment in the euro area

(annual percentage changes; percentages)

real housing investment (left-hand side)
 housing investment-to-GDP ratio
 (right-hand side)



Sources: Eurostat and ECB calculations

prices, in the form of housing investment, will remain subdued. A major challenge in this latter respect will be the reabsorption of resources elsewhere in the economy, particularly in those countries where the correction in housing sector activity is most pronounced.

#### 3.5 THE OUTLOOK FOR INFLATION

Annual HICP inflation has remained well above the level consistent with price stability since last autumn, reaching 3.7% in May 2008 and – according to Eurostat's flash estimate – 4.0% in June. This results largely from sharp increases in energy and food prices at the global level in recent months. Elevated and persistent external price pressures, stemming from price developments in those commodities, combined with intensifying domestic pipeline pressures and an acceleration of wage dynamics, point to a protracted period of high annual rates of inflation. On the basis of current futures prices for oil and non-oil commodity prices, the annual HICP inflation rate is likely to remain well above 2% for quite some time, moderating only gradually in 2009.

Risks to price stability over the medium-term horizon remain clearly on the upside and have increased further over the past few months. These risks include notably the possibility of further increases in energy and food prices. There is also a very strong concern that price and wage-setting behaviour could add to inflationary pressures via broadly based second-round effects. Furthermore, there are potential upside risks from unanticipated rises in indirect taxes and administered prices.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

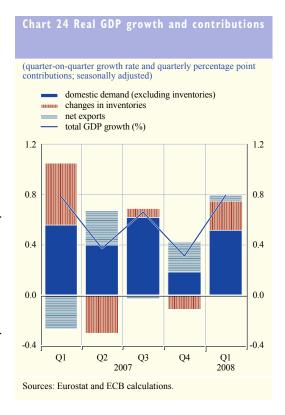
Real GDP growth in the first quarter of 2008, at a quarter-on-quarter rate of 0.8%, was strong. This partly reflected temporary factors, notably the unusually mild winter in many parts of Europe which appears to have boosted construction activity. Consequently, real GDP in the second quarter is expected to be rather weak. Surveys of business and consumer confidence, which have indicated a decline in confidence since the summer of 2007, suggest that the moderation in the underlying pace of economic activity has continued in 2008. The fundamentals of the euro area economy remain sound. The euro area does not suffer from major imbalances. Profitability of non-financial corporations has been sustained, the level of employment is high and unemployment stands at levels not seen for 25 years. However, uncertainty about the prospects for economic growth remains high and risks surrounding the outlook for economic activity are on the downside.

#### 4.1 OUTPUT AND DEMAND DEVELOPMENTS

#### **REAL GDP AND DEMAND COMPONENTS**

According to Eurostat's first estimate, euro area real GDP grew by 0.8% in the first quarter of 2008 (revised upwards by 0.1 percentage point compared with the flash estimate), following growth of 0.3% in the previous quarter (see Chart 24). Domestic demand excluding inventories made a strong contribution to euro area real GDP growth in the first quarter of the year, of 0.5 percentage point, while inventories also provided a positive contribution of 0.2 percentage point. The contribution of net trade was broadly neutral.

The strength of euro area real GDP growth in the first quarter reflected to a large extent the exceptional growth observed in Germany, at 1.5% quarter on quarter, partly on account of very strong investment growth in the country (at 4.0% quarter on quarter). Mirroring these developments, investment growth in the euro area increased to 1.6% quarter on quarter in the first quarter of 2008, following growth



of 1.0% in the previous quarter. The breakdown of investment growth for the first quarter has not yet been released at the euro area level, but both construction and non-construction investment are likely to have grown strongly. Developments in the construction sector are likely to reflect the unusually mild weather conditions in the winter and are therefore expected to be short-lived (see the section on sectoral output below). However, investment growth in the first quarter was also driven by the high levels of capacity utilisation and the corresponding need for capacity expansion in the business sector.

Capacity constraints were partly compounded by the sustained pace of external demand, as reflected in the increase in the growth of euro area exports in the first quarter of the year, to 1.9% quarter on quarter, from 0.3% in the previous quarter. However, in line with buoyant domestic and external

Output, demand and the labour market

demand, the growth of imports also increased in the first quarter, to 1.8% quarter on quarter, from -0.3% in the previous quarter.

Part of this acceleration in imports was related to the moderate recovery of private consumption growth in the first quarter of 2008, which rose to 0.2% quarter on quarter, from -0.1% in the previous quarter. Private consumption showed signs of weakness at the end of 2007, which may have been related to the sharp rise in retail prices for food and energy.

The improvement in private consumption in the first quarter of 2008 was partly due to a stabilisation in retail sales, which had declined by 0.9% in the last quarter of 2007 (see Chart 24). This stabilisation reflected a slight increase in the sales of non-food products (0.1%), in particular textiles, which offset a decline in the sales of food, beverages and tobacco products (-0.4%). New passenger car registrations in the euro area decreased by 3.0% quarter on quarter in the first quarter of 2008. Therefore, it is very likely that most of

art 25 Retail sales and confidence in the tail trade and household sectors (monthly data) total retail sales 1) (left-hand scale) consumer confidence 2) (right-hand scale) retail confidence<sup>2)</sup> (right-hand scale) 3.0 12 2.5 10 2.0 8 1.5 6 1.0 0.5 2 0.0 0 -0.5-2 -10 -4 -1.5 -6 -2.0 2004 2005 2006 2007 Sources: European Commission Business and Consumer Surveys and Eurostat 1) Annual percentage changes; three-month moving averages; working day-adjusted. 2) Percentage balances; seasonally and mean-adjusted.

the growth in private consumption stemmed from its non-retail component, although no monthly or quarterly statistical series are available for this part of consumption.

Available indicators suggest subdued growth in private consumption in the second quarter of 2008. Euro area retail sales declined by 0.6% month on month in April, following a decline of 0.9% in March (see Chart 25). New passenger car registrations declined by 5.7% month on month in May, having declined by 2.4% in April. The European Commission's retail trade confidence indicator, which captures the perceptions of retailers, declined again in June. This indicator, which has been affected by significant volatility in the recent past, remains at a high level despite having declined notably in the course of 2007 and early 2008. According to the European Commission, euro area consumer confidence declined further in June 2008, thus suggesting that the stabilisation observed in the first quarter may not last. This partly reflects a worsening of consumers' expectations regarding the general economic situation and their personal finances. Nevertheless, labour market conditions remain supportive for private consumption. Recent developments in private consumption are analysed in more detail in Box 5.

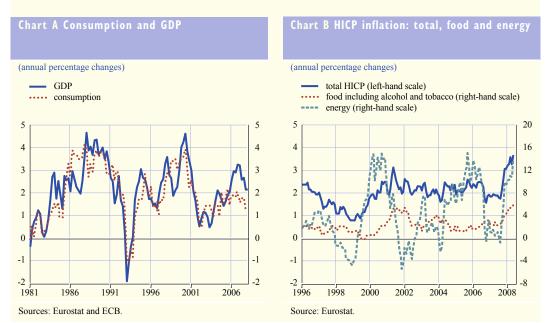
#### Box 5

#### RECENT DEVELOPMENTS IN PRIVATE CONSUMPTION AND THE IMPACT OF PRICE INCREASES

Overall economic activity has outpaced household spending since the recovery began in 2003, and compared with previous economic upturns consumption growth has been relatively moderate (see Chart A). Private consumption contracted by 0.1% (quarter on quarter) in the final quarter of 2007 and increased by just 0.2% in the first quarter of 2008. Available indicators of spending such as retail trade, consumer confidence and new car registrations currently suggest subdued growth in the second quarter. This box looks at the factors underlying recent developments in private consumption.

Although household spending decisions are motivated by a range of factors, a key determinant is household income. In principle, households base their consumption on present and expected future real disposable income derived from labour compensation and returns on financial and non-financial wealth. However, some households may place more weight on current (rather than expected) income developments. Over recent years, households' disposable income has been supported by strong employment growth. However, at the same time, it has been dampened by a series of price shocks. Increases in indirect taxes and administered prices have reduced households' purchasing power. Furthermore, towards the end of 2007, sharp increases in food and energy prices raised the cost of households' typical consumption basket: HICP inflation rose from 1.9% in June 2007 to 2.9% in the last quarter of 2007 and 3.4% in the first quarter of 2008 (see Chart B).

Faced with an increase in prices, households' purchasing power declines. In the long run households would need to adapt spending to account for that change. But the short-term adjustment may depend on the nature of the price shock or expectations about future price developments. While households need to adjust to increases in indirect taxes and administered prices, they may be reluctant to reduce consumption of items such as food and fuel and instead choose to lower savings temporarily rather than scale back consumption – particularly if they



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believe the price increases are likely to be temporary. In the past, when prices increases were driven by food and energy consumers typically tended to moderate spending to a smaller extent than when inflation reflected price increases in other goods and services.

However, in late 2007 and early 2008 the opposite happened. Private consumption moderated sharply, while the available evidence suggests that the savings ratio even rose slightly. One reason may be that households believe that the factors driving the recent oil and food price increases are likely to be more permanent. They may therefore be less likely, in this instance, to accommodate the price shock in the short term with a temporary adjustment in savings. As a result, the recent price increases may have affected household spending more than during past episodes of relatively short-lived price increases. An additional factor may be that inflation perceptions are particularly sensitive to price increases for frequently purchased items such as food and fuel and that this has dampened households' confidence regarding the economic outlook and their purchasing power.

While recent price increases appear to have had an important influence on current household spending patterns, other developments may also be playing a role. In particular, households may have been affected by the financial turmoil that began in mid-2007. Households' financial wealth has declined while, according to the ECB's latest bank lending survey, credit conditions on loans to households have further tightened. The turmoil may also have increased uncertainty about the prospects for economic activity. The European Commission's consumer confidence indicator has declined significantly since August 2007, with a particularly sharp deterioration in households' expectations about the general economic situation.<sup>1</sup>

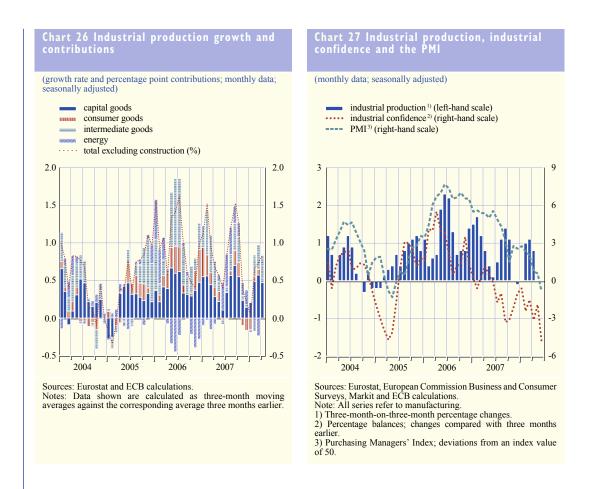
Overall, there seems to have been a number of factors contributing to the relative weakness of household spending in the recent past. Looking ahead, growth in household spending is expected to continue at a modest pace during the remainder of 2008, mainly on account of the real income losses resulting from higher prices, a slower pace of employment growth and wealth effects, in particular from lower house price growth. In 2009, as inflation is projected to decline gradually and real income to recover, private consumption growth is expected to rise again.<sup>2</sup>

- 1 It is worth noting that, although the balances summarising households' responses to questions on prices are not included directly in the overall European Commission measure of consumer confidence, changes in households' inflation perceptions and expectations may have affected consumer confidence.
- 2 See the section entitled "Eurosystem staff macroeconomic projections for the euro area" in the June 2008 issue of the Monthly Bulletin.

#### **SECTORAL OUTPUT**

The contribution of the services sector to euro area total value added was 0.5 percentage point in the first quarter of 2008, compared with 0.2 percentage point in the previous quarter. The contribution of both the industrial sector and the construction sector to value added growth in the first quarter was 0.2 percentage point, following a contribution of 0.1 percentage point in the fourth quarter of 2007.

The resilience of the industrial sector appears to have continued at the beginning of the second quarter of 2008. Euro area industrial production (excluding construction) increased by 0.9% month on month in April (see Chart 26). Production rebounded for all the main industrial groupings (excluding energy) but it was particularly strong in the production of capital goods (2.0% month on month). In contrast, the production of energy represented a drag on growth in April, probably reflecting mild weather conditions. Meanwhile, the overall dynamism of industrial growth was



somewhat dampened by the moderation in industrial new orders (excluding heavy transport equipment). These declined by 0.2% in April 2008, having increased by 1.0% in March. It is likely that part of the strength in industrial production growth reflects the high backlog in order books in the industrial sector.

The positive developments since the start of the year should not be seen as an indication of a change in the trend of moderating growth observed in the industrial sector in recent quarters. This trend remains visible in the Purchasing Managers' Index (PMI) for the manufacturing sector, which has declined in the course of 2008 (see Chart 27). In June, the manufacturing PMI fell further, to 49.2, which is below the threshold indicating positive growth. A similar picture is portrayed by the European Commission's industrial confidence indicator, which continued to decline in the first half of 2008.

Production in the construction sector decreased by 0.6% month on month in April 2008, having declined by 2.7% in March. Recent data confirm that the very pronounced rebound observed at the beginning of this year was mainly on account of very mild weather conditions. Construction confidence declined in June, according to the European Commission's indicator, thereby signalling a resumption of the downward trend in this indicator seen since the end of 2006.

As regards developments in the services sector, survey data available up to June 2008 point to moderating growth in this sector. On average, the level of the PMI for services business activity

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in the second quarter of 2008 was below the level observed in the previous quarter. In June, the PMI for services stood at 49.5, slightly below the threshold indicating positive growth and at a three-year low. A similar picture of moderation is conveyed by the Commission's services confidence indicator, although slight increases in confidence have been observed in the last two months. The weaker performance of the services sector likely reflects the impact of the various shocks that have recently affected the euro area economy, stemming in particular from the financial turmoil and the rises in food and oil prices. The sub-sectoral breakdown of these surveys suggests that the impact of these shocks was broadly based across services.

Summing up, the available data for both the industrial and services sectors suggest at present that the moderation in the underlying pace of economic activity has continued in 2008. As part of the rebound in real GDP growth observed in the first quarter is likely to reflect temporary factors, like the unusually mild winter, or quarterly volatility, it is expected that real GDP growth will be rather weak in the second quarter of 2008.

#### 4.2 LABOUR MARKET

The euro area labour market has shown a clear improvement in recent years, and, despite moderating somewhat, this favourable performance has continued in the first half of 2008. In particular, employment expectations, although weakening, remain positive and underpin the assessment that labour market prospects are broadly favourable.

#### **EMPLOYMENT**

Euro area employment growth was 0.3% quarter on quarter in the first quarter of 2008 (see Table 7), following an increase of the same magnitude in the previous quarter (revised upwards by 0.1 percentage point). The sectoral breakdown will only be available with the second release of the national accounts.

The favourable developments in the euro area labour market in recent years appear to have persisted up to mid-2008, based on survey data available to June 2008 (see Chart 28). According to the Markit (formerly NTC Economics) PMI survey, job creation continued in the second quarter of 2008 in both the

(percentage changes compared with			justed)				
	Annual 1	ates	Quarterly rates				
	2006	2007	2007	2007	2007	2007	2008
			Q1	Q2	Q3	Q4	Q1
Whole economy	1.6	1.8	0.5	0.5	0.4	0.3	0.3
of which:							
Agriculture and fishing	-1.5	-1.0	0.8	-0.6	-1.0	-0.6	
Industry	0.5	1.4	0.6	0.2	0.0	0.2	
Excluding construction	-0.4	0.3	0.1	0.1	0.0	0.2	
Construction	2.6	3.8	1.9	0.4	-0.1	0.3	
Services	2.2	2.1	0.5	0.7	0.7	0.4	
Trade and transport	1.5	1.7	0.4	0.8	0.8	0.1	
Finance and business	3.8	4.2	1.3	1.3	0.7	0.8	
Public administration 1)	2.0	1.3	0.1	0.3	0.5	0.4	

<sup>1)</sup> Also includes education, health and other services.



industrial and services sectors. The employment expectations reported in the European Commission's Business and Consumer Survey convey a similar picture. Notwithstanding the weakening of employment indicators observed in both surveys in recent months, labour market conditions have so far remained broadly resilient despite the climate of heightened uncertainty regarding economic growth prospects. The high levels of employment attained in various regions and sectors of the euro

area have led to a certain degree of tightness in the labour market. Anecdotal evidence from large corporations operating in various sectors in a number of euro area countries points to difficulties in recruiting staff with the required skills, particularly in segments where highly qualified staff are needed. This is in line with the conclusions of the 2008 Structural Issues Report published by the ECB entitled "Labour supply and employment in the euro area: developments and challenges" (see Box 6).

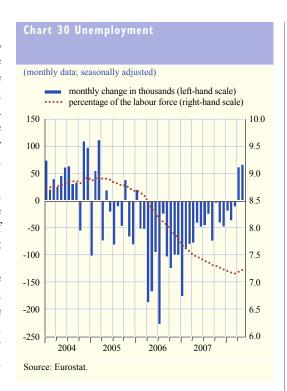
Year-on-year labour productivity growth (per person employed) was 0.6% in the first quarter of 2008, after 0.4% in the previous quarter (see Chart 29). This is the first increase in year-on-year labour productivity growth since the end of 2006 and is likely to reflect the temporary strength of activity in the first quarter. Data available from the PMI survey also point to some improvement in labour productivity growth in April and May 2008.



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#### UNEMPLOYMENT

The euro area unemployment rate stood at 7.2% in May 2008, unchanged with respect to the previous five months (see Chart 30). This figure is the lowest rate seen since the early 1980s and is significantly below the rate of 7.5% recorded a year ago. The unchanged rate masks an increase in the number of unemployed, with a further 62,000 unemployed in May 2008 compared with April - the first time since February 2005 that the number of unemployed increased in two consecutive months. The increase can be attributed to a marked rise in the number of unemployed in Spain (of 77,000) and slight increases in Germany, Ireland and Portugal. Apart from Germany, developments in the construction sector were the main driver behind the rise in the number of unemployed in these countries. Overall, in the euro area as a whole, the number of unemployed remains considerably lower than the number recorded one year ago, having fallen by around 200,000.



#### Roy 6

#### LABOUR SUPPLY AND EMPLOYMENT IN THE EURO AREA: DEVELOPMENTS AND CHALLENGES

On 25 June the ECB published its 2008 Structural Issues Report entitled "Labour supply and employment in the euro area countries: developments and challenges". This report describes and analyses the main developments in labour supply and its determinants in the euro area since the early 1980s. Furthermore, it reviews the links between labour supply and labour market institutions in order to assess how well labour supply reflects the demand for labour in the euro area and to identify future challenges for policy-makers.

This box briefly reviews the main developments in labour supply for the period 1996-2007, which were generally favourable:<sup>2</sup>

- (i) Euro area employment growth accelerated significantly, with the equivalent of 21.6 million more people entering employment. This contributed to a substantial 3.9 percentage point reduction in the unemployment rate, which stood at 7.5% in 2007 (see the table). Since 1996, the total labour market participation rate<sup>3</sup> has risen by 5.6 percentage points to 70.8% in 2007 and the employment rate rose by 7.7 percentage points to 65.5%.
- 1 The cut-off date for euro area data included in the report was 14 December 2007. The euro area aggregate therefore refers to the 13 countries that formed the euro area in 2007.
- 2 These developments are based on annual data from the spring surveys of Eurostat's Labour Force Survey (EU-LFS) up to 2007. More recent data suggest some further improvement.
- 3 The participation rate refers to the number of people employed plus the number unemployed divided by the total working age population.

- (ii) The composition of labour supply changed over the period under review, with growing numbers of women and immigrants entering the labour market and older workers remaining in the labour market for longer. The participation rates of these groups increased by 9.0 percentage points, 7.4 percentage points and 10.5 percentage points respectively from 1996 to 2007. Over time, changes in educational levels, preferences and social norms have played a role in boosting female labour market participation.
- (iii) Experiences with immigration vary considerably from country to country, but on the whole, non-EU15 immigrants<sup>4</sup> contributed positively to labour supply and employment during the period under review, enhancing competition in labour markets and helping to fill skills shortages. Alongside the increase in immigration to the euro area, cross-border commuting within the euro area rose threefold.
- (iv) The share of the working age population with a higher level of education, in particular tertiary education, increased by 6 percentage points to 20.7% in 2007. This implies that the number of people with tertiary level qualifications rose by 16.7 million. The proportion of low-skilled workers in the euro area decreased by 9 percentage points to 37.7% over the period under review.
- (v) While the number of workers increased, the average number of hours worked per week declined by a total of 1.2 hours in the euro area. The ratio of part-time employment to total employment rose by around 5 percentage points.

These encouraging developments result in part from the implementation of product and labour market reforms and wage moderation. However, there is no room for complacency. Unemployment rates are still unacceptably high and much higher than in other developed

4 Immigrants from the new EU Member States and non-EU countries

(percentage points; percentages)

	Total chang	e over the period	1996 to 2007	Level in 2007				
	Participation	Employment	Unemployment	Participation	Employment	Unemployment		
Total	5.6	7.7	-3.9	70.8	65.5	7.5		
According to gender								
Males	2.1	4.1	-2.9	78.4	73.2	6.6		
Females	9.0	11.2	-5.5	63.2	57.8	8.6		
According to age								
15-24 years old	0.3	3.7	-7.8	44.0	37.3	14.8		
25-54 years old	4.8	7.0	-3.2	84.6	79.1	6.6		
55-64 years old	10.5	10.5	-1.9	46.4	43.4	6.5		
According to level of e	ducation							
Low	5.2	6.9	-3.9	63.5	57.6	9.3		
Medium	2.9	4.4	-2.4	80.4	75.3	6.4		
High	0.6	2.8	-2.5	88.3	84.7	4.1		
According to nationalit	ty							
Nationals	3.7	6.4	-4.5	70.9	65.9	7.0		
Other EU15	2.5	3.9	-2.2	73.7	67.6	8.2		
citizens								
Non-EU15 citizens	7.4	9.5	-5.2	69.6	59.3	14.7		

Sources: EU-LFS (spring data), ECB and Nationale Bank van België/Banque Nationale de Belgique calculations. Note: EU15 refers to those countries that formed the EU prior to 2004

# ECONOMIC AND MONETARY DEVELOPMENTS

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economies such as the United States or Japan. In addition, unemployment rates are particularly high for some groups of workers (see the table). For example, in 2007 the unemployment rate was 14.8% for young people (up to 33% for 15-19 year olds in some countries), 9.3% for low-skilled workers (up to 17% in some countries) and 14.7% for non-EU15 immigrants (up to 28% in some countries). Moreover, demographic projections show that, unless participation rates increase even further, the increase in the number of people entering the labour market will soon no longer be sufficient to compensate for the reduction in size of the working-age population. Finally, progress in terms of structural reform has varied considerably across countries.

Looking ahead, it is important that countries learn from each other, as well as from best practices, in order to develop new and improved labour market institutions and structural policies. The report identifies the following policy measures as particularly important.

First, there is a need to further optimise structural policies in the euro area and to increase labour market participation and employment among all groups of society. Lower marginal tax rates, stricter work availability requirements and reduced incentives to retire early would contribute to stimulating labour supply. Fewer restrictions on working time and labour contracts alongside well-designed "work/family reconciliation" policies (such as the provision of affordable childcare, parental leave and part-time work opportunities) would promote labour market participation.

Second, labour market institutions need to be more flexible in order to better match those seeking a job with the characteristics of firms' labour demand (by skill, sector and region). Wage developments should reflect local labour market conditions (such as regional and skill-specific unemployment rates, regional and sectoral productivity growth and workers' skills), and institutional arrangements that hinder the employment of low-skilled workers (such as excessive minimum wages) should be avoided.

Third, there is a need to improve skills and knowledge levels, as well as to increase the transferability of skills. Over time, bringing unemployed or inactive people into jobs will enhance individuals' labour productivity and thus real wages. Good-quality education is of the utmost importance. The efficiency and service orientation of educational establishments should be improved and the labour market should play a greater role in signalling to education systems and workers which skills are in short supply.

Finally, the euro area should make better use of skills from outside the euro area. Its immigration policy should take into account the skills needed by the labour market, facilitate labour mobility and ensure the successful integration of immigrants into the active workforce and society as a whole. Selective migration policies that limit labour mobility within the EU should be avoided and replaced by measures that support labour market mobility, such as the increased portability of pension rights. In order to fully reap the benefits of the euro and to allow adjustment mechanisms to operate efficiently within the enlarged currency area, it is important that all remaining barriers to labour mobility within the euro area are removed.

These policy measures also have implications for monetary policy. The implementation of structural policy measures which enhance labour supply and employment growth speeds up the pace at which an economy can grow without higher inflation. Increasing the number of people in

employment and the level of skills among the workforce will also help to support the euro area's potential output and per capita income, as well as to finance pension and health care systems. Well-designed and flexible labour and product market institutions are essential for this process. Greater flexibility in euro area labour markets and wages would reduce adjustment costs and inflation pressures in the event of adverse supply shocks and would augment the economy's resilience, thus facilitating the conduct of the stability-oriented monetary policy of the ECB. In addition, there is a need for greater flexibility in terms of wages and labour mobility in order to limit employment losses in the event of adverse country-specific shocks and thereby facilitate the functioning of EMU.

#### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

The information available remains broadly in line with a scenario of moderate but ongoing real GDP growth. Both domestic and foreign demand are expected to support real GDP growth in the euro area in 2008, albeit to a lesser extent than during 2007. While moderating, growth in the world economy is expected to remain resilient, benefiting in particular from continued robust growth in emerging economies. This should support euro area external demand. As regards domestic developments, the fundamentals of the euro area economy remain sound and the euro area does not suffer from major imbalances. In this context, investment growth in the euro area should continue to support economic activity, as rates of capacity utilisation remain elevated and profitability in the non-financial corporate sector has been sustained. Moreover, employment rates and labour force participation have increased significantly in recent years, and unemployment rates have fallen to levels not seen for 25 years. However, these developments, which support household disposable income and consumption, are unlikely to fully compensate the loss of purchasing power caused by higher energy and food prices.

The uncertainty surrounding this outlook for economic activity remains high, owing not least to the very high levels of commodity prices, and downside risks prevail. In particular, risks stem from the dampening impact on consumption and investment of further unanticipated increases in energy and food prices. Moreover, downside risks continue to relate to the potential for the ongoing financial market tensions to affect the real economy more adversely than anticipated. Concerns about the emergence of protectionist pressures and the possibility of disorderly developments owing to global imbalances also imply downside risks to the outlook for economic activity.

Exchange rate and balance of payments developments

# 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

#### **5.1 EXCHANGE RATES**

After peaking in the second half of April, the euro largely stabilised in May and June, amid some volatility. On 2 July the euro stood in effective terms broadly at the same level as at the end of March and 8% above its 2007 average.

#### EFFECTIVE EXCHANGE RATE OF THE EURO

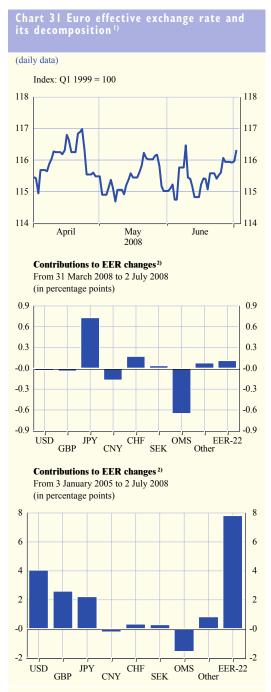
On 2 July 2008 the nominal effective exchange rate of the euro – as measured against the currencies of 22 of the euro area's important trading partners – was broadly unchanged from its level at the end of March 2008 and 8% higher than its average level in 2007 (see Chart 31). In the course of the past three months, the euro initially appreciated, reaching a peak in late April. It then depreciated and broadly stabilised.

The overall stability of the effective exchange rate of the euro over the past three months was the result of largely offsetting movements in bilateral rates. A significant strengthening of the euro vis-à-vis the Japanese yen and, to a lesser extent, the Korean won and Swiss franc, was counterbalanced by a weakening vis-à-vis some of the currencies of the new EU Member States, most notably the Hungarian forint.

Taking a longer-term perspective, the nominal effective exchange rate of the euro stood on 2 July 7.8% higher than at the beginning of 2005. This appreciation can be largely attributed to a strengthening of the single currency in nominal bilateral terms vis-à-vis the US dollar, the pound sterling and the Japanese yen (see Chart 31).

#### **US DOLLAR/EURO**

After appreciating vis-à-vis the US dollar throughout most of April, the euro subsequently depreciated to stabilise in a range from USD 1.55 to USD 1.57 in June. While the initial strengthening of the euro was driven to some extent by shifting market expectations regarding the relative resilience of economic activity in the two economies, subsequently market concerns



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-22 changes are displayed individually for the currencies of the six main trading partners of the euro area. The category "Other Member States (OMS)" refers to the aggregate contribution of the currencies of the non-euro area Member States (except the GBP and SEK).

The category "Other" refers to the aggregate contribution of the

The category "Other" refers to the aggregate contribution of the remaining six trading partners of the euro area in the EER-22 index. Changes are calculated using the corresponding overall trade weights in the EER-22 index.

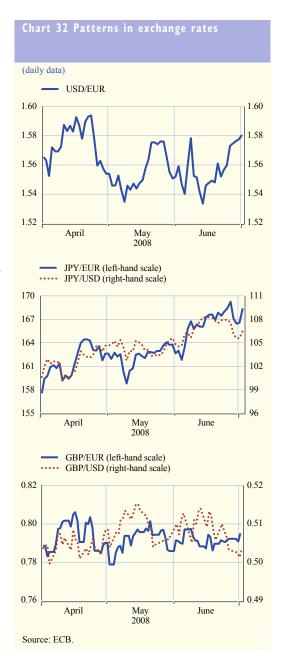
about the US inflation outlook appear to have become a more important factor. This may have contributed to the weakening of the euro vis-à-vis the US dollar owing to the associated shifts in market expectations about relative monetary policy stances in the United States and in the euro area. The euro traded on 2 July at USD 1.58, broadly unchanged from its level at the end of March 2008 and 15.3% stronger than its average level in 2007 (see Chart 32).

#### **JAPANESE YEN/EURO**

After remaining broadly stable throughout May, the euro appreciated vis-à-vis the Japanese yen in June. Together with an initial appreciation in April, this resulted in an overall appreciation of 7% between the end of March and 2 July, with the euro trading at JPY 168.41 on 2 July, 4.4% above its average in 2007 (see Chart 32). The strengthening of the euro vis-à-vis the Japanese yen may in part be related to some deterioration in the outlook for the Japanese economy and the increased attractiveness of the Japanese currency for carry trade activity. After peaking around mid-March, expectations of future volatility in the bilateral JPY/EUR exchange rate, as captured by options-prices-based indicators, have subsided to their historical average, thereby reducing the riskiness of carry trade positions.

#### **EU MEMBER STATES' CURRENCIES**

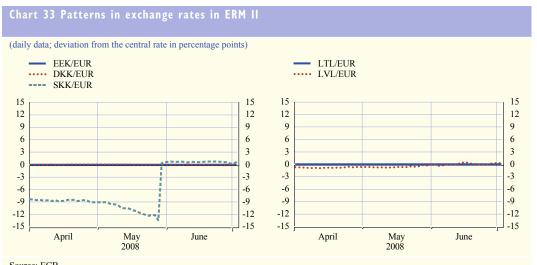
Since the end of March 2008, most currencies participating in ERM II remained stable vis-à-vis the euro and continued to trade at, or close to, their respective central rates (see Chart 33). Following the revaluation of its central rate within ERM II by 17.64% with effect from 29 May, the Slovak koruna traded consistently slightly weaker than its new central rate of SKK/



EUR 30.1260, standing on 2 July 0.6% below this rate. The Latvian lats remained broadly stable vis-à-vis the euro in the first six months of 2008 and, on 2 July, traded close to its central rate.

With regard to the currencies of other EU Member States not participating in ERM II, between the end of March 2008 and 2 July 2008, the euro was broadly stable vis-à-vis the pound sterling, notwithstanding some short-term volatility. Over the same period, the euro depreciated vis-à-vis the currencies of some of the new EU Member States: by 8.9% against the Hungarian forint, 4.7% against the Polish zloty, 5.8% against the Czech koruna and 2.4% vis-à-vis the Romanian leu.

Exchange rate and balance of payments developments



Source: ECB. Note: A positive (negative) deviation from the central rate against the euro implies that the currency is on the weak (strong) side of the band. For the Danish krone, the fluctuation band is  $\pm 2.25\%$ ; for all other currencies, the standard fluctuation band of  $\pm 15\%$  applies. The central rate of the Slovak koruna in ERM II was revalued by 17.6472% with effect from 29 May 2008.

#### **OTHER CURRENCIES**

Between the end of March and 2 July 2008, the euro appreciated by 4.7% vis-à-vis the Korean won and by 2.5% vis-à-vis the Swiss franc. At the same time, it depreciated by 2.3% against the Chinese renminbi and 1.3% against the Singapore dollar, while remaining broadly stable vis-à-vis the Swedish krona and the Canadian dollar.

#### **5.2 BALANCE OF PAYMENTS**

The 12-month cumulated current account surplus continued to contract compared with its level a year earlier, reaching a close-to-balance position (in seasonally adjusted terms) in the 12-month period to April 2008. This largely reflected a widening deficit in current transfers and income accounts. In the financial account, combined direct and portfolio investment registered cumulative net inflows of  $\epsilon$ 8 billion in the 12-month period to April 2008, compared with net inflows of  $\epsilon$ 6 billion a year earlier. This decrease mainly reflected lower net inflows in portfolio investment.

#### TRADE AND THE CURRENT ACCOUNT

The latest balance of payments data show a rebound in exports growth in the three-month period to April 2008, accompanied by a decline in imports growth. In seasonally adjusted terms, the value of extra-euro area exports and imports of goods and services grew by 2.3% and 1.2% respectively, with the former being consistent with the robust growth in foreign demand (see Table 8). The rebound in export growth was mainly the result of developments in the exports of goods, which were only partly offset by decreasing exports of services. By contrast, the slowdown in imports growth reflected subdued growth in the value of imported goods and a decrease in the value of imported services. In the three-month period to April 2008, imports of goods grew by 2.1%, compared with 3.2% in the previous three-month period. At the same time, imports of services declined by1.6%, compared with positive growth of 0.5% in the preceding three-month period.

seasonally adjusted, unless otherwise in	dicated)							
seasonany adjusted, diffess otherwise in		Three-month moving average figures ending				12-month cumulate		
	2008	2008	2007	2007	2008	2008	2007	200
	Mar.	Apr.	July	Oct.	Jan.	Apr.	Apr.	Ap
		EUR bi	llions					
Current account	-13.2	-0.3	4.3	2.5	-4.8	-2.0	10.3	(
Goods balance	-2.9	5.9	5.7	5.5	0.7	2.5	37.5	4.
Exports	127.7	135.6	125.1	128.7	127.9	132.3	1,436.0	1,54
Imports	130.6	129.7	119.4	123.2	127.2	129.8	1,398.5	1,49
Services balance	4.3	3.3	3.6	4.7	4.5	4.6	45.2	5
Exports	41.5	41.6	40.5	42.1	42.1	41.6	455.7	49
Imports	37.1	38.2	36.9	37.4	37.6	37.0	410.5	44
Income balance	-3.9	-2.1	0.7	0.6	-1.4	-1.6	7.7	-
Current transfers balance	-10.8	-7.4	-5.7	-8.2	-8.6	-7.4	-80.1	-8
inancial account 1)	11.6	21.4	15.4	0.1	0.8	2.7	121.3	5
Combined net direct and portfolio								
investment	-16.4	-23.7	17.2	-3.6	2.7	-13.6	268.0	
Net direct investment	-16.3	-24.2	-17.6	-3.7	-13.7	-20.2	-133.5	-16
Net portfolio investment	-0.1	0.5	34.8	0.1	16.4	6.6	401.5	17
Equities	12.4	-20.9	41.7	-6.0	14.0	8.9	214.8	17
Debt instruments	-12.5	21.4	-6.8	6.1	2.4	-2.3	186.7	-
Bonds and notes	-0.9	1.9	-1.1	-0.0	14.0	-0.6	251.6	3
Money market instruments	-11.5	19.5	-5.8	6.2	-11.5	-1.7	-64.9	-3
	Percentag	e changes o	ver previou	s period				
Goods and services								
Exports	-3.6	4.7	0.8	3.2	-0.5	2.3	11.5	
Imports	1.7	0.1	1.5	2.8	2.6	1.2	11.0	
Goods								
Exports	-4.5	6.1	1.2	2.9	-0.6	3.4	12.4	
Imports	1.1	-0.7	1.1	3.3	3.2	2.1	11.7	
Services								
Exports	-0.7	0.2	-0.5	4.0	-0.1	-1.2	8.7	
Imports	3.8	3.0	2.9	1.4	0.5	-1.6	8.6	

Source: ECB

Note: Figures may not add up due to rounding.

The breakdown of trade in goods into volumes and prices, available up to the first quarter of 2008, indicates that the sharp rise in the price of both oil and non-oil commodities seems to be the main factor behind the growth in import values. By contrast, import volumes have continued to decline. With regard to euro area exports, prices picked up recently and also increased relative to producer prices. Export volumes accounted for a large part of the relatively strong growth rate of export values of goods in recent months. Largely reflecting positive developments in foreign demand, export volumes increased by 2.1% in the three-month period to March 2008. This resulted from relatively broad-based export growth, including a pick up in exports to the United States and the United Kingdom – towards which euro area exports had been stagnant or in decline since early 2007 – and to oil-exporting countries, whose demand for euro area goods and services has grown at a sustained pace since 2003. Against the background of the significant increase in oil prices, Box 7 examines in more detail the "recycling" of oil revenues through the trade channel and assesses its possible impact on euro area export growth. Looking ahead, the outlook for euro area export volumes may weaken somewhat, in line with indications from surveys assessing export order-book levels.

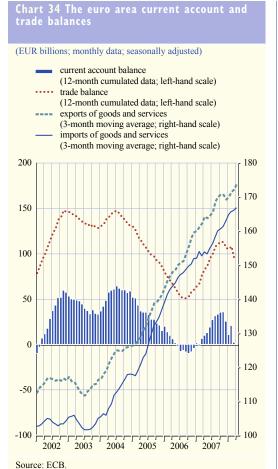
<sup>1)</sup> Figures refer to balances (net flows). A positive (negative) sign indicates a net inflow (outflow). Not seasonally adjusted.

Exchange rate and balance of payments developments

Taking a longer-term perspective, the 12-month cumulated current account recorded a close-to-balance position in April 2008, with surpluses in goods and services offsetting the deficits in current transfers and income. The shift to a close-to-balance position from a surplus in the current account of  $\in 10.3$  billion a year earlier was primarily on account of developments in the income and current transfers deficits, which – in 12-month cumulated terms – deteriorated by  $\in 12.9$  and  $\in 9.6$  billion respectively (see Chart 34) More recently, the decline in the current account surplus was also driven by the decline in the goods surplus that started in October 2007.

#### FINANCIAL ACCOUNT

In the three-month period to April 2008, euro area combined direct and portfolio investment recorded average monthly net outflows of  $\in 13.6$  billion, as opposed to net inflows of  $\in 2.7$  billion in the three-month period ending in January 2008 (see Table 8). Higher net outflows in direct investment, which increased by  $\in 6.5$  billion, were associated with lower net inflows in portfolio investment, which declined by  $\in 9.8$  billion. This decline in net inflows of portfolio investment mainly reflected lower net purchases of euro area equities and a shift from net inflows to net outflows in debt instruments.



#### Roy 7

#### OIL-BILL RECYCLING AND ITS IMPACT ON EXTRA-EURO AREA EXPORTS

Over the past few years, oil prices have increased sharply, with the reference Brent crude oil price rising from USD 20 per barrel in January 2002 to more than USD 135 per barrel in June 2008. This sustained increase in oil prices has generated large gains in export revenues for oil-exporting countries¹ and has implied a significant redistribution of wealth from oil-importing to oil-exporting countries and important shifts in their respective external balances. In the euro area in particular, the sustained rise in oil prices since 2002 has led to a significant deterioration in the current account balance.² However, these additional oil export revenues normally return, at least partially, to oil-importing economies, either through stronger exports or increased capital inflows, helping to mitigate the initial negative impact of rising oil prices in their respective external balances. This box examines the trade channel of this "oil-bill recycling" and assesses its possible impact on euro area export growth.

- 1 In this box, oil-exporting countries refer to major OPEC countries (Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela) plus Oman and Russia.
- 2 See also the box entitled "Oil-bill recycling and extra-euro area exports" in the April 2007 issue of the Monthly Bulletin.

#### Import demand from oil-exporting countries

The sustained rise in oil prices since 2002 has led to a notable increase in the annual export revenues of major oil-exporting countries, from approximately USD 412 billion in 2002 to USD 1,259 billion in 2007. At the same time, imports rose from USD 226 billion to USD 842 billion, which corresponds to an average annual rate of increase of about 26% in nominal terms, well above the world average growth in imports.

The euro area is among the regions which have benefited significantly from the rising import demand from oil-exporting countries. Despite the growing share of Asian economies in these markets, the euro area has succeeded in maintaining a relatively high and stable market share over recent years (see Chart A). This positive outcome is, however, mainly driven by Russia, as the euro area has in recent years seen a decline in its import market share for other oil-exporting countries (mainly OPEC countries), from around 25% in 2002 to 21% in 2007. At the same time, the market share of the United States in total imports of oil-exporting countries (including Russia) decreased considerably from 12% in 1999 to 7.5% in 2007.

#### Impact on extra-euro area export growth

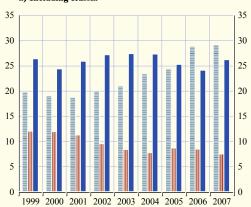
From a euro area perspective, the growing import demand from oil-exporting countries and the relatively successful performance of

## Chart A Import market shares of selected economies in oil-exporting countries

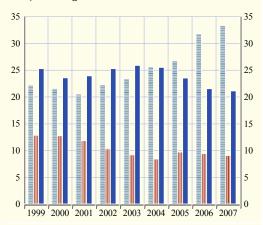


(percentages)

#### a) Including Russia



#### b) Excluding Russia



Sources: IMF and ECB calculations.

the euro area in these markets has resulted in a significant increase in euro area export volumes to these countries (see Chart B). Between 2002 and 2007, the annual growth in export volumes of goods to OPEC members and Russia was, on average, 7% and 17% respectively, i.e. significantly above the average growth in extra-euro area export volumes of goods (of around 5%).

Overall, oil-exporting countries have increased in importance for euro area exports since 2002, both as a destination market and in terms of their contribution to foreign demand. As suggested by the comparison of export value shares by destination country or region in total euro area exports between 2002 and 2007, there has been a reorientation of extra-euro area exports towards Russia and OPEC members, but also towards the new EU Member States. The increasing share of these countries has been mirrored by a declining share of exports

Exchange rate and balance of payments developments

directed towards more advanced economies (see Chart C). Against this background, oil-exporting countries have also become a more important contributor to euro area foreign demand<sup>3</sup>, with an estimated contribution of about a quarter of the annual growth of total euro area foreign demand in 2007. Apart from the increase in the share of these countries in euro area exports, this higher contribution is mainly attributed to the strong rise in import volumes of oil-exporting countries.

The overall strong performance of euro area exports to oil-exporting countries notwithstanding the strengthening of the euro against the US dollar - can be attributed to two major factors: the geographical proximity of the euro area to most major oil exporters and the structure of import demand from oil-exporting countries. First, geographical proximity puts the euro area at an advantage, in particular, in comparison to the United States. This is particularly true in the case of Russia. Second, the structure of import demand from oil-exporting countries is determined by the pattern of their economic expansion, which in most countries is investment-led, driven, in particular, by rising public expenditure on infrastructure. European exporters seem to be well-positioned to satisfy this demand for capital goods.

Overall, although the high price of oil has had a negative direct impact on the euro area current account, it appears that increased demand from oil-exporting countries has had a mitigating effect. There has been a notable increase in export volume growth from the euro area to oil-exporting countries during the recent oil price boom, which have been significantly above the average growth in total extra-euro area exports.

## Chart B Extra-euro area exports of goods by destination

(volume indices: Q1 2002 = 100; seasonally adjusted; 3-month moving average)



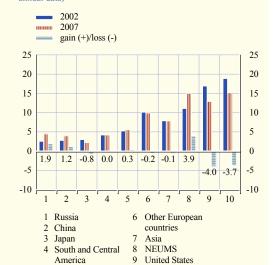
--- United States
United Kingdom



Sources: Eurostat and ECB calculations. Note: Latest observation refers to April 2008, except for total and United Kingdom (March 2008).

## Chart C Extra-euro area export value shares by destination

(value shares; gains and losses in shares (in percentage points);



Sources: Eurostat and ECB calculations.

Notes: Latest observation refers to February 2008, except for Russia, CEEC and OPEC. Figures in the chart refer to gain (+)/ loss (-) in market shares. NEUMS denotes non-euro area EU Member States that have joined the EU since 2004.

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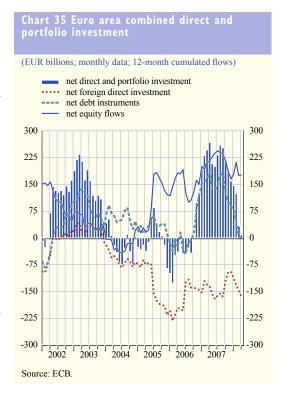
United Kingdom

5 OPEC

<sup>3</sup> Foreign demand contributions are calculated by multiplying the annual growth rate of imports of the respective extra-euro area trading partner with the share of this country or region in total extra-euro area exports.

As regards portfolio investment, the decrease in net equity flows in the three months to April was mainly driven by lower inflows of investment by foreign residents in euro area equity securities. This decline notwithstanding, foreign residents remained net purchasers of euro area equities, in line with positive equity returns differentials between the euro area and the United States. Meanwhile, euro area residents repatriated investment in foreign equities, continuing a trend that started in January 2008 and that may be connected to renewed credit-related concerns and associated increased risk aversion. The shift from net inflows in debt instruments to net outflows mainly reflected lower net purchases of euro area bonds and notes by non-residents, which took place despite the widening gap between euro area and US interest rates, in favour of investment in the euro area.

Turning to direct investment, the observed higher net outflows were mainly related to repatriations by foreign residents of equity capital, reinvested



earnings and inter-company loans. At the same time, net outflows of euro area investment abroad diminished, in line with a somewhat worsened outlook for euro area multinational enterprises, the stock market valuations of which generally declined after having steadily improved in the course of the past few years.

In the 12-month period to April 2008, combined net inflows in direct and portfolio investment amounted to close to  $\in 8$  billion, representing a considerable decline compared with net inflows of  $\in 268$  billion a year earlier (see Chart 35). This decrease largely resulted from lower net inflows in portfolio investment ( $\in 173.9$  billion), which, in turn, mainly reflected lower net purchases of euro area bonds and notes by non-resident investors. The cumulated portfolio equity investments by foreign residents in the euro area also declined over time, despite an increase in the expected earnings growth differential between the euro area and the United States since May 2007. Meanwhile, net outflows in direct investment increased relative to a year earlier, recording cumulative net outflows of  $\in 165.9$  billion in the 12-month period to April 2008.

In general, and notwithstanding the fact that financial flows are generally characterised by volatile data, the overall picture seems to suggest that cross-border direct and portfolio investment continued to be affected by the credit market turmoil which began in August 2007, with investors generally remaining cautious in their foreign investment strategies.

### **ARTICLES**

# ONE MONETARY POLICY AND MANY FISCAL POLICIES: ENSURING A SMOOTH FUNCTIONING OF EMU



The euro area is characterised by a unique combination of centralised monetary policy-making and largely decentralised, albeit closely coordinated, fiscal policy-making (as well as other economic policies which are decentralised but not covered in this article). This feature of "one monetary policy and many fiscal policies" is at the heart of the institutional setting which governs the interactions between monetary and fiscal policies in the euro area and aims to ensure a smooth functioning of EMU. This article summarises insights from the macroeconomic literature on how to appropriately design the interactions between monetary and fiscal policies in currency areas and links them to key features of the institutional setting of the euro area. The main focus of the article is on conceptual issues. The article stresses the advantages of conducting monetary and fiscal policies within a rules-based framework and discusses selected empirical indicators which summarise the conduct of monetary policy and fiscal policies in the euro area over the period 1999-2007. Drawing on this evidence, the article concludes that the significant dividends offered by a rules-based framework are at risk if policy-makers fail to deliver results in line with the stated objectives.

#### **I INTRODUCTION**

The institutional framework of EMU is unique. It is characterised by a single monetary policy assigned to the supranational level (i.e. the Community level) and by largely decentralised fiscal policies, which remain a competence of sovereign Member States but are subjected to rules-based coordination procedures. The framework is based on clearly specified objectives and a clear allocation of responsibilities between policy areas. Given the large number of policymakers involved in the decision-making process, these features are indispensable to ensure a smooth and effective functioning of EMU. As regards the interactions between monetary policy and fiscal policies, the framework is conducive to well-aligned policy outcomes provided that all policy-makers live up to their responsibilities.

Against this background, this article summarises insights from recent contributions to the macroeconomic literature on how to design the interactions between monetary and fiscal policies in monetary unions. The article contributes to a better understanding of the rationale behind the main provisions and guiding principles of the institutional framework of EMU which govern the relationship between monetary and fiscal policy-making. The article also considers selected empirical indicators which summarise the conduct of monetary policy and fiscal policies in the euro area over the period 1999-2007.

Overall, although it is satisfactory from a historical perspective, the performance of monetary and fiscal policies exhibits considerable differences between the two fields in an environment characterised by a sequence of severe challenges stemming from a number of unexpected adverse shocks. With regard to monetary policy, price stability has been broadly achieved, despite the fact that strong global commodity price increases – on which monetary policy has no direct influence - have affected Europe and the rest of the world, leading to an average inflation rate that has been slightly above 2% since the launch of the euro. While there is no room for complacency, this is a remarkable result. In the decades before the launch of the euro, average annual inflation rates in the individual countries were significantly higher than those in the euro area over the period 1999-2007. The overall assessment of fiscal policy is nuanced. On the one hand, the overall fiscal position of the euro area has improved significantly in recent years. On the other hand, some euro area countries have still to achieve and maintain sound fiscal positions, as well as reduce government debt ratios to more sustainable levels. In this respect, the failure in many cases to

1 For a comprehensive discussion of the institutional arrangement, also covering numerous aspects not addressed in this article, as well as the ECB's monetary policy strategy, see the June 2008 Special Issue of the Monthly Bulletin on the occasion of the tenth anniversary of the euro. See also the article entitled "The relationship between monetary policy and fiscal policies in the euro area" in the February 2003 issue of the Monthly Bulletin.

consolidate public finances more rapidly in good times has been especially disappointing.

Section 2 reviews insights from the literature on how to design monetary and fiscal policy-making, focusing in particular on issues specific to monetary unions. Section 3 summarises key features of the institutional arrangements and guiding principles of monetary policy and fiscal policies in the euro area. Section 4 takes an empirical perspective and summarises the conduct of monetary policy and fiscal policies in the euro area for the period 1999-2007. Section 5 concludes.

# 2 PRINCIPLES AND INSTITUTIONAL PREREQUISITES FOR SOUND MONETARY AND FISCAL POLICY-MAKING IN A MONETARY UNION

This section identifies widely agreed principles and institutional prerequisites for sound monetary and fiscal policy-making. It first addresses a number of general issues before turning to aspects which are unique to the euro area and related to the combination of centralised monetary policy and decentralised, albeit closely coordinated, fiscal policies in a monetary union.

## MONETARY AND FISCAL INTERACTIONS: GENERAL ISSUES

First, the monetary policy provisions of the institutional framework should respect the fundamental insight that the maintenance of price stability is the single most important contribution that monetary policy can make to sustainable economic growth, job creation, prosperity and social stability. This assessment is supported by ample empirical evidence and well grounded in economic theory.<sup>2</sup> Moreover, it is widely understood that monetary policy can affect price developments only with significant and variable time-lags, making it impossible to fine-tune the inflation rate at short horizons. This insight calls for a medium-term orientation of monetary policy.

Second, the fiscal policy provisions of the institutional framework should respect the fundamental insight that sound and sustainable fiscal policies are indispensable requirements for growth and prosperity. This insight is firmly grounded in the public finance and growth literature. It is also of high relevance from the perspective of monetary policy, since it ensures that fiscal policies, if conducted in this way, will be conducive to a macroeconomic environment in which the task of a stability-oriented central bank will be substantially facilitated.<sup>3</sup>

Third, the institutional arrangement should not only allow for a clear assignment of objectives among policy-makers, but also support this assignment by granting the central bank a high and encompassing degree of independence, thereby insulating the central bank from political influence on the conduct of monetary policy. This institutional feature is indispensable for the central bank to be able to maintain price stability, in the light of various interdependencies between monetary and fiscal policies. On the one hand, fiscal policy matters for monetary policy. In particular, in addition to the demand-side effects of fiscal policy (which often directly affect the inflation outlook), fiscal policy also shapes the supply side of the economy and how it responds to monetary policy measures. Moreover, certain fiscal measures, such as changes in indirect taxes and administered prices, have a direct impact on price developments. On the other hand, monetary policy matters for fiscal policy. In particular, monetary policy decisions affect the overall budget constraint of the public sector because changes in interest rates and inflation expectations (which, in the medium term, are influenced by monetary policy) affect the interest burden on government debt. From this perspective, a credible monetary policy can contribute directly to a smooth conduct of fiscal policies by ensuring that low inflation expectations and low inflation risk premia are incorporated in

<sup>2</sup> For a detailed summary, see the article entitled "Price stability and growth" in the May 2008 issue of the Monthly Bulletin.

<sup>3</sup> See the article entitled "Fiscal policies and economic growth" in the August 2001 issue of the Monthly Bulletin.

the core responsibilities of fiscal policy-makers. In particular, these responsibilities should include a credible fiscal commitment to respect the objective pursued by monetary policy, as discussed in further detail in Box 1.

longer-term government bond yields. Because of these (and further) interdependencies, there is a need to embed the mandates of independent and stability-oriented central banks in broader-based institutional arrangements which also address

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## REQUIREMENTS FOR PRICE STABILITY: MAIN INSIGHTS FROM THE LITERATURE ON MONETARY AND FISCAL INTERACTIONS

The literature on monetary and fiscal interactions typically starts out from the observation that any consistently specified dynamic general equilibrium model needs to allow for an intertemporal public sector budget constraint which entails budgetary contributions from both monetary and fiscal policy. For a simple exposition, this constraint, from a closed economy perspective, can be written as follows:

(1) 
$$\frac{R_{t-1} B_{t-1} + M_{t-1}}{p_{t}} = \sum_{s=0}^{\infty} s_{t+s}^{f} + s_{t+s}^{m}$$

Equation (1) captures the broad insight that, in any representative period t, the real value of outstanding nominal public sector liabilities issued in the past (i.e. the left-hand side of the equation) needs to be backed in equilibrium by an appropriately sized stream of discounted future surpluses (i.e. the right-hand side of the equation). Specifically, in equation (1) the term  $s_{t+s}^f$  denotes the discounted value of the primary fiscal surplus (i.e. the difference between tax revenues and government expenditures) in some future period t+s, while  $s_{t+s}^m$  refers to the discounted seigniorage income earned by the central bank in the same period. The latter is linked to the interest income that the central bank earns on the assets backing the monetary base in its balance sheet and returns to the fiscal authority as a transfer.\(^1\) Concerning the left-hand side of equation (1),  $M_{t-1}$  denotes the stock of outstanding nominal base money which is a predetermined variable from the perspective of period t. Similarly,  $B_{t-1}$  denotes the predetermined stock of interest-bearing nominal government debt, carrying the nominal interest factor  $R_{t-1}$ , while  $p_t$  denotes the price level prevailing in period t.

For the central bank to be able to control inflation over the medium term, it is well understood that monetary policy must not be overburdened with other objectives. Given the budgetary interdependence of monetary and fiscal policies summarised by equation (1), this general insight implies that monetary policy needs to be conducted within an institutional arrangement that rules out any type of "fiscal dominance". In this context, two distinct channels have been identified in the recent literature.

First, seigniorage transfers from the central bank to the fiscal authority can be a substitute for taxation. In other words, a "lax" fiscal authority – i.e. one which seeks to avoid the short-term political costs associated with enforcing fiscal discipline – may face an incentive to extract from the central bank pre-specified seigniorage contributions to the overall budget. To rule out such a

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<sup>1</sup> Strictly speaking, only currency in circulation earns zero interest. However, as long as the interest paid on reserves is below the market interest rate, the net interest income earned by the central bank on reserves will also be positive.

constellation, there is the need for an institutional arrangement which guarantees that the central bank enjoys full independence at all times to conduct monetary policy operations consistent with its inflation objective, irrespective of the budgetary implications for equation (1). In the extreme situation that the fiscal authority is forced to default on outstanding debt, this requirement includes that monetary policy be protected through a no-bailout clause.

Second, for given expectations of the entire stream of seigniorage revenues of the independent central bank, the private sector may nevertheless perceive fiscal policies to be unsustainable without this immediately leading to an open default. Instead, to the extent that outstanding government liabilities are issued in nominal terms, such expectations may cause revaluations of these liabilities in real terms through once-and-for-all adjustments in the price level, triggered through wealth effects of fiscal expansions on private expenditures. To prevent such a scenario, a fiscal commitment is needed, complementing the first requirement, which ensures that public debt always remains on a sustainable path which does not exert any pressure on the prevailing price level. The logic of this revaluation channel, when applied to a monetary union, implies that an increase in government debt of one member country, when not backed by future tax increases, may exert a certain upward pressure on the union-wide price level. Hence, this channel naturally supports recommendations to limit the debt issuance of member countries via fiscal rules.<sup>2</sup>

2 For detailed (closed-economy) expositions of these two channels, see, in particular, T. Sargent and N. Wallace (1981), "Some unpleasant monetarist arithmetic", Federal Reserve Bank of Minneapolis Quarterly Review, Fall, pp. 1-17, and M. Woodford (2001), "Fiscal requirements for price stability", Journal of Money, Credit, and Banking, 33/3, pp. 669-728. For a discussion in the context of monetary unions, see, for example, P. Bergin (2000), "Fiscal solvency and price level determination in a monetary union", Journal of Monetary Economics, 45/1, pp. 37-53.

Fourth, the arrangement of monetary and fiscal policies should take into account that over the past few decades macroeconomic theory has witnessed a profound reassessment of the benefits of rules-based policies, as opposed to purely "discretionary" policies. It is now widely understood that the latter type of policy, which assumes that policy-makers reoptimise their current and future conduct period by period in response to changing circumstances, under the mistaken assumption that private sector expectations will not internalise such ad hoc behaviour over time, tends to be self-defeating and costly.

There are numerous ways to exemplify this general insight, which affects all areas of policymaking. For example, attempts to increase employment through an expansionary monetary policy at any given level of nominal wages (which embody, inter alia, expectations about future inflation) cannot have lasting employment effects, because inflation expectations will adjust.<sup>5</sup> However, it is also understood that policy-makers may find it difficult to credibly

refrain from this type of discretionary behaviour, unless they receive adequate support from the institutional set-up.<sup>6</sup>

As regards monetary policy, central bank independence, when combined with the unambiguous mandate to maintain price stability and a consistently communicated medium-term orientation of monetary policy, goes a long way towards reaping the benefits associated with a rules-based policy. In this context, it is important to stress that the announcement of a quantitative definition of price stability acts as a commitment

- 4 Seminal papers in this context include F. Kydland and E. Prescott (1977), "Rules rather than discretion: the inconsistency of optimal plans", Journal of Political Economy, 85/3, pp. 473-91, and R. Barro and D. Gordon (1983), "Rules, discretion and reputation in a model of monetary policy", Journal of Monetary Economics, 12/1, pp. 101-121.
- 5 Similarly, attempts to increase government revenues through higher capital taxes at a given level of the economy's capital stock (which depends, inter alia, on expectations of future tax rates) may be self-defeating if, over time, investment decisions adjust to higher tax rates.
- For a non-technical overview of these concepts, see, for example, V. V. Chari and P. Kehoe (2006), "Modern macroeconomics in practice: how theory is shaping policy", Journal of Economic Perspectives, 20/4, pp. 3-28.

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device which can be constantly used to monitor and assess the performance of the central bank over the medium term. Moreover, it also acts as an effective implicit coordination device for all other policy-makers.

Concerning fiscal policies, given the constraints associated with political election cycles and the multidimensional set of objectives, similar mechanisms are lacking, implying that fiscal policy-making is more strongly affected by short-term considerations. This implies that the fiscal policy provisions of the institutional arrangement should be sufficiently flexible to accommodate these considerations. In general, short-run fluctuations in economic activity are best dealt with by letting automatic stabilisers operate freely and symmetrically over the cycle. By conducting fiscal policy in this way, imbalances in government debt over the medium to long term are ruled out and inflationary

pressures, which could arise under pro-cyclical fiscal policies, are avoided. This recommendation, as discussed in further detail in Box 2, reflects that the track record of fiscal activism, i.e. the use of discretionary fiscal policy actions aimed at fine-tuning the business cycle, has been disappointing. At the same time, the fiscal policy provisions should ensure that the required shortterm flexibility cannot endanger the long-term sustainability of public finances. To this end, there is a need for mechanisms of effective fiscal surveillance which rule out unsustainable fiscal developments. These mechanisms should be cast in terms of binding rules that respect fundamental principles such as simplicity, transparency and enforceability, thereby ensuring the credibility of the overall framework.7

7 For a detailed exposition of "good" principles of fiscal rules, see G. Kopits and S. Symansky (1998), "Fiscal policy rules", IMF Occasional Paper No 162.

#### Box 2

#### DISCRETIONARY FISCAL POLICY ACTION

The track record of fiscal activism, i.e. fiscal policies aimed at fine-tuning the business cycle, is disappointing. There is ample evidence that the discretionary fiscal policies pursued in the 1970s in many European and other OECD countries did not stabilise their economies as intended, but rather led to a sustained increase in debt-to-GDP ratios. Often, fiscal policy measures turned out to be pro-cyclical, i.e. they exacerbated the cycle, rather than countercyclical as originally intended. The failure of activist fiscal policies can be traced to a number of factors, among which the information, political, implementation and economic lags associated with discretionary fiscal policy measures figure prominently. For activist fiscal policies to be effective, policy-makers need to correctly identify the cyclical state of the economy and fiscal measures need to be implemented in a timely manner, well targeted and temporary. In practice, these conditions are very difficult to meet. Moreover, if fluctuations in short-run economic growth are caused by supply-side rather than demand-side developments, activist fiscal policies aimed at smoothing short-run growth will be destabilising rather than stabilising. Against this background, a consensus view has emerged which states that the best contribution fiscal policy can make to short-term macroeconomic stabilisation is to avoid discretionary fiscal fine-tuning. while ensuring the free operation of automatic stabilisers (the automatic response of taxes and unemployment benefits to the business cycle).1

1 See J. B. Taylor (2000), "Reassessing discretionary fiscal policy", Journal of Economic Perspectives 14 (3), pp. 21-36, and A. Auerbach (2002), "Is there a role for discretionary fiscal policy?", in Rethinking Stabilization Policy, proceedings of the symposium of the Federal Reserve Bank of Kansas City, 29-31 August 2002, pp. 109-150.

While fiscal activism aimed at fine-tuning the business cycle should be avoided, there are circumstances under which discretionary fiscal policy action is warranted. First, the line of theoretical reasoning presented in this article emphasises that ensuring the long-term sustainability of public finances should be the overarching goal of fiscal policy. For countries with unsustainable fiscal positions, this implies the need to take structural consolidation measures to correct the fiscal imbalances. It is sometimes argued that during the transition period there will be a trade-off between the goals of sound public finances and macroeconomic stabilisation. However, there is evidence showing that consolidation measures which correct severe fiscal imbalances are likely to result in only small output costs, if any.<sup>2</sup> Second, discretionary fiscal policy action may be necessary to correct severe internal and/or external macroeconomic imbalances. Third, there may be a need for emergency fiscal policy action in the rare event of a major crisis. Finally, the avoidance of fiscal activism does not relieve the need to adjust policies to the needs of the economy. In particular, in many euro area countries, there is ample scope for improving the quality of public expenditure and taxation in such a way as to promote long-term economic growth and job creation.<sup>3</sup>

- 2 See G. Briotti (2005), "Economic reactions to public finance consolidation: a survey of the literature", ECB Occasional Paper No 38.
- 3 As regards these arguments in the context of the euro area, see the article entitled "Fiscal policies and economic growth" in the August 2001 issue of the Monthly Bulletin and the article entitled "The importance of public expenditure reform for economic growth and stability" in the April 2006 issue of the Monthly Bulletin.

#### **MONETARY AND FISCAL INTERACTIONS: ISSUES** SPECIFIC TO MONETARY UNIONS

In addition to the principles summarised so far, the overall setting should be consistent with the core principles of a monetary union which is characterised by a single monetary policy and many decentralised fiscal policies. For a monetary union of this type, optimal policies should support a clear division of labour between the objectives of centralised and non-centralised policies. Monetary policy should aim to maintain price stability in the monetary union as a whole. By contrast, fiscal policy-makers are well equipped to absorb country-specific shocks. This latter feature calls for a certain degree of flexibility in the conduct of fiscal policies at the national level, mainly through letting automatic stabilisers act as shock absorbers.

At the same time, however, monetary unions of this type create coordination challenges between fiscal policies, which call for constraints on national policies. In this context, notwithstanding the existence of a credible no-bailout clause protecting the central bank, the excessive issuance of national government debt constitutes a widely acknowledged risk. Given the large

number of independent fiscal policy-makers that share the benefits of a single currency and gain access to an enlarged pool of savings, a situation in which free-riding incentives for excessive government borrowing are created needs to be avoided.8 Such incentives arise if national debt can be financed at largely union-widedetermined interest rates which do not fully incorporate adequate and country-specific risk adjustments. If not held in check, these incentives are likely to reinforce each other, leading to higher area-wide fiscal deficits and upward pressure on area-wide interest rates, and thereby to less favourable financing conditions in all participating countries. In principle, financial markets themselves should eliminate such incentives by assigning appropriate risk premia to sovereign debt. Yet, in practice, not least due to short-termism and the herding behaviour of investors, the discrimination between risk characteristics of national government debt by financial markets tends to be imperfectly reliable and often incomplete.9

- For more details, see C. Detken, V. Gaspar and B. Winkler (2004), "On prosperity and posterity: the need for fiscal discipline in a monetary union", ECB Working Paper No 420.
- See the article entitled "Fiscal policies and financial markets" in the February 2007 issue of the Monthly Bulletin.

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To compensate for these features, there is a clear complementary need for a collective fiscal framework that limits the issuance of national government debt.

In sum, monetary unions, by nature, give rise to specific challenges that need to be carefully balanced in the overall framework. In particular, the framework should recognise the requirement to grant fiscal policy-makers the flexibility required at the national level to address, whenever necessary, countryspecific developments. At the same time, the framework should recognise the requirement to strictly impose rules-based discipline on all fiscal policy-makers, thereby ensuring that fiscal policy-makers in each member country achieve and maintain sound budgetary positions.

### INSTITUTIONAL ARRANGEMENTS AND **GUIDING PRINCIPLES OF MONETARY POLICY** AND FISCAL POLICIES IN THE EURO AREA

This section argues that the institutional arrangements and guiding principles of monetary policy and fiscal policies in the euro area are in line with the insights summarised in Section 2. At the same time, given the broad nature of these insights, it is clear that many of the more specific elements of the arrangement in the euro area cannot be understood without knowledge of the historical context and particular characteristics of the participating countries.

#### THE SINGLE MONETARY POLICY

Treaty establishing the European Community assigns responsibility for monetary policy to the Eurosystem and unambiguously entrusts it with the primary objective of maintaining price stability in the euro area over the medium term. To ensure that this assignment can be fulfilled effectively, the Eurosystem and the members of its decision-making bodies have been granted a high degree of independence. To facilitate a clear translation of the general principle of central bank independence into practical terms, the Treaty explicitly covers

a number of its dimensions, thereby ensuring independence from the institutional, personal and financial perspectives.

Moreover, the Eurosystem has been granted functional independence to render operational its mandate of primarily safeguarding price stability in the euro area. In line with this stipulation, the Governing Council of the ECB developed and announced in October 1998 a comprehensive monetary policy strategy. As an important component of this strategy, the Governing Council adopted a quantitative definition of price stability: "Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term." Following a thorough evaluation of the strategy in 2003, the Governing Council clarified that, within the definition, it aims to keep HICP inflation "below, but close to, 2%". Such an approach is sufficient to hedge against the risks of both very low inflation and deflation. The ECB's overall approach to assessing the risks to price stability is based on two analytical perspectives, often referred to as the two "pillars". Within the twopillar framework, the monetary analysis serves mainly as a means of cross-checking, from a medium to longer-term perspective, the short to medium-term indications from the economic analysis. Generally speaking, by offering complementary perspectives, the two pillars ensure an all-encompassing assessment of the risks to price stability.

#### **NATIONAL FISCAL POLICIES**

The institutional arrangements relating to fiscal policies reflect the fundamental principle that fiscal discipline is necessary for the smooth functioning of a monetary union. The Treaty and the secondary legislation provided by the Stability and Growth Pact (SGP) offer effective area-wide fiscal surveillance framework designed to ensure fiscal discipline and the long-term sustainability of public finances. Beyond explicitly prohibiting the financing of government debt through the

central bank and stipulating that neither the Community nor any Member States should be liable for commitments of another Member State (the "no bailout clause"), the Treaty obliges all Member States to avoid excessive deficits. For euro area countries that do not comply with the government deficit and debt ceilings (3% of GDP and 60% of GDP respectively) defined in the Protocol on the Excessive Deficit Procedure (EDP) annexed to the Treaty, the procedure can ultimately lead to sanctions.

The SGP, adopted in 1997, complements and strengthens the EU fiscal framework.10 The "preventive arm" of the SGP, aimed at avoiding excessive deficits, provides for a concrete procedure of multilateral surveillance whereby a "stability programme" has to be submitted each year by countries having joined the single currency. However, non-euro area countries are committed to submitting a "convergence programme". These programmes present a general outlook for economic and fiscal developments in Member States, along with the medium-term objective (MTO) for the structural budget balance, and an adjustment path towards the MTO. The SGP also comprises a set of procedures referred to as the "corrective arm", which aim to ensure a rapid correction of excessive deficits. In particular, the EDP sets out a stepwise procedure to ensure that countries implement timely and efficient measures to reduce high deficits. The reform of the SGP in 2005 introduced more flexibility into the procedures. In particular, the use of discretion in the determination of an excessive deficit was widened and procedural deadlines were extended. Many observers, including the ECB, expressed concerns that these changes would make the EU fiscal framework more complex and less transparent and thereby undermine confidence in the framework sustainability of public finances in the euro area countries.11

The European Commission and the ECOFIN Council, i.e. the Council of the European Union in its composition of economics and finance ministers from all EU Member States,

play a central role in enforcing the EU fiscal framework. The Lisbon Treaty, signed on 13 December 2007, which, after ratification by the EU Member States, is expected to enter into force on 1 January 2009, assigns a more prominent role to the Eurogroup - currently an informal body bringing together, on a monthly basis, economics and finance ministers from the euro area countries. In addition, the Commissioner responsible for Monetary Affairs and the President of the ECB regularly participate in Eurogroup meetings. While not fundamentally modifying the provisions of the current treaties on economic and monetary policy, the Lisbon Treaty stipulates that, on some matters, only euro area countries will be entitled to take decisions. For example, decisions on the non-compliance of euro area countries with the EDP will be taken only by euro area countries, and without the Member State concerned.

### 4 MONETARY POLICY AND FISCAL POLICIES IN THE EURO AREA: SELECTED INDICATORS

This section describes the main outcomes of monetary policy and fiscal policies in Stage Three of EMU for the period 1999-2007 by considering a range of selected indicators, covering both aggregate outcomes and country-specific developments.

### **SELECTED INDICATORS OF MONETARY POLICY**

Table 1 reports averages of annual HICP inflation rates (as well as those of its main subcomponents) for the euro area for the period 1999-2007. Over this period, overall HICP inflation was low on average and remarkably stable by historical standards and when compared with the countries with the best record in terms of price stability in the pre-EMU period. Annual HICP inflation reached its single highest

<sup>10</sup> The SGP consists of a European Council Resolution and Regulations 1466/97 and 1467/97 adopted in 1997, eventually amended in 2005 by Regulations 1055/05 and 1056/05.

<sup>11</sup> See the statement issued by the Governing Council of the ECB on 21 March 2005 and the article entitled "The reform of the Stability and Growth Pact" in the August 2005 issue of the Monthly Bulletin.

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value of 3.1% in May 2001 and its lowest value of 0.8% in February 1999. 12 Nevertheless, average annual HICP inflation over this period was slightly above 2%, and from 2000 average annual inflation rates remained at levels persistently exceeding the upper limit of the ECB's definition of price stability. This outcome was largely due to a sequence of unexpected adverse shocks which occurred over that period, as can be inferred from the lower average values of HICP inflation excluding unprocessed food and energy prices.

Over the entire period, overall inflation was driven, in particular, by substantial contributions from the energy component on account of the surge in oil prices (see Table 1). Food prices also made a substantial contribution to overall HICP inflation, reflecting a number of weather-related shocks, the impact of animal diseases as well as tobacco tax increases. Price developments in the latter components were partly compensated for by overall favourable price developments in non-energy industrial goods, reflecting strong international competition, technical progress and fast productivity growth. Services prices contributed significantly to upward pressures on overall inflation, with annual inflation rates in services standing above annual overall HICP inflation rates in seven out of the nine years, mainly on account of below-average labour productivity in the sector.<sup>13</sup> Since the introduction of the euro, the inflation rates of food and energy components have not only been high on average, but also highly volatile. Chart 1 shows the 24-month rolling window standard deviations of annual growth rates for overall HICP inflation and its food and energy components. The volatility of unprocessed

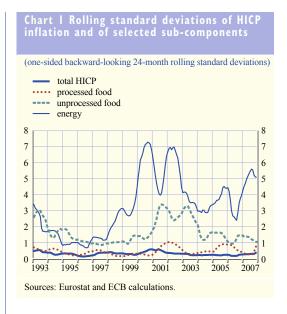
Source: Eurostat.

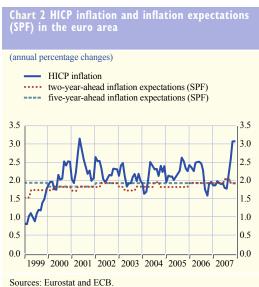
food and energy components was on average high and had a marked time-varying pattern, fluctuating in ranges of between 1% and 3% and 1% and 7% respectively. Despite these very volatile patterns, monetary policy has managed to ensure that the resulting volatility of overall HICP inflation has been remarkably low (i.e. below 1%) and stable over time.

In the light of the importance of unexpected adverse shocks to inflation, a more encompassing way to evaluate the ECB's past performance in terms of its primary objective is to also look at inflation rates expected by market participants. Chart 2 reports for the period 1999-2007 the evolution of inflation expectations two and five years ahead, as measured by the ECB Survey of Professional Forecasters (SPF), together with the realised annual inflation rates. While actual inflation has been fluctuating over time as a result of shocks hitting the euro area economy, inflation expectations have been firmly anchored at levels consistent with the ECB's definition of price stability. Both five-year-ahead inflation two-year and expectations were always below 2%, with the only exception of the third quarter of 2007 when both observations were exactly 2%. In addition, the standard deviation of SPF respondents' point forecasts for five-year-ahead inflation expectations halved between 1999 and 2002 and continued to gradually decline from 0.2% in 2002 to around 0.1% in 2006, where it remained

- 12 More recently, annual HICP inflation reached 3.7% in May 2008.
- 13 For an analysis of recent developments in services prices, see the box entitled "Recent developments in euro area services price inflation" in the April 2008 issue of the Monthly Bulletin.

Table I Ov	erall HI	CP and its sub-compo	nents in t	he euro area			
(average annua	l percentage	e changes)					
	Total	Total excl. unprocessed food and energy	Energy	Unprocessed food	Processed food	Non-energy industrial goods	Services
1999-2007	2.06	1.73	5.05	2.37	2.41	0.77	2.28
1999-2003	1.98	1.70	4.08	2.81	2.26	0.84	2.23
2004-2007	2.16	1.76	6.28	1.81	2.58	0.69	2.35





thereafter. This pattern suggests a broader consensus that inflation was perceived as being consistent with the definition of price stability over the medium term. Moreover, if one considers inflation expectations extracted from financial market data and the degree to which they reacted to macroeconomic news in the short term (a measure of the extent to which they were anchored around the objective of the central bank), long-run inflation expectations tended to be insensitive to news in the euro area over the sample period 2003-06.<sup>14</sup>

With regard to links between fiscal policies and inflation, administered prices and indirect taxes are two particularly prominent channels through which governments directly influence price developments in the short term. As shown in Charts 3 and 4, between mid-2003 and the first half of 2007, increases in administered prices virtually always exceeded overall HICP increases. In the second half of 2007, annual rates of changes in administered prices were broadly stable at levels below HICP inflation, with a contribution to overall inflation similar to the value in 2003. This favourable development in administered prices, however, was offset by unusually strong upward pressures on prices coming from changes in indirect taxes. According to ECB staff estimates, the

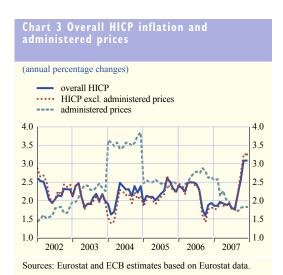
contribution of indirect tax changes to euro area HICP inflation reached about 0.4 percentage point in 2007. This was above the average contribution of about 0.2 percentage point in previous years, mainly owing to the increase in the German VAT rate in January 2007.<sup>15</sup>

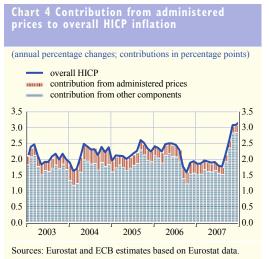
### **SELECTED INDICATORS OF FISCAL POLICIES**

Looking at fiscal developments in the euro area, the period since the introduction of the single currency provides a mixed picture. In the runup to Stage Three of EMU, fiscal deficits were significantly reduced, mainly due to falling interest payments. The convergence of long-term interest rates to lower levels in many countries appears to have been at least in part linked to the set-up of the EU fiscal framework and to countries' efforts to meet the fiscal convergence criteria. <sup>16</sup> In the

- 14 For more details, see M. Beechey, B. Johannsen and A. Levin (2007), "Are long-run inflation expectations anchored more firmly in the euro area than in the United States?", CEPR Discussion Paper No 817, and M. Ehrann, M. Fratzscher, R. S. Gurkaynak and E. T. Swanson (2007), "Convergence and anchoring of yield curves in the euro area", ECB Working Paper No 817.
- 15 See also the box entitled "Measuring and assessing the impact of administered prices on HICP inflation" in the May 2007 issue of the Monthly Bulletin.
- 16 See the article entitled "EMU and the conduct of fiscal policies" in the January 2004 issue of the Monthly Bulletin for a comparison of fiscal policies before and after Stage Three of EMU

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period since 1999, fiscal deficits have on average been much lower than in the early 1990s.

In 1999 and 2000, nominal fiscal balances continued to improve. In these years, no euro area country recorded a deficit above the reference value of 3% of GDP. However, this was the result of a favourable macroeconomic environment. while structural balances deteriorated in many countries due to insufficient consolidation efforts. In the context of the economic downturn that began in 2001, fiscal balances declined and an increasing number of Member States ran the risk of or incurred excessive deficits. In 2003 the average fiscal deficit in the euro area increased to 3% of GDP and, at the same time, five out of the then 12 euro area countries recorded deficits above the reference value. This period provided the first real test of the EU fiscal framework in Stage Three of EMU. The reluctance at that time to follow the rules and procedures of the Treaty and the SGP eroded confidence in the framework and ultimately resulted in a reform of the SGP.

In the period from 2004, the picture improved although fiscal considerably, imbalances persisted in a number of countries. The average euro area fiscal deficit declined to 0.6% of GDP in 2007, the lowest level since the introduction of the euro.17 In addition, no euro area country recorded a deficit above 3% of GDP in 2007. Importantly, over the period 2004-07, the

structural deficit fell on average by more than 0.5% of GDP per year. While this improvement partly reflected revenue windfalls unrelated to structural consolidation measures, it also appears to have reflected a strengthened commitment to sound public finances in a number of countries.

Table 2 provides a summary of fiscal developments over the period from 1999. While the average euro area deficit-to-GDP ratio has declined by 1.6 percentage points since the start of Stage Three of EMU, this cannot be attributed to genuine fiscal consolidation efforts. Rather the decline in the fiscal deficit has been facilitated by the fall in government interest payments (the "EMU premium") associated with the convergence of nominal interest rates in many countries to much lower levels than in the pre-EMU period.18 The low level of longterm interest rates in Stage Three of EMU is, among other factors, an outcome of a credible monetary policy, which has ensured low and stable inflation expectations and low inflation risk premia. Seven euro area countries have seen their interest burden in relation to GDP fall by at least two percentage points. The majority of

<sup>17</sup> This assessment excludes the proceeds from the allocation of mobile phone licences (UMTS), which in 2000 had a one-off deficit-reducing impact of 1% of GDP in the euro area on average.

See the article entitled "Fiscal policies and financial markets" in the February 2006 issue of the Monthly Bulletin.

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		Fiscal balance to GDP ratio		Government debt to GDP ratio		Interest payments to GDP ratio		Primary expenditure to GDP ratio	
	2007	change 1998-2007	2007	change 1998-2007	2007	change 1998-2007	2007	change 1998-2007	
Belgium	-0.2	0.7	84.9	-32.2	3.8	-3.5	45.0	2.0	
Germany	0.0	2.2	65.0	4.7	2.8	-0.6	41.1	-3.6	
Ireland	0.3	-2.1	25.4	-27.6	0.9	-2.4	35.4	4.4	
Greece	-2.8	1.1	94.5	-8.1	4.1	-4.4	39.0	2.3	
Spain	2.2	5.4	36.2	-27.0	1.6	-2.6	37.2	0.3	
France	-2.7	-0.1	64.2	5.4	2.7	-0.6	49.9	0.5	
Italy	-1.9	0.9	104.0	-10.9	5.0	-2.9	43.5	2.5	
Cyprus	3.3	7.4	59.8	1.4	3.2	0.2	40.6	7.0	
Luxembourg	2.9	-0.4	6.8	-0.6	0.2	-0.2	37.3	-3.3	
Malta	-1.8	8.1	62.6	10.1	3.4	0.2	39.1	-0.7	
Netherlands	0.4	1.3	45.4	-20.4	2.3	-2.4	43.6	1.6	
Austria	-0.5	1.8	59.1	-5.1	2.7	-0.9	45.3	-4.5	
Portugal	-2.6	0.8	63.6	11.5	2.8	-0.4	42.9	3.3	
Slovenia	-0.1	2.3	24.1	2.2	1.3	-0.9	42.0	-2.1	
Finland	5.3	3.6	35.4	-12.8	1.5	-2.0	45.9	-3.1	
Euro area	-0.6	1.6	66.4	-6.5	3.0	-1.6	43.3	-0.6	

Source: European Commission, Spring 2008 forecast.

Notes: 2007 levels are expressed as a percentage of GDP. The change between 1998 and 2007 levels is expressed in percentage points. For changes in the fiscal balance, a positive (negative) figure reflects an improvement (deterioration) in the fiscal balance.

these countries have offset the fall in the interest burden by expanding primary expenditure and/or cutting taxes, thereby hindering a faster transition towards sound public finances. Government debt-to-GDP ratios decreased over the period 1999-2007 in a large number of countries, but in about half of the countries, as well as in the euro area as a whole, the debt ratio was still above the 60% reference value in 2007.

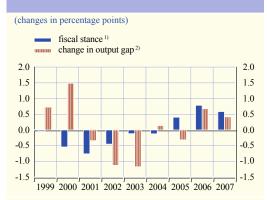
There is also evidence that the conduct of fiscal policies over the economic cycle improved in the second half of the period under review. Chart 5 plots the change in the output gap, measured as the percentage deviation of actual from potential real GDP, against the fiscal stance, measured by the change in the cyclically adjusted primary balance-to-potential GDP ratio, for the euro area over the period 1999-2007. The chart provides information on whether discretionary fiscal policies in the euro area (counter-cyclical) were stabilising destabilising (pro-cyclical) in the individual years over this period. Fiscal policies in any given year are assessed to have been pro-cyclical (counter-cyclical) if the change in the output gap has a different (the same) sign than (as) the fiscal stance in that year. 19 During this period, the euro area economy experienced a cyclical upswing in 1999 and 2000, a downturn over the period 2001-05, interrupted by a year of close to potential growth in 2004, and another upswing in 2006 and 2007. Over the years 1999 and 2000, governments missed an opportunity to make progress with fiscal consolidation in economic "good times". On the contrary, the fiscal stance loosened considerably in 2000, when fiscal policies were pro-cyclical, thereby potentially destabilising the economy and fuelling inflationary pressures. The loosening of the fiscal stance also meant that many countries, which later would be subject to the EDP, had weak starting positions when the economic downturn started.

Chart 5 also reveals that the fiscal stance in euro area countries on average loosened further during the economic downturn that started in 2001, leading to a deterioration

<sup>19</sup> It should be noted that the assessment of the cyclicality of fiscal policies is, to some extent, sensitive to the output gap estimation method used and, for a given estimation method, also complicated by large revisions over time of output gap estimates for a given year. On output gap estimation issues, see the box entitled "The (un)reliability of output gap estimates in real time" in the February 2005 issue of the Monthly Bulletin.

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Source: European Commission, Spring 2008 forecast. Note: Fiscal policies in any given year are assessed to have been pro-cyclical (counter-cyclical) if the change in output gap has a different (the same) sign than (as) the fiscal stance in that year. 1) Fiscal stance is defined as the change in the cyclically adjusted primary balance (as a percentage of potential GDP), excluding UMTS receipts.

OMITS receipts.

2) Output gap is defined as the percentage deviation of actual from potential GDP.

in the fiscal deficit beyond the operation of automatic stabilisers. This is also true for most individual euro area countries, including – with the exception of Portugal – all those countries that would later be subject to the EDP. Fiscal policies in 2006 and 2007 were in many countries fully compatible with the revised SGP, although the measured improvement

in structural budget balances partly reflected revenue windfalls unrelated to structural consolidation measures. At the same time, fiscal policies also contributed to macroeconomic stability in the euro area by undertaking a counter-cyclical tightening of the fiscal stance during the economic upswing.

While the conduct of fiscal policies over most recent years has been satisfactory on average, there is a risk that complacency may set in and that past mistakes might be repeated in the coming years. Almost ten years after the start of Stage Three of EMU, most euro area countries have still not reached their mediumterm budgetary objectives, which are defined in terms of the cyclically adjusted balance net of temporary fiscal policy measures, and which for most countries are set at a balanced budget (see Table 3). A number of countries do not even satisfy the minimum benchmarks calculated by the European Commission as the level of the structural deficit which, except for unusually severe economic downturns, would prevent the deficit from breaching the 3% of GDP reference value. In the absence of additional consolidation efforts, even a moderate deterioration in the macroeconomic environment could entail renewed excessive deficits in these countries.

	Table 3 Structura	I balance,	medium-te	rm objective	and minimum	benchmark
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(as a percentage of GDP	)		
	Structural balance 2007	Medium-term objective (MTO)	Minimum benchmark
Belgium	-0.3	0.5	-1.3
Germany	-0.3	0.0	-1.6
Ireland	0.2	0.0	-1.5
Greece	-3.3	0.0	-1.4
Spain	2.4	0.0	-1.2
France	-2.7	0.0	-1.6
Italy	-1.5	0.0	-1.4
Cyprus	3.5	0.0	-1.8
Luxembourg	2.8	-0.8	-1.0
Malta	-2.4	0.0	-1.7
Netherlands	0.3	-0.5 to -1.0	-1.1
Austria	-1.0	0.0	-1.6
Portugal	-2.2	-0.5	-1.5
Slovenia	-0.7	-1.0	-1.6
Finland	4.9	2.0	-1.2
Euro area	-0.7		

Sources: European Commission, Spring 2008 forecast (for 2007 structural balances), Member States' end-2007 stability programme updates (for medium-term objectives) and European Commission Public Finances in EMU – 2007, p. 95 (for minimum benchmarks).

### 5 CONCLUSION

The institutional framework which governs monetary policy and fiscal policies in the euro area builds on solid conceptual foundations and meets, if adhered to by all policy-makers, all the requirements for the smooth functioning of EMU. It is based on clearly specified objectives and offers a clear allocation of responsibilities which need to be mutually respected. Moreover, all individual policy-makers are equipped with adequate instruments to achieve the objectives which have been assigned to them. Therefore, there is no need for an explicit ex ante coordination of monetary policy and fiscal policies.

This latter assessment is also supported by the overall performance of monetary policy and fiscal policies, which has been satisfactory from an historical perspective. In particular, in comparison with the pre-EMU period, the euro area has been characterised by higher macro-stability, much lower risk premia and inflation expectations, and on average lower fiscal deficits. Despite this broadly positive assessment, the performance of monetary policy and fiscal policies during the period 1999-2007 exhibits considerable differences between the two fields, in an environment characterised by a sequence of major challenges from a number of unexpected adverse shocks. Monetary policy delivered low and stable inflation, albeit on average slightly above 2%. With regard to fiscal policies, the assessment is more nuanced. On the one hand, the overall fiscal position of the euro area improved significantly towards the end of the period under review. On the other hand, a number of countries showed a disappointing lack of ambition to adjust their budgetary positions. This lack of ambition ultimately created a worrying situation, in which not fiscal policies themselves, but rather the rules were adjusted, as evidenced by the reform of the SGP in 2005. The associated challenge of maintaining the credibility of the institutional framework could have been avoided if all fiscal policy-makers had been clearly committed to the agreed rules.

Looking forward, this episode gives rise to an important insight for all policy-makers in the euro area. In particular, it needs to be understood that the significant advantages offered by a rules-based framework are at risk policy-makers fail to deliver results in line with the stated objectives or, even worse, if the framework itself is made responsible for disappointing policy outcomes which rooted in a lack of ambition. Fiscal policymakers should be aware that the real test of the credibility of the reformed SGP is yet to come. Furthermore, to reap the full benefits of the rules-based framework in EMU, the ECB will remain firmly committed to delivering inflation outcomes over the medium term in line with the definition of price stability.

# EURO AREA TRADE IN SERVICES: SOME KEY STYLISED FACTS

The euro area appears to be the largest exporter of services worldwide, accounting for almost one-quarter of total world exports of services. In part, this substantial share reflects a large domestic market for services, which seems to be a key factor in developing export capacity in this and other sectors of the economy. At the same time, euro area trade is relatively balanced in terms of specialisation, with exports evenly spread across many manufacturing and services sectors. By contrast, other major world exporters of services, such as the United States and the United Kingdom, are more specialised in specific sectors such as financial services. Notwithstanding these differences, in most countries trade in services still remains relatively subdued compared with trade in goods. While this is due partly to the intrinsically lower tradability of services, greater and more pervasive barriers to trade in services also seem to play a role. Looking ahead, measures to integrate further the EU's internal market for services may boost the international competitiveness of the euro area both in services and in manufacturing and also lead to sizeable welfare gains for the euro area economy.

### I INTRODUCTION

Services provide the bulk of employment and income in most developed countries. In areas such as finance or telecommunications, they also provide vital input for the production of other services and goods. However, despite their dominant role in the domestic economy of the euro area and of other industrialised countries, trade in services has not expanded as vigorously as trade in goods.

Against this background, this article reviews the key stylised facts pertaining to euro area trade in services. Furthermore, it assesses the performance of the euro area in this area of economic activity relative to global trends and in comparison with other major developed and emerging market economies. The article also discusses the importance of boosting trade in services by streamlining the regulation of the services sectors of the euro area.

Sections 2 and 3 look into the main trends in the euro area's trade in services in terms of economic importance and patterns of specialisation. Section 4 investigates whether the euro area is moving into the services sectors where global export growth is most dynamic. Section 5 assesses the role regulatory barriers play in hindering the cross-border tradability of services and discusses the potential welfare gains from the liberalisation of trade. Finally, Section 6 concludes.

# 2 MAIN TRENDS IN EURO AREA TRADE IN SERVICES

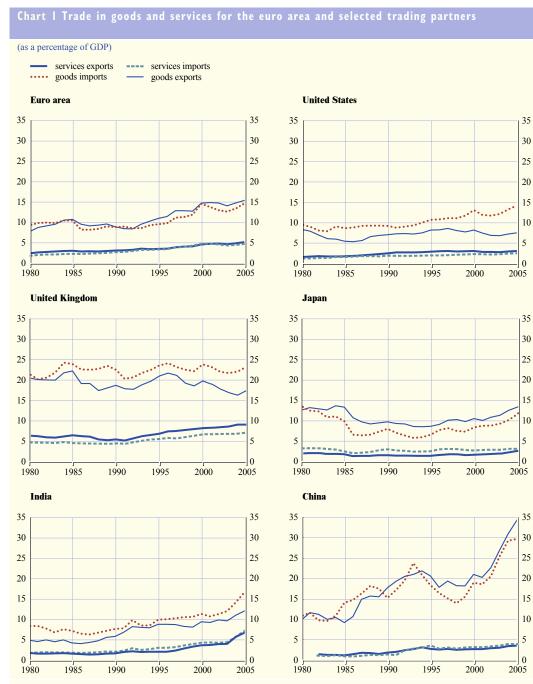
In 2005 the total value of euro area exports of goods and services (including intra-euro area trade) was about €3.160 billion.¹ Exports of services represented about one-fifth of this figure and 8% of euro area GDP. At the same time, about 19% of total extra-euro area exports were in services, accounting for 5% of GDP (see Chart 1). Imports of services were of broadly similar magnitudes. The relatively small share of services in euro area trade appears to be in sharp contrast to their contribution to the euro area domestic economy. For instance, in 2005 services represented 72% of the euro area's total value added, while a similar percentage of the euro area workforce was employed in services industries. Moreover, the importance of services in total euro area production has been rising over time, as opposed to the declining shares of agriculture and industry. In other major industrialised economies, such as Japan, the United Kingdom and the United States, as well as in emerging market economies, including India and China, trade in services accounts for a broadly similar share of overall economic activity.2 In all of these countries, exports of services represent less than 10% of GDP.

### **ARTICLES**

Euro area trade in services: some key stylised facts

<sup>1</sup> The article does not cover trade in services for the period after 2005, as data are only partially available for the years 2006 and 2007.

<sup>2</sup> The choice of these countries reflects their status as some of the major world exporters of services.



Sources: International Monetary Fund Balance of Payments Statistics Yearbook (as reported by the World Bank's World Development Indicators) and ECB calculations.

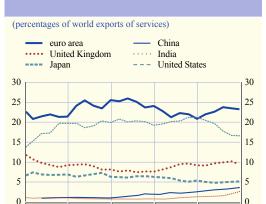
Notes: Trade in goods and services is based on nominal data. The last observation refers to 2005. Euro area data exclude Cyprus, Malta and Slovenia.

In nominal terms, the euro area appears to be the largest exporter of services worldwide. In 2005 it supplied the rest of the world with 23% of the services traded globally (see Chart 2). The

euro area's positive performance reflects a large domestic market and regional, cultural, linguistic and historical ties that, in many services sectors, play a key role as a platform for developing

Euro area trade in services: some key stylised facts

## Chart 2 Shares in the world export market for services



Sources: Eurostat, World Bank and ECB calculations. Notes: Export market shares are measured in nominal terms. The last observation refers to 2005. Euro area data exclude Cyprus, Malta and Slovenia

1995

2000

2005

1990

export capacity (see Box 1). Moreover, the euro area's share of world exports of services has been relatively stable over the past decade, unlike its share of world manufacturing, which has declined. By contrast, the United States, which is the second largest exporter of services in nominal terms (accounting for 16% of world exports), has in the recent past experienced sizeable declines in its share of global trade in services, possibly reflecting to some extent valuation effects derived from the weakening of the US dollar. For their part, the United Kingdom (which accounts for 9% of world exports) and Japan (which accounts for about 5%) have had broadly stable world market shares, while China and India (supplying around 3% each) have respectively doubled and quadrupled their market shares in the last decade, albeit from a very low base.

### Box

1980

1985

### **DETERMINANTS OF TRADE IN SERVICES**

In many services sectors, a large and open domestic market plays a key role as a platform for developing export capacity. Empirical estimates derived from standard gravity models lend support to this view, indicating that the greater the economic size and economic freedom of the exporting country (and, to a lesser extent, of the importing country), the greater the trade in services. Moreover, estimates have been found to be robust to different measures of size (value of GDP, population and value added) and economic freedom.<sup>1</sup>

Regional, linguistic, cultural and historical ties are also important. Empirical estimates indicate that existing regional trade agreements – designed to facilitate trade in goods among neighbouring countries – have a positive effect on trade in services. Moreover, services exports are estimated to be about 50% larger between countries using the same language, other things being equal. Linguistic, cultural and geographical elements are particularly important in the successful marketing of services in sectors such as education, traditional medicine and information services. Diaspora populations have also proven critical in many sectors, for example in information technology and audiovisual services.

Distance also matters. As the distance between the importing country and the exporting country increases, trade in services declines faster than trade in goods, owing perhaps to the fact that many services require proximity between producers and consumers. Finally, while a common border greatly enhances bilateral trade in goods, it does not seem to play a role in trade in services.

<sup>1</sup> See, for example, F. Kimura and H. H. Lee, "The gravity equation in international trade in services", Review of World Economics, 142, 2006, pp. 92-121, and D. Mirza and G. Nicoletti, "What is so special about trade in services?", Research Paper 2004/02, Leverhulme Centre for Research on Globalisation and Economic Policy.

The geographical distribution of the euro area's trade in services seems to confirm the findings of empirical gravity studies. In addition to featuring a strong regional component, it is influenced by the economic size of trading partners, as well as by cultural, historical and linguistic ties. Indeed, intra-euro area exports account for around 39% of total intra and extra-euro area trade in services. Moreover, 25% of all extra-euro area exports are destined for the United Kingdom, followed by the United States and Switzerland (with 19% and 10% respectively). On the imports side, about 23% of services originate from the United States. The euro area's second most important supplier is the United Kingdom (accounting for 21% of imported services), followed by Switzerland (which accounts for 9%). By contrast, the trade in services of the United States is geographically more diverse, reflecting its different regional, historical and cultural ties (see table).

### 3 PATTERNS OF SPECIALISATION

Notwithstanding the euro area's sizeable global market share as an exporter of services, the question arises of how the euro area compares with its major competitors in terms of trade specialisation in services. While the focus of the analysis is on services, in order to provide a benchmark for such an assessment, evidence for manufacturing and commodities is also reported. Chart 3 shows export specialisation indicators for the euro area, China, India, Japan, the United Kingdom and the United States across nine broad economic sectors. These include four services sectors (insurance and financial services, travel, transport, and the composite sector of computer, information and other business services<sup>3</sup>) and five goods sectors (manufacturing, agriculture, fuel, food, and ores and metals). A value greater than 1 on the specialisation index indicates that a country specialises in exports in a given sector, as it implies that the share of the sector in the country's exports is higher than the share of the same sector in world exports. Conversely, an index value smaller than 1 indicates that a country lacks specialisation in a given sector,

Geo	ographica	l breakdo <sup>°</sup>	wn of euro area and
US	trade in	services in	n 2005

(percentages)

4		
Trading partner	Exports	Imports
euro area		
United States	19	23
United Kingdom	25	21
Japan	3	2
Switzerland	10	9
Other European countries	13	17
Emerging Asia	8	7
Argentina, Brazil, Chile and Mexico	2	2
Rest of the world	20	19
United States		
Euro area	19	23
United Kingdom	11	10
Japan	13	7
Canada	9	7
Emerging Asia	14	17
Argentina, Brazil, Chile and Mexico	10	9
Rest of the world	24	27

Sources: Eurostat, OECD and ECB calculations. Notes: Data refer to extra-euro area trade. Euro area data exclude Cyprus, Malta and Slovenia.

since the share of that sector in world exports outweighs its share in the country's exports.<sup>4</sup>

On the basis of this indicator, the trade specialisation of the euro area appears quite balanced across services and manufacturing. The euro area has a specialisation index value moderately greater than 1 for computer, information and other business services (1.1) and index values equal to 1 for travel services and transport services, two sectors which account for almost half of all euro area exports. Finally, the euro area has a relative lack of specialisation in insurance and financial services.

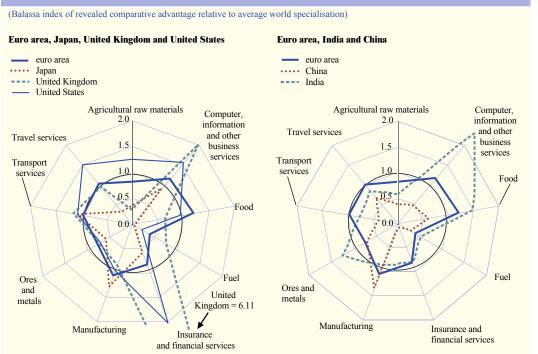
- 3 "Other business services" covers merchanting services, other trade-related services, operational leasing services and miscellaneous business, professional and technical services, including legal services, accounting, auditing, business and management consulting, and public relations services, etc.
- 4 Indicators of specialisation are measured by an index of revealed comparative advantage (RCA) following Balassa (1965):

$$RCA_{k,i} = \frac{X_{k,i} / \sum_{k=1}^{n} X_{k,i}}{X_{k,world} / \sum_{n=1}^{n} X_{k,world}}$$

The numerator represents the share of sector k in the total exports of country i and the denominator represents the same share in world exports.

Euro area trade in services: some key stylised facts





Sources: Eurostat, World Bank and ECB calculations.

Notes: Data are averages for the period 2003-05. Specialisation in services exports for the euro area has been calculated on the basis of total euro area exports (the sum of intra and extra-euro area exports). Euro area data exclude Cyprus, Greece and Malta.

The balanced patterns of specialisation observed for the euro area stand compared with more selective specialisation patterns for individual euro area countries (see Box 2) and for other major world exporters. Indeed, while Japan and China are relatively more specialised in manufacturing, the United States, the United Kingdom and India are relatively more specialised in some services sectors. The United States seems to specialise primarily in insurance and financial services, travel services, and computer, information and other business services. Within this last group, royalties and licence fees, including payments for patents and other intangible property rights, are the main source of revenue. Similarly, the United Kingdom appears to be relatively successful in computer, information and other business services, with a sizable share of revenues accruing in the form of royalties and licence fees. However, it specialises most in insurance and financial services (being six times more specialised than the world average). Finally, the emerging Indian export industry shows significant specialisation in computer, information and other business services.

Looking at imports, the euro area appears to be a large consumer of extra-euro area transport services and travel services (see Table 1). These two sectors together account for about 45% of total extra-euro area imports of services. At the same time, the share of total imports accounted for by computer, information, insurance and financial services is relatively small (below 5%). These sectors, however, appear to be more intensively traded within the euro area.

Turning to net trade balances, it emerges that, overall, the euro area is a net exporter of services. In particular, it records net exports of computer and information services, travel services, transport services, financial services

Table I	Furo area	trade ha	alances i	n servi	ces sectors
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	Exports	Imports	Net exports
Total	381.7	351.8	29.9
Communication services	8.4	8.7	-0.3
Computer and information services	19.9	10.0	9.9
Construction services	11.9	7.6	4.3
Financial services	18.7	13.9	4.8
Insurance services	9.0	11.6	-2.6
Personal, cultural and recreational services	3.8	6.5	-2.7
Royalties and licence fees	15.2	28.0	-12.9
Transportation	88.8	82.0	6.9
Travel	85.2	78.3	6.9
Other services	120.9	105.3	15.6

Source: Eurostat. Notes: Data refer to averages for the period 2004-05. Euro area data exclude Cyprus, Malta and Slovenia.

and construction services. Conversely, it is a net importer in the sectors of personal, cultural and recreational services, insurance services and communication services, while also

recording a negative net balance for royalties and licence fees.

### PATTERNS OF TRADE IN SERVICES ACROSS EURO AREA COUNTRIES

Trade in services appears to play a larger role in smaller euro area economies, owing possibly to the tendency for a number of smaller countries to specialise in services sectors such as financial services or tourism. Luxembourg is an extreme case, with imports and exports of financial services representing 68% and 111% of GDP respectively. Turning to developments over time, patterns are diverse across euro area countries. In the last decade, growth in traded services relative to GDP has been very strong in Ireland and Luxembourg (see table). Meanwhile, Germany, Greece, Spain, Cyprus, Austria and Finland have also experienced significant increases in exported services relative to domestic GDP, although these started from low levels. In other euro area countries (including France, Italy, the Netherlands and Portugal) trade in services has developed at a pace broadly in line with GDP.

The euro area is heterogeneous also in terms of trade specialisation. Germany, for instance, specialises in exporting construction services and transportation services, while France has a particularly strong comparative advantage in the exporting of personal, cultural and recreational services (see Chart A). Spain, France, Italy and Portugal are important exporters of travel services, while for Germany this sector occupies a prominent position in its imports. At the same time, Austria specialises in imports and exports of insurance services. In line with the important role of the IT sector in the Finnish economy, Finland specialises in imports and exports of computer and information services. Finally, Belgium is a large importer of computer and information services and financial services, while specialising in exports of communication and construction services.

Euro area trade in services: some key stylised facts

(as a percentage of GDP; percentage points)

	Goods					Servio	ees	
	exp	orts	imp	ports	exports		imports	
	2005	1995-20052)	2005	1995-2005 <sup>2)</sup>	2005	1995-2005 <sup>2)</sup>	2005	1995-2005 <sup>2)</sup>
Belgium	90.2	25.8	85.9	25.1	14.4	0.3	13.6	0.4
Germany	34.7	13.0	27.7	8.4	5.3	2.2	7.2	2.0
Ireland	54.4	-4.9	33.7	-11.5	28.1	20.5	34.6	19.9
Greece	7.6	-1.6	24.0	3.0	15.1	6.4	6.3	3.0
Spain	16.6	2.7	24.8	7.3	8.2	1.9	5.8	2.1
France	21.6	3.6	23.4	5.1	5.4	-0.4	4.9	0.2
Italy	20.8	1.9	21.5	4.3	5.0	-0.3	5.0	0.1
Cyprus	6.13)	-6.34)	35.73)	-4.04)	38.13)	6.14)	$16.6^{3)}$	3.54)
Luxembourg	50.4	5.45)	59.5	1.85)	110.5	41.15)	68.1	19.75)
Malta	40.9	-12.5	64.6	-22.4	27.9	-6.3	17.0	-5.9
Netherlands	64.5	15.2	57.5	12.6	12.5	1.1	11.6	0.8
Austria	40.5	17.0	41.2	13.4	17.4	3.2	16.0	5.4
Portugal	20.8	1.8	33.3	3.6	8.2	0.8	5.4	-0.3
Slovenia	54.2	4.5	58.5	4.4	11.6	-0.5	8.4	0.3
Finland	34.2	4.3	30.5	6.1	8.7	2.6	7.8	-0.4
Euro area	31.2	7.9	30.2	7.7	8.0	1.8	7.7	1.7

Sources: World Development Indicators and ECB calculations.

- 1) All trade figures refer to total (i.e. intra and extra-curations.
  2) Difference in percentage points between the average for the period 2003-05 and the average for the period 1993-95.
  3) Data refer to 2004.
  4) Owing to a lack of available data, changes refer to the difference between the average for the period 2003-2004 and the average for the period 1993-95.
  5) Owing to a lack of comparable data, changes for goods refer to the difference between the average for the period 2003-05 and the average
- for the period 1999-2001, while changes for services refer to the difference between the average for the period 2003-05 and the average for the period 1995-97.

Turning to trade balances, in recent years most euro area countries have either consistently recorded positive net exports of services or have always been very close to balance. Germany and Ireland are exceptions, with traditionally large net imports of services.

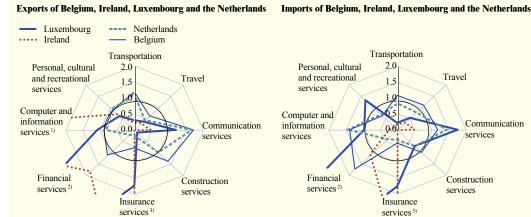
(Balassa index of revealed comparative advantage relative to the euro area)

### **Exports of Germany, Spain, France and Italy** Imports of Germany, Spain, France and Italy Germany ---- Italy ···· France Spain Transportation Transportation 2.0 2.0 Personal, cultural Personal, cultural and recreational Travel and recreational Travel 1.5 services services 0.5 Computer and Computer and Communication Communication information information services services services services Construction Financial Construction Financial services services services Insurance Insurance services services

Sources: Eurostat and ECB calculations.

Notes: Data are averages for the period 2003-05. Owing to a lack of available data, figures for Greece and Malta are not reported.

(Balassa index of revealed comparative advantage relative to the euro area)





Insurance

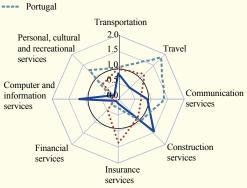
services 3)

Construction

services

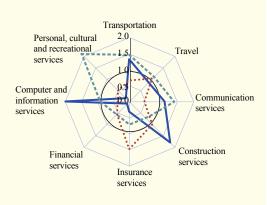
### **Exports of Austria, Portugal and Finland**

Finland ···· Austria



### Imports of Austria, Portugal and Finland

services 23

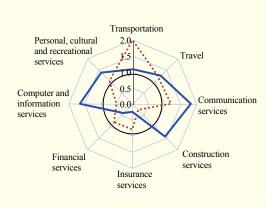


### **Exports of Cyprus and Slovenia**

Slovenia

···· Cyprus Transportation Personal, cultural and recreational Travel services Computer and Communication information services services Financial Construction services services Insurance services

### Imports of Cyprus and Slovenia



Sources: Eurostat and ECB calculations.

Notes: Data are averages for the period 2003-05. Owing to a lack of available data, figures for Greece and Malta are not reported.

1) The Irish revealed comparative advantage in exports of computer and information services is 6.5.
2) The Luxembourg revealed comparative advantage in financial services is 11.2 for exports and 13.5 for imports.
3) The Irish revealed comparative advantage in insurance is 6.2 for exports and 3.7 for imports.

Euro area trade in services: some key stylised facts

### **EVOLUTION OF EXPORTS AND WORLD DEMAND**

This snapshot of the euro area's specialisation relative to its main trading partners leads to another question, namely whether the euro area is specialising in the most dynamic sectors in terms of world demand. Chart 4 brings together sectoral evidence on recent changes in export specialisation in the euro area and the other major service-exporting countries of the world (China, Japan, India, the United Kingdom and the United States).5

For each country, bubbles of different sizes indicate the relative importance of a sector in the country's overall exports. Sectors with increasing specialisation are located on the right-hand side of each chart, in the upper or lower quadrant, depending on whether the worldwide exports in the given sector are growing at a rate higher or lower than the average cross-sector growth rate of total world trade. Conversely, sectors with declining specialisation appear on the lefthand side of each chart, on the upper or lower quadrant, where global trade growth in that sector is respectively higher or lower than average total world trade growth across sectors. For example, financial services, the global trade performance of which is very dynamic, are identified as a fastgrowing sector. Hence, the bubble corresponding to this sector is located towards the top of each chart, respectively in the upper-left or upper-right quadrant for countries whose export specialisation in financial services has decreased or increased over the reference period.

While, in general, it appears advantageous to specialise in fast-growing areas and move out of those that are growing slowly, in practice indications from such classifications should be interpreted with caution. These classifications are based on a methodology that does not take into account other important factors such as differences across sectors in value added per worker and the natural comparative advantages of countries.

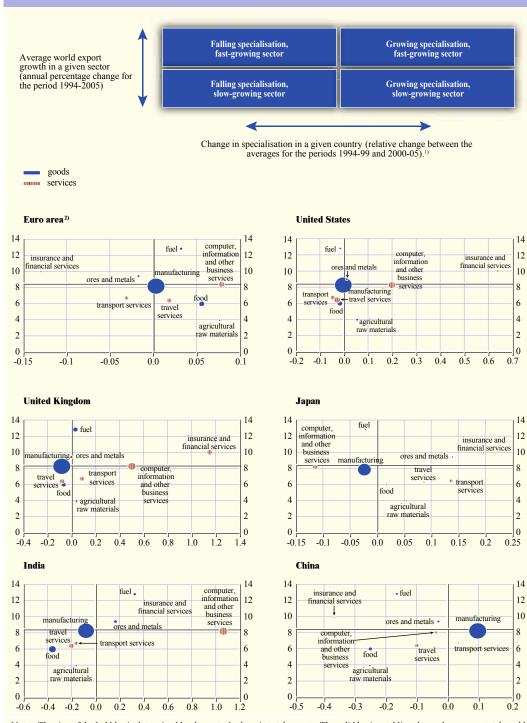
The change in specialisation over the two periods 1994-99 and 2000-05 would suggest that, of

the faster-growing services sectors in terms of world demand, the euro area has increased its specialisation mainly in the computer, information and other business services sector. This sector comprises the services with the fastest-growing world demand after insurance and financial services, where the euro area has in fact reduced its overall specialisation. Furthermore, the euro area's export specialisation has increased in travel services (which also includes personal, cultural and recreational services). This group of services has experienced sluggish global growth in the recent past but may, however, recover if emerging market economies increase their consumption of travel services. Meanwhile, the euro area has reduced its export specialisation in the transport services sector in line with the sluggish global growth of this industry. In the case of goods, the euro area continues to specialise in manufacturing, in line with past trends, while it is also increasing its specialisation in the food, fuel and agricultural raw materials sectors.

Turning to the other major world exporters of services, the United States also appears still to be specialising in manufacturing. At the same time, this country is increasing its specialisation in most of the fastest-growing services and goods sectors, while retreating from large sectors with sluggish growth in world demand. The same holds for the United Kingdom, which, while retreating from manufacturing and the sluggish travel services and food sectors, is specialising in the fast-growing insurance and financial services and computer, information and other business services sectors. India, whose share of exports in computer, information and other business services is twice as large as the euro area's share, is also positioning itself in the fastest-growing industries, while retreating from sectors with sluggish growth in world demand. Finally, Japan and China seem to be following a different pattern, with Japan retreating from some fast-growing services and goods sectors and China clearly focusing on manufacturing.

These charts are based on those of the International Trade Centre (see http://www.intracen.org).

Chart 4 Changes in the export specialisation of the euro area and major trading partners



Notes: The size of the bubbles is determined by the sector's share in total exports. The solid horizontal line shows the average total world export growth across all sectors for the period 1994-2005.

1) The change in export specialisation is defined as the change in the Balassa index of revealed comparative advantage. This has been calculated on the basis of nominal data.

2) For the euro area, the change in specialisation has been calculated on the basis of total euro area exports (the sum of intra and extra-euro area exports).

Euro area trade in services: some key stylised facts

### IMPEDIMENTS TO TRADE IN SERVICES

Barriers seem to play a significant role in limiting trade in services (see Box 3). At the same time, empirical analysis shows that potentially very large gains are associated with the liberalisation of trade in services. The findings of studies that analyse the potential gains from the liberalisation of trade in services vary on the basis of the estimated size and nature of initial trade barriers, as well as the theoretical approach and data used therein. In general, they nonetheless indicate that the gains from the liberalisation of trade in services are larger than those from the liberalisation of trade in goods, with some studies suggesting that the former can be as much as five times the size of the latter.6 This outcome stems from a number of distinctive features of the liberalisation of trade in services:

- Higher levels of protection. Current levels of protection are higher and more pervasive in trade in services than in trade in goods, which naturally means that there are larger gains to be had from liberalisation.
- Improved mobility of people and capital. A major benefit of liberalising trade in services is the improved mobility of people and capital, leading to spillover benefits for the whole economy.

- Opening up of services markets. The removal of barriers to market access for service providers will open services markets to new entrants - both local and foreign. While the removal of barriers to trade in goods benefits primarily foreign exporters, important gains from the liberalisation of services are likely to stem from increased domestic competition and efficiency of production.
- Infrastructural role of services. The term "services" covers a heterogeneous group of activities spanning banking, insurance, transportation, telecommunications, consulting, legal services and retail and wholesale trade. Part of this activity plays the important infrastructural role of facilitating transactions, the function providing economic intermediation either through time (banking, insurance, legal) or space (telecommunications, transportation, retailing, wholesaling), which, when explicitly modelled as such, can make a crucial contribution to overall economic efficiency and growth.
- See J. Nielson and D. Taglioni, "Services Trade Liberalisation: Identifying Opportunities and Gains", OECD Trade Policy Working Paper No 1, 2004.

### WHY IS TRADE IN SERVICES GENERALLY MORE LIMITED THAN TRADE IN GOODS?

Notwithstanding cross-country differences in trade specialisation, for most countries, trade in services is relatively subdued compared with trade in goods. However, the assumption behind most discussions about trade in services is that it can be assessed using the same models and assumptions as for trade in goods. While there is a certain appeal to equating services to goods when discussing trade, empirical observations highlight three distinctive features of services, which contribute to the different levels of trade in goods and services and should be taken into account when discussing trade in services.

First, as mentioned previously, services are less tradable than goods. Once provided, many services are simultaneously consumed and, accordingly, cannot be resold. In addition, the supplier and consumer often need to be in physical proximity at the time of the provision of the services. While this is the case, for instance, for personal services such as face-to-face medical consultation or hairdressing services, it should also be noted that for important services, such as financial services, this is not the case. Moreover, the possibility of electronic delivery has somewhat reduced the need for such physical proximity for a range of services. In particular, remote call centres and the internet are reducing the need to establish a commercial presence close to customers. Unfortunately, data on the extent of this phenomenon are not easily available owing to measurement difficulties.

Second, conventional trade statistics systematically underestimate trade in services by large amounts. Unlike trade in goods, trade in services includes not only cross-border trade (e.g. an engineer from Germany planning the urban road design for a city in the United States), which is generally well documented by trade statistics but estimated by the World Trade Organization to account for only 35% of total trade in services. It also includes: (i) the temporary movement abroad of labour suppliers (e.g. a nurse from the Philippines working temporarily in London); (ii) the temporary movement abroad of consumers (e.g. a French resident requiring the services of a Brazilian lawyer in Brazil); and (iii) commercial presence abroad (e.g. a Greek tourist office opening sales offices in Russia or a French museum opening a subsidiary in Hong Kong, China. While trade in services delivered through the temporary movement abroad of labour suppliers or consumers (which accounts for about 15% of overall trade in services) is somewhat underestimated by conventional trade statistics, commercial presence abroad, which the World Trade Organization estimates to account for about 50% of total trade in services, is hardly captured by such statistics.

Finally, barriers seem to play a significant role in limiting trade in services. Services are the area in which most economic regulation is concentrated.<sup>2</sup> Moreover, the nature of barriers to trade in services differs from that of barriers to trade in goods in one important respect. Given that delivery of services often takes place not across the border but within the same country, tariffs cannot ensure effective trade protection.<sup>3</sup> Thus, barriers to trade in services primarily take the form of government regulations (e.g. provisions on licensing or on technical standards). Like most non-tariff barriers, "beyond-the-border regulation" is not only difficult to quantify but also hard to remove, as it is usually linked to wider public policy objectives (e.g. addressing market failures or pursuing public interest objectives).<sup>4</sup>

- 1 World Trade Organization, "Manual on Statistics of International Trade in Services", 2005.
- 2 See, for example, P. Conway and G. Nicoletti, "Product market regulation in the non-manufacturing sectors of OECD countries: measurement and highlights", OECD Economics Department Working Paper No 530, 2006.
- 3 See B. Hoekman and C. Primo Braga, "Protection and trade in services: a survey", Open Economies Review 8(3), 1997, pp. 285-308.
- 4 Regulation can be aimed, for example, at protecting consumers from information asymmetries (which are a common feature of professional services) or can take the form of prudential regulation of financial services, protecting against systemic risks. Furthermore, as natural monopolies are a feature of some services sectors where it can be inefficient to have several providers or even more than one (e.g. the railways or providers of telecommunications infrastructure), regulation can be necessary in preventing the misuse of monopoly power.

Notwithstanding the potential large gains associated with the liberalisation of trade in services, there is a public interest in curbing barriers to trade in services when the barriers increase costs (for example, by limiting the scope for outsourcing abroad), thereby distorting market conditions, or if they have the effect of reducing competition (for example, by limiting the number of producers in a given

industry, thereby creating rent for incumbent firms while hampering productivity growth and preventing prices from converging to their efficiency level).

A recent study by the OECD has quantified, at the level of individual sectors, regulations that curb efficiency-enhancing competition. The resulting indicators, which cover regulations in

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21 OECD countries for the period 1975-2003, suggest that, overall, anti-competitive regulation in services has fallen considerably since 1998 for both the euro area and the other OECD countries considered.7 A multi-year project started by the Australian Productivity Commission and the Australian National University goes further. It allows restrictions on trade in services to be quantified in a way that distinguishes measures that apply to domestic and foreign suppliers alike (non-discriminatory measures) from measures that mainly restrict entry into the domestic market by foreign suppliers (discriminatory measures), while also extending the analysis to non-OECD countries.8 According to these indicators, the euro area, the United States and the United Kingdom appear to have relatively similar levels of nondiscriminatory and discriminatory measures, although regulation in the euro area and in the United Kingdom remains somewhat tighter than in the United States. By contrast, Japan appears much more restrictive in terms of nondiscriminatory measures but has relatively lower discriminatory barriers against foreign providers. At the same time, regulation in South-East Asian countries is by far the most discriminatory in terms of limiting foreign service providers' entry into domestic markets.

The results for the whole euro area mask relatively diverse levels of barriers across individual countries and sectors, in terms of both discriminatory and non-discriminatory restrictions. In broad terms, estimated restrictions seem to follow a geographical pattern, with overall barriers to services in southern euro area countries higher than in northern euro area countries. Meanwhile, sector-specific indices for the euro area show that barriers are considerably higher in the euro area than in the United Kingdom and the United States in services sectors with the important infrastructural role of facilitating transactions, such as legal services and distribution.

Looking ahead, the Services Directive, which was adopted by the European Parliament and the Council in December 2006 and which is scheduled to be transposed into national legislation by the Member States by the end of

2009, is expected to reduce barriers to services traded within the EU. The Directive aims to create a genuine internal market in services by removing legal and administrative barriers to the development of cross-border services. This implies that Member States must not only remove discriminatory barriers and cut red tape, but also modernise and simplify the legal and administrative framework and make their administrations cooperate much more systematically. For instance, businesses in services sectors should in the future be able to obtain all necessary licences and permits more quickly in order to establish themselves in other Member States, instead of waiting for months or years. The simplification and harmonisation of the administrative framework is expected to reduce the entry costs of new businesses, eliminating the need to spend time and money on discovering what the legal and administrative formalities are. In addition, since Member States will be prohibited from applying "economic needs tests", service providers will benefit from considerable cost savings and a higher degree of certainty when filing applications for authorisation to set up a business in another Member State.

All in all, the objective is to make it easier for businesses to provide and use cross-border services in the EU, thus increasing cross-border competition in services sectors, bringing down prices and improving quality and choice for consumers. The Directive also aims to strengthen the rights of users of services. The activities to which the provisions of the Services Directive apply directly represented roughly 30% of the total value added and 40% of total employment in the euro area in 2005.9

- 7 See P. Conway and G. Nicoletti, "Product market regulation in the non-manufacturing sectors of OECD countries: measurement and highlights", OECD Economics Department Working Paper No 530, 2006.
- 8 For a discussion of the methodology used, see P. Dee, K. Hanslow and T. Phamduc, "Measuring the cost of barriers to trade in services", (2003) in T. Ito and A. Krueger (eds), Trade in Services in the Asia-Pacific Region, NBER-East Asia Seminar on Economics, Volume 11, 2003, pp. 11-46, and P. Dee, "A compendium of barriers to services trade", World Bank, 2005.
- 9 Source: EUKLEMS. Figures for 2005 for market services excluding post, telecommunications and financial intermediation.

The impact on the economy is expected to be broader. Indeed, as discussed above, many services constitute key inputs in other sectors. Hence, the latter would also greatly benefit from increased domestic and intra-EU competition and efficiency of production in the services sector. Large benefits are indeed expected to stem from lower prices and improved quality in the provision of services, similar to what happened with the opening up of the telecommunications sector. The Services Directive is therefore intended to improve the competitiveness not only of service providers, but also of many other European service-using industrial sectors, and is thereby expected to lead to considerable improvements in the EU's overall internal and external trade, employment and growth, as well as in the global competitiveness of its firms.<sup>10</sup>

However, important challenges remain. The Services Directive does not apply to key services such as network services industries or financial services. Despite progress in some specific sectors, such as telecommunications, others are still a long way from being fully integrated and further progress in this direction – going beyond the Services Directive – would enhance the positive effects on employment and growth.

### 6 CONCLUSION

This article provides stylised facts pertaining to euro area trade in services. The euro area appears to be the largest exporter – in nominal terms – of services worldwide. Looking at developments over time, growth in euro area trade in services has accelerated over the last decade, but has remained relatively subdued when compared with the impressive growth rates observed in manufacturing. While this also holds true for most other developed and emerging economies, the aggregate euro area figures mask the greater dynamism of some smaller countries in the euro area.

Turning to patterns of specialisation, euro area trade appears broadly balanced across services

and manufacturing. Meanwhile, other important global suppliers of services, including India, the United Kingdom and the United States, appear to specialise more in specific services sectors.

Over time the euro area has increased its specialisation in a range of traded services with relatively dynamic export growth. These include computer, communication and information services, as well as a range of smaller business services. Conversely, the euro area seems to be lagging behind in financial services, a sector where global exports are growing robustly and where important competitors, such as the United Kingdom and the United States, are highly specialised.

Regional, cultural and historical ties seem to play a prominent role in shaping cross-border trade in services. Indeed, almost half of extraeuro area trade in services is within Europe. However, a well developed domestic market also seems to be important, suggesting that a more integrated internal EU market for services – resulting from transposing the 2006 Services Directive into national legislation – should represent a step forward in enhancing the international competitiveness of the euro area in both the services and goods sectors, while also leading to sizeable welfare gains for the euro area economy.

<sup>10</sup> For more detailed information on the potential macroeconomic consequences of the Directive, see the article entitled "Competition in and economic performance of the euro area services sector" in the May 2007 issue of the Monthly Bulletin.

# THE EUROSYSTEM AS A PROVIDER OF TECHNICAL ASSISTANCE TO EU NEIGHBOURING REGIONS

By sharing expertise and experiences among professionals through technical assistance, central banks ultimately support monetary and financial stability. In the Eurosystem, technical assistance to other central banks has developed into an important activity. In terms of person-years, staff members involved represent the equivalent of several dozens of full-time officers employed during the entire year, with around 30 person-years devoted to the direct support of central banks in those regions neighbouring Europe for which the Eurosystem collects data on technical assistance. In fact, a substantial part of the overall technical assistance is offered by the Eurosystem to the central banks of south-eastern Europe, Russia and the European CIS countries, the Mediterranean, the Middle East and Sub-Saharan African countries. The bulk of these activities are undertaken by the national central banks and take different forms, ranging from staff participation in single educational events to larger training programmes, or from staff secondments to central banks of third countries to EU-funded multi-year twinning programmes. A few large programmes are coordinated by the European Central Bank according to the modalities described in this article. These latter Eurosystem programmes have been also financed by the European Union as part of the EU policies to strengthen cooperation between Europe and the neighbouring regions.

### **I INTRODUCTION**

In 2007 the Eurosystem concluded two major programmes giving technical assistance to the Central Bank of Bosnia and Herzegovina and the Central Bank of Egypt. In 2008 it started a new programme to support the Central Bank of Russia - the second one in the last five years – and began preparations for two other programmes. Each of these activities has been carried out jointly by several central banks of the Eurosystem – and at times with the support of central banks from non-euro area countries of the EU - with a coordinating role by the European Central Bank (ECB), which has taken contractual responsibility for the programmes and assumed the overall project management and administrative functions. The programmes are part of a broader policy through which, over recent years, the Eurosystem has consolidated its relationship with all the central banks in the neighbourhood of Europe, holding a systematic policy dialogue, for instance in the form of regular high-level seminars, with the central banks of EU accession countries, with the Central Bank of Russia, with the governors of the central banks of the Mediterranean, and with those of some regions of Sub-Saharan Africa or the Arab Peninsula. It is often in the course of these meetings that programmes of technical assistance have been conceived. The programmes have been funded by the European Commission, in the framework of policies reinforcing cooperation between the European Union and its neighbours, including the countries which aim to join the EU.

These Eurosystem programmes are examples of an activity – technical assistance – which is well established among central banks worldwide. Section 2 of this article explains what technical assistance among central banks is, describes how it may be given, illustrates some important episodes in recent history and briefly refers to the role of international financial institutions. Section 3 turns to the Eurosystem and focuses on the role of its national central banks and of the ECB. Section 4 describes the abovementioned major Eurosystem programmes. Section 5 concludes.

# 2 TECHNICAL ASSISTANCE AMONG CENTRAL BANKS

Cooperation among central banks is a wellestablished practice, which began with the creation of an international network among major central banks in the first half of the last century, at the time the Bank for International Settlements (BIS) was established in 1930. This article considers the specific category of central bank cooperation which may be defined as technical assistance. Technical assistance

### **ARTICLES**

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comprises those supportive actions through which central banks transfer their expertise, share best practices, contribute to capacity building or make human capital available to each other. It therefore excludes usual practices of regular policy dialogue between central banks or more far-reaching types of cooperative activity, such as for instance the extension of lending facilities, the conclusion of agreements supporting exchange rate arrangements, or the collective definition of common standards and practices. While the essence of technical assistance among central banks is the transfer of expertise, its ultimate goal goes beyond it. When they put their expertise at the disposal of their peers, central banks do not only help each other to reach high levels of professionalism, independence and transparency, but also contribute to promoting monetary and financial stability globally.

In terms of modalities, technical assistance among central banks covers an extremely diverse set of activities. Assistance may be given by central banks through their training centres, offering a variety of training courses or other learning events, or it may take the form of conferences and seminars which are attended by representatives of other central banks worldwide. Technical assistance may also be given directly to the beneficiary institutions, e.g. through the permanent secondment of staff, support in institution building and policy set-up, or regular missions, either at technical or policy level. Central banks may act unilaterally or conclude agreements with non-central banks (such as international financial institutions,

EU institutions or their own governments) to coordinate activities and at times obtain external financing.

Historically, technical assistance among central banks has been particularly intense during phases characterised by institution building, where either new monetary institutions were being set up, or existing institutions had to cope with new challenges. This was for instance the case in Europe immediately after the Second World War, when the BIS provided its expertise to the restored or newly created central banks in western Europe. The United States authorities also helped central banks in western Europe to create institutional structures and operational mechanisms to reconstruct multilateral payments and establish external convertibility. Institution building was also particularly intense a few decades afterwards, during the decolonisation process of the 1960s, when European institutions helped establishing central banks in the new independent countries. A new wave was generated by the economic transition which began in the former socialist economies in the late 1980s. Central banks in central and eastern Europe moved from the earlier socialist model - in which the central bank and the state-owned lender were consolidated in a single institution without autonomy from government - to the model prevailing in market economies. The dissolution of the Soviet Union in 1992 and the creation of new states in need of their own central bank added to the challenges in this domain. Box 1 describes how the global central banking community took action from 1990 to support the central banks of transition economies.

### COORDINATION OF TECHNICAL ASSISTANCE BY CENTRAL BANKS OF GIO COUNTRIES AFTER THE BEGINNING OF THE ECONOMIC TRANSFORMATION OF FORMER SOCIALIST COUNTRIES

At their meeting in July 1990, the G10 central bank governors agreed that it would be useful to coordinate the technical assistance and training provided to central banks in central and eastern Europe and the Commonwealth of Independent States (CIS). The coordination process, as requested by the

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governors, was not burdensome, focusing on bilateral networking and the exchange of information on technical assistance and training provided. The BIS was asked to facilitate the process.

A core group of donor central banks, consisting of representatives from central banks in the G10 countries, Austria and the International Monetary Fund (IMF), and later joined by the ECB, started meeting regularly from autumn 1991. Also, in order to facilitate the coordination process, a database was created by the BIS comprising activities in the field of technical assistance and training.

Initially two series of meetings were organised. The first one involved countries in central and eastern Europe (the Baltic countries and former Yugoslav republics were gradually invited to this meeting). The second series was held with recipient central banks from the CIS. This meeting was initially held in conjunction with a larger high-level meeting called by the IMF.

The governors have received regular progress reports on the group's activities, most recently in May 2003. They have also extended the mandate of the group (the current mandate ends in 2008). At their last review, the governors agreed that:

- the group would combine the two series of meetings and meet only once a year with the central banks from central and eastern Europe and the CIS;
- the group would meet occasionally with major global training providers to central banks worldwide (this was done in 2004 and 2007).

Over the last decades, central banking has been characterised by a rapid evolution in technology and techniques, with an impact on all operating systems. Beneficiary central banks have obtained the support of their peers to prepare for the introduction of stability-oriented monetary policy strategies, to enrich their intervention tools in money and foreign exchange markets, to increase the efficacy and security of payment systems, to deepen their capacity to analyse economic and financial developments, to enhance the use of forecasting techniques, to refine their supervisory systems, to fight against money laundering and financing of terrorism, to collect and disseminate wider and more accurate series of statistics, to enhance the quality and safety of banknotes, to strengthen central bank independence and - last but not least - to improve the quality of central bank governance.

In Europe the process of enlargement of the EU from 15 to 27 Member States, between 2004 and 2007, has imposed upon the central banks of accession countries the obligation to comply with a wide range of specific institutional and

operational requirements (often referred to by the broad denomination of *acquis communautaire*) and to enter into the European System of Central Banks (ESCB). This has prompted central banks of EU countries – and since 1998 the ECB itself – to make a considerable effort to support the central banks of countries joining the EU. For the central banks of Cyprus, Malta and Slovenia the entry into the euro area has created a further demand for support, in particular the sharing of experiences on the changeover to the single currency.

The Eurosystem has concurred with the collective effort of the central banking community. It goes without saying that several other central banks in the world have been a part of this display of solidarity, including vis-à-vis European central banks. They include the Federal Reserve System in the United States (with specialised training programmes offered by the Board of Governors in Washington and several Federal Reserve Banks), the Bank of England (with the Centre for Central Banking Studies in London) and the Swiss National Bank (with the Study Centre in Gerzensee).

### AN EXAMPLE OF COORDINATION BETWEEN INSTITUTIONS: THE JOINT VIENNA INSTITUTE

The continuous increase in requests and the multiplicity of donors call for international cooperation. One example of such coordination between institutions is the Joint Vienna Institute (JVI). The JVI provides training to public officials and selected private sector executives from transition countries in central, eastern and south-eastern Europe, the CIS and Asia. The JVI is sponsored by two Primary Members: the IMF and the Austrian authorities (the Federal Ministry of Finance and the Oesterreichische Nationalbank), and by four Contributing Members: the European Bank for Reconstruction and Development, the Organisation for Economic Co-operation and Development, the World Bank and the World Trade Organization. Generous financial support is also provided by a number of donor countries. The JVI offers a comprehensive programme of approximately 60 seminars per year, generally of short duration, on topics that reflect the expertise of its various sponsor organisations. These seminars focus primarily on practical policy issues relevant to economies in transition. Since its establishment in 1992, roughly 22,000 officials have been trained at the JVI.

To complete the picture, it should be mentioned that central banks are not alone in supporting their own peer institutions. The BIS has already been mentioned. The IMF and the World Bank have - since their inception - specialised in offering programmes of technical assistance and in setting up operational departments to make training available to their central bank membership. Box 2 gives one example of effective coordination between global and European institutions, including one Eurosystem central bank.

### THE ROLE OF THE NATIONAL CENTRAL BANKS AND OF THE ECB

Within the Eurosystem, the bulk of technical assistance activity is performed by the national central banks. This reflects the fact that for decades the central banks of EU countries have developed strong links of cooperation with other central banks. These activities have remained in their domain after the start of Economic and Monetary Union (EMU). National central banks operate according to various procedures, following patterns reflecting their history, the configuration of their institutions and often the foreign

relations of their country. Overall, taking into account the entire wealth of experience in the Eurosystem (see Box 3) four different patterns can be described.

First, a few national central banks have become global providers of training activities: they dedicate staff to technical assistance activities on a full-time basis and dispose of a permanent infrastructure to organise and host training courses of general interest to the central banking community. At times they operate in coordination with their respective national foreign offices or public aid agencies. They also actively cooperate with multilateral global institutions, like the IMF or the World Bank.

Second, other central banks have restricted their activities to maintaining direct relations with fewer central banks, either because of specific historical relationships with them or because they belong to given language areas. While they do not have separate administrative structures specifically devoted to training, they dispose of smaller full-time coordinating units.

Third, a group of central banks have a primarily demand-driven approach and, without dedicating staff to technical assistance on a

permanent basis, they accommodate individual requests according to the availability of resources and the intensity of bilateral ties with the beneficiary institutions.

For a fourth group, consisting of some of the smaller national central banks, technical assistance activities are carried out on an ad hoc basis, owing to staff constraints.

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### WEALTH OF EXPERIENCE IN SELECTED NATIONAL CENTRAL BANKS

Nationale Bank van België/Banque Nationale de Belgique. Outside the EU, technical assistance is provided to the Banque Centrale du Congo, as part of the bilateral cooperation with the Democratic Republic of the Congo.

Deutsche Bundesbank. The Deutsche Bundesbank has for many years considered it to be its responsibility to contribute to setting up and developing market-oriented central bank systems in many countries around the world. All its generally demand-driven activities are coordinated by the Centre for Technical Central Bank Cooperation.

Central Bank and Financial Services Authority of Ireland. Besides participating in Eurosystem activities, the Central Bank and Financial Services Authority of Ireland has also provided bilateral contributions in the areas of supervision and financial stability, as well as on a number of administrative and technical issues.

Bank of Greece. The Bank of Greece has a long-standing tradition of providing technical assistance to the central banks of south-eastern Europe, especially in the fields of banking supervision (including the promotion of multilateral agreements among the central banks of the region), payment systems and monetary policy.

Banco de España. From 2003, the focus of technical assistance has been enlarged from Latin America to include other regions. The cooperation - often in conjunction with international organisations or other central banks – is organised on a twofold basis, training and consultancy, involving both central banking and supervision.

Banque de France. The Banque de France's demand-driven approach very often relies on longlasting relationships with other central banks. Technical cooperation is the responsibility of the Governor's office. The Banque de France's International Banking and Finance Institute organises approximately 50 seminars annually, in France and abroad.

Banca d'Italia. The Banca d'Italia provides training and capacity building to central banks of EU accession countries, other EU neighbours and selected emerging economies, on all institutional functions carried out by the bank (central banking, banking supervision, payment systems and treasury) and support activities (IT, internal auditing, etc.).

Banque centrale du Luxembourg. Over the last few years, the Banque centrale du Luxembourg has regularly extended technical assistance in various domains to central banks, notably in Africa and Asia, with which it entertains privileged relations.

**De Nederlandsche Bank**. Technical assistance is focused on transition economies (and members of the Dutch IMF Constituency) and is provided through the DNB International Seminar Series, regional seminars abroad and bilateral activities and commitments, involving around 90 "handson" specialists.

Oesterreichische Nationalbank. The Oesterreichische Nationalbank works together with the Joint Vienna Institute, co-sponsoring the Institute and offering training courses. The OeNB's own bilateral technical cooperation takes the form of consultations, lectures and study visits, mostly focusing on south-eastern European countries.

**Banco de Portugal.** Cooperation activities, coordinated by the International Relations Department, are carried out mainly with the African Portuguese-speaking countries as well as East Timor, either on a bilateral basis or in regional courses (often with the IMF Institute's participation), seminars and workshops.

**Banka Slovenije**. Banka Slovenije has delivered technical assistance to central banks in south-eastern Europe in particular, given the historical ties. Most recently, it has provided technical assistance on the euro changeover activities to the NCBs of EU Member States which have not yet adopted the euro.

**Suomen Pankki – Finlands Bank**. Suomen Pankki has provided technical assistance mainly to economies in transition, with special emphasis on Russia, in the form of regular training seminar series between 1993 and 2006, most recently replaced by the annual senior economist experts' seminar.

Several dozens of staff are involved in these activities at the national central banks. An estimate, as indicated in Box 4, is available only for those activities performed to the benefit of central banks in those regions geographically closer to the EU, with which institutional relations are deeper partly as a result of common historical and institutional ties. For this reason the Eurosystem has created a Task Force on Central Bank Cooperation, as a flexible instrument for sharing information on past activities and on main orientations for the future. When the task force was first created in 2000, the geographical coverage consisted of the twelve European countries aspiring at that time to join the EU. Since their EU entry, cooperation with their central banks has become an integral part of the intra-institutional relationships within the ESCB. The geographical coverage of the task force was subsequently extended to the new candidate or potential candidate countries to the

EU in south-eastern Europe, and to a broader concept of "EU neighbourhood" encompassing Russia and the European countries of the CIS, the countries on the southern and eastern shores of the Mediterranean, the Middle East and Sub-Saharan Africa.

Where necessary, the task force also serves as a forum to help coordinate larger central bank cooperation projects in these regions, such as those mentioned in the following sections. Furthermore, the task force facilitates the voluntary reallocation of incoming requests for cooperation, when they cannot be accommodated exclusively by the receiving central bank. Although the task force has been set up by the Eurosystem, representatives of the central banks of EU countries not participating in the euro area have been increasingly involved in its activities.

### EUROSYSTEM TECHNICAL ASSISTANCE TO EU NEIGHBOURING REGIONS

Every year, the Task Force on Central Bank Cooperation of the ECB International Relations Committee gathers from the Eurosystem information about technical assistance activities provided to central banks in transition economies in Europe outside the European Union (including Russia), to non-EU countries around the Mediterranean, and to countries in the Middle East and in Sub-Saharan Africa. This is a composite part of the world – defined for the purpose of this article as the "EU neighbouring regions" - to which the Eurosystem devotes particular attention, and for which it considers necessary to share information. The reporting period starts in October of the previous year and ends in September of the current year. Between October 2006 and September 2007, an equivalent of around 30 person-years was engaged in technical assistance activities (missions, training courses, other consultations, long and shortterm secondments, etc.) implying direct contacts with staff in central banks in EU neighbouring regions. The tables below offer a breakdown by region and central banking area of activities to the benefit of EU neighbouring regions.

(by person-years)

	Sub-Saharan Africa	Non-EU Mediterranean countries*	EU candidate and potential candidate countries	Russia and European CIS	Middle East**	Cross- regional ***	Total
Oct. 2006-							
Sept. 2007	7.0	6.3	5.7	4.6	0.4	6.4	30.4
Oct. 2005-							
Sept. 2006	5.9	7.3	9.4	5.7	1.0	5.7	35.0
Oct. 2004-							
Sept. 2005	5.0	3.8	7.5	7.3	0.4	5.5	29.5
Oct. 2003-							
Sept. 2004	5.7	3.5	3.1	6.2	0.2	5.9	24.6

# Table B Breakdown by central banking activity of Eurosystem technical assistance to EU neighbouring regions

(by person-years)

	Supervision and Financial Stability	Monetary and Exchange Rate Operations	Monetary Policy Formulation	Regulations, governance and administration	Others	Total
Oct. 2006-						
Sept. 2007	8.7	5.4	4.9	4.1	7.3	30.4
Oct. 2005-						
Sept. 2006	9.9	7.0	4.6	5.2	8.3	35.0
Oct. 2004-						
Sept. 2005	9.8	5.5	4.4	4.8	5.0	29.5
Oct. 2003-						
Sept. 2004	4.3	5.7	2.7	4.9	7.0	24.6

<sup>\*</sup> Excluding Turkey, which is included among EU candidate and potential candidate countries.

\*\* Excluding Egypt, Israel, Jordan, Lebanon, Libya and Syria, which are included among "non-EU Mediterranean countries" as they are members of the so-called Barcelona process.

\*\*\* Cross-regional activities involve all regions of this table together.

Supervision and financial stability were the most requested topics for support, followed by monetary and exchange rate operations, monetary policy formulation, regulations, governance and administration.

The ECB does not systematically pursue an active technical assistance policy, but it receives and, when possible, accommodates a variety of requests, covering a very wide set of issues, and with a particular focus over recent years on payment systems, statistics and market operations. Like several other central banks, every year the ECB invites an extended number of central banks worldwide to attend specialised conferences organised for central bank staff. The ECB holds annual events on statistics and on payment and settlement issues and, every two years, a Central Banking Conference with high-level attendance from central banks and other institutions.

In a few areas ECB staff is systematically confronted with specific requests. ECB staff has regularly provided information and technical advice on how central banks and other authorities can suitably prepare the establishment of their own monetary unions, or reinforce those existing. Considerable interest has been shown by third country authorities on how preparations for EMU were coordinated by the European Monetary Institute between 1994 and 1998. The cooperation with the Committee of Governors of the Central Banks in the Gulf Cooperation Council<sup>1</sup> has been particularly intense, including the provision by staff of a report on the possible convergence criteria for the six member countries (2004) and the preparations to build common monetary institutions (2006). Requests to obtain policy advice from the ECB in the setting up of monetary unions have also been received since the start of EMU from authorities of several regional groupings in Africa (Common Market for Eastern and Southern Africa,2 South African Development Community,3 West African Monetary Zone,4

and the West African Economic and Monetary Union<sup>5</sup>).

Several authorities or peer central banks have also solicited the support of the ECB in their preparations for an update of central bank legislation or of relevant secondary legislation, and in view of the ECB's experience with the assessment of central bank independence in EU Member States with a derogation. In these cases, the ECB has responded through staff opinions, which could be brought to the attention of the legislator or other regulators. Similar requests have come mostly from the authorities of countries involved in the EU accession process, either as candidate or potential candidate countries (for instance, from Albania, Croatia, the former Yugoslav Republic of Macedonia, Serbia and Turkey). However, authorities from countries without the perspective of EU entry have requested and obtained ECB staff opinions on proposals for central bank legislation under discussion among authorities in their countries.

### 4 LARGE EUROSYSTEM PROGRAMMES

Well before the establishment of the Eurosystem, national central banks took part in large multi-

- The Gulf Cooperation Council encompasses Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.
- 2 COMESA consists of Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe.
- 3 SADC consists of Angola, Botswana, Democratic Republic of the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe.
- 4 The members of the WAMZ are Gambia, Ghana, Guinea, Nigeria and Sierra Leone.
- 5 The Members of the WAEMU are Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.

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year programmes of technical assistance, financed by the European Commission.<sup>6</sup> This form of technical assistance - called twinning has proved particularly successful, because it creates a strong institutional link between institutions performing the same tasks, in the donor and beneficiary countries. Twinning agreements may be contracted by one public institution of an EU Member State - such as a national central bank - which may associate institutions of other Member States in consortia of up to a maximum of three institutions. Twinning agreements may last between six months (so-called "twinning light") and three years, and are always based on a detailed work plan with a final obligation of result. This implies that, upon expiry of the twinning arrangement, the beneficiary institution must have been given the appropriate technical assistance to enable it exercise its EU-relevant institutional responsibilities in the field concerned. Indeed as explained in Box 5 – during the last decade twinning agreements have been instrumental in enhancing the preparedness of the central banks of several EU candidate countries to join the ESCB upon their countries' entry into the EU.

Twinning agreements remain an important instrument to ensure compliance by the new EU candidate countries with the so-called *acquis communautaire*. Recently, the geographic scope of twinning arrangements has been

expanded by the EU to include the broader category of those countries neighbouring the EU which do not have the prospect of joining the European Union.<sup>8</sup> For these countries, the objective of twinning agreements is to ensure the approximation of the domestic institutional and regulatory framework to EU standards. A few Eurosystem national central banks are currently implementing or considering entering into such contractual agreements, either with EU candidate or potential candidate countries or with EU neighbouring countries without an EU candidate status.

- 6 Also the European Investment Bank albeit on a smaller scale promotes and finances technical assistance. In particular, the EIB funds the Technical Assistance Support Fund of FEMIP (the Facility for Euro-Mediterranean Investment and Partnership), which finances among others studies on the financial infrastructure in the countries of the Mediterranean. So far, no Eurosystem central bank has taken part in EIB technical assistance activities.
- 7 The European Union offers comprehensive support to candidate or potential candidate countries, with funding of €11.5 billion earmarked for the period 2007-2013 to implement the Instrument for Pre-Accession Assistance (IPA). These countries are Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia, the former Yugoslav Republic of Macedonia and Turkey. The official status of Kosovo in the EU enlargement process is still under discussion.
- 8 €12 billion are available for the period 2007-2013 to support the European Neighbourhood Policy, which encompasses relations with Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, Occupied Palestinian Territory, Syria, Tunisia and Ukraine. With Russia, the EU intends to create a single economic space, under an adhoc Strategic Partnership.

### Box !

### TWINNING AGREEMENTS FINANCED BY THE EUROPEAN COMMISSION

At the beginning of the enlargement process, the Banque de France began a two-year twinning with Narodowy Bank Polski, leading a consortium together with the Banca d'Italia. Assistance was provided covering a broad range of central banking issues. A few years later, Česká národní banka benefited from an 18-month twinning with the Deutsche Bundesbank in the area of financial stability. Bulgaria and Romania also received technical assistance, in the form of two consecutive two-year twinning programmes covering multiple sectors of central banking, from a consortium led by the Banque de France and including the Banca d'Italia and De Nederlandsche Bank. The Deutsche Bundesbank and Narodowy Bank Polski are currently envisaging a twinning arrangement with the National Bank of Ukraine on a horizontal set of different central

banking issues, while the Deutsche Bundesbank is also envisaging a twinning arrangement with the Central Bank of Bosnia and Herzegovina on human resources issues.

In some cases, institutions other than central banks have benefited from the participation of Eurosystem national central banks as partners in twinning programmes. For instance, the Deutsche Bundesbank has advised the Turkish Capital Markets Board on capital market legislation as part of a twinning project, while the Banca d'Italia has participated in a twinning to the benefit of the Statistical Office of Bosnia and Herzegovina.

A variant of twinning is represented by the agreements through which the Eurosystem undertakes similar obligations, benefiting from the capacity of the ECB to enter into a single financing agreement with the European Commission on behalf of a number of Eurosystem central banks. This is in line with the Eurosystem's mission to perform its tasks effectively and efficiently, in a spirit of cooperation and teamwork.

The agreement is entered into by the ECB (which also signs on behalf of the participating national central banks) and the European Commission, to the benefit of the central bank of a third country. As in the case of twinning agreements, the programme is governed by a steering committee, chaired by the beneficiary central bank, with the participation of the European Commission, and has a clear contractual definition of obligations. The ECB undertakes the overall managerial responsibility and control of the budget, while the national central banks provide expertise through long and short-term expert visits to the recipient institution. A locally-based team programme coordinator, selected by a Eurosystem procedure, ensures programme coordination and assists the beneficiary central bank.

In policy terms, this model has four main benefits. First, it permits the Eurosystem to embark on larger programmes which would be too much of a challenge for individual Eurosystem central banks. Second, it gives an opportunity to the ECB and the partner national central banks to apply new forms of cooperation and to demonstrate to their external partners the Eurosystem taking cohesive action. Third, it further strengthens the quality of the

already existing central banking relationship between the Eurosystem and the beneficiary central banks. Fourth, it reinforces the EU's visibility in partner countries, as illustrated also by the cooperation between the two European institutions giving the assistance (the ECB and the Commission).

The first of these Eurosystem programmes was implemented at the Central Bank of the Russian Federation between November 2003 and October 2005, with the participation of the ECB and nine Eurosystem national central banks (the Banca d'Italia, Banco de España, Banco de Portugal, Banque de France, Central Bank and Financial Services Authority of Ireland, De Nederlandsche Bank, Deutsche Bundesbank, Oesterreichische Nationalbank and Suomen Pankki - Finlands Bank), and the assistance of three non-central bank supervisors: Financial Services Authority (UK), Finansinspektionen (SE), and Rahoitustarkastus (FI). The programme involved training a total of 1000 supervisory staff working in branches of the CBR all over Russia and teaching them about the best supervisory practices applied in the EU. To this end, 60 training courses and four academic high-level seminars were organised. The training materials were compiled in a selfstudy book, published in English and Russian, on Russian and EU supervision experiences and practices for CBR staff.

The second programme involved the Central Bank of Egypt, on the one side, and the ECB, Banca d'Italia, Bank of Greece, Banque de France and Deutsche Bundesbank on the side of the Eurosystem. Between November 2005 and November 2007, the Eurosystem assisted

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the Central Bank of Egypt in an overall revision of its administrative and operational procedures in banking supervision, aimed at moving from a compliance-based to a risk-based approach. Work proceeded along six work streams: ongoing surveillance, inspections and controls, macro-prudential analysis, regulation and standard setting, methodology and information technology and a training curriculum for supervisors. More than 70 events, including missions, study visits, training courses and other consultations took place over the two years.

The third programme - involving the Central Bank of Bosnia and Herzegovina - started in April 2007 and terminated in September of the same year. During those six months, the ECB and eight national central banks (the Banca d'Italia, Banco de España, Bank of Greece, Banka Slovenije, Banque de France, Deutsche Bundesbank, Eesti Pank and Oesterreichische Nationalbank) identified the specific topics in which the Central Bank of Bosnia and Herzegovina needed to make progress in order to reach a level comparable to that of a central bank of an EU Member State, in seven central banking areas (audit, coordination among banking supervisors, economic analysis and research, financial stability, monetary policy implementation under a currency board, payment systems and statistics). The Eurosystem identified 70 recommendations, which the Central Bank of Bosnia and Herzegovina has already started to implement.

A new multi-year programme to the benefit of the Central Bank of the Russian Federation was signed in Moscow on 20 March 2008 and started on 1 April this year. The programme, which will last until December 2010, has two components. In the area of audit, it aims to make the Central Bank of the Russian Federation acquainted with the audit practices of the Eurosystem, in particular in view of the transition from a compliance-based to a risk-based audit. In the area of banking supervision, the Eurosystem will support the implementation of the Basel II requirements in Russia in its own three pillars, in particular in the regulatory

framework. The programme will be carried out by specialists from the ECB, Banca d'Italia, Banco de España, Bank of Greece, Banque de France, De Nederlandsche Bank, Deutsche Bundesbank, Oesterreichische Nationalbank and Suomen Pankki – Finlands Bank, the latter in cooperation with the financial supervisor Rahoitustarkastus.

The ECB has also entered into negotiations for two further programmes which may begin in 2008.

A programme with the National Bank of Serbia will assess preparatory needs in view of the country's possible future entry into the EU: it will include extensive participation by ESCB national central banks and will focus on seven central banking areas: capital account liberalisation, consumer protection and education, harmonisation of regulations with the *acquis communautaire*, monetary and exchange rate policy, statistics, supervision of banks and other financial institutions.

A new programme with the Central Bank of Egypt will concern the implementation of Basel II requirements in Egypt. It is planned to last for three years and will be carried out by the ECB together with eight national central banks from the ESCB. It will support the Central Bank of Egypt's preparations for implementing the three pillars of Basel II, in particular in contact with the local banking and financial industry.

### 5 CONCLUSION

Technical assistance in the domain of central banking is an institutional practice – aiming at transferring expertise and sharing experiences among professionals of different institutions – dating back to the building of a network of cooperative relationships between central banks worldwide in the course of the last century. It is strongly in the interest of the central banking community, as it ultimately supports the extension of monetary and financial stability in a financially intertwined world.

The bulk of the technical assistance provided by the Eurosystem to central banks in third countries is given by the national central banks, which operate according to different institutional and operational modalities, taking into account their history and foreign relations. Information on activities to the benefit of regions geographically closer to Europe is exchanged on a regular basis by the Eurosystem Task Force on Central Bank Cooperation, which also coordinates a number of larger multi-year programmes organised by the ECB on behalf of the Eurosystem. Such programmes have been financed by the European Commission as part of the EU regional policies to increase integration between Europe and its neighbouring regions. All in all, the Eurosystem is an important provider of technical assistance to other central banks. Considering only those central banks of regions around Europe, the Eurosystem dedicates the equivalent of around 30 full-time person-years to this activity. This support has been instrumental in the past to prepare the central banks of new EU Member States for EU enlargement and is currently given to both new candidate countries and emerging economies in Europe's neighbourhood.

The Eurosystem is continuing and deepening activities which its national central banks had inaugurated long before its inception. The increasing volume of requests for support which the Eurosystem receives from central banks in third countries is ultimately proof of the capacity of Europe to render, in the central banking area, a service to countries outside the European Union, while illustrating that the EU model is attracting interest also in central banking. By acting in unison, the outreach of the Eurosystem has also considerably increased, compared with the period prior to the establishment of EMU, illustrating another, mostly overlooked, benefit of the creation of Monetary Union in Europe.

# **EURO AREA STATISTICS**



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

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#### ENLARGEMENT OF THE EURO AREA ON I JANUARY 2008 TO INCLUDE CYPRUS AND MALTA

Unless otherwise indicated, all data series covering observations for 2008 relate to the Euro 15 (the euro area including Cyprus and Malta) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), 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 indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for 2001, 2007 and 2008, calculated from a base in 2000, 2006 and 2007, use a series which takes into account the impact of the entry of Greece, Slovenia and Cyprus and Malta, respectively, into the euro area. Historical data referring to the euro area before the entry of Cyprus and Malta are available on the ECB web site at http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html

#### Conventions used in the tables

66 22	4-4- 4- 4-4		not applicable
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"." data are not yet available

"..." nil or negligible

"billion" 109

(p) provisional

s.a. seasonally adjusted

n.s.a. non-seasonally adjusted





### **EURO AREA OVERVIEW**

Summary of economic indicators for the euro area

#### 1. Monetary developments and interest rates

	M1 <sup>1)</sup>	M2 <sup>1)</sup>	M3 <sup>1), 2)</sup>	M3 <sup>1), 2)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>1)</sup>	Securities other than shares issued in euro by non-MFI corporations <sup>1)</sup>	3-month interest rate (EURIBOR, % per annum, period averages)	10-year spot rate (% per annum, end-of- period) <sup>3)</sup>
	1	2	3	4	5	6	7	8
2006 2007	8.6 6.4	8.7 9.9	8.4 11.1	-	10.9 10.8	15.3 18.7	3.08 4.28	3.91 4.38
2007 Q3 Q4 2008 Q1 Q2	6.5 5.9 3.8	10.3 10.7 10.3	11.5 12.0 11.2	- - -	11.0 11.1 11.0	20.1 19.8 20.5	4.49 4.72 4.48 4.86	4.38 4.38 4.13 4.73
2008 Jan. Feb. Mar.	4.4 3.7 2.9	10.4 10.6 9.8	11.5 11.3 10.1	11.4 10.9 10.6	11.1 11.0 10.8	21.8 20.4 17.2	4.48 4.36 4.60	4.05 4.06 4.13
Apr. May June	2.5 2.3	10.4 10.1	10.5 10.5	10.4	10.6 10.4	18.5	4.78 4.86 4.94	4.32 4.52 4.73

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

	НІСР	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
2006	2.2	5.1	2.5	2.8	4.0	83.2	1.6	8.3
2007	2.1	2.8	2.7	2.6	3.4	84.2	1.8	7.4
2007 Q3	1.9	2.1	2.6	2.7	4.0	84.0	1.9	7.4
Q4	2.9	4.0	2.8	2.1	3.1	84.0	1.8	7.3
2008 Q1	3.4	5.4	3.3	2.2	2.8	83.7	1.6	7.2
2008 Jan.	3.2	5.1	-	-	3.5	83.9	-	7.2
Feb.	3.3	5.4	-	-	3.3	-	-	7.2
Mar.	3.6	5.8	-	-	1.6	-	-	7.2
Apr.	3.3	6.2	-	-	3.9	83.5	-	7.2
May	3.7	7.1	-	-		-	-	7.2
June	4.0		-	-		-	-	

#### ${\bf 3.\,Balance\,\,of\,\,payments,\,reserve\,\,assets\,\,and\,\,exchange\,\,rates}$

(EUR billions, unless otherwise indicated)

	В	alance of payment	s (net transactions)		Reserve assets (end-of-period			USD/EUR exchange rate
	Current and			Q1 = 100)				
	capital accounts	Goods	investment	investment		Nominal	Real (CPI)	
	1	2	3	4	5	6	7	8
2006	7.9	19.2	-144.7	266.3	325.8	103.6	104.6	1.2556
2007	40.5	55.6	-94.8	253.8	347.4	107.7	108.3	1.3705
2007 Q3	15.2	17.1	-40.9	65.1	340.5	107.6	108.2	1.3738
Q4	16.8	9.7	18.2	-44.1	347.4	110.5	111.2	1.4486
2008 Q1	-10.0	-1.7	-66.3	68.6	356.3	112.7	113.1	1.4976
Q2						115.7	115.8	1.5622
2008 Jan.	-15.5	-7.3	-29.9	49.3	374.8	112.0	112.3	1.4718
Feb.	10.5	4.2	-20.0	19.4	375.4	111.8	111.9	1.4748
Mar.	-4.9	1.3	-16.3	-0.1	356.3	114.6	115.0	1.5527
Apr.	-8.6	3.0	-24.2	0.5	348.7	116.0	116.1	1.5751
May					349.2	115.5	115.7	1.5557
June	,					115.4	115.6	1.5553

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

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

- Annual percentage changes of monthly data refer to the end of the month, whereas those of quarterly and yearly data refer to the annual change in the period average of the series.
- See the Technical notes for details.

  M3 and its components exclude holdings by non-euro area residents of money market fund shares/units and debt securities with a maturity of up to two years.

  Based on AAA-rated euro area central government bond yield curves. For further information, see table 4.7.
- For the definition of the trading partner groups and other information, please refer to the General notes.



### **MONETARY POLICY STATISTICS**

# I.I Consolidated financial statement of the Eurosystem (EUR millions)

#### 1. Assets

	2008 6 June	2008 13 June	2008 20 June	2008 27 June
Gold and gold receivables	209,515	209,402	209,376	209,353
Claims on non-euro area residents in foreign currency	136,204	135,683	136,095	135,270
Claims on euro area residents in foreign currency	55,300	55,502	55,195	56,283
Claims on non-euro area residents in euro	15,077	14,788	14,861	14,686
Lending to euro area credit institutions in euro	438,030	466,035	463,047	483,006
Main refinancing operations	153,000	191,001	188,001	208,001
Longer-term refinancing operations	285,027	275,026	275,043	275,004
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	0	2	2	0
Credits related to margin calls	3	6	1	1
Other claims on euro area credit institutions in euro	31,396	30,353	30,606	31,723
Securities of euro area residents in euro	114,943	115,223	115,296	114,708
General government debt in euro	38,007	38,007	38,002	38,002
Other assets	369,274	377,619	378,673	379,679
Total assets	1,407,746	1,442,612	1,441,151	1,462,710

#### 2. Liabilities

	2008 6 June	2008 13 June	2008 20 June	2008 27 June
Banknotes in circulation	675,558	675,044	674,305	677,441
Liabilities to euro area credit institutions in euro	195,146	225,932	216,002	227,208
Current accounts (covering the minimum reserve system)	195,069	225,868	215,783	226,528
Deposit facility	70	54	48	674
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	7	10	171	6
Other liabilities to euro area credit institutions in euro	156	148	210	206
Debt certificates issued	0	0	0	0
Liabilities to other euro area residents in euro	66,496	65,823	74,936	81,404
Liabilities to non-euro area residents in euro	72,348	76,882	77,464	77,470
Liabilities to euro area residents in foreign currency	2,396	1,600	1,816	2,998
Liabilities to non-euro area residents in foreign currency	16,587	17,057	16,596	15,575
Counterpart of special drawing rights allocated by the IMF	5,148	5,148	5,148	5,148
Other liabilities	146,008	147,072	146,767	147,357
Revaluation accounts	156,231	156,231	156,231	156,231
Capital and reserves	71,672	71,675	71,676	71,672
Total liabilities	1,407,746	1,442,612	1,441,151	1,462,710

#### I.2 Key ECB interest rates

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

With effect from 1)	With effect from 1) Deposit facility		Ma	in refinancing operatio	ns	Marginal lend	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	
13 Dec.	2.50	0.25	-	3.50	0.25	4.50	0.25	
2007 14 Mar.	2.75	0.25	-	3.75	0.25	4.75	0.25	
13 June	3.00	0.25	-	4.00	0.25	5.00	0.25	
2008 9 July	3.25	0.25	-	4.25	0.25	5.25	0.25	

- 1) From 1 January 1999 to 9 March 2004, the date refers to the deposit and marginal lending facilities. For main refinancing operations, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day. From 10 March 2004 onwards, the date refers to the deposit and marginal lending facilities and to the main refinancing operations (changes effective from the first main refinancing operation following the Governing Council discussion), unless otherwise indicated.
- 2) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new monetary regime by market participants.
- 3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

#### 1.3 Eurosystem monetary policy operations allotted through tenders 1), 2)

#### 1. Main and longer-term refinancing operations 3)

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	V	ariable rate tenders		Running for () days
364464164	(umount)	paracepants	(411194111)	Minimum bid rate	Marginal rate 4)	Weighted average rate	(ii) days
	1	2	3	4	5	6	7
		'	Main refinan	cing operations			
2008 5 Mar.	240,542	264	176,500	4.00	4.11	4.14	7
12	260,402	298	209,500	4.00	4.12	4.16	7
19	295,701	336	202,000	4.00	4.16	4.20	7
26	302,534	301	216,000	4.00	4.23	4.28	7
2 Apr.	283,699	306	150,000	4.00	4.21	4.25	7
9	247,590	295	130,000	4.00	4.23	4.24	7
16	249,682	310	204,500	4.00	4.21	4.26	7
23	218,419	302	173,000	4.00	4.21	4.25	7
30	247,451	316	170,000	4.00	4.26	4.29	7
7 May	229,288	304	150,000	4.00	4.26	4.29	7
14	208,523	287	191,500	4.00	4.18	4.26	7
21	203,091	326	176,500	4.00	4.15	4.22	7 7
28	224,080	330	170,000	4.00	4.19	4.23	7
4 June	210,100	336	153,000	4.00	4.17	4.22	7 7
11	202,780	343	191,000	4.00	4.03	4.18	
18 25	224,290	425	188,000	4.00	4.03 4.07	4.13	7 7
	243,286	439	208,000	4.00		4.25	7
2 July	254,664	433	154,500	4.00	4.10	4.15	
				nancing operations			
2007 12 Dec.	105,126	122	60,000	-	4.81	4.88	92
20	48,476	97	48,476	-	4.00	4.56	98
2008 31 Jan.	98,183	151	50,000	_	4.21	4.33	92
21 Feb.	110.490	105	60,000	_	4.15	4.26	91
28	109,612	165	50,000	_	4.16	4.23	91
13 Mar.	132,591	139	60,000	_	4.25	4.40	91
27	131,334	190	50,000	-	4.44	4.53	91
3 Apr.	103,109	177	25,000	-	4.55	4.61	189
2 May	101,175	177	50,000	-	4.67	4.75	90
22	86,628	138	50,000	-	4.50	4.68	84
29	97,744	171	50,000	-	4.51	4.62	91
12 June	99,781	128	50,000	-	4.60	4.72	91
26	89,836	174	50,000	-	4.50	4.67	91

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders		able rate tend		Running for () days
					Fixed rate	Minimum bid rate	Marginal rate 4)	Weighted	
						bid rate	Tate	average rate	
	1	2	3	4	5	6	7	8	9
2007 19 Dec.	Collection of fixed-term deposits	133,610	52	133,610	4.00	-	_	-	1
20	Collection of fixed-term deposits	165,815	58	150,000	4.00	-	-	-	1
21	Collection of fixed-term deposits	141,565	55	141,565	4.00	-	-	-	6
27	Collection of fixed-term deposits	145,640	49	145,640	4.00	-	-	-	1
28	Collection of fixed-term deposits	160,450	52	150,000	4.00	-	-	-	3
2008 2 Jan.	Collection of fixed-term deposits	168,640	54	168,640	4.00	-	-	-	1
3	Collection of fixed-term deposits	212,620	69	200,000	4.00	-	-	_	1
15	Collection of fixed-term deposits	45,712	28	20,000	4.00	_	_	_	1
12 Feb.	Collection of fixed-term deposits	29,155	22	16,000	4.00	-	-	-	1
11 Mar.	Reverse transaction	45,085	32	9,000	-	4.00	4.13	4.14	1
20	Reverse transaction	65,810	44	15,000	-	4.00	4.13	4.20	5
31	Reverse transaction	30,720	25	15,000	-	4.00	4.06	4.13	1
15 Apr.	Collection of fixed-term deposits	14,880	7	14,880	4.00	-	-	-	1
13 May	Collection of fixed-term deposits	32,465	29	23,500	4.00	-	-	-	1
10 June	Collection of fixed-term deposits	18,505	15	14,000	4.00	-	-	-	1

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

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

### 1.4 Minimum reserve and liquidity statistics

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

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

Reserve	Total	Liabilities to which a 2% res	serve coefficient is applied	Liabilities to which a 0% reserve coefficient is applied			
as at 1)		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	
2006 2007	15,648.3 17,394.7	8,411.7 9,438.8	601.9 815.0	1,968.4 2,143.1	1,180.3 1,364.0	3,486.1 3,633.9	
2008 Jan. Feb. Mar. Apr.	17,678.3 17,734.6 17,703.3 17,955.9	9,525.3 9,572.0 9,551.7 9,762.0	845.1 844.7 840.2 856.1	2,140.6 2,132.7 2,126.0 2,135.6	1,512.9 1,533.9 1,558.4 1,562.3	3,654.4 3,651.2 3,627.1 3,640.0	

#### 2. Reserve maintenance

Maintenance period ending on:	reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2006 2007	172.5 195.9	173.2 196.8	0.7 1.0	0.0 0.0	3.30 4.17
2008 Q1	204.6	205.3	0.7	0.0	4.10
2008 11 Mar. 15 Apr. 10 June 8 July	204.6 206.9 207.3 211.9	205.3 207.5 208.1	0.7 0.6 0.8	0.0 0.0 0.0	4.10 4.19 4.17

#### 3. Liquidity

Maintenance period ending on:	ſ	Liquidity	-providing fact  Monetary pol		as of the Furo	system	Liquidi	ty-absorbing	factors		Credit institutions' current	Base money
chang on.			monetary po	ney operation	is of the Euro	system					accounts	
	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
2006 2007	327.0 327.5	313.1 173.0	120.0 278.6	0.1 0.3	0.1 0.0	0.1 0.4	0.0 2.2	598.6 644.6	54.9 61.9	-66.4 -126.6	173.2 196.8	771.8 841.9
2008 15 Jan. 12 Feb. 11 Mar. 15 Apr. 13 May 10 June	343.8 353.6 343.3 349.1 364.5 375.0	255.7 173.8 181.3 181.5 174.4 172.8	268.8 268.5 268.5 278.6 295.0 287.9	0.3 0.2 0.1 0.1 0.1 0.3	0.0 0.0 0.3 2.6 0.0 0.0	1.1 0.4 0.3 0.6 0.3 0.2	68.4 0.6 0.0 0.4 0.8 0.5	668.2 651.7 653.2 661.7 667.6 671.4	46.4 51.7 59.7 70.2 68.9 67.3	-116.4 -110.7 -125.0 -128.6 -112.3 -111.5	200.9 202.4 205.3 207.5 208.6 208.1	870.2 854.5 858.7 869.9 876.5 879.7

Source: ECB.
1) End of period.

<sup>2)</sup> Starting from 1 January 2008, includes monetary policy operations in the form of collection of fixed-term deposits which were conducted by the Central Bank of Malta and the Central Bank of Cyprus before 1 January 2008 and were still outstanding after this date.



### MONEY, BANKING AND INVESTMENT FUNDS

## 2.1 Aggregated balance sheet of euro area MFIs 1) (EUR billions; outstanding amounts at end of period)

#### 1. Assets

	Total	Lo	ans to euro a	rea resident	ts		ngs of securi issued by eur			Money market fund	Holdings of shares/ other equity	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	MFIs	Total		Other euro area residents	MFIs	shares/ units 2)	issued by euro area residents			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
							Eurosystem							
2005 2006	1,404.9 1,558.2	635.5 695.7	20.7 19.7	0.6 0.6	614.2 675.3	185.7 217.0	165.6 187.5	2.1 2.5	18.1 27.0	-	14.8 17.2	337.0 351.4	14.7 14.7	217.2 262.4
2007 Q3	1,707.3	753.5	17.8	0.6	735.1	259.5	219.3	2.2	38.0	-	17.7	368.8	15.6	292.3
Q4	2,046.1	1,031.7	17.8	0.6	1,013.3	268.6	225.1	1.9	41.6	-	17.4	373.7	15.2	339.6
2008 Jan.	1,934.3	886.8	19.4	0.7	866.7	273.5	230.2	2.0	41.3	-	16.3	401.3	15.4	341.1
Feb. Mar.	1,957.8 2.017.8	902.9 965.9	19.4 19.4	0.7 0.7	882.8 945.9	279.1 278.5	236.2 235.9	2.2 2.3	40.7 40.3		16.5 16.2	400.6 383.3	15.3 15.2	343.3 358.6
Apr.	2,017.8	951.4	18.8	0.7	931.9	278.9	235.9	2.5	40.3	-	16.2	375.3	16.0	374.3
May (p)	2,009.4	934.9	18.8	0.7	915.4	280.0	236.3	2.4	41.3	-	16.5	376.6	16.0	385.4
						MFIs exc	luding the Eu	rosystem						
2005	23,631.5	13,681.7	826.9	8,285.1	4,569.7	3,498.6	1,429.4	551.5	1,517.7	83.1	1,008.7	3,652.8	165.7	1,540.9
2006	25,950.2	14,904.3	810.5	9,160.3	4,933.5	3,555.4	1,276.5	645.9	1,632.9	83.5	1,171.4	4,329.0	172.6	1,733.9
2007 Q3	28,438.9	16,175.3	794.0	9,948.1	5,433.3	3,748.3	1,214.4	806.3	1,727.6	95.9	1,226.1	4,875.1	203.1	2,115.0
Q4	29,447.4	16,905.0	956.1	10,159.9	5,789.0	3,880.8	1,194.1	949.7	1,737.0	93.5	1,296.6	4,872.5	206.0	2,193.0
2008 Jan.	30,046.7	17,123.9	961.0	10,299.8	5,863.1	3,973.7	1,219.8	962.1	1,791.8	98.2	1,315.4	5,088.5	205.7	2,241.3
Feb.	30,219.3	17,164.7	951.4	10,354.6	5,858.7	4,023.9	1,216.4	983.9	1,823.6	102.7	1,303.0	5,129.2	200.6	2,295.1
Mar. Apr.	30,228.2 30,522.9	17,231.1 17,425.7	958.2 971.0	10,447.7 10,523.6	5,825.2 5,931.1	4,037.2 4,095.2	1,216.4 1,224.5	1,004.8 1,032.3	1,815.9 1,838.4	100.4 99.9	1,312.4 1,365.9	4,971.8 5,079.5	197.4 198.1	2,377.8 2,258.6
May (p)	30,922.9	17,605.6	963.3	10,525.8	6,054.5	4,177.3	1,229.3	1,055.0	1,893.0	98.8	1,386.4	5,061.5	198.7	2,379.6

#### 2. Liabilities

	Total	Currency	1	Deposits of euro	o area residents		Money market	Debt securities	Capital and	External liabilities	Remaining liabilities
		circulation	Total	Central government	Other general government/ other euro area residents	MFIs	fund shares/ units <sup>3)</sup>	issued 4)	reserves		
	1	2	3	4	5	6	7	8	9	10	11
					Eurosystem						
2005 2006	1,404.9 1,558.2	582.7 647.0	385.4 431.6	24.4 33.7	14.5 15.9	346.5 382.0	-	0.1 0.1	202.9 208.6	27.6 35.3	206.2 235.6
2007 Q3 Q4	1,707.3 2,046.1	657.2 697.0	510.7 714.7	51.7 23.9	19.1 19.1	439.9 671.8	-	0.1 0.1	222.6 238.0	48.3 66.0	268.4 330.3
2008 Jan. Feb.	1,934.3 1,957.8 2,017.8	671.3 674.4 681.9	626.6 653.9 703.2	54.6 53.7 60.4	21.0 23.1 20.8	551.1 577.0 622.0	-	0.1 0.1 0.1	254.5 259.3 246.5	72.9 58.2 70.3	308.9 311.9 315.9
Mar. Apr. May <sup>(p)</sup>	2,017.8 2,012.4 2,009.4	690.5 692.8	682.9 656.3	66.9 44.4	23.1 25.0	592.9 586.9	-	0.1 0.1 0.1	237.9 239.1	81.4 95.6	319.7 319.7 325.5
				MFIs	excluding the Eu	rosystem					
2005 2006	23,631.5 25,950.2	-	12,212.2 13,257.2	149.2 124.2	7,211.9 7,890.6	4,851.2 5,242.4	698.9 698.3	3,858.3 4,247.6	1,310.6 1,449.7	3,518.0 3,991.1	2,033.5 2,306.2
2007 Q3 Q4	28,438.9 29,447.4	-	14,255.0 15,085.2	144.3 127.1	8,410.0 8,865.9	5,700.7 6,092.2	778.4 754.1	4,577.1 4,645.2	1,589.4 1,678.8	4,527.5 4,530.4	2,711.6 2,753.6
2008 Jan. Feb. Mar.	30,046.7 30,219.3 30,228.2	-	15,188.9 15,219.0 15,287.8	114.3 135.4 139.8	8,926.4 8,942.3 9,012.1	6,148.2 6,141.3 6,136.0	835.5 852.8 843.0	4,686.7 4,686.7 4.678.6	1,699.4 1,702.8 1,719.0	4,794.2 4,869.0 4,761.2	2,841.9 2,889.0 2,938.5
Apr. May (p)	30,5228.2 30,522.9 30,908.0	-	15,476.8 15,653.4	131.0 129.5	9,101.7 9,101.7 9,173.5	6,244.2 6,350.4	852.1 876.1	4,706.1 4,789.0	1,727.8 1,733.8	4,927.6 4,959.7	2,832.5 2,896.0

- Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets. Amounts held by euro area residents.

  Amounts issued with maturity up to two years held by non-euro area residents are included in external liabilities.
- Data refer to the changing composition of the euro area. For further information, see the General notes.
   Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in exter
   Amounts held by euro area residents.
   Amounts issued with maturity up to two years held by non-euro area residents are included in external l

## **2.2 Consolidated balance sheet of euro area MFIs** <sup>1)</sup> (EUR billions; outstanding amounts at end of period; transactions durin

#### 1. Assets

	Total	Loans to	o euro area res	idents		ecurities other y euro area re		Holdings of shares/ other equity	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents	issued by other euro area residents			
	1	2	3	4	5	6	7	8	9	10	11
					Outstand	ing amounts					
2005	17,870.7	9,133.3	847.5	8,285.7	2,148.5	1,595.0	553.6	710.5	3,989.7	180.4	1,708.2
2006	19,723.8	9,991.1	830.2	9,161.0	2,112.4	1,464.0	648.4	811.2	4,680.4	187.3	1,941.4
2007 Q3	21,652.2	10,760.4	811.8	9,948.7	2,242.2	1,433.7	808.5	826.4	5,243.9	218.7	2,360.5
Q4	22,331.4	11,134.4	973.9	10,160.5	2,370.9	1,419.2	951.7	884.7	5,246.2	221.1	2,474.1
2008 Jan.	22,833.6	11,281.0	980.5	10,300.5	2,414.1	1,450.0	964.1	893.5	5,489.7	221.1	2,534.3
Feb.	22,975.5	11,326.1	970.8	10,355.2	2,438.7	1,452.6	986.1	872.3	5,529.8	216.0	2,592.7
Mar.	23,012.2	11,425.9	977.6	10,448.3	2,459.4	1,452.3	1,007.1	871.5	5,355.2	212.6	2,687.5
Apr.	23,182.6	11,514.1	989.8	10,524.3	2,494.4	1,459.7	1,034.8	921.4	5,454.8	214.1	2,583.8
May <sup>(p)</sup>	23,386.0	11,570.6	982.1	10,588.5	2,523.0	1,465.5	1,057.4	921.7	5,438.1	214.7	2,717.9
					Tran	sactions					
2005	1,608.0	708.9	12.8	696.0	156.2	76.2	80.0	53.2	448.0	1.4	240.4
2006	1,997.5	877.3	-14.4	891.6	10.7	-96.8	107.5	97.7	801.9	6.4	203.5
2007	2,593.4	1,016.6	-9.7	1,026.3	229.5	-46.8	276.3	59.8	792.1	-0.5	496.0
2007 Q4	564.4	233.8	8.0	225.7	98.3	-12.2	110.5	52.2	94.2	-5.8	91.6
2008 Q1	779.2	256.5	0.9	255.6	81.8	24.7	57.1	-7.0	261.1	-9.7	196.5
2008 Jan.	408.8	94.0	3.6	90.4	22.6	13.6	9.0	10.3	236.2	-1.3	47.1
Feb.	192.5	50.7	-9.6	60.2	25.9	2.8	23.1	-19.8	85.4	-5.1	55.5
Mar.	177.9	111.9	6.9	105.0	33.3	8.3	25.0	2.5	-60.4	-3.3	94.0
Apr.	160.8	91.9	12.0	79.9	38.7	10.9	27.8	47.6	86.0	1.5	-104.9
May <sup>(p)</sup>	200.0	58.5	-7.6	66.2	31.0	10.0	21.0	0.6	-23.2	0.6	132.4

#### 2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units <sup>2</sup>	Debt securities issued 3)	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter- MFI liabilities
	1	2			utstanding amoun		1	8	9	10
2005	17,870.7	532.8	173.6	7,226.4	615.8	2,322.6	1,200.6	3,545.6	2,239.7	13.7
2006	19,723.8	592.2	158.0	7,906.5	614.7	2,587.8	1,280.8	4,026.5	2,541.8	15.6
2007 Q3	21,652.2	610.4	196.0	8,429.2	682.5	2,811.5	1,394.7	4,575.7	2,979.9	-27.9
Q4	22,331.4	638.5	151.0	8,885.0	660.6	2,866.8	1,487.5	4,596.4	3,083.9	-38.3
2008 Jan.	22,833.6	623.1	168.9	8,947.4	737.3	2,853.7	1,515.8	4,867.1	3,150.8	-30.5
Feb.	22,975.5	628.7	189.2	8,965.5	750.1	2,822.5	1,514.8	4,927.3	3,200.9	-23.3
Mar.	23,012.2	632.9	200.2	9,032.9	742.5	2,822.5	1,508.5	4,831.5	3,254.4	-13.1
Apr.	23,182.6	641.3	197.8	9,124.8	752.2	2,826.5	1,504.7	5,008.9	3,152.2	-25.9
May (p)	23,386.0	645.7	173.9	9,198.6	777.3	2,854.8	1,491.7	5,055.3	3,221.6	-32.7
					Transactions					
2005	1,608.0	64.4	10.9	495.7	-3.1	213.5	95.5	448.0	333.9	-50.8
2006	1,997.5	59.4	-15.2	683.7	27.6	285.5	57.4	601.6	252.2	45.3
2007	2,593.4	45.8	-13.3	835.0	54.7	270.2	162.0	776.0	468.3	-5.3
2007 Q4	564.4	28.1	-49.8	311.2	-12.7	22.8	80.9	98.9	78.5	6.5
2008 Q1	779.2	-6.7	46.8	118.5	53.4	-5.9	31.7	337.2	149.9	54.2
2008 Jan.	408.8	-16.4	15.3	16.3	43.8	2.2	11.9	257.5	63.2	14.9
Feb.	192.5	5.6	20.3	25.0	11.9	-22.6	2.3	99.3	36.4	14.3
Mar.	177.9	4.1	11.2	77.1	-2.3	14.5	17.5	-19.6	50.2	25.0
Apr.	160.8	8.5	-2.4	88.7	10.3	2.3	4.8	156.4	-93.0	-14.9
May <sup>(p)</sup>	200.0	4.3	-24.0	71.5	25.2	27.8	-9.6	43.1	66.6	-4.9

- Source: ECB.

  1) Data refer to the changing composition of the euro area. For further information, see the General notes.

  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.

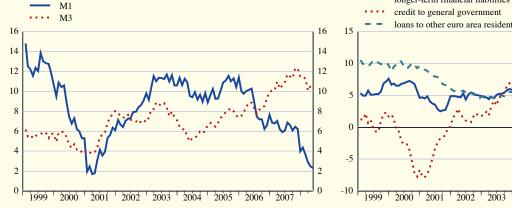
### 2.3 Monetary statistics 1)

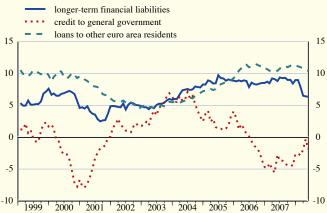
#### 1. Monetary aggregates 2) and counterparts

			M2	M3-M2	M3	M3 3-month moving	Longer-term financial liabilities	Credit to general government	Credit to euro area re	esidents	Net external assets 3)
	M1	M2-M1				average (centred)				Loans	
	1	2	3	4	5	6	7	8	9	10	11
					Outstanding a	amounts					
2005 2006	3,423.3 3,686.1	2,653.2 2,953.0	6,076.5 6,639.1	998.1 1,101.7	7,074.6 7,740.8	-	5,000.6 5,434.1	2,473.0 2,321.3	9,564.3 10,645.1	8,289.3 9,171.5	424.3 634.3
2007 Q3 Q4	3,819.3 3,835.4	3,314.8 3,504.0	7,134.1 7,339.4	1,264.2 1,310.7	8,398.3 8,650.1	-	5,795.8 5,977.7	2,258.5 2,417.2	11,606.3 12,028.9	9,948.6 10,176.5	662.7 629.5
2008 Jan. Feb. Mar. Apr. May (P)	3,857.3 3,853.5 3,855.1 3,842.0 3,858.5	3,575.8 3,630.6 3,666.9 3,767.6 3,792.2	7,433.1 7,484.1 7,522.0 7,609.6 7,650.7	1,349.2 1,339.8 1,337.2 1,339.6 1,370.8	8,782.4 8,823.9 8,859.2 8,949.2 9,021.5	- - - -	6,037.3 6,014.5 5,972.4 6,002.6 6,007.4	2,430.9 2,423.7 2,421.5 2,434.9 2,436.5	12,173.3 12,246.0 12,328.5 12,419.5 12,512.6	10,304.4 10,372.6 10,451.8 10,514.6 10,586.5	620.2 599.2 541.7 479.0 422.3
<u> </u>					Transacti	ions					
2005 2006 2007	339.8 261.2 147.4	139.3 309.8 523.4	479.1 571.0 670.8	8.4 131.0 220.3	487.5 702.0 891.1		401.5 427.7 488.5	94.1 -114.7 -60.1	837.0 1,106.5 1,370.0	701.8 898.6 1,031.6	-0.4 200.6 15.5
2007 Q4 2008 Q1	18.2 14.3	160.6 137.9	178.8 152.2	54.7 9.4	233.5 161.5	-	136.5 32.4	6.4 -7.0	397.6 275.3	241.8 243.1	-19.5 -37.9
2008 Jan. Feb. Mar. Apr. May (p)	9.7 -0.1 4.7 -13.9 14.5	40.9 56.6 40.3 99.9 24.5	50.6 56.5 45.1 86.1 39.0	16.5 -9.9 2.8 2.9 30.6	67.1 46.6 47.8 89.0 69.5	- - - -	43.7 -9.7 -1.5 35.5 8.4	-6.5 -6.9 6.5 16.8 5.7	92.9 80.6 101.7 92.9 93.7	78.3 73.7 91.0 66.8 73.9	-3.5 -14.7 -19.6 -55.2 -59.9
					Growth r	ates					
2005 Dec. 2006 Dec.	11.4 7.6	5.4 11.7	8.5 9.4	0.9 13.3	7.4 10.0	7.5 9.8	8.9 8.5	4.1 -4.7	9.6 11.6	9.3 10.8	-0.4 200.6
2007 Sep. Dec.	6.1 4.0	15.4 17.7	10.2 10.1	18.1 20.0	11.3 11.5	11.7 11.8	9.0 8.9	-4.4 -2.6	11.6 12.8	11.0 11.2	198.4 15.5
2008 Jan. Feb. Mar. Apr. May <sup>(p)</sup>	4.4 3.7 2.9 2.5 2.3	17.8 19.2 18.2 19.8 19.4	10.4 10.6 9.8 10.4 10.1	18.2 15.0 11.8 11.6 12.6	11.5 11.3 10.1 10.5 10.5	11.4 10.9 10.6 10.4	9.0 7.9 6.5 6.4 6.4	-2.6 -2.8 -1.9 -0.3 -1.8	12.8 12.7 12.3 12.0 11.9	11.1 11.0 10.8 10.6 10.4	18.5 -33.4 -147.9 -173.6 -228.6

#### CI Monetary aggregates 1)

#### C2 Counterparts 1)





- Data refer to the changing composition of the euro area. For further information, see the General notes.

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

#### 2.3 Monetary statistics <sup>1</sup>

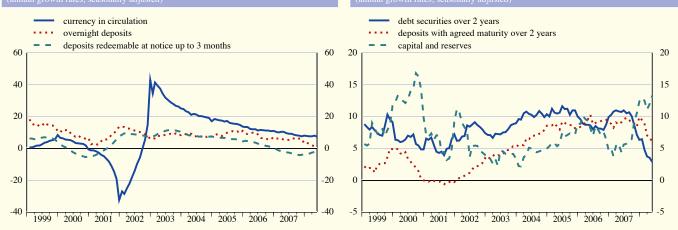
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	Currency in circulation	Overnight deposits		Deposits 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	Outstanding a	6 mounts	7	8	9	10	11_
2005	521.1	2,902.2	1,109.6	1,543.7	236.0	635.9	126.2	2,205.0	86.8	1,511.3	1,197.5
2006	578.4	3,107.7	1,401.0	1,552.0	266.1	637.0	198.6	2,399.6	102.2	1,655.0	1,277.3
2007 Q3	611.6	3,207.7	1,807.8	1,507.0	295.3	687.2	281.7	2,526.5	112.9	1,766.9	1,389.4
Q4	625.8	3,209.6	1,968.7	1,535.3	307.4	686.8	316.5	2,561.0	119.6	1,813.5	1,483.6
2008 Jan.	629.5	3,227.8	2,038.8	1,537.0	306.4	745.2	297.7	2,578.9	122.9	1,819.0	1,516.6
Feb.	634.2	3,219.3	2,093.9	1,536.6	313.4	754.8	271.7	2,561.2	121.3	1,816.0	1,516.1
Mar.	638.0	3,217.1	2,125.3	1,541.6	307.7	746.9	282.5	2,540.6	119.4	1,813.2	1,499.1
Apr.	644.8	3,197.2	2,224.5	1,543.1	323.4	743.9	272.2	2,554.8	118.7	1,817.9	1,511.2
May (p)	643.7	3,214.8	2,255.6	1,536.6	315.6	760.5	294.7	2,554.4	117.6	1,831.2	1,504.2
					Transacti						
2005	63.0	276.8	70.3	69.0	-7.1	-0.9	16.4	199.5	-4.3	111.4	94.9
2006	57.3	203.9	300.5	9.3	30.9	30.0	70.1	217.2	15.4	138.1	57.0
2007	46.9	100.4	579.4	-55.9	43.3	58.8	118.2	152.3	9.9	164.5	161.8
2007 Q4	14.2	4.0	171.6	-11.1	12.2	8.8	33.8	3.2	-0.1	51.1	82.3
2008 Q1	11.2	3.1	137.2	0.7	0.6	31.3	-22.5	6.5	-1.5	1.3	26.1
2008 Jan.	2.7	7.0	45.0	-4.1	-0.9	25.0	-7.6	22.0	1.9	3.2	16.6
Feb.	4.7	-4.8	56.9	-0.3	7.0	8.8	-25.7	-9.3	-1.5	-1.6	2.7
Mar.	3.8	0.9	35.3	5.1	-5.5	-2.5	10.8	-6.1	-1.8	-0.3	6.7
Apr.	6.8	-20.6	98.4	1.5	15.7	-2.4	-10.4	12.5	-0.7	3.0	20.7
May <sup>(p)</sup>	-1.0	15.5	31.0	-6.5	-7.9	16.7	21.8	-0.1	-1.1	13.2	-3.6
					Growth ra	ates					
2005 Dec.	13.8	11.0	6.6	4.4	-3.0	-0.1	15.7	10.0	-4.7	8.1	8.8
2006 Dec.	11.0	7.0	27.2	0.6	13.2	4.9	54.5	9.9	17.8	9.1	4.7
2007 Sep.	8.3	5.7	38.2	-3.6	12.1	9.8	55.2	10.1	15.1	9.0	6.4
Dec.	8.1	3.2	41.3	-3.6	16.3	9.2	59.5	6.3	9.6	9.9	12.4
2008 Jan.	7.8	3.7	40.9	-3.7	17.6	11.0	39.9	6.4	9.2	9.5	12.9
Feb.	7.7	2.9	43.0	-3.1	18.4	10.9	22.0	4.8	6.3	8.9	12.5
Mar.	7.7	2.0	39.2	-2.5	11.2	8.2	22.2	3.8	3.5	7.1	11.1
Apr.	8.0	1.4	41.6	-2.2	17.8	6.8	17.4	3.5	1.9	6.5	12.0
May <sup>(p)</sup>	7.5	1.3	40.4	-2.4	16.8	7.7	20.9	2.9	0.6	6.3	13.3

#### C3 Components of monetary aggregates 1)

### C4 Components of longer-term financial liabilities ()



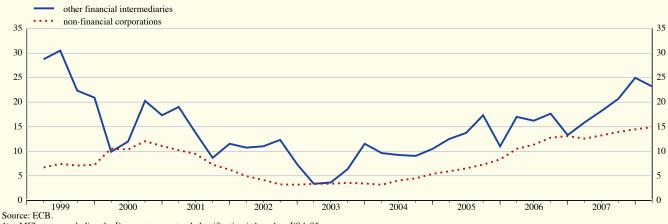
<sup>1)</sup> Data refer to the changing composition of the euro area. For further information, see the General notes.

### 2.4 MFI loans, breakdown <sup>1), 2)</sup> (EUR billions and annual growth rates;

#### 1. Loans to financial intermediaries and non-financial corporations 3)

	Insurance corpora and pension fur		Other financi intermediarie			Non-financial con	rporations	
	Total	Up to 1 year	Total	Up to 1 year	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8
	•		Outstand	ling amounts		5		
2005	64.6	41.6	620.4	370.2	3,409.1	1,037.7	594.0	1,777.3
2006	82.8	55.2	696.0	420.6	3,844.5	1,137.9	707.1	1,999.5
2007 Q3	112.0	87.8	854.7	535.3	4,230.5	1,248.2	814.0	2,168.4
Q4	96.4	70.6	866.4	526.2	4,389.0	1,276.8	858.9	2,253.3
2008 Jan.	101.7	75.7	901.9	559.4	4,460.8	1,294.7	878.9	2,287.2
Feb.	102.7	76.7	902.2	559.7	4,497.9	1,307.2	887.9	2,302.9
Mar.	104.2	78.7	937.1	589.8	4,546.3	1,328.0	895.4	2,323.0
Apr.	102.4	76.0	959.8	610.8	4,591.0	1,338.1	901.9	2,351.0
May <sup>(p)</sup>	105.6	79.7	980.0	625.2	4,619.5	1,339.0	908.4	2,372.1
			Tran	sactions				
2005	15.0	9.8	60.8	29.2	262.7	56.8	54.3	151.6
2006	18.1	13.9	81.9	57.7	446.2	100.5	123.1	222.6
2007	14.0	15.8	175.2	113.4	556.3	145.0	155.7	255.6
2007 Q4	-15.5	-17.1	16.8	-5.8	161.0	30.2	47.7	83.1
2008 Q1	8.0	8.3	73.5	65.2	137.8	47.1	33.2	57.5
2008 Jan.	5.3	5.2	32.5	30.6	44.1	10.9	14.2	19.0
Feb.	1.1	1.0	2.0	1.7	39.6	13.5	10.1	15.9
Mar.	1.6	2.1	39.0	32.9	54.1	22.7	8.8	22.6
Apr.	-1.9	-2.7	20.3	18.7	49.1	11.7	9.1	28.3
May <sup>(p)</sup>	3.3	3.6	20.0	14.3	29.3	1.2	6.8	21.2
			Grov	wth rates				
2005 Dec.	30.6	31.2	11.0	8.7	8.3	5.8	9.9	9.3
2006 Dec.	28.0	33.3	13.3	15.6	13.1	9.7	20.8	12.4
2007 Sep.	25.6	40.0	20.7	23.3	14.0	12.6	20.3	12.5
Dec.	16.9	28.5	25.0	26.9	14.5	12.7	22.0	12.8
2008 Jan.	2.2	5.4	26.6	28.5	14.4	12.2	22.7	12.8
Feb.	6.4	9.9	23.1	23.1	14.8	13.0	22.8	12.9
Mar.	6.3	10.3	23.2	23.1	14.9	13.8	21.9	13.1
Apr.	-2.7	-3.9	22.2	23.1	14.9	13.0	21.4	13.6
May <sup>(p)</sup>	-2.6	-2.8	25.7	28.5	14.2	12.4	19.6	13.3

### C5 Loans to financial intermediaries and non-financial corporations 2)



- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- 1) 2) 3) 4) Data refer to the changing composition of the euro area. For further information, see the General notes.

  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. This category includes investment funds.

## 2.4 MFI loans, breakdown <sup>1), 2)</sup> (EUR billions and annual growth rates;

#### 2. Loans to households 3)

	Total		Consumer	credit		Le	nding for h	ouse purchase			Other l	ending	
		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
					O	utstanding an	nounts						
2005	4,191.0	554.1	129.1	200.7	224.3	2,915.3	15.2	67.5	2,832.6	721.6	147.3	99.9	474.4
2006	4,537.0	586.5	135.3	202.7	248.5	3,212.1	15.6	72.1	3,124.5	738.4	146.2	101.5	490.7
2007 Q3	4,750.8	607.3	134.1	203.1	270.1	3,390.9	16.1	73.4	3,301.4	752.7	146.6	104.2	501.9
Q4	4,808.1	617.9	137.6	203.7	276.6	3,436.9	15.9	73.8	3,347.2	753.4	147.5	104.0	501.8
2008 Jan.	4,835.4	619.4	136.8	204.1	278.5	3,457.1	15.9	73.7	3,367.5	758.9	146.7	104.8	507.3
Feb.	4,851.7	619.0	135.7	202.5	280.8	3,471.5	15.8	73.5	3,382.2	761.2	145.4	105.7	510.1
Mar.	4,860.2	623.1	136.9	203.0	283.2	3,476.2	16.1	73.6	3,386.6	760.8	147.1	105.5	508.3
Apr.	4,870.4	627.1	136.5	204.6	285.9	3,484.9	16.1	73.4	3,395.5	758.4	145.6	102.8	510.0
May <sup>(p)</sup>	4,882.6	627.0	136.6	203.5	286.9	3,497.0	15.8	73.4	3,407.8	758.7	144.5	102.3	511.9
	,					Transactio	ns		,				
2005	357.5	40.6	9.0	11.6	20.0	300.6	0.7	4.8	295.0	16.2	3.8	1.3	11.1
2006	345.3	42.6	8.2	4.8	29.5	281.8	1.5	4.6	275.8	20.9	1.4	3.8	15.7
2007	280.6	31.3	3.6	1.1	26.7	228.5	0.9	2.3	225.3	20.7	1.7	4.4	14.6
2007 Q4	63.4	10.8	4.2	0.6	6.0	48.1	0.0	0.6	47.5	4.6	1.5	1.0	2.0
2008 Q1	36.4	1.6	-1.1	-1.9	4.7	31.3		-0.3	31.6	3.5	-1.3	0.9	3.9
2008 Jan.	8.6	-1.6	-1.4	-0.9	0.8	11.1	-0.1	-0.2	11.5	-0.9	-1.9	-0.1	1.1
Feb.	17.5	-0.5	-1.0	-1.5	2.0	14.8	-0.1	-0.2	15.0	3.3	-1.2	1.0	3.5
Mar.	10.3	3.8	1.3	0.5	1.9	5.4	0.2	0.1	5.1	1.1	1.8	0.0	-0.7
Apr.	12.4	4.4	-0.3	1.7	3.0	9.3	0.0	-0.2	9.5	-1.3	-1.3	-2.1	2.1
May <sup>(p)</sup>	13.6	-0.3	0.2	-1.1	0.6	12.6	-0.2	0.0	12.9	1.2	-1.1	-0.2	2.5
						Growth rat	es						
2005 Dec.	9.4	7.9	7.5	6.1	9.8	11.5	5.1	7.5	11.7	2.3	2.6	1.3	2.4
2006 Dec.	8.2	7.7	6.5	2.4	13.2	9.6	9.7	6.8	9.7	2.9	1.0	3.9	3.3
2007 Sep.	6.7	5.1	3.9	-0.5	10.5	7.8	7.1	4.4	7.9	3.4	1.0	5.3	3.7
Dec.	6.2	5.3	2.7	0.5	10.7	7.1	6.1	3.2	7.2	2.8	1.2	4.3	3.0
2008 Jan.	6.0	5.3	2.1	0.6	10.8	6.9	7.2	2.4	7.0	2.7	0.7	5.1	2.9
Feb.	5.9	5.4	3.0	0.2	10.9	6.6	4.5	1.9	6.7	2.8	-0.4	6.0	3.1
Mar.	5.4	5.2	4.3	-0.1	9.9	6.1	2.3	2.5	6.2	2.1	-0.2	4.5	2.3
Apr.	5.2	5.2	3.1	0.8	9.8	5.9	4.7	2.2	6.0	2.1	-0.2	2.1	2.7
May <sup>(p)</sup>	4.9	4.8	3.3	-0.4	9.6	5.5	2.1	1.8	5.6	2.0	-0.3	1.6	2.8

### C6 Loans to households 2)



- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
- Data refer to the changing composition of the euro area. For further information, see the General notes.

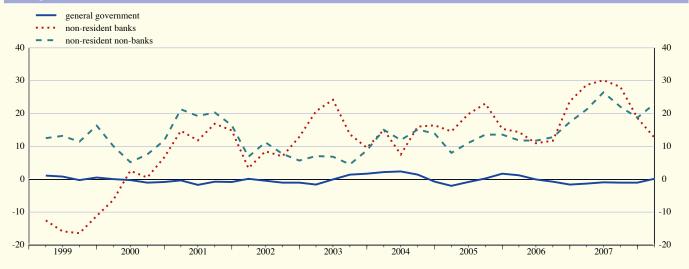
  Including non-profit institutions serving households. Before January 2003 data were collected in March, June, September and December each year. Monthly data prior to January 2003 are derived from quarterly data.

#### 2.4 MFI loans, breakdown 1), 2)

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

		G	eneral governme	nt			Non-	euro area resido	ents	
	Total	Central government	Other	general governm	ent	Total	Banks 3)		Non-banks	
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
				Outsta	nding amounts					
2005 2006	826.9 810.5	125.1 104.1	246.8 232.5	425.8 448.1	29.2 25.8	2,485.2 2,924.3	1,722.1 2,061.0	763.1 863.4	66.0 63.2	697.1 800.2
2007 Q2 Q3 Q4 2008 Q1 <sup>(p)</sup>	798.3 794.0 956.1 958.2	95.7 92.7 213.4 211.2	218.8 213.9 217.6 212.8	446.2 446.0 495.7 504.2	37.6 41.4 29.4 30.1	3,286.0 3,302.8 3,295.2 3,412.4	2,334.1 2,354.1 2,337.9 2,395.6	952.0 948.7 957.2 1,016.8	61.4 61.3 59.8 61.3	890.5 887.4 897.4 955.5
				Tr	ansactions					
2005 2006 2007	13.7 -13.4 -7.7	-5.6 -17.6 -4.5	-8.1 -14.3 -13.0	21.9 21.9 6.2	5.5 -3.4 3.5	296.8 532.5 542.0	207.9 402.9 382.3	89.0 129.5 159.7	1.3 -0.1 0.3	87.7 129.6 159.5
2007 Q2 Q3 Q4 2008 Q1 <sup>(p)</sup>	-3.4 -4.2 8.0 0.9	-1.8 -2.8 7.0 -2.7	-5.5 -5.0 3.8 -4.9	-2.5 -0.2 9.2 7.9	6.4 3.8 -12.0 0.7	135.0 77.5 56.8 214.5	79.4 57.7 23.3 122.7	55.7 19.8 33.5 91.6	1.8 1.2 -0.1 2.7	53.9 18.6 33.6 88.9
				Gr	owth rates					
2005 Dec. 2006 Dec.	1.7 -1.6	-4.3 -14.0	-3.2 -5.8	5.4 5.1	22.9 -11.6	14.8 21.8	15.3 23.7	13.6 17.4	2.0 -0.1	14.9 19.1
2007 June Sep. Dec. 2008 Mar. (p)	-0.9 -1.0 -1.0 0.1	-7.7 -7.8 -4.3 1.2	-5.9 -6.3 -5.6 -5.2	2.0 1.9 1.4 3.1	17.3 16.0 13.7 -3.5	29.0 26.3 18.7 15.6	30.1 28.1 18.6 12.7	26.4 22.1 18.8 22.9	-5.2 -2.0 0.5 9.6	29.4 24.2 20.2 23.9

### to government and non-euro area residents 2)



- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
   Data refer to the changing composition of the euro area. For further information, s
   The term "banks" is used in this table to indicate institutions of a similar type to N Data refer to the changing composition of the euro area. For further information, see the General notes.

  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), 2)

#### 1. Deposits by financial intermediaries

		Insu	rance corpoi	ations an	d pension fu	nds				Other finan	cial intern	nediaries 3)		
	Total	Overnight	With agreed	maturity	Redeemabl	e at notice	Repos	Total	Overnight	With agreed	d maturity	Redeemable	e 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
						Outstand	ing amounts							
2005 2006	612.6 650.0	67.8 70.2	51.9 57.1	469.7 495.4	1.2 1.0	1.4 1.4	20.6 24.9	880.4 1,140.3	233.9 283.1	185.0 251.8	329.8 469.4	10.5 10.6	0.1 0.2	121.1 125.1
2007 Q3 Q4	676.6 687.8	67.9 71.1	62.9 68.9	522.9 525.1	0.8 0.8	1.1 1.1	21.0 20.9	1,392.9 1,472.7	331.2 312.3	305.9 348.0	580.9 652.8	13.0 12.2	0.8 0.3	161.1 147.1
2008 Jan. Feb. Mar. Apr. May <sup>(p)</sup>	714.7 707.2 723.3 722.4 718.7	83.6 72.8 81.8 74.9 69.6	76.3 75.9 83.9 87.7 88.9	526.6 530.7 532.6 534.2 535.6	1.5 1.6 1.6 1.4 1.3	1.4 1.6 1.6 1.6 1.6	25.2 24.6 21.9 22.6 21.7	1,502.1 1,499.6 1,527.6 1,561.8 1,580.7	332.3 315.2 335.6 314.8 322.8	339.7 362.4 361.7 395.5 389.9	652.4 643.7 648.2 656.3 673.6	12.9 11.9 13.2 14.1 12.7	0.3 0.3 0.2 0.2 0.2	164.5 166.1 168.5 180.8 181.5
						Tran	sactions							
2005 2006 2007	26.3 37.9 41.4	7.4 2.7 0.8	-0.6 5.5 11.7	19.2 25.6 33.4	0.4 -0.2 -0.2	0.0 0.0 -0.3	-0.2 4.4 -4.1	176.1 249.2 341.1	40.1 45.5 32.7	37.3 67.8 98.9	96.8 130.5 183.7	1.5 0.3 1.7	0.0 0.1 0.1	0.4 4.9 24.1
2007 Q4 2008 Q1	12.7 33.2	3.4 10.5	5.9 13.9	3.6 7.4	0.0 0.2	0.0 0.2	-0.1 1.0	82.4 61.6	-17.6 25.5	41.9 15.2	73.1 -1.3	-0.7 1.0	-0.5 -0.1	-13.9 21.4
2008 Jan. Feb. Mar. Apr. May <sup>(p)</sup>	24.0 -7.3 16.5 -1.0 -3.8	12.2 -10.8 9.2 -6.9 -5.4	6.0 -0.2 8.2 3.8 1.1	1.4 4.1 1.9 1.6 1.5	0.1 0.1 0.0 -0.2 -0.1	0.0 0.2 0.0 0.0 0.0	4.4 -0.6 -2.8 0.7 -0.9	26.6 2.0 33.0 31.8 16.8	18.1 -14.5 21.9 -21.2 6.0	-8.9 23.5 0.6 33.5 -5.7	-0.2 -7.7 6.6 6.4 17.1	0.5 -0.9 1.4 0.8 -1.4	-0.1 0.0 0.0 0.0 0.0	17.2 1.6 2.6 12.2 0.7
						Grov	vth rates							
2005 Dec. 2006 Dec.	4.5 6.2	12.4 4.0	-1.2 10.7	4.3 5.4	36.0 -16.3	-	-0.8 21.2	26.9 28.2	22.2 19.5	25.0 36.8	47.3 38.9	14.3 2.9	-	0.4 4.0
2007 Sep. Dec.	6.5 6.4	1.5 1.1	23.4 20.5	6.6 6.8	-18.2 -22.5	-	-13.7 -16.3	28.7 30.0	20.5 11.5	31.1 39.5	38.5 39.1	29.0 16.0	-	12.1 19.0
2008 Jan. Feb. Mar. Apr. May (p)	9.2 7.8 10.0 8.7 9.3	15.9 4.3 12.7 6.6 6.4	30.1 28.2 41.8 37.5 45.6	6.2 6.3 6.6 6.3 6.0	-21.5 -21.4 -17.7 -20.6 -18.3	- - - -	4.0 1.9 -4.3 -7.3 -5.3	28.4 28.5 22.0 23.0 21.9	8.9 6.5 7.1 3.4 3.0	39.0 48.2 36.7 44.4 43.5	37.6 34.5 26.4 23.9 22.5	24.1 16.7 17.6 24.2 11.9	- - - -	21.8 21.2 12.9 20.4 21.0

Total deposits and deposits included in M3 sector 2) (annual growth rates)

### C8 Total deposits by sector 2)

#### insurance corporations and pension funds (total) other financial intermediaries (total) insurance corporations and pension funds (total) insurance corporations and pension funds (included in M3) <sup>4)</sup> other financial intermediaries (included in M3) <sup>5)</sup> other financial intermediaries (total) 35 40 35 30 30 30 25 25 20 20 20 15 15 10 10 10 0 5 0 -10

2004

2005

2006

2007

- 1999 Source: ECB.

2002 2003

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

Data refer to the changing composition of the euro area. For further information, see the General notes. This category includes investment funds.

Covers deposits in columns 2, 3, 5 and 7. 2) 3)

2004 2005

2006

- Covers deposits in columns 9, 10, 12 and 14.

2000 2001

40

30

20

10

0

-10

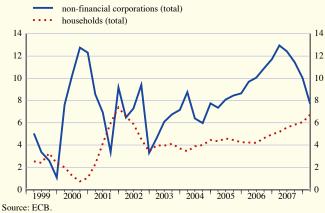
### 2.5 Deposits held with MFIs, breakdown 1), 2)

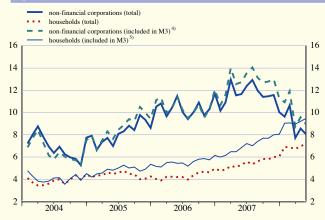
#### 2. Deposits by non-financial corporations and households

			Non-finar	icial corpo	orations					Н	ouseholds 3	)		
	Total	Overnight	With agreed	maturity	Redeemabl	e at notice	Repos	Total	Overnight	With agree	d maturity	Redeemable	e 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
						Outstand	ing amounts							
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	1,343.1	851.8	355.3	69.4	40.5	1.3	24.8	4,552.6	1,751.2	669.0	606.8	1,355.7	99.8	70.0
2007 Q3	1,405.0	844.6	438.8	64.1	31.6	1.4	24.4	4,706.3	1,754.3	886.5	565.7	1,308.0	107.9	84.0
Q4	1,470.6	882.1	474.6	59.6	29.2	1.4	23.7	4,989.0	1,777.6	994.5	561.1	1,457.6	111.1	87.1
2008 Jan.	1,426.4	840.9	472.3	60.0	29.4	1.6	22.3	5,045.0	1,763.1	1,057.4	558.5	1,462.4	112.0	91.6
Feb.	1,441.0	833.3	494.0	60.3	28.6	1.5	23.3	5,053.9	1,747.7	1,084.3	553.3	1,461.6	111.1	95.9
Mar.	1,448.4	846.7	488.7	59.7	28.9	1.5	23.0	5,076.4	1,757.1	1,100.2	548.5	1,465.9	109.1	95.6
Apr.	1,458.9	837.5	510.1	60.2	27.8	1.4	21.7	5,119.2	1,771.3	1,133.7	544.0	1,464.9	107.8	97.5
May <sup>(p)</sup>	1,478.2	853.9	513.1	60.9	27.5	1.5	21.3	5,147.8	1,777.6	1,159.2	539.9	1,463.0	106.4	101.7
							sactions							
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	141.2	85.7	55.7	3.9	-4.2	0.1	0.2	215.2	65.7	137.5	-23.1	2.5	15.4	17.2
2007	134.5	31.8	123.3	-8.0	-11.0	-0.7	-1.1	280.9	21.7	321.9	-45.4	-45.6	11.2	17.1
2007 Q4	69.6	38.0	38.3	-4.1	-1.8	-0.1	-0.7	136.7	23.4	107.7	-3.1	2.3	3.3	3.1
2008 Q1	-27.5	-35.8	10.9	0.0	-1.9	-0.1	-0.8	59.1	-26.6	89.1	-14.1	5.1	-2.9	8.5
2008 Jan.	-54.7	-43.6	-8.2	0.0	-1.3	0.0	-1.5	26.3	-21.2	45.9	-4.4	1.4	0.0	4.6
Feb.	16.6	-6.9	22.9	0.4	-0.8	-0.1	1.1	9.1	-15.2	26.6	-5.1	-0.7	-0.9	4.3
Mar.	10.5	14.7	-3.7	-0.4	0.2	0.0	-0.4	23.8	9.7	16.6	-4.6	4.4	-2.0	-0.4
Apr.	10.1	-9.3	21.1	0.6	-1.0	-0.1	-1.2	42.5	13.9	33.5	-4.5	-1.0	-1.3	2.0
May <sup>(p)</sup>	19.3	16.4	2.9	0.7	-0.3	0.0	-0.4	28.6	6.3	25.4	-4.1	-1.9	-1.4	4.2
						Grov	vth rates							
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 Dec.	11.7	11.2	18.4	5.7	-9.4	5.9	0.6	5.0	3.9	25.8	-3.7	0.2	18.2	32.6
2007 Sep.	11.4	7.1	32.5	-8.8	-28.4	-26.9	-2.8	5.8	2.7	43.9	-7.2	-3.5	16.0	29.6
Dec.	10.0	3.7	34.8	-11.7	-26.9	-31.6	-4.3	6.1	1.2	47.8	-7.5	-3.5	11.2	24.4
2008 Jan.	9.6	4.3	31.5	-11.9	-27.7	-34.7	-10.6	6.9	2.3	48.6	-7.4	-3.5	9.2	25.7
Feb.	10.7	3.2	37.2	-10.6	-26.9	-37.4	-11.3	6.9	1.4	48.0	-7.4	-2.8	6.2	27.9
Mar.	7.7	1.9	29.3	-10.9	-29.0	-1.3	-15.1	6.7	1.4	45.5	-7.5	-2.1	2.7	25.1
Apr.	8.6	0.5	34.7	-10.2	-28.5	-5.9	-11.1	7.0	1.1	45.9	-7.3	-1.8	1.2	28.4
May <sup>(p)</sup>	8.1	1.4	31.1	-8.7	-29.3	-4.7	-20.8	7.2	1.3	45.7	-7.1	-1.7	0.1	29.2

## C10 Total deposits by sector <sup>2)</sup> (annual growth rates)

### I Total deposits and deposits included in M3 sector 2) (annual growth rates)





- 1) 2)
- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.

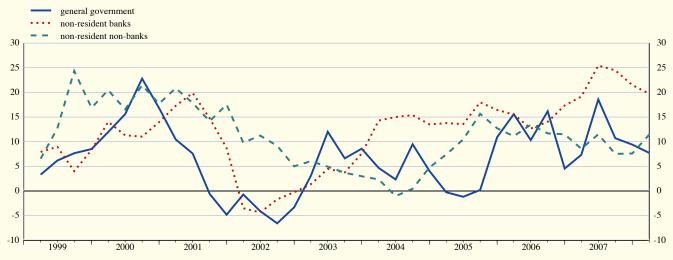
  Data refer to the changing composition of the euro area. For further information, see the General notes. Including non-profit institutions serving households.
- 4) 5)
- Covers deposits in columns 2, 3, 5 and 7. Covers deposits in columns 9, 10, 12 and 14.

### 2.5 Deposits held with MFIs, breakdown 1), 2)

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

		Ger	neral governmen	nt			Non-	euro area reside	nts	
	Total	Central government	Other	general governm	nent	Total	Banks 3)		Non-banks	
		government	State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
				Outs	tanding amounts	<b>S</b>				
2005 2006	313.1 329.0	149.2 124.2	38.3 45.4	80.9 90.8	44.7 68.6	3,050.5 3,429.0	2,250.5 2,557.1	800.0 871.9	125.8 128.6	674.2 743.3
2007 Q2 Q3 Q4 2008 Q1 <sup>(p)</sup>	380.2 373.5 372.9 376.2	169.8 144.3 127.1 139.8	43.8 60.0 59.0 49.7	95.2 97.2 106.8 106.7	71.4 72.0 80.1 80.0	3,821.4 3,877.0 3,853.4 4,036.9	2,898.6 2,963.4 2,960.4 3,097.5	922.8 913.6 893.0 939.5	137.5 145.9 143.4 133.2	785.3 767.7 749.6 806.3
				,	Transactions					
2005 2006 2007	30.8 14.2 30.9	11.2 -24.5 -3.1	7.8 7.0 13.6	11.5 7.8 8.9	0.3 23.9 11.5	381.1 476.6 611.8	292.8 385.8 545.8	88.3 90.8 66.0	17.8 6.6 20.2	70.5 84.2 45.8
2007 Q2 Q3 Q4 2008 Q1 (p)	42.4 -7.3 -12.0 3.1	30.8 -26.1 -21.9 12.7	1.7 16.1 -1.0 -9.2	6.4 2.0 2.8 -0.2	3.5 0.6 8.1 -0.2	177.6 130.2 47.4 279.1	136.0 120.7 51.8 227.0	41.6 9.4 -4.4 52.1	5.7 10.8 -0.5 -6.3	35.9 -1.4 -3.8 58.4
				(	Growth rates					
2005 Dec. 2006 Dec.	10.9 4.5	8.1 -16.5	25.4 18.4	16.6 9.6	0.6 53.5	15.4 15.8	16.4 17.3	12.7 11.5	16.8 5.3	12.0 12.6
2007 June Sep. Dec. 2008 Mar. (p)	18.5 10.7 9.4 7.7	21.9 -3.5 -2.3 -3.6	10.5 44.0 29.9 18.2	12.2 13.3 9.8 12.4	25.3 19.4 16.7 17.8	21.8 20.0 18.0 17.7	25.4 24.5 21.5 19.7	11.5 7.5 7.6 11.4	8.9 13.2 15.8 7.2	12.0 6.5 6.2 12.2

### C12 Deposits by government and non-euro area residents 2)

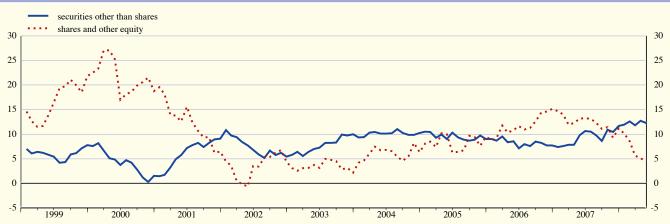


- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
   Data refer to the changing composition of the euro area. For further information, see the General notes.
   The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

2.6 MFI holdings of securities, breakdown <sup>1), 2)</sup>
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

			5	Securities o	ther than sh	ares				Shares and	other equity	7
	Total	MF	FIs	Gen govern		Other area res		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
					Out	standing am	ounts					
2005	4,418.9	1,450.4	67.3	1,412.5	17.0	525.7	25.8	920.3	1,254.7	308.5	700.1	246.1
2006	4,664.3	1,560.6	72.3	1,260.4	16.2	615.8	30.1	1,108.9	1,465.9	373.0	798.5	294.4
2007 Q3	4,972.9	1,645.5	82.1	1,199.7	14.7	770.6	35.7	1,224.6	1,572.6	412.8	813.3	346.5
Q4	5,113.6	1,652.9	84.0	1,177.5	16.6	916.3	33.4	1,232.8	1,639.9	424.8	871.8	343.3
2008 Jan.	5,251.2	1,698.1	93.7	1,202.2	17.6	925.3	36.8	1,277.5	1,646.7	433.6	881.7	331.3
Feb.	5,313.4	1,728.8	94.9	1,200.7	15.7	949.9	34.0	1,289.5	1,629.1	442.7	860.3	326.1
Mar.	5,301.6	1,727.3	88.6	1,201.1	15.3	960.5	44.4	1,264.5	1,605.5	452.5	859.9	293.1
Apr.	5,381.1	1,746.5	91.9	1,208.5	16.0	984.2	48.1	1,285.9	1,669.5	456.5	909.4	303.7
May <sup>(p)</sup>	5,484.5	1,795.6	97.4	1,214.6	14.7	1,005.7	49.3	1,307.2	1,684.8	476.7	909.7	298.4
						Transaction	1S					
2005	356.3	85.7	2.0	52.3	-0.9	71.9	7.7	137.6	109.1	26.5	53.4	29.2
2006	337.4	122.8	10.6	-122.7	0.5	100.6	6.5	219.0	193.3	58.6	96.2	38.5
2007	541.2	136.6	18.2	-86.7	1.5	267.3	9.5	194.7	163.6	51.8	59.7	52.0
2007 Q4	188.5	48.7	4.9	-20.3	2.5	111.9	-1.2	41.9	68.0	13.4	52.3	2.3
2008 Q1	217.7	58.0	6.8	20.1	-0.6	43.4	13.4	76.7	-17.6	25.0	-7.3	-35.3
2008 Jan.	103.7	29.1	7.2	14.1	0.8	5.7	3.3	43.5	16.1	6.9	10.3	-1.0
Feb.	80.0	29.8	2.8	-1.6	-1.6	24.8	-2.0	27.9	-14.4	9.0	-20.0	-3.4
Mar.	34.0	-0.9	-3.2	7.6	0.3	12.9	12.0	5.3	-19.4	9.1	2.5	-31.0
Apr.	74.5	19.0	2.6	10.1	0.6	23.9	3.7	14.6	61.3	4.5	47.6	9.1
May <sup>(p)</sup>	103.7	49.5	5.4	8.7	-1.3	19.9	1.1	20.4	16.8	21.5	0.9	-5.6
						Growth rate	es					
2005 Dec.	9.0	6.3	3.6	4.2	-4.5	16.0	43.8	18.2	9.4	9.4	8.0	13.6
2006 Dec.	7.7	8.5	16.5	-8.9	3.0	19.3	25.7	24.2	15.2	18.6	13.6	15.2
2007 Sep.	8.6	6.3	27.1	-10.0	-5.7	31.7	49.2	21.0	11.1	20.7	2.3	24.4
Dec.	11.7	8.8	25.6	-6.9	10.5	42.9	33.4	17.7	11.1	13.9	7.5	17.7
2008 Jan.	11.9	8.9	32.7	-6.9	20.0	44.0	32.2	17.8	10.1	13.9	7.6	12.0
Feb.	12.6	10.2	28.4	-6.8	8.7	45.2	16.0	18.2	8.6	13.4	6.7	7.4
Mar.	11.8	8.7	26.5	-5.5	12.2	41.1	48.3	16.4	5.6	14.8	4.4	-3.0
Apr.	12.7	9.0	28.5	-2.8	16.1	40.2	56.8	15.9	5.1	13.3	3.4	-0.9
May <sup>(p)</sup>	12.3	11.0	34.4	-4.7	4.4	38.3	60.6	14.0	4.5	12.3	4.5	-6.1

### C13 MFI holdings of securities <sup>2)</sup> (annual growth rates)



- Source: ECB.

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

  2) Data refer to the changing composition of the euro area. For further information, see the General notes.

## 2.7 Revaluation of selected MFI balance sheet items <sup>1), 2)</sup> (EUR billions)

#### 1. Write-offs/write-downs of loans to households 3)

		Consum	er credit		L	ending for h	ouse purchase			Other l	ending	
	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
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	-3.9	-1.5	-0.9	-1.6	-2.7	-0.1	-0.1	-2.4	-6.7	-1.1	-2.0	-3.6
2007	-4.2	-1.2	-1.4	-1.6	-2.7	-0.2	-0.2	-2.3	-6.8	-0.8	-2.3	-3.7
2007 Q4	-1.6	-0.4	-0.6	-0.6	-1.2	-0.1	-0.1	-1.0	-2.2	-0.2	-1.1	-1.0
2008 Q1	-1.1	-0.4	-0.3	-0.4	-1.2	0.0	-0.1	-1.2	-1.4	-0.4	-0.2	-0.9
2008 Jan.	-0.5	-0.2	-0.1	-0.2	-0.7	0.0	0.0	-0.6	-0.6	-0.3	0.0	-0.3
Feb.	-0.3	-0.1	-0.1	-0.1	-0.2	0.0	0.0	-0.2	-0.3	-0.1	-0.1	-0.2
Mar.	-0.3	-0.1	-0.1	-0.1	-0.4	0.0	0.0	-0.4	-0.6	-0.1	-0.1	-0.4
Apr.	-0.3	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.9	-0.1	-0.6	-0.2
May <sup>(p)</sup>	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.5	0.0	-0.3	-0.2

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

		Non-financial corp	orations		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
2005	-19.3	-7.4	-5.6	-6.2	-1.2	-0.3	-0.9
2006	-13.2	-3.5	-4.6	-5.1	-0.8	-0.1	-0.7
2007	-12.4	-2.1	-5.4	-4.9	-5.2	-3.4	-1.8
2007 Q4	-4.9	-0.9	-2.6	-1.4	-3.7	-3.3	-0.4
2008 Q1	-3.0	-1.2	-0.8	-1.0	-2.4	-1.8	-0.6
2008 Jan.	-1.5	-0.8	-0.3	-0.5	-0.3	-0.1	-0.3
Feb.	-0.4	-0.1	-0.2	-0.1	-0.2	0.0	-0.2
Mar.	-1.1	-0.3	-0.3	-0.4	-1.8	-1.7	-0.1
Apr.	-3.3	-0.5	-2.7	-0.2	0.0	0.0	0.1
May <sup>(p)</sup>	-0.8	-0.2	-0.4	-0.3	-0.1	-0.1	0.0

#### 3. Revaluation of securities held by MFIs

			S	ecurities of	ther than sh	ares				Shares and	d other equity	y
	Total	MF	Is	Gen goveri		Other area re		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
2005 2006 2007	21.5 -8.6 -11.8	3.4 1.2 -2.7	0.5 -0.4 0.0	6.7 -7.9 0.6	0.7 -0.2 -0.2	1.3 -0.4 -2.5	0.2 -0.3 -0.5	8.6 -0.7 -6.5	25.7 31.5 13.6	5.0 7.1 3.2	14.4 16.3 9.6	6.3 8.0 0.8
2007 Q4 2008 Q1	-4.0 -23.4	-1.0 -4.7	0.0 -0.2	0.9 0.4	-0.1 -0.2	-0.4 -4.8	-0.2 -0.7	-3.2 -13.1	0.3 -23.2	2.7 -1.4	0.0 -13.6	-2.4 -8.3
2008 Jan. Feb. Mar. Apr. May <sup>(p)</sup>	-7.7 -3.6 -12.1 -2.0 -2.0	-3.4 0.1 -1.4 0.6 -0.3	0.0 0.0 -0.1 0.0 0.0	2.6 0.0 -2.2 -2.5 -2.6	0.0 -0.1 -0.2 0.0 0.0	-3.1 -0.2 -1.5 -0.1 1.6	-0.1 -0.3 -0.4 -0.4 0.0	-3.7 -3.1 -6.3 0.4 -0.7	-15.8 -3.2 -4.2 3.7 -1.5	-2.1 0.0 0.7 0.7 -1.3	-9.2 -1.4 -3.0 1.5 -0.5	-4.4 -1.8 -2.0 1.4 0.3

- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
   Data refer to the changing composition of the euro area. For further information, see the General notes.
   Including non-profit institutions serving households.

## 2.8 Currency breakdown of selected MFI balance sheet items <sup>1),2)</sup> (percentages of total; outstanding amounts in EUR billions; end of period)

#### 1. Deposits

			MF	Ts 3)						Non-	MFIs			
	All	Euro 4)		Non-eur	ro currencie	es		All	Euro 4)		Non-eur	o currencies	S	
	(outstanding		Total					currencies (outstanding		Total				
	amount)			USD	JPY	CHF	GBP	amount)			USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
						By euro a	rea residei	nts						
2005	4,851.2	90.9	9.1	5.6	0.4	1.5	1.0	7,361.0	96.8	3.2	1.9	0.3	0.1	0.5
2006	5,242.4	90.7	9.3	5.6	0.4	1.5	1.2	8,014.8	96.4	3.6	2.2	0.3	0.1	0.6
2007 Q2	5,573.0	90.5	9.5	5.8	0.4	1.3	1.1	8,448.3	96.3	3.7	2.3	0.3	0.1	0.6
Q3	5,700.7	91.2	8.8	5.3	0.4	1.3	1.0	8,554.3	96.1	3.9	2.4	0.3	0.1	0.6
Q4	6,092.2	92.1	7.9	4.8	0.4	1.1	1.0	8,993.0	96.4	3.6	2.2	0.4	0.1	0.5
2008 Q1 (p)	6,136.0	91.8	8.2	4.8	0.5	1.3	1.0	9,151.9	96.4	3.6	2.1	0.4	0.1	0.6
					E	By non-euro	area resid	dents						
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	2,557.1	45.3	54.7	35.1	2.3	2.7	11.5	871.9	50.7	49.3	32.0	1.3	2.0	10.4
2007 Q2	2,898.6	45.0	55.0	34.8	2.6	2.4	11.8	922.8	51.2	48.8	32.3	1.3	1.8	9.7
Q3	2,963.4	46.2	53.8	33.6	2.6	2.3	11.9	913.6	49.5	50.5	33.8	1.1	1.9	9.6
Q4	2,960.4	46.7	53.3	33.7	2.9	2.5	11.1	893.0	50.3	49.7	32.8	1.6	1.6	10.0
2008 Q1 (p)	3,097.5	48.1	51.9	33.3	2.9	2.7	10.1	939.5	52.3	47.7	32.0	1.4	1.5	8.9

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

	All currencies	Euro 4)		Non-er	uro currencies		
	(outstanding amount)		Total				
	amount)			USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2005 2006	4,051.7 4,485.5	81.2 80.5	18.8 19.5	9.6 10.0	1.8 1.6	1.9 1.9	3.2 3.5
2007 Q2 Q3 Q4 2008 Q1 (p)	4,797.0 4,862.4 4,948.0 4,988.8	80.2 80.8 81.4 82.1	19.8 19.2 18.6 17.9	10.1 9.7 9.3 8.8	1.6 1.7 1.7 1.7	1.8 1.8 1.9 1.9	3.7 3.6 3.4 3.3

- MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95.
   Data refer to the changing composition of the euro area. For further information, see the General notes.
   For non-euro area residents, the term "MFIs" refers to institutions of a similar type to euro area MFIs.
   Including items expressed in the national denominations of the euro.

## 2.8 Currency breakdown of selected MFI balance sheet items <sup>1),2)</sup> (percentages of total; outstanding amounts in EUR billions; end of period)

#### 3. Loans

			MI	FIs 3)						Non-	MFIs			
	All currencies	Euro 4)		Non-eu	ro currencie	es		All currencies	Euro 4)		Non-eur	ro currencie:	S	
	(outstanding amount)		Total					(outstanding amount)		Total				
	uniounty			USD	JPY	CHF	GBP	umount)			USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
						To euro a	rea reside	nts						
2005	4,569.7	-	-	-	-	-	-	9,112.0	96.3	3.7	1.6	0.2	1.3	0.5
2006	4,933.5	-	-	-	-	-	-	9,970.8	96.4	3.6	1.6	0.2	1.1	0.5
2007 Q2	5,264.9	-	-	-	-	-	-	10,509.4	96.2	3.8	1.8	0.2	1.0	0.6
Q3	5,433.3	-	-	-	-	-	-	10,742.0	96.1	3.9	1.9	0.2	1.0	0.5
Q4	5,789.0	-	-	-	-	-	-	11,116.0	96.2	3.8	1.8	0.2	0.9	0.6
2008 Q1 (p)	5,825.2	-	-	-	-	-	-	11,405.9	96.1	3.9	1.8	0.2	1.0	0.6
					,	To non-euro	area resi	dents						
2005	1,722.1	48.5	51.5	30.5	4.3	2.0	10.1	763.1	38.2	61.8	43.7	1.8	4.1	8.6
2006	2,061.0	50.7	49.3	28.9	2.0	2.3	11.0	863.4	39.3	60.7	43.2	1.1	4.0	8.6
2007 Q2	2,334.1	50.3	49.7	28.7	1.9	2.4	11.7	952.0	39.4	60.6	43.1	1.0	3.8	8.4
Q3	2,354.1	48.8	51.2	28.3	2.1	2.5	12.9	948.7	39.2	60.8	43.3	1.1	3.9	8.2
Q4	2,337.9	48.0	52.0	28.9	2.3	2.4	12.7	957.2	40.9	59.1	41.3	1.2	3.7	8.2
2008 Q1 (p)	2,395.6	48.1	51.9	28.7	2.6	2.6	12.1	1,016.8	43.1	56.9	39.3	1.3	4.2	7.6

#### 4. Holdings of securities other than shares

			Issued by	y MFIs 3)						Issued by	non-MFIs			
	All currencies	Euro 4)		Non-eur	o currencie:	S		All currencies	Euro 4)		Non-euro	currencies	;	
	(outstanding amount)		Total					(outstanding amount)		Total				
	, , , , ,			USD	JPY	CHF	GBP	,			USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
					Iss	ued by euro	area res	idents						
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	1,632.9	95.6	4.4	2.3	0.2	0.3	1.3	1,922.5	97.6	2.4	1.3	0.3	0.1	0.7
2007 Q2	1,716.7	95.4	4.6	2.2	0.3	0.3	1.6	2,044.6	97.6	2.4	1.3	0.3	0.1	0.7
Q3	1,727.6	95.2	4.8	2.4	0.3	0.2	1.5	2,020.7	97.5	2.5	1.4	0.3	0.1	0.7
Q4	1,737.0	95.2	4.8	2.4	0.3	0.3	1.5	2,143.9	97.7	2.3	1.4	0.2	0.1	0.5
2008 Q1 (p)	1,815.9	95.1	4.9	2.6	0.3	0.3	1.3	2,221.3	97.3	2.7	1.8	0.3	0.1	0.4
					Issue	d by non-e	uro area r	esidents						
2005	397.5	51.0	49.0	28.5	0.8	0.5	15.7	522.8	38.3	61.7	35.0	7.8	0.8	12.6
2006	514.5	52.2	47.8	28.8	0.7	0.4	14.5	594.4	38.9	61.1	36.5	4.9	0.8	14.2
2007 Q2	584.0	51.9	48.1	28.5	0.7	0.5	14.6	666.8	37.4	62.6	36.9	4.3	0.7	15.7
Q3	573.8	53.9	46.1	26.7	0.7	0.4	15.0	650.7	35.3	64.7	38.9	4.1	0.7	14.5
Q4	580.5	53.8	46.2	27.4	0.7	0.4	14.4	652.3	35.8	64.2	39.4	4.5	0.8	12.6
2008 Q1 (p)	633.5	51.2	48.8	29.8	0.8	0.5	14.4	630.9	37.7	62.3	37.5	5.0	0.8	11.7

- Source: ECB.

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

  2) Data refer to the changing composition of the euro area. For further information, see the General notes.

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

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

### 2.9 Aggregated balance sheet of euro area investment funds <sup>1)</sup> (EUR billions; outstanding amounts at end of period)

#### 1. Assets

	Total	Deposits		lings of securitie her than shares	es	Holdings of shares/ other	Holdings of investment fund shares	Fixed assets	Other assets
			Total	Up to 1 year	Over 1 year	equity			
	1	2	3	4	5	6	7	8	9
2006 Q3 Q4	5,359.0 5,551.3	317.5 320.6	1,985.0 2,005.8	178.4 170.6	1,806.6 1,835.2	1,874.4 2,022.0	631.3 670.6	181.5 187.9	369.2 344.3
2007 Q1 Q2	5,713.3 5,989.1	332.4 346.2	2,031.8 2,044.4	181.0 192.9	1,850.8 1,851.5	2,068.9 2,216.1	718.7 784.1	188.9 182.0	372.7 416.3
Q2 Q3 Q4 <sup>(p)</sup>	5,892.3 5,779.8	358.1 353.0	2,015.8 1,994.4	187.0 183.8	1,828.8 1,810.6	2,165.9 2,073.7	773.3 783.3	182.5 190.7	396.6 384.7

#### 2. Liabilities

	Total	Deposits and loans taken	Investment fund shares	Other liabilities
	1	2	3	4
2006 Q3	5,359.0	75.9	4,999.5	283.7
Q4	5,551.3	77.8	5,217.0	256.4
2007 Q1	5,713.3	82.2	5,349.3	281.8
Q2	5,989.1	85.9	5,586.6	316.6
Q3	5,892.3	80.1	5,495.5	316.7
Q4 <sup>(p)</sup>	5,779.8	78.2	5,409.4	292.2

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

	Total		Fund	ls by investment po	licy		Funds by typ	e 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
2006 Q3 Q4	5,359.0 5,551.3	1,533.3 1,680.5	1,594.2 1,657.0	1,321.5 1,376.0	221.2 231.8	688.9 606.0	4,085.5 4,252.1	1,273.5 1,299.2
2007 Q1 Q2 Q3 Q4 <sup>(p)</sup>	5,713.3 5,989.1 5,892.3 5,779.8	1,723.2 1,824.8 1,796.1 1,732.0	1,674.9 1,693.4 1,655.8 1,598.1	1,459.3 1,539.2 1,522.8 1,537.2	238.4 230.9 236.1 244.0	617.5 700.7 681.4 668.6	4,372.8 4,577.2 4,468.4 4,344.1	1,340.6 1,411.8 1,423.9 1,435.7

## C14 Total assets of investment 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	Holdings of investment fund shares	Fixed assets	Other assets
			Total	Up to 1 year	Over 1 year	equity			
	1	2	3	4	5	6	7	8	9
				Equity funds					
2006 Q3	1,533.3	53.8	76.1	33.2	42.9	1,284.3	66.8	-	52.3
Q4	1,680.5	56.1	66.0	22.7	43.3	1,429.3	74.3	-	54.8
2007 Q1	1,723.2 1.824.8	59.3 60.9	65.7 67.9	25.7 27.4	40.0 40.4	1,461.2 1,546.2	78.4 84.0	-	58.6 65.9
Q2 Q3	1,824.8	71.9	68.6	26.7	40.4 41.9	1,546.2	84.0 82.2	-	68.4
Q4 <sup>(p)</sup>	1,732.0	57.7	71.7	26.5	45.2	1,461.4	79.2	-	61.8
				Bond funds					
2006 Q3	1,594.2	105.5	1,288.5	86.8	1,201.8	41.6	48.2	-	110.3
Q4	1,657.0	108.3	1,343.6	91.1	1,252.5	45.4	49.8	-	110.0
2007 Q1	1,674.9	112.3	1,356.5	95.1	1,261.4	44.5	52.5	-	109.0
Q2 Q3	1,693.4	114.9	1,346.7	99.5	1,247.2	62.9	55.7	-	113.2
Q3	1,655.8	109.9	1,319.6	97.0	1,222.6	62.6	53.2	-	110.5
Q4 <sup>(p)</sup>	1,598.1	116.1	1,274.3	92.8	1,181.6	58.1	49.8	-	99.8
				Mixed funds					
2006 Q3	1,321.5	68.5	510.6	45.2	465.4	332.3	272.3	0.3	137.4
Q4	1,376.0	71.0	519.4	43.4	476.0	364.2	292.8	0.4	128.2
2007 Q1	1,459.3	73.8	530.5	45.5	485.0	380.8	322.3	0.3	151.5
Q2	1,539.2	84.0	529.2	50.2	479.0	398.9	346.4	0.9	179.8
Q3 Q4 <sup>(p)</sup>	1,522.8 1,537.2	86.2 89.9	522.4 546.9	46.3 47.0	476.1 499.9	405.3 394.8	345.0 343.3	0.5 0.8	163.3 161.5
Q4 **	1,337.2	69.9	340.9			394.6	343.3	0.8	101.5
				Real estate fund					
2006 Q3	221.2	16.4	6.0	1.6	4.4	1.9	6.2	180.3	10.4
Q4	231.8	17.6	6.1	1.7	4.4	2.2	7.0	187.0	11.9
2007 Q1	238.4	18.9	6.7	1.9	4.8	2.3	9.6	188.4	12.6
Q2 Q3	230.9 236.1	18.8 20.7	6.6	1.9	4.7	2.0	10.0 13.1	180.4 181.1	12.9 12.8
Q3 Q4 <sup>(p)</sup>	236.1	20.7 19.6	6.4 6.0	1.6 1.5	4.8 4.5	2.0 1.7	13.1 12.5	181.1 189.5	12.8 14.7
Q+ "	244.0	19.0	0.0	1.5	4.5	1./	12.3	109.3	14./

#### 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	
			General publ	lic funds			
2006 Q3	4,085.5	260.6	1,374.1	1,531.3	470.9	151.2	297.3
Q4	4,252.1	265.4	1,402.4	1,650.2	498.2	155.2	280.6
2007 Q1	4,372.8	274.3	1,420.9	1,693.5	529.0	155.6	299.5
Q2	4,577.2	280.9	1,432.0	1,816.8	576.5	147.3	323.7
Q3	4,468.4	287.8	1,376.6	1,788.8	564.0	144.8	306.4
Q4 <sup>(p)</sup>	4,344.1	279.7	1,337.8	1,714.9	569.1	150.7	291.9
	,		Special invest	ors' funds			
2006 Q3	1,273.5	56.9	610.9	343.1	160.5	30.2	71.9
Q4	1,299.2	55.2	603.4	371.8	172.4	32.7	63.7
2007 Q1	1,340.6	58.0	610.8	375.4	189.7	33.3	73.2
Q2	1,411.8	65.3	612.4	399.3	207.6	34.7	92.7
Q3	1,423.9	70.3	639.2	377.1	209.3	37.7	90.2
Q4 <sup>(p)</sup>	1,435.7	73.2	656.5	358.8	214.2	40.0	92.9



### **EURO AREA ACCOUNTS**

# 3.1 Integrated economic and financial accounts by institutional sector

Uses	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2007 Q4						
External account						
Exports of goods and services  Trade balance 1)						523.0 -27.9
Generation of income account						
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) Compensation of employees	1,144.1	119.1	718.4	57.9	248.7	
Other taxes less subsidies on production	39.7 321.8	9.2 87.9	20.7 180.4	4.7 10.9	5.1 42.6	
Consumption of fixed capital  Net operating surplus and mixed income 1)	557.1	280.7	255.7	26.6	-6.0	
Allocation of primary income account						
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production						4.5
Property income	835.6	53.9	313.8	403.7	64.2	137.2
Interest	501.1	50.8	84.9	301.2	64.2	84.3
Other property income	334.5	3.0	228.9	102.5	0.0	53.0
Net national income 1)	2,003.0	1,634.5	73.4	47.7	247.4	
Secondary distribution of income account						
Net national income Current taxes on income, wealth, etc. Social contributions	336.0 428.1	249.5 428.1	71.2	15.0	0.3	1.4 1.0
Social benefits other than social transfers in kind	420.4	1.5	16.0	25.3	377.7	0.8
Other current transfers	192.6	72.3	25.1	49.1	46.1	8.9
Net non-life insurance premiums Non-life insurance claims	46.3 46.2	33.4	11.1	1.0 46.2	0.7	1.1 0.6
Other	100.1	38.9	14.0	1.9	45.4	7.2
Net disposable income 1)	1,977.6	1,392.5	-8.2	46.3	547.0	7.2
Use of income account						
Net disposable income	1.775.0	1 270 0			406.2	
Final consumption expenditure Individual consumption expenditure Collective consumption expenditure	1,775.2 1,575.6 199.6	1,278.9 1,278.9			496.3 296.7 199.6	
Adjustment for the change in net equity of households in pension fund reserves	16.2	0.1	1.8	14.3	0.0	0.1
Net saving/current external account 1)	202.5	129.8	-10.0	32.0	50.7	-16.9
Capital account						
Net saving / current external account	507.4	162.1	256.4	0.6	70.2	
Gross capital formation Gross fixed capital formation	507.4 513.1	163.1 163.8	256.4 261.6	9.6 9.5	78.3 78.2	
Changes in inventories and acquisitions less disposals of valuables	-5.8	-0.7	-5.2	0.1	0.1	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.1	0.0	0.7	0.0	-0.6	-0.1
Capital transfers	60.4	9.8	2.5	2.7	45.4	7.8
Capital taxes Other capital transfers	6.3 54.1	6.0 3.8	0.2 2.2	0.0 2.7	45.4	0.0 7.8
Net lending (+)/net borrowing (-) (from capital account) 1)	22.0	59.5	-52.7	31.6	-16.3	-22.0
Statistical discrepancy	0.0	17.6	-17.6	0.0	0.0	0.0

Sources: ECB and Eurostat.

1) For the calculation of the balancing items, see the Technical notes.

## 3.1 Integrated economic and financial accounts by institutional sector (cont'd) (EUR billions)

Resources	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2007 (	24					
External account					'	
Imports of goods and services Trade balance						495.1
Generation of income account						
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) <sup>2)</sup> Compensation of employees Other taxes less subsidies on production Consumption of fixed capital Net operating surplus and mixed income	2,062.7 247.8 2,310.5	497.0	1,175.2	100.1	290.3	
Allocation of primary income account						
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income Net national income	557.1 1,145.9 295.6 840.1 489.1 351.0	280.7 1,145.9 261.8 77.8 184.0	255.7 131.5 48.1 83.5	26.6 424.7 354.0 70.7	-6.0 295.6 22.0 9.2 12.8	2.7 -8.1 132.7 96.3 36.4
Secondary distribution of income account						
Net national income	2.003.0	1,634.5	73.4	47.7	247.4	
Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims	336.7 428.1 418.5 168.5 46.2 45.7	1.2 418.5 89.7	18.3 12.5 9.2	40.7 47.3 46.2 0.8	336.7 368.0 19.1	0.7 1.0 2.7 33.0 1.2 1.1
Other Net disposable income	76.7	54.3	3.3	0.3	18.8	30.7
Use of income account						
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households in pension fund reserves Net saving/current external account	1,977.6	1,392.5	-8.2	46.3	547.0	0.0
Capital account						
Net saving / current external account Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital	202.5 321.8	129.8 87.9	-10.0 180.4	32.0	50.7	-16.9
Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes	65.6 6.3	14.8	36.4	1.0	13.4 6.3	2.6 0.0
Other capital transfers  Net lending (+)/net borrowing (-) (from capital account)  Statistical discrepancy	59.3	14.8	36.4	1.0	7.1	2.6

Sources: ECB and Eurostat.

2) Gross domestic product is equal to gross value added of all domestic sectors plus net taxes (taxes less subsidies) on products.

# 3.1 Integrated economic and financial accounts by institutional sector (cont'd) (EUR billions)

Assets	Euro area	Households	Non-financial corporations	MFIs	Other financial inter-	Insurance corporations and pension	General govern- ment	Rest of the world
2007 Q4					mediaries	funds		
Opening balance sheet, financial assets								
Total financial assets		17,530.1	14,616.1	21,596.0	10,129.1	6,221.1	2,904.5	15,059.5
Monetary gold and special drawing rights (SDRs)				191.7			#00 a	
Currency and deposits		5,494.2	1,686.2	2,465.4	1,490.3	775.8	580.3	3,999.6
Short-term debt securities Long-term debt securities		50.0 1,258.6	122.8 223.0	111.5 3,473.6	269.1 1,962.7	261.8 1,956.1	41.3 220.0	799.7 2,391.4
Loans		41.8	2,015.9	11,717.4	1,490.6	335.0	362.5	1,645.2
of which long-term		25.8	1,171.0	8,790.8	1,178.2	298.6	321.6	1,043.2
Shares and other equity		5,188.2	7,752.1	1,877.2	4,701.7	2,414.7	1,137.7	5,436.2
Quoted shares		1,215.4	1,920.0	740.2	2,514.3	860.3	427.1	
Unquoted shares and other equity		2,321.4	5,434.8	858.7	1,482.6	464.2	561.1	
Mutual fund shares		1,651.4	397.4	278.3	704.7	1,090.3	149.6	
Insurance technical reserves		5,164.2	136.1	2.0	0.0	149.6	3.2	220.4
Other accounts receivable and financial derivatives		333.2	2,680.0	1,757.2	214.8	328.1	559.3	567.1
Net financial worth								
Financial account, transactions in financial assets								
Total transactions in financial assets  Monetary gold and special drawing rights (SDRs)		151.4	209.0	504.8	331.2	80.7	-50.0	258.4
Currency and deposits		147.5	50.2	-1.4 40.3	115.2	10.4	-42.9	1.4 67.2
Short-term debt securities		-1.5	2.5	3.0	18.3	-2.7	-42.9 -6.8	-17.4
Long-term debt securities		9.3	4.0	176.8	-20.6	40.9	6.0	85.1
Loans		-1.4	48.7	250.9	96.0	-5.7	8.1	68.9
of which long-term		-1.9	4.1	225.9	59.1	-5.0	-1.0	
Shares and other equity		-46.4	46.1	21.3	123.6	41.4	-3.1	40.9
Quoted shares		-24.8	34.0	-3.4	41.5	4.6	0.6	
Unquoted shares and other equity		3.6	47.7	31.7	70.4	21.3	-5.1	
Mutual fund shares Insurance technical reserves		-25.2 58.6	-35.6 0.3	-7.0 0.0	11.8 0.0	15.5 2.4	1.4 0.0	3.3
Other accounts receivable and financial derivatives		-14.6	57.2	13.9	-1.3	-6.0	-11.3	9.0
Changes in net financial worth due to transactions		11.0	57.2	15.5	1.0	0.0	11.5	7.0
Other changes account, financial assets								
Total other changes in financial assets		-108.4	52.3	79.6	-257.8	-55.4	29.4	-100.0
Monetary gold and special drawing rights (SDRs)				15.3				
Currency and deposits		7.1	-1.4	-41.1	-82.7	-5.0	-0.1	-71.3
Short-term debt securities		-2.3	12.5	3.1	-0.6	0.2	0.0	-8.1
Long-term debt securities		0.6	-2.6	-14.5	-16.1	-4.3	-0.1	0.6
Loans of which long-term		-0.1 0.0	6.8 2.5	115.5 139.1	-78.2 -73.4	1.3 0.7	7.5 7.5	-11.7
Shares and other equity		-111.7	43.0	-16.3	-81.9	-46.5	20.8	-42.1
Quoted shares		-61.8	7.2	-17.2	-41.0	-21.4	11.4	12.1
Unquoted shares and other equity		-38.3	38.4	6.0	-39.3	-3.8	12.1	
Mutual fund shares		-11.5	-2.5	-5.1	-1.6	-21.4	-2.7	
Insurance technical reserves		-0.7	-0.1	0.0	0.0	-4.2	0.0	22.9
Other accounts receivable and financial derivatives		-1.4	-6.0	17.6	1.7	3.2	1.3	9.7
Other changes in net financial worth								
Closing balance sheet, financial assets		17,570.1	14 077 4	22 100 4	10 202 5	6.246.4	2 002 0	15.016.5
Total financial assets  Monetary gold and special drawing rights (SDRs)		17,573.1	14,877.4	22,180.4 205.6	10,202.5	6,246.4	2,883.8	15,216.5
Currency and deposits		5,648.7	1,735.0	2,464.6	1,522.7	781.3	537.3	3,995.5
Short-term debt securities		46.2	137.8	117.6	286.7	259.3	34.5	774.2
Long-term debt securities		1,268.5	224.4	3,635.9	1,926.1	1,992.6	225.9	2,477.1
Loans		40.3	2,071.5	12,083.8	1,508.3	330.6	378.1	1,702.3
of which long-term		23.9	1,177.6	9,155.7	1,163.9	294.3	328.2	
Shares and other equity		5,030.1	7,841.2	1,882.2	4,743.4	2,409.5	1,155.4	5,435.0
Quoted shares		1,128.7	1,961.1	719.6	2,514.8	843.5	439.0	
Unquoted shares and other equity Mutual fund shares		2,286.6 1,614.7	5,520.8 359.3	896.4 266.2	1,513.7 714.9	481.7 1,084.3	568.0 148.3	
Insurance technical reserves		5,222.1	136.3	2.0	0.0	1,084.3	3.3	246.6
Other accounts receivable and financial derivatives  Net financial worth		317.2	2,731.2	1,788.7	215.2	325.3	549.4	585.8
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## 3.1 Integrated economic and financial accounts by institutional sector (cont'd) (EUR billions)

Liabilities	Euro area	Households	Non-financial corporations	MFIs	Other financial inter-	Insurance corporations and pension	General govern- ment	Rest of the world
2007 Q4					mediaries	funds		
Opening balance sheet, liabilities								
Total liabilities		5,826.4	23,570.5	21,699.9	10,017.0	6,413.4	6,811.3	13,526.2
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			26.5	13,182.7	221.8	4.6	331.2	2,724.9
Short-term debt securities Long-term debt securities			276.4 445.6	405.7 2,691.3	79.3 1,446.0	0.8 25.0	661.4 4,343.1	232.6 2,534.4
Loans		5,245.0	6.931.5	2,091.3	1,483.2	184.3	1,081.9	2,682.3
of which long-term		4,935.6	4,729.8		734.0	73.4	920.5	2,002.0
Shares and other equity			13,149.7	3,185.4	6,571.7	677.5	10.2	4,913.4
Quoted shares			4,978.1	1,032.2	264.0	295.1	0.0	
Unquoted shares and other equity			8,171.6	1,105.6	904.7	381.8	10.2	
Mutual fund shares		22.7	225 7	1,047.6	5,402.9	5.252.0	0.5	
Insurance technical reserves Other accounts payable and financial derivatives		32.7 548.7	335.7 2,405.0	53.3 2,181.6	0.6 214.5	5,252.8 268.4	0.5 383.0	438.7
Net financial worth 1)	-1,341.5	11,703.7	-8,954.3	-103.9	112.1	-192.3	-3,906.9	430.7
Financial account, transactions in liabilities	1,511.5	11,703.7	0,551.5	103.5	112.1	172.5	5,500.5	
Total transactions in liabilities		74.3	279.3	450.8	362.0	72.3	-33.7	280.4
Monetary gold and special drawing rights (SDRs)		74.3	219.3	-+.∪0.0	302.0	12.3	-33.1	200.4
Currency and deposits			-1.6	396.1	9.6	-0.2	12.3	-28.5
Short-term debt securities			4.6	34.9	8.2	-0.1	-55.7	3.3
Long-term debt securities			9.6	11.7	215.4	1.6	-7.2	70.4
Loans		83.5	201.9		78.1	-18.1	-2.8	122.8
of which long-term		77.7	162.7	20.2	50.9	-7.8	17.9	70.0
Shares and other equity			40.1 -20.0	39.2 -1.1	63.1 13.8	2.3 -1.0	0.2	78.9
Quoted shares Unquoted shares and other equity			60.1	43.8	80.6	3.3	0.0	
Mutual fund shares			00.1	-3.5	-31.3	5.5	0.2	
Insurance technical reserves		0.0	2.1	-0.2	0.0	62.7	0.0	
Other accounts payable and financial derivatives		-9.3	22.6	-31.1	-12.3	24.1	19.4	33.5
Changes in net financial worth due to transactions 1)	22.0	77.1	-70.4	54.0	-30.8	8.4	-16.3	-22.0
Other changes account, liabilities								
Total other changes in liabilities		1.8	35.9	74.1	-235.5	-33.8	0.6	-218.9
Monetary gold and special drawing rights (SDRs)			0.0	77.9	142.5	0.0	-90.2	-39.6
Currency and deposits Short-term debt securities			0.0	5.4	-142.5 -0.1	0.0	-90.2	-39.6
Long-term debt securities			-2.3	20.7	-22.4	-0.4	-12.1	-19.7
Loans		0.3	-18.9		-1.6	-0.3	98.0	-36.4
of which long-term		0.7	-2.5		-4.1	-0.1	98.2	
Shares and other equity			25.3	-54.9	-71.9	-17.5	0.0	-115.8
Quoted shares			10.7	-30.7	-14.4	-17.6	0.0	
Unquoted shares and other equity Mutual fund shares			14.6	-14.9 -9.2	-10.4 -47.1	0.0	0.0	
Insurance technical reserves		0.0	0.0	0.0	0.0	17.8	0.0	
Other accounts payable and financial derivatives		1.5	31.7	25.1	3.0	-33.4	5.1	-7.0
Other changes in net financial worth 1)	-103.6	-110.2	16.4	5.5	-22.3	-21.7	28.7	118.9
Closing balance sheet, liabilities								
Total liabilities		5,902.5	23,885.7	22,224.9	10,143.5	6,451.9	6,778.3	13,587.7
Monetary gold and special drawing rights (SDRs)				40				
Currency and deposits			25.0	13,656.8	88.9	4.5	253.3	2,656.8
Short-term debt securities Long-term debt securities			281.2 452.8	446.0 2,723.7	87.4 1,638.9	0.6 26.2	605.6 4,323.8	235.4 2,585.1
Loans		5,328.9	7,114.5	4,143.1	1,559.7	165.9	1,177.1	2,768.8
of which long-term		5,014.0	4,890.0		780.8	65.5	1,036.6	_,,
Shares and other equity		,	13,215.1	3,169.7	6,562.8	662.3	10.4	4,876.5
Quoted shares			4,968.8	1,000.3	263.3	276.5	0.0	
Unquoted shares and other equity			8,246.3	1,134.5	974.9	385.1	10.4	
Mutual fund shares		22.5	227.7	1,034.9	5,324.6	5 222 4	0.5	
Insurance technical reserves Other accounts payable and financial derivatives		32.7 541.0	337.7 2,459.3	53.2 2,175.6	0.6 205.1	5,333.4 259.1	0.5 407.5	465.2
Net financial worth 1)	-1,423.1	11,670.6	-9,008.3	2,173.6 -44.4	59.0	-205.5	-3,894.5	403.2
	1,120.1	11,070.0	,,000.5		57.0	205.5	2,071.3	

## 3.2 Euro area non-financial accounts (EUR billions; four-quarter cumulated flows)

Uses	2003	2004	2005	2006 Q1- 2006 Q4	2006 Q2- 2007 Q1	2006 Q3- 2007 Q2	2006 Q4- 2007 Q3	2007 Q1- 2007 Q4
Generation of income account						'		
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) Compensation of employees Other taxes less subsidies on production Consumption of fixed capital Net operating surplus and mixed income 1)	3,666.7	3,772.0	3,878.6	4,031.3	4,074.5	4,116.5	4,155.5	4,203.8
	110.2	121.5	130.2	131.3	132.8	133.4	132.6	128.7
	1,072.7	1,120.3	1,171.7	1,223.7	1,235.5	1,246.4	1,256.9	1,269.0
	1,889.1	1,990.9	2,055.5	2,163.3	2,199.3	2,236.3	2,279.2	2,312.5
Allocation of primary income account								
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income Net national income 1)	2,281.2	2,338.2	2,556.9	2,929.9	3,025.6	3,128.2	3,213.7	3,296.7
	1,268.1	1,243.6	1,331.7	1,602.1	1,676.0	1,751.2	1,821.4	1,896.1
	1,013.1	1,094.7	1,225.1	1,327.9	1,349.6	1,377.0	1,392.3	1,400.6
	6,408.3	6,679.7	6,913.0	7,241.0	7,336.8	7,423.5	7,516.1	7,607.9
Secondary distribution of income account								
Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims Other Net disposable income 1)	856.8	882.1	931.6	1,023.0	1,035.9	1,058.7	1,085.0	1,106.7
	1,388.8	1,428.2	1,470.7	1,532.5	1,545.7	1,560.8	1,573.1	1,588.3
	1,408.7	1,453.7	1,498.2	1,543.0	1,551.1	1,559.8	1,569.7	1,586.0
	658.4	683.6	703.2	708.3	711.5	717.4	719.3	726.5
	173.8	175.7	175.6	175.3	176.2	177.4	177.9	178.8
	174.5	176.3	176.7	175.5	176.6	177.8	178.1	178.6
	310.0	331.7	350.8	357.5	358.7	362.2	363.4	369.1
	6,338.5	6,602.1	6,826.4	7,151.1	7,247.3	7,334.8	7,427.9	7,517.7
Use of income account								
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households in pension funds reserves Net saving 1)	5,854.8	6,075.8	6,307.5	6,565.3	6,619.5	6,670.7	6,727.0	6,789.8
	5,234.7	5,432.1	5,646.9	5,887.0	5,936.1	5,983.5	6,034.6	6,090.8
	620.1	643.7	660.6	678.3	683.4	687.2	692.4	698.9
	54.6	57.3	59.5	63.0	63.1	61.2	61.2	60.9
	483.9	526.5	519.2	586.2	628.1	664.4	701.2	728.1
Capital account								
Net saving Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital	1,528.0	1,609.6	1,701.8	1,842.7	1,884.5	1,918.1	1,947.2	1,981.5
	1,527.5	1,600.3	1,689.5	1,814.7	1,857.6	1,890.6	1,919.4	1,946.5
	0.5	9.3	12.3	28.0	26.9	27.5	27.7	35.0
Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes Other capital transfers Net lending (+)/net borrowing (-) (from capital account) 1)	0.6	-1.1	-0.1	0.6	0.2	0.0	0.0	0.3
	182.6	172.7	181.4	175.8	174.0	170.5	168.7	160.2
	35.9	29.8	24.3	22.3	22.9	23.4	24.1	24.0
	146.8	142.9	157.2	153.5	151.1	147.1	144.6	136.2
	40.2	54.7	2.7	-17.9	-3.2	9.8	26.8	30.1

Sources: ECB and Eurostat.

1) For the calculation of the balancing items, see the Technical notes.

### 3.2 Euro area non-financial accounts (cont'd)

2006 Q1-2006 Q2-2006 Q3-2006 Q4-2007 Q1-Resources 2003 2004 2005 2006 Q4 2007 Q1 2007 Q2 2007 Q3 2007 Q4 Generation of income account Gross value added (basic prices) 6,738.7 7,004.7 7.235.9 7,549.6 7,642.1 7,732.7 7,824.3 7.914.0 Taxes less subsidies on products 761.3 797.2 839 7 904.4 921.3 933 5 944 2 953 9 7,500.0 Gross domestic product (market prices)2) 7,801.9 8,075.6 8.454.0 8.563.3 8,666.1 8.768.5 8,867.9 Compensation of employees Other taxes less subsidies on production Consumption of fixed capital Net operating surplus and mixed income Allocation of primary income account Net operating surplus and mixed income 1,889.1 1,990.9 2,055.5 2,163.3 2,199.3 2,236.3 2,279.2 2,312.5 3,673.9 3,779.1 3,884.3 4,037.4 4,080.7 4,122.8 4,161.8 4,210.2 Compensation of employees Taxes less subsidies on production 880.7 932.4 981.5 1,046.9 1,063.7 1,076.4 1,085.6 1,091.8 Property income 2,246.0 2,315.5 2,548.7 2,923.3 3,018.7 3,116.2 3,203.2 3,290.1 Interest 1,237.2 1,212.6 1,303.5 1,570.0 1,642.2 1,718.6 1,786.8 1,857.4 1,008.8 1,103.0 1,245.2 1,353.4 1,376.5 1,397.6 1,416.4 1,432.7 Other property income Net national income Secondary distribution of income account Net national income 6,408.3 6,679.7 6,913.0 7,241.0 7,336.8 7,423.5 7,516.1 7,607.9 858.7 885.2 935.4 1,027.8 1,041.2 1,065.7 1,092.5 1,114.2 Current taxes on income, wealth, etc. 1,387.9 1,427.4 1,470.3 1,532.0 1,545.3 1,572.5 Social contributions 1,560.3 1.587.8 1,551.8 Social benefits other than social transfers in kind 1,402.2 1,446.2 1,490.6 1,535.4 1,543.2 1,561.4 1,577.8 594.0 Other current transfers 611.3 620.8 621.6 624.9 630.3 632.5 637.5 Net non-life insurance premiums 174.5 176.3 176.7 175.5 176.6 177.8 178.1 178.6 172.9 175.2 Non-life insurance claims 171.2 173.5 174.4 173.9 175.7 176.5 248.3 269.7 274.4 277.3 278.7 282.4 Other 261.5 273.2 Net disposable income Use of income account 6,338.5 6,602.1 7,151.1 7,247.3 7,334.8 7,427.9 7,517.7 Net disposable income 6.826.4 Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households 54.8 57.5 59.8 63.4 63.5 in pension funds reserves 61.5 61.4 61.1 Net saving Capital account 519.2 728.1 Net saving 483.9 526.5 586.2 628.1 664.4 701.2 Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables 1,072.7 1,223.7 1.269.0 Consumption of fixed capital 1,120.3 1,171.7 1,235.5 1,246.4 1,256.9 Acquisitions less disposals of non-produced non-financial assets 189.2 195.0 191.4 191.8 187.5 184.5 194.8 175.0 Capital transfers Capital taxes 359 298 243 22.3 22.9 23.4 24 1 24.0 158 9 1594 170.7 Other capital transfers 169 1 168 9 164 1 1604 1510 Net lending (+)/net borrowing (-) (from capital account)

Sources: ECB and Eurostat.

<sup>2)</sup> Gross domestic product is equal to gross value added of all domestic sectors plus net taxes (taxes less subsidies) on products.

3.3 Households
(EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

Gross operating surplus and mixed income (+)  Interest receivable (+) Interest payable (-) Other property income receivable (+) Other property income payable (-) Current taxes on income and wealth (-) Net social contributions (-) Net social benefits (+) Net current transfers receivable (+)  = Gross disposable income	3,673.9 1,229.9 237.6 124.0 614.9 702.2 1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3 724.5	3,779.1 1,281.7 230.7 125.2 650.9 9.3 705.6 1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	3,884.3 1,330.5 228.8 128.8 696.4 9.4 1,466.7 1,485.4 67.8 5,349.8 4,652.4 59.4	2006 Q1- 2006 Q4 4,037.4 1,404.7 259.8 157.0 736.5 9.5 788.8 1,528.2 1,529.9 64.3 5,549.0	4,080.7 1,425.3 267.2 165.3 743.1 9.5 796.7 1,541.4 1,537.7 65.4	4,122.8 1,447.0 275.4 174.3 755.6 9.6 810.2 1,556.5 1,546.2	2006 Q4- 2007 Q3 4,161.8 1,467.5 284.1 181.4 759.7 9.6 828.4 1,568.8	2007 Q1- 2007 Q4 4,210.2 1,484.5 292.9 189.0 765.2 9.7
Compensation of employees (+) Gross operating surplus and mixed income (+) Interest receivable (+) Interest payable (-) Other property income receivable (+) Other property income payable (-) Current taxes on income and wealth (-) Net social contributions (-) Net social benefits (+) Net current transfers receivable (+)  = Gross disposable income Final consumption expenditure (-) Changes in net worth in pension funds (+)  = Gross aving Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth 10 Investment, financing and changes in net worth Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities 20	1,229.9 237.6 124.0 614.9 8 702.2 1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	1,281.7 230.7 125.2 650.9 9.3 705.6 1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	1,330.5 228.8 128.8 696.4 9.4 738.4 1,466.7 1,485.4 67.8 5,349.8 4,652.4	1,404.7 259.8 157.0 736.5 9.5 788.8 1,528.2 1,529.9 64.3 5,549.0	1,425.3 267.2 165.3 743.1 9.5 796.7 1,541.4 1,537.7	1,447.0 275.4 174.3 755.6 9.6 810.2 1,556.5	1,467.5 284.1 181.4 759.7 9.6 828.4	1,484.5 292.9 189.0 765.2
Gross operating surplus and mixed income (+) Interest receivable (+) Interest payable (-) Other property income receivable (+) Other property income payable (-) Current taxes on income and wealth (-) Net social contributions (-) Net social benefits (+) Net current transfers receivable (+)  = Gross disposable income Final consumption expenditure (-) Changes in net worth in pension funds (+)  = Gross saving Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth 10 (+)  = Changes in net worth Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities 20	1,229.9 237.6 124.0 614.9 8 702.2 1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	1,281.7 230.7 125.2 650.9 9.3 705.6 1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	1,330.5 228.8 128.8 696.4 9.4 738.4 1,466.7 1,485.4 67.8 5,349.8 4,652.4	1,404.7 259.8 157.0 736.5 9.5 788.8 1,528.2 1,529.9 64.3 5,549.0	1,425.3 267.2 165.3 743.1 9.5 796.7 1,541.4 1,537.7	1,447.0 275.4 174.3 755.6 9.6 810.2 1,556.5	1,467.5 284.1 181.4 759.7 9.6 828.4	1,484.5 292.9 189.0 765.2
Interest receivable (+) Interest payable (-) Other property income receivable (+) Other property income payable (-) Current taxes on income and wealth (-) Net social contributions (-) Net social benefits (+) Net current transfers receivable (+) = Gross disposable income Final consumption expenditure (-) Changes in net worth in pension funds (+) = Gross saving Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth 10 Investment, financing and changes in net worth Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities 20	237.6 124.0 614.9 8.9 702.2 1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	230.7 125.2 650.9 9.3 705.6 1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	228.8 128.8 696.4 9.4 738.4 1,466.7 1,485.4 67.8 5,349.8 4,652.4	259.8 157.0 736.5 9.5 788.8 1,528.2 1,529.9 64.3 5,549.0	267.2 165.3 743.1 9.5 796.7 1,541.4 1,537.7	275.4 174.3 755.6 9.6 810.2 1,556.5	284.1 181.4 759.7 9.6 828.4	292.9 189.0 765.2
Interest payable (-) Other property income receivable (+) Other property income payable (-) Current taxes on income and wealth (-) Net social contributions (-) Net social benefits (+) Net current transfers receivable (+)  = Gross disposable income Final consumption expenditure (-) Changes in net worth in pension funds (+)  = Gross saving Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth 10 (+)  = Changes in net worth 10 (+)  = Changes in net worth 10 (+)  Storterm assets Currency and deposits Money market fund shares Debt securities 20	124.0 614.9 8.9 702.2 1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	125.2 650.9 9.3 705.6 1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	128.8 696.4 9.4 738.4 1,466.7 1,485.4 67.8 5,349.8 4,652.4	157.0 736.5 9.5 788.8 1,528.2 1,529.9 64.3 5,549.0	165.3 743.1 9.5 796.7 1,541.4 1,537.7	174.3 755.6 9.6 810.2 1,556.5	181.4 759.7 9.6 828.4	189.0 765.2
Other property income receivable (+) Other property income payable (-) Current taxes on income and wealth (-) Net social contributions (-) Net social benefits (+) Net current transfers receivable (+)  = Gross disposable income Final consumption expenditure (-) Changes in net worth in pension funds (+)  = Gross saving Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth 10 (+) = Changes in net worth 10 Investment, financing and changes in net worth  Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities 20	614.9 8.9 702.2 1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	650.9 9.3 705.6 1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	696.4 9.4 738.4 1,466.7 1,485.4 67.8 5,349.8 4,652.4	736.5 9.5 788.8 1,528.2 1,529.9 64.3 5,549.0	743.1 9.5 796.7 1,541.4 1,537.7	755.6 9.6 810.2 1,556.5	759.7 9.6 828.4	765.2
Other property income payable (-) Current taxes on income and wealth (-) Net social contributions (-) Net social benefits (+) Net current transfers receivable (+)  = Gross disposable income Final consumption expenditure (-) Changes in net worth in pension funds (+)  = Gross saving Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth (-)  Investment, financing and changes in net worth  Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities (-)	8.9 702.2 1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	9.3 705.6 1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	9.4 738.4 1,466.7 1,485.4 67.8 5,349.8 4,652.4	9.5 788.8 1,528.2 1,529.9 64.3 5,549.0	9.5 796.7 1,541.4 1,537.7	9.6 810.2 1,556.5	9.6 828.4	
Current taxes on income and wealth (-)  Net social contributions (-)  Net social benefits (+)  = Gross disposable income  Final consumption expenditure (-)  Changes in net worth in pension funds (+)  = Gross saving  Consumption of fixed capital (-)  Net capital transfers receivable (+)  Other changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+)  Consumption of fixed capital (-)  Main items of financial investment (+)  Short-term assets  Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>	702.2 1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	705.6 1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	738.4 1,466.7 1,485.4 67.8 5,349.8 4,652.4	788.8 1,528.2 1,529.9 64.3 5,549.0	796.7 1,541.4 1,537.7	810.2 1,556.5	828.4	9.7
Net social contributions (-) Net social benefits (+) Net current transfers receivable (+)  = Gross disposable income Final consumption expenditure (-) Changes in net worth in pension funds (+)  = Gross saving Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth <sup>1)</sup> (+)  = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities <sup>2)</sup>	1,385.1 1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	1,424.5 1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	1,466.7 1,485.4 67.8 5,349.8 4,652.4	1,528.2 1,529.9 64.3 5,549.0	1,541.4 1,537.7	1,556.5		
Net social benefits (+)  Net current transfers receivable (+)  = Gross disposable income  Final consumption expenditure (-)  Changes in net worth in pension funds (+)  = Gross saving  Consumption of fixed capital (-)  Net capital transfers receivable (+)  Other changes in net worth <sup>1)</sup> (+)  = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+)  Consumption of fixed capital (-)  Main items of financial investment (+)  Short-term assets  Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>	1,397.5 66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	1,441.3 65.4 5,184.6 4,484.8 57.1 756.9 303.6	1,485.4 67.8 5,349.8 4,652.4	1,529.9 64.3 5,549.0	1,537.7		1,568.8	845.9
Net current transfers receivable (+)  = Gross disposable income  Final consumption expenditure (-)  Changes in net worth in pension funds (+)  = Gross saving  Consumption of fixed capital (-)  Net capital transfers receivable (+)  Other changes in net worth <sup>1)</sup> (+)  = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+)  Consumption of fixed capital (-)  Main items of financial investment (+)  Short-term assets  Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>	66.8 5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	65.4 5,184.6 4,484.8 57.1 756.9 303.6	67.8 5,349.8 4,652.4	64.3 5,549.0		1,546.2		1,584.0
= Gross disposable income Final consumption expenditure (-) Changes in net worth in pension funds (+) = Gross saving Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth <sup>1)</sup> (+) = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities <sup>2)</sup>	5,000.3 4,319.8 54.4 734.9 288.3 12.6 265.3	5,184.6 4,484.8 57.1 756.9 303.6	5,349.8 4,652.4	5,549.0	65.4		1,555.9	1,572.2
Final consumption expenditure (-)  Changes in net worth in pension funds (+)  = Gross saving  Consumption of fixed capital (-)  Net capital transfers receivable (+)  Other changes in net worth <sup>1)</sup> (+)  = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+)  Consumption of fixed capital (-)  Main items of financial investment (+)  Short-term assets  Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>	4,319.8 54.4 734.9 288.3 12.6 265.3	4,484.8 57.1 756.9 303.6	4,652.4			65.3	65.7	66.0
Changes in net worth in pension funds (+)  = Gross saving  Consumption of fixed capital (-)  Net capital transfers receivable (+)  Other changes in net worth <sup>1)</sup> (+)  = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+)  Consumption of fixed capital (-)  Main items of financial investment (+)  Short-term assets  Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>	54.4 734.9 288.3 12.6 265.3	57.1 756.9 303.6			5,606.5	5,661.8	5,706.5	5,762.6
= Gross saving  Consumption of fixed capital (-)  Net capital transfers receivable (+)  Other changes in net worth <sup>1)</sup> (+)  = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+)  Consumption of fixed capital (-)  Main items of financial investment (+)  Short-term assets  Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>	734.9 288.3 12.6 265.3	756.9 303.6	59.4	4,843.5	4,881.5	4,920.4	4,960.6	5,005.4
Consumption of fixed capital (-) Net capital transfers receivable (+) Other changes in net worth <sup>1)</sup> (+) = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities <sup>2)</sup>	288.3 12.6 265.3	303.6		62.9	63.0	61.1	61.0	60.7
Net capital transfers receivable (+) Other changes in net worth 10 (+) = Changes in net worth 10 Investment, financing and changes in net worth  Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities 20	12.6 265.3		756.8	768.4	788.1	802.5	806.9	818.0
Other changes in net worth <sup>1)</sup> (+)  = Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+)  Consumption of fixed capital (-) Main items of financial investment (+)  Short-term assets  Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>	265.3		318.7	335.6	339.1	342.4	344.8	347.3
= Changes in net worth <sup>1)</sup> Investment, financing and changes in net worth  Net acquisition of non-financial assets (+)  Consumption of fixed capital (-) Main items of financial investment (+)  Short-term assets  Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>		18.8	24.9	28.4	27.6	25.7	23.6	17.5
Investment, financing and changes in net worth  Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities <sup>2)</sup>	724.5	305.8	564.3	497.3	404.9	611.2	225.6	-100.0
Net acquisition of non-financial assets (+) Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities <sup>2)</sup>		777.9	1,027.3	958.5	881.5	1,096.9	711.4	388.2
Consumption of fixed capital (-) Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities <sup>2)</sup>								
Main items of financial investment (+) Short-term assets Currency and deposits Money market fund shares Debt securities <sup>2)</sup>	495.9	526.8	560.2	612.6	627.3	638.1	644.6	649.9
Currency and deposits  Money market fund shares  Debt securities <sup>2)</sup>	288.3	303.6	318.7	335.6	339.1	342.4	344.8	347.3
Money market fund shares Debt securities 2)	211.4	214.7	207.6	304.6	347.5	379.7	395.6	418.9
Debt securities 2)	226.5	213.0	247.9	283.8	293.2	316.8	328.2	348.0
	25.1	-6.4	-20.2	0.7	25.7	44.7	44.4	43.3
Long-term assets	-40.1	8.2	-20.2	20.1	28.6	18.2	23.0	27.6
	309.4	342.2	443.1	322.2	284.6	246.3	196.2	144.8
Deposits	-8.7	29.6	-8.8	-6.6	-20.6	-31.0	-37.4	-48.0
Debt securities	27.3	65.1	12.3	70.2	51.7	38.1	8.3	8.6
Shares and other equity	59.6	-4.6	139.2	-30.6	-22.9	-37.4	-36.2	-65.5
Quoted, unquoted shares and other equity	7.5	-11.1	65.7	-0.1	36.2	32.1	40.6	21.1
Mutual fund shares	52.1	6.5	73.6	-30.5	-59.0	-69.5	-76.9	-86.6
Life insurance and pension fund reserves	231.2	252.1	300.3	289.1	276.4	276.5	261.5	249.7
Main items of financing (-) Loans	262.9	311.6	390.6	390.0	382.0	365.1	260.4	341.1
of which from euro area MFIs	262.8 211.6	280.8	358.3	346.5	337.2	316.8	360.4 302.3	279.4
Other changes in financial assets (+)	211.0	200.0	336.3	340.3	331.2	310.6	302.3	2/9.4
Shares and other equity	274.6	252.9	483.8	474.6	371.4	576.5	203.0	-112.4
Life insurance and pension fund reserves	28.8	56.3	129.5	51.3	35.6	65.2	32.1	16.8
Remaining net flows (+)	-44.5	0.2	-87.5	-81.2	-63.9	-101.3	-54.9	-41.5
= Changes in net worth 1)	724.5	777.9	1,027.3	958.5	881.5	1,096.9	711.4	388.2
Financial balance sheet								
Financial assets (+)								
Short-term assets 4	4,058.1	4,276.0	4,494.1	4,752.8	4,830.8	4,970.1	5,017.5	5,204.0
Currency and deposits 3	3,710.1	3,926.0	4,176.7	4,456.5	4,497.3	4,613.3	4,653.9	4,844.8
Money market fund shares	321.0	313.9	300.5	261.7	281.0	305.0	304.3	303.7
Debt securities 2)	27.1	36.0	16.9	34.6	52.4	51.8	59.4	55.5
	9,131.2	9,767.9	10,808.8	11,675.7	11,889.6	11,979.0	11,788.2	11,661.5
Deposits	843.0	881.6	890.9	881.3	854.2	841.7	840.3	804.0
	1,207.2	1,248.0	1,233.6	1,286.1	1,296.4	1,249.8	1,249.2	1,259.2
• •	3,554.3	3,803.2	4,419.4	4,903.0	5,057.7	5,120.1	4,883.9	4,726.4
	2,406.4	2,638.3	3,102.5	3,524.3	3,682.4	3,734.8	3,536.7	3,415.3
	1,147.9	1,164.9	1,316.8	1,378.6	1,375.3	1,385.4	1,347.2	1,311.0
	3,526.7	3,835.2	4,265.0	4,605.4	4,681.2	4,767.4	4,814.7	4,871.9
Remaining net assets (+) Liabilities (-)	213.8	252.9	187.1	146.0	155.1	143.3	143.0	134.0
	20000	4,247.6	16211					
	3,923.9		4,634.4	5,018.6	5,079.2	5,170.1	5,245.0	
= Net financial wealth	3,521.2	3,812.5 10,049.2	4,195.9 10,855.7	5,018.6 4,543.0 11,556.0	5,079.2 4,611.3 11,796.3	5,170.1 4,692.7 11,922.3	5,245.0 4,752.9 11,703.7	5,328.9 4,808.7 11,670.6

Sources: ECB and Eurostat.

1) Excluding changes in net worth due to other changes in non-financial assets such as revaluations of residential property.

2) Securities issued by MFIs with a maturity of less than two years and by other sectors with a maturity of less than one year.

## 3.4 Non-financial corporations (EUR billions; four-quarter cumulated flo

				2006 Q1-	2006 Q2-	2006 Q3-	2006 Q4-	2007 Q1-
Income and saving	2003	2004	2005	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4
	3,834.8	3,989.3	4 112 0	4,294.8	4,354.3	4,412.3	4,467.6	4,518.7
Gross value added (basic prices) (+) Compensation of employees (-)	2,313.1	2,382.4	4,113.8 2,445.7	2,544.6	2,573.2	2,605.6	2,633.5	2,664.4
Other taxes less subsidies on production (-)	58.6	64.6	71.4	75.1	77.1	78.0	2,033.3 77.6	73.4
= Gross operating surplus (+)	1,463.1	1,542.4	1,596.8	1,675.1	1,704.1	1,728.7	1,756.5	1,780.9
Consumption of fixed capital (-)	607.2	631.9	660.4	686.9	693.0	698.6	704.5	711.2
= Net operating surplus (+)	855.8	910.5	936.4	988.2	1,011.0	1,030.2	1,052.0	1,069.7
Property income receivable (+)	320.5	364.2	427.8	468.7	478.5	485.4	496.3	507.5
Interest receivable	126.6	121.9	132.5	154.8	161.1	168.6	175.1	181.3
Other property income receivable	193.9	242.3	295.4	313.9	317.4	316.8	321.2	326.2
Interest and rents payable (-)	228.9	226.8	235.4	279.2	293.4	307.5	318.6	331.2
= Net entrepreneurial income (+)	947.5	1,047.8	1,128.8	1,177.7	1,196.2	1,208.1	1,229.7	1,246.0
Distributed income (-)	693.4	751.5	837.2	906.8	915.1	923.4	931.3	933.1
Taxes on income and wealth payable (-)	117.0	135.6	147.8	184.1	188.4	195.8	203.6	208.1
Social contributions receivable (+) Social benefits payable (-)	73.4 59.9	73.5 60.4	74.2 62.2	76.8 62.1	77.2 62.1	76.0 61.9	74.7 62.0	73.0 62.2
Other net transfers (-)	57.0	63.2	61.8	61.6	61.3	58.5	56.1	55.3
= Net saving	93.6	110.7	94.0	39.8	46.5	44.6	51.4	60.4
Investment, financing and saving								
Net acquisition of non-financial assets (+)	196.5	214.4	241.2	288.6	304.0	318.3	330.2	349.2
Gross fixed capital formation (+)	803.8	841.0	889.4	950.2	973.6	993.4	1,010.8	1,029.8
Consumption of fixed capital (-)	607.2	631.9	660.4	686.9	693.0	698.6	704.5	711.2
Net acquisition of other non-financial assets (+)	-0.1	5.4	12.2	25.3	23.4	23.5	23.9	30.6
Main items of financial investment (+)								
Short-term assets	105.9	103.1	126.7	155.4	188.8	205.1	177.7	176.2
Currency and deposits	64.9	88.9	112.9	144.5	163.2	163.4	157.6	148.3
Money market fund shares	22.5	16.5	8.6	3.7	19.7	23.5	-9.2	-18.5
Debt securities 1)	18.5	-2.4	5.2	7.2	5.8	18.2	29.3	46.4
Long-term assets Deposits	281.6 43.9	213.0 5.2	365.4 35.6	376.0 27.6	372.5 28.6	395.2 35.5	429.8 20.0	430.3 -1.8
Debt securities	-46.1	-52.5	-29.7	-21.7	-31.4	-42.5	-42.5	-56.1
Shares and other equity	149.4	179.3	228.9	207.3	197.7	207.0	243.5	295.5
Other, mainly intercompany loans	134.3	81.0	130.7	162.7	177.7	195.2	208.8	192.7
Remaining net assets (+)	56.1	76.0	100.7	171.0	159.5	149.5	194.2	182.4
Main items of financing (-)								
Debt	289.7	235.0	422.0	657.7	660.8	695.4	750.1	781.0
of which loans from euro area MFIs	102.7	172.4	264.6	448.6	443.9	483.6	520.6	557.1
of which debt securities	63.1	7.0	12.0	40.2	39.4	53.6	37.3	49.5
Shares and other equity	210.6	197.1	257.2	223.9	245.6	256.3	260.0	230.7
Quoted shares	18.7	11.9	100.5	36.2	55.6	74.4	81.1	44.2
Unquoted shares and other equity	191.8	185.3	156.8	187.7	190.0	181.9	178.9	186.6
Net capital transfers receivable (-)	46.3	63.8	60.8	69.6	71.9	69.5	68.1	66.7
= Net saving Financial balance sheet	93.6	110.7	94.0	39.8	46.5	44.6	51.4	60.4
Financial assets								
Short-term assets	1,318.8	1,379.2	1,510.2	1,655.6	1,694.4	1,747.0	1.762.3	1,830.7
Currency and deposits	1,028.9	1,102.6	1,220.7	1,356.8	1,364.8	1,405.0	1,429.0	1,499.7
Money market fund shares	143.8	163.7	176.3	185.9	204.2	205.2	185.8	162.3
Debt securities 1)	146.1	112.9	113.2	112.9	125.4	136.8	147.5	168.7
Long-term assets	6,696.2	7,194.0	8,160.6	9,371.6	9,733.8	10,115.2	10,037.8	10,179.2
Deposits	136.5	137.4	180.3	210.2	261.7	269.0	257.2	235.3
Debt securities	380.9	328.5	284.8	260.3	236.5	228.6	198.3	193.5
Shares and other equity	4,709.8	5,191.4	6,020.7	7,050.3	7,309.1	7,637.8	7,566.4	7,678.9
Other, mainly intercompany loans	1,469.1	1,536.7	1,674.7	1,850.8	1,926.5	1,979.8	2,015.9	2,071.5
Remaining net assets	195.2	240.6	285.2	356.8	430.5	428.1	437.7	433.2
Liabilities	6 162 0	6 2 4 4 0	6 700 0	7 422 7	7 500 5	7.926.0	7,000.3	0 106 2
Debt	6,163.8	6,344.9	6,788.9	7,422.7	7,588.5	7,836.9	7,989.2	8,186.3
of which loans from euro area MFIs of which debt securities	3,034.4 628.2	3,160.8 650.8	3,419.5 668.9	3,857.4 690.5	3,956.3 698.2	4,106.8 730.3	4,230.6 722.0	4,388.6 734.0
Shares and other equity	8,289.2	9.216.8	10,539.2	12,229.6	12,685.1	13,315.8	13,149.7	13,215.1
Quoted shares	2,731.5	2,986.7	3,680.5	4,451.1	4,685.5	5,060.7	4,978.1	4,968.8
Unquoted shares and other equity	5,557.7	6,230.1	6,858.7	7,778.4	7,999.6	8,255.1	8,171.6	8,246.3
Sources: ECB and Eurostat.		-,	-,550.7	.,,,,,,,,,	.,	-,200.1	-,-,-,-	-,
1) Securities issued by MEIs with a maturity of less than two years and by	v other coeters v	with a maturit	y of loss the	n one yeer				

1) Securities issued by MFIs with a maturity of less than two years and by other sectors with a maturity of less than one year.

## 3.5 Insurance corporations and pension funds (EUR billions; four-quarter cumulated flows; outstanding amount

		1		2006 Q1-	2006 Q2-	2006 Q3-	2006 Q4-	2007 Q1-
	2003	2004	2005	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4
Financial account, financial transactions								
Main items of financial investment (+)								
Short-term assets	21.7	40.0	23.8	50.6	69.5	57.7	49.3	44.2
Currency and deposits	7.0	13.2	7.2	12.4	18.0	2.4	8.9	7.8
Money market fund shares	7.7	2.7	0.4	3.7	7.1	3.6	0.3	0.1
Debt securities 1)	7.1	24.1	16.2	34.5	44.4	51.7	40.2	36.3
Long-term assets	231.0	218.5	286.4	318.1	289.7	295.5	266.3	273.2
Deposits	22.7	37.6	17.1	51.9	61.6	65.4	62.2	53.5
Debt securities	144.9	131.2	132.9	131.3	148.3	162.1	155.8	158.3
Loans	11.6	6.6	-2.6	-0.9	-18.4	-17.2	-23.0	-17.0
Quoted shares	9.5	13.0	31.7	19.2	14.9	8.1	7.1	8.5
Unquoted shares and other equity	5.1	-0.4	20.3	28.2	20.8	23.3	29.1	31.1
Mutual fund shares	37.1	30.6	87.1	88.4	62.6	53.8	35.2	38.8
Remaining net assets (+)	-2.3	11.7	15.1	30.0	34.6	30.5	41.3	2.4
Main items of financing (-)	4.0	1.7	0.4	5.0	5.0	2.0	2.2	1.4
Debt securities	4.9	-1.7	-0.4	5.2	5.0	3.9	3.3	1.4
Loans	12.5	4.6	18.4	32.7	19.8	25.5	21.9	9.2
Shares and other equity	11.6	13.6	9.9	8.6	11.1	12.5	10.7	12.0
Insurance technical reserves	236.8	262.1 230.5	335.3 292.0	344.5 288.6	340.0 280.3	341.3 281.7	324.2 274.5	301.8 263.9
Net equity of households in life insurance and pension fund reserves	210.5	230.3	292.0	200.0	260.5	201.7	274.3	203.9
Prepayments of insurance premiums and reserves for	26.4	31.6	43.3	55.9	59.7	59.7	49.8	37.9
outstanding claims  Changes in not financial worth due to transactions	-15.3	-8.3	-37.8	7.7	18.0	0.6	-3.2	-4.7
= Changes in net financial worth due to transactions	-13.3	-0.3	-37.6	1.1	16.0	0.0	-3.2	-4.7
Other changes account								
Other changes in financial assets (+)	10.0							4=0
Shares and other equity	106.8	110.3	175.7	176.4	136.5	253.0	141.9	17.8
Other net assets	-12.3	140.1	53.8	-49.6	-64.5	-86.0	-119.6	-55.3
Other changes in liabilities (-)	00.2	21.0	124.1	44.2	21.0	05.1	12.7	17.0
Shares and other equity	98.3	21.0	124.1	44.2	31.0	95.1 72.5	12.7	-17.9
Insurance technical reserves	33.5 34.0	83.7 63.9	139.8 145.4	56.3 59.1	43.3 43.7	72.5 70.2	34.5 34.0	34.8 20.5
Net equity of households in life insurance and pension fund reserves	34.0	03.9	143.4	39.1	43.7	70.2	34.0	20.3
Prepayments of insurance premiums and reserves for outstanding claims	-0.5	19.8	-5.6	-2.8	-0.4	2.2	0.5	14.3
= Other changes in net financial worth	-37.3	145.6	-34.5	26.2	-2.3	-0.5	-24.9	-54.4
Financial balance sheet	5715	11510	51.5	20.2	210	0.0	2.0	5
Financial assets (+)								
Short-term assets	264.5	401.4	430.2	481.4	505.4	511.2	515.6	521.5
Currency and deposits	121.3	133.6	142.7	154.6	155.9	144.4	154.0	163.2
Money market fund shares	68.5	72.2	74.3	80.4	82.8	84.3	81.0	78.2
Debt securities 1)	74.7	195.5	213.2	246.4	266.7	282.6	280.6	280.1
Long-term assets	3,754.0	4,110.3	4,588.6	5,014.9	5,102.1	5,205.3	5,227.8	5,251.8
Deposits	457.6	497.1	515.6	570.8	595.1	609.4	621.8	618.1
Debt securities	1,470.6	1,639.7	1,789.9	1,857.7	1,890.8	1,901.2	1,937.3	1,971.8
Loans	368.3	363.5	360.1	353.6	337.5	338.9	335.0	330.6
Quoted shares	524.9	574.9	703.7	827.0	847.2	873.9	860.3	843.5
Unquoted shares and other equity	304.7	334.5	377.5	444.0	447.3	468.1	464.2	481.7
Mutual fund shares	627.8	700.6	841.8	961.8	984.2	1,013.8	1,009.3	1,006.1
Remaining net assets (+)	108.5	125.0	165.6	209.6	207.9	205.7	204.8	209.5
Liabilities (-)								
Debt securities	24.4	22.9	22.0	26.8	26.6	25.7	25.8	26.8
Loans	126.3	119.8	131.7	160.6	167.3	178.4	184.3	165.9
Shares and other equity	446.7	481.3	615.4	668.2	684.0	711.4	677.5	662.3
Insurance technical reserves	3,775.0	4,120.8	4,595.9	4,996.7	5,094.2	5,193.8	5,252.8	5,333.4
Net equity of households in life insurance and pension fund reserves	3,194.2	3,488.6	3,926.0	4,273.7	4,352.8	4,443.5	4,495.8	4,558.1
Prepayments of insurance premiums and reserves								
for outstanding claims	580.8	632.2	669.9	723.0	741.4	750.3	757.0	775.3
= Net financial wealth	-245.4	-108.1	-180.4	-146.5	-156.7	-187.1	-192.3	-205.5

Source: ECB.

1) Securities issued by MFIs with a maturity of less than two years and by other sectors with a maturity of less than one year.



### FINANCIAL MARKETS

### 4.1 Securities, other than shares, by original maturity, residency of the issuer and currency (FIIR billions and period growth rates: seasonally adjusted: transactions during the month and end of period outstanding amounts: nominal value

	,	Fotal in euro 1)					By euro area residents					
		rotar in curo			In euro				In all cur	rrencies		
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally a	djusted 2)
										Ü	Net issues g	6-month rowth rates
	1	2	3	4	5	6	7	8	9	10	11	12
						Total						
2007 Apr.	12,196.1	1,041.1	23.4	10,257.3	983.1	55.6	11,541.6	1,039.6	72.4	8.6	63.5	9.1
May June	12,407.1 12,537.0	1,216.5 1,219.8	211.4 129.8	10,416.6 10.461.5	1,115.3 1,069.0	159.6 44.8	11,728.9 11,790.7	1,178.8 1,129.0	181.3 59.1	9.0 9.2	135.4 53.2	9.7 9.7
July	12,537.0	1,076.5	2.9	10,490.4	1,004.7	28.0	11,790.7	1,068.6	45.9	9.2	61.6	9.7
Aug.	12,570.2	1,184.0	29.5	10,517.6	1.131.8	27.4	11,856.0	1.181.7	27.4	9.2	84.4	9.1
Sep.	12,661.9	1,243.2	90.1	10,574.3	1,153.7	55.1	11,885.0	1,201.5	45.4	9.0	56.9	8.1
Oct.	12,771.2	1,349.6	108.0	10,704.4	1,278.1	129.1	12,030.6	1,347.1	146.3	9.1	130.3	9.3
Nov.	12,859.4	1,175.3	86.3	10,774.7	1,107.0	68.3	12,074.5	1,158.9	63.0	8.6	46.8	7.6
Dec.	12,885.2	1,038.7	28.8	10,771.6	957.2	-0.2	12,055.5	1,000.1	-17.5	9.1	107.2	8.5
2008 Jan.	12,919.2	1,199.3	38.0	10,826.2	1,129.9	58.7	12,124.0	1,195.4	68.2	8.5	20.0	7.7
Feb.	13,001.6	1,024.7	82.6	10,898.8	966.2	72.7	12,184.9	1,034.1	75.8	8.0	42.6	6.9
Mar.	13,107.1	1,070.3	106.1	10,945.6	966.3	47.3	12,202.6	1,021.6	44.9	7.1	6.9	6.0
Apr.	•	•	•	11,012.5	1,067.0	67.0	12,282.2	1,131.6	78.8	7.1	67.4	4.9
						Long-term						
2007 Apr.	11,085.6	182.6	41.8	9,274.2	156.1	31.7	10,379.5	177.9	45.2	8.6	53.3	9.0
May	11,269.7	266.3	185.3	9,407.6	199.3	134.6	10,534.2	225.6	149.6	9.0	105.8	9.1
June	11,369.5	258.9	98.4	9,472.6	190.9	63.7	10,615.3 10,638.6	217.8	77.4	8.9	47.2	8.8 8.3
July	11,395.9 11,391.1	198.9 103.0	26.0 -5.3	9,484.0 9,478.2	162.8 87.2	11.1 -6.3	10,638.6	188.8 104.4	25.2 -1.3	8.8 8.5	46.4 51.5	8.3 7.6
Aug. Sep.	11,415.8	157.4	23.4	9,495.0	132.1	15.5	10,628.0	146.5	14.3	8.0	9.7	6.2
Oct.	11,413.5	236.1	77.7	9,558.6	199.9	64.9	10,689.8	224.1	71.7	7.8	80.3	6.7
Nov.	11,572.3	174.1	78.2	9,618.1	140.5	57.7	10,731.0	155.2	54.5	7.1	34.9	5.2
Dec.	11,628.6	197.0	56.9	9,665.5	163.1	48.0	10,765.3	174.2	36.7	7.4	81.1	5.2 5.9
2008 Jan.	11,627.9	194.3	2.5	9,658.6	166.1	-3.5	10,762.7	189.7	1.5	6.7	11.8	5.2
Feb.	11,674.9	181.6	47.0	9,707.9	162.3	49.2	10,804.9	186.4	51.3	6.1	27.6	4.7
Mar.	11,710.3	178.4	36.2	9,733.0	144.0	25.8	10,803.6	158.9	22.4	5.3	-1.7	4.5
Apr.				9,797.4	207.0	64.5	10,877.8	224.5	69.6	5.5	80.1	4.4

### C15 Total outstanding amounts and gross issues of securities, other than shares, issued by euro area residents (EUR billions)



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

- 1) Total euro-denominated securities, other than shares, issued by euro area residents and non-euro area residents.
- 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	Non-MFI corp	orations	General go	vernment	Total	MFIs (including	Non-MFI co	orporations	General go	overnment		
		Eurosystem)	Financial No corporations co other than MFIs	n-financial orporations	Central government	Other general government		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government		
	1	2	3	4	5	6 Total	7	8	9	10	11	12		
2006	11.090	4,573	1,161	635	4,417	305	11,359	8,396	422	1,114	1,342	85		
2007	12,056	5,054	1,473	684	4,530	315	13,622	10,088	542	1,458	1,453	80		
2007 Q2 Q3	11,791 11,885	4,878 4,960	1,311 1,342	683 678	4,610 4,595	308 310	3,347 3,452	2,369 2,605	118 89	453 394	389 346	18 19		
Q4	12,056	5,054	1,473	684	4,530	315	3,506	2,663	194	326	302	21		
2008 Q1 2008 Jan.	12,203 12,124	5,095 5,104	1,491 1,464	689 695	4,615 4,546	313 315	3,251 1,195	2,358 887	71	317 108	478 181	27 12		
Feb.	12,185	5,108	1,480	694	4,589	314	1,034	744	32	102	148	8 7		
Mar. Apr.	12,203 12,282	5,095 5,126	1,491 1,518	689 692	4,615 4,635	313 313	1,022 1,132	727 781	31 43	107 121	149 181	7 6		
7101.	12,202	3,120	1,510	0,2	1,033	Short-term	1,132	701	15	121	101			
2006 2007	1,015 1,290	575 787	12 18	94 122	330 357	4 7	9,194 11,348	7,392 9,052	59 58	1,023 1,367	688 832	31 38		
2007 Q2	1,175	632	11	120	407	5	2,726	2,081	12	413	210	9		
Q3	1,257	715	9	117	409	7	3,012	2,406	10	378	207	11		
2008 Q1	1,290 1,399	787 817	18 31	122 133	357 411	7 7	2,953 2,716	2,427 2,100	20 21	304 306	192 278	10 12		
2008 Jan.	1,361	825 818	18	131	380	7	1,006	793	3	104	101	5		
Feb. Mar.	1,380 1,399	818 817	31 31	132 133	392 411	7 7	848 863	649 659	15 3	98 103	82 95	4 3		
Apr.	1,404	817	31	133	417	7	907	680	3	113	107	4		
2006	10.055	2.000	1.140	541	4.005	Long-term 1)	2166	1.004	262	00	65.1			
2006 2007	10,075 10,765	3,998 4,267	1,148 1,454	541 563	4,087 4,173	301 309	2,166 2,274	1,004 1,036	363 484	90 92	654 621	54 42		
2007 Q2 Q3	10,615 10,628	4,247 4,245	1,300 1,332	563 561	4,203 4,186	304 304	621 440	288 199	106 79	40 16	179 138	8		
Q4	10.765	4,267	1,454	563	4,173	309	553	236	174	23	110	11		
2008 Q1	10,804	4,278	1,460	555	4,204	306	535	258	50	11	200	15		
2008 Jan. Feb.	10,763 10,805	4,279 4,289	1,446 1,450	564 562	4,166 4,197	308 306	190 186	95 95	5 17	3 4	80 66	7 5		
Mar.	10,804 10,878	4,278 4,309	1,460 1,487	555 559	4,204 4,218	306 306	159 225	69 102	28 40	4 8	54 74	4 2		
Apr.	10,676	4,309	1,467	339		ch long-term fi		102	40	0	/4			
2006	7,059	2,136	543	413	3,729	237	1,292	475	143	56	579	39		
2007	7,325	2,274	589	426	3,787	250	1,281	532	117	57	540	36		
2007 Q2 O3	7,319 7,319	2,256 2,254	584 591	426 423	3,809 3,805	244 246	339 263	132 100	29 25 23	24 8	147 123	7 7 8		
Q4	7,325	2,274	589	426 417	3,787	250	275 330	128 130	23 13	16	99 168	8 10		
2008 Q1 2008 Jan.	7,304 7,304	2,271 2,279	583 586	417	3,788 3,766	246 247	122	48		8	66			
Feb.	7,323	2,282	584	424	3,789	245	120	52	2 5	2 2	58	4 3 3		
Mar. Apr.	7,304 7,348	2,271 2,290	583 587	417 420	3,788 3,805	246 245	87 142	30 58	6 10	3 7	44 67	1		
					Of which	long-term var	riable rate							
2006 2007	2,596 2,984	1,512 1,615	594 847	114 126	312 338	64 58	719 821	408 373	215 358	31 33	49 51	15 5		
2007 Q2	2,835	1,608	702	125	341	60	228	112	76	16	23	1		
Q3 Q4	2,855 2,984	1,610 1,615	725 847	126 126	336 338	57 58	139 241	72 75	52 148	7 7	8	1 3		
2008 Q1	3,027	1,627	856	127	357	60	157	96	33	3	20	5		
2008 Jan. Feb.	2,993 3,012	1,619 1,626	841 845	127 128	346 351	60 62	46 54	32 35	2 10	1	8 5	3		
Mar.	3,027	1,627	856	127	357	60	58	29 37	21	1	7	1		
Apr.	3,058	1,642	877	127	350	60	71	37	29	1	3	1		

Source: ECB.

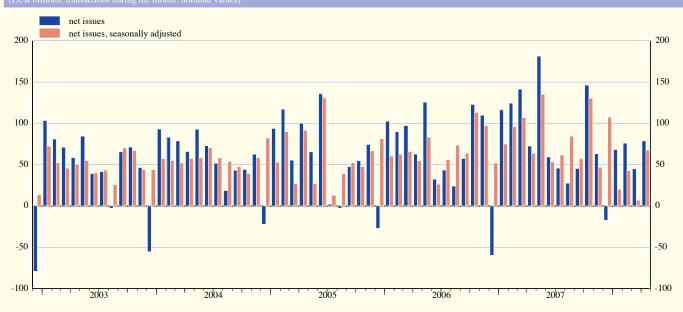
1) The residual difference between total long-term debt securities and fixed and variable rate long-term debt securities consists of zero coupon bonds and revaluation effects.

### **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			General government		Total	MFIs (including	Non-MFI corporations		General government			
		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government		
	1	2	3	4	5	6	7	8	9	10	11	12		
	Total													
2006	807.0	422.3	240.6	31.5	90.3	22.3	808.8	427.8	237.0	31.8	89.9	22.3		
2007	1,005.6	485.1	333.5	55.4	120.7	10.9	1,016.7	495.4	328.8	58.1	123.5	10.9		
2007 Q2	312.8	105.9	58.8	36.3	111.9	-0.1	252.1	114.2	45.5	28.2	65.1	-0.9		
Q3	118.7	95.3	35.8	-3.3	-11.3	2.3	202.9	120.9	63.7	3.7	8.3	6.3		
Q4	191.8	95.8	144.8	9.4	-63.0	4.9	284.4	137.1	108.2	15.6	20.6	2.9		
2008 Q1	188.8	68.9	25.4	7.7	88.9	-2.1	69.6	-9.1	46.2	2.6	33.2	-3.4		
2008 Jan.	68.2	48.8	-8.3	11.1	16.9	-0.4	20.0	16.3	15.5	9.6	-20.3	-1.1		
Feb.	75.8	14.1	18.7	0.0	44.0	-1.1	42.6	-12.4	18.5	-1.5	40.0	-1.9		
Mar.	44.9	6.0	14.9	-3.4	28.0	-0.6	6.9	-13.0	12.2	-5.5	13.6	-0.4		
Apr.	78.8	32.1	25.7	2.5	18.8	-0.4	67.4	17.7	35.3	-2.3	16.8	0.0		
						Long-term								
2006	755.6	347.4	235.2	28.1	121.6	23.3	755.7	349.3	231.7	27.9	123.4	23.3		
2007	741.3	285.5	327.4	28.1	92.3	8.1	738.9	287.3	322.9	28.0	92.7	7.9		
2007 Q2	272.2	101.2	59.1	22.3	90.2	-0.6	206.3	97.0	45.7	15.8	49.1	-1.3		
Q3	38.2	14.2	37.5	0.0	-14.0	0.4	107.6	27.9	65.8	2.6	7.1	4.2		
Q4	162.9	28.6	135.6	4.8	-11.0	4.9	196.2	54.9	99.2	2.1	37.1	2.9		
2008 Q1	75.3	34.4	12.9	-4.1	34.2	-2.1	37.7	-1.7	33.4	2.5	6.8	-3.3		
2008 Jan.	1.5	15.2	-7.5	1.3	-6.6	-0.8	11.8	18.2	15.6	6.0	-26.6	-1.3		
Feb.	51.3	14.9	5.8	-0.6	32.3	-1.2	27.6	-8.5	5.2	1.1	31.5	-1.8		
Mar.	22.4	4.2	14.6	-4.8	8.5	0.0	-1.7	-11.4	12.6	-4.6	1.9	-0.2		
Apr.	69.6	28.5	25.9	2.9	13.0	-0.7	80.1	28.6	36.0	2.8	12.9	-0.2		

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



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

	Annual growth rates (non-seasonally adjusted)							6-month seasonally adjusted growth rates						
	Total	MFIs (including			General government		Total	MFIs (including	Non-MFI corporations		General government			
		Eurosystem)	corporations other than MFIs	Non-financial corporations	Central government	Other general government		Eurosystem)	corporations other than MFIs	Non-financial corporations	Central government	Other general government		
	1	2	3	4	5	Total	7	8	9	10	11	12		
2007 Apr. May June July Aug. Sep. Oct.	8.6 9.0 9.2 9.2 9.2 9.0 9.1	10.7 10.5 10.8 10.8 11.0 10.9	28.0 29.8 28.3 28.8 28.9 27.3 27.3	6.0 6.0 8.3 10.1 9.8 8.6 9.1	2.6 3.5 3.8 3.3 3.1 3.2 3.0	7.2 5.0 3.3 2.5 2.6 4.3 5.6	9.1 9.7 9.7 9.4 9.1 8.1 9.3	10.9 11.5 10.5 9.6 9.8 10.1	28.7 30.0 29.4 29.6 26.9 18.2 26.0	7.8 8.2 12.5 15.5 12.1 10.1 10.5	3.0 3.7 4.3 3.8 3.8 3.3	6.1 3.3 1.1 0.7 3.1 3.5 5.5		
Nov. Dec.	8.6 9.1	10.4 10.6	26.0 28.9	9.0 8.7	2.7 2.7	4.3 3.6	7.6 8.5	9.4 10.9	22.1 28.4	9.9 5.8	1.6 1.3	5.3 6.1		
2008 Jan. Feb. Mar. Apr.	8.5 8.0 7.1 7.1	10.0 8.7 7.7 7.2	27.5 24.8 21.3 23.5	10.5 9.8 7.8 6.6	2.2 3.0 2.8 2.9	3.0 2.8 1.6 1.0	7.7 6.9 6.0 4.9	10.3 7.5 5.2 3.3	25.4 22.9 24.2 21.1	6.1 7.6 5.4 2.6	0.6 2.1 2.4 2.8	5.3 2.3 -0.3 -3.2		
						Long-term								
2007 Apr. May June July Aug. Sep. Oct. Nov. Dec.	8.6 9.0 8.9 8.8 8.5 8.0 7.8 7.1 7.4	10.6 10.8 10.5 10.3 10.1 9.0 8.8 7.7 7.1	28.1 29.9 28.5 29.2 29.3 27.9 27.2 25.9 28.7	4.8 4.2 6.3 7.2 7.1 6.3 6.1 6.3 5.2	2.4 3.2 3.3 2.9 2.4 2.4 2.0 1.9 2.3	7.4 5.1 3.4 2.7 2.7 3.5 4.6 3.1 2.7	9.0 9.1 8.8 8.3 7.6 6.2 6.7 5.2 5.9	11.9 11.1 10.4 9.2 8.0 6.1 5.9 4.3 4.0	29.2 30.5 29.9 30.4 27.4 18.8 25.2 21.4 27.5	5.8 6.0 8.9 8.4 8.0 6.9 6.2 6.5	1.7 2.5 2.4 2.1 2.7 2.4 1.3 2.1	5.8 2.8 0.6 0.6 2.8 2.0 3.7 3.4 4.8		
2008 Jan. Feb. Mar. Apr.	6.7 6.1 5.3 5.5	6.6 5.3 4.3 4.1	27.2 23.4 19.9 22.1	5.9 5.7 4.2 4.4	1.6 2.4 2.4 2.5	2.2 1.9 0.9 0.4	5.2 4.7 4.5 4.4	4.0 2.6 2.5 2.4	24.2 19.6 20.8 19.1	3.4 3.5 1.6 2.5	1.0 2.6 2.1 2.6	3.7 0.9 -0.3 -2.9		

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



<sup>1)</sup> For the calculation of the growth rates, see the Technical notes. The 6-month growth rates have been annualised.

### 4.3 Growth rates of securities, other than shares, issued by euro area residents (cont'd)

	Long-term fixed rate							Long-term variable rate					
	Total	MFIs (including			General government		Total	MFIs (including	Non-MFI corporations		General government		
		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government	
	13	14	15	16	17	18	19	20	21	22	23	24	
	In all currencies combined												
2006	4.5	4.7	13.9	0.8	3.2	13.5	16.1	11.9	39.8	26.5	5.0	4.3	
2007	5.2	7.1	17.8	3.7	2.4	6.6	15.7	11.1	37.5	18.8	3.8	-1.8	
2007 Q2	5.5	7.5	19.9	2.7	2.7	7.5	16.4	12.1	37.6	19.2	5.1	-0.3	
Q3	5.4	8.0	17.6	4.7	2.3	5.0	16.1	11.1	39.2	19.9	4.4	-4.7	
Q4	4.5	6.7	13.5	4.9	1.8	6.3	15.0	9.0	39.2	14.5	4.8	-6.5	
2008 Q1	3.3	5.3	8.6	4.2	1.3	3.3	14.3	6.0	38.7	12.4	11.4	-3.3	
2007 Nov.	4.3	6.5	12.6	5.3	1.7	6.4	14.2	8.3	37.4	14.2	4.6	-9.3	
Dec.	4.3	6.8	11.4	4.4	1.7	5.8	15.4	7.2	43.5	10.8	8.3	-8.8	
2008 Jan.	3.4	6.0	10.4	4.6	0.7	3.9	15.4	6.7	41.9	13.1	11.6	-4.6	
Feb.	3.1	4.8	6.9	4.5	1.5	2.4	13.8	5.3	37.4	12.8	12.2	-0.2	
Mar.	2.6	3.5	5.8	2.8	1.6	1.4	12.1	4.8	30.9	12.2	12.3	-1.3	
Apr.	2.7	3.7	5.0	3.7	1.7	0.8	12.4	4.6	36.1	9.3	7.2	-1.4	
						In euro							
2006	3.8	3.1	11.3	0.1	3.2	13.7	14.9	10.1	36.3	29.2	5.2	3.4	
2007	4.6	6.4	14.5	2.2	2.7	6.7	15.0	10.2	35.2	18.8	3.9	-2.4	
2007 Q2	4.9	6.8	16.4	0.8	2.9	7.4	15.7	11.2	35.1	20.0	5.2	-0.8	
Q3	4.7	7.1	14.6	3.3	2.5	5.1	15.5	10.3	37.4	19.1	4.5	-5.6	
Q4	4.1	6.2	11.3	3.5	2.1	6.6	14.8	8.7	37.7	13.4	4.9	-7.2	
2008 Q1	3.0	4.9	7.4	2.9	1.5	3.5	14.9	5.8	39.1	11.8	11.7	-4.1	
2007 Nov.	3.9	6.1	10.5	4.2	1.9	6.8	14.0	8.1	35.7	13.0	4.8	-10.0	
Dec.	3.9	6.3	9.7	3.3	1.9	6.1	15.8	7.0	43.5	10.0	8.6	-8.9	
2008 Jan.	2.9	5.4	9.0	3.4	0.9	4.3	15.9	6.6	42.0	12.4	11.9	-5.0	
Feb.	2.9	4.5	6.1	3.2	1.7	2.5	14.5	5.2	38.1	12.1	12.5	-1.5	
Mar.	2.3	3.1	4.8	1.1	1.8	1.4	12.8	4.4	32.0	11.8	12.9	-2.8	
Apr.	2.4	3.4	4.1	1.9	1.9	0.8	13.6	4.9	37.7	8.9	7.6	-2.8	

C18 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined



Source: ECB.

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

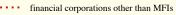
# **4.4 Quoted shares issued by euro area residents** (EUR billions, unless otherwise indicated; market values)

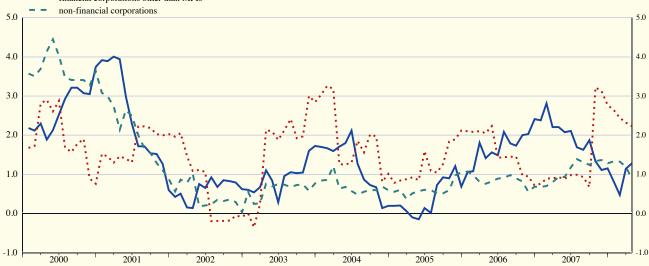
# **1. Outstanding amounts and annual growth rates** (outstanding amounts as end-of-period)

	Total Index Annua			MFIs Financial corporations other than MF			s other than MFIs	1		
	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	
2006 Apr.	5,687.6	103.1	1.0	957.5	1.4	579.1	2.1	4,151.0	0.8	
May	5,396.4	103.2	1.1	901.3	1.6	543.6	2.2	3,951.4	0.8	
June	5,408.2	103.3	1.0	909.8	1.5	539.7	1.4	3,958.7	0.9	
July	5,405.1	103.5	1.2	923.0	2.1	553.7	1.4	3,928.3	0.9	
Aug.	5,586.9	103.5	1.2	963.8	1.8	604.6	1.4	4,018.5	1.0	
Sep.	5,728.5	103.5	1.1	991.8	1.7	616.7	1.5	4,120.0	0.9	
Oct.	5,917.6	103.6	1.0	1,022.4	2.0	623.8	1.0	4,271.4	0.8	
Nov.	5,972.2	103.7	0.9	1,031.8	2.0	613.6	0.9	4,326.8	0.6	
Dec.	6,190.9	103.9	1.0	1,063.9	2.4	633.2	0.7	4,493.7	0.7	
2007 Jan.	6,369.9	104.0	1.0	1,123.5	2.4	646.2	0.8	4,600.2	0.7	
Feb.	6,283.9	104.1	1.1	1,092.8	2.8	637.8	0.9	4,553.3	0.7	
Mar.	6,510.1	104.1	1.1	1,111.4	2.2	649.3	0.9	4,749.4	0.8	
Apr.	6,760.5	104.3	1.2	1,168.6	2.2	675.5	0.9	4,916.3	0.9	
May	7,040.4	104.4	1.1	1,174.5	2.1	688.8	0.9	5,177.0	0.9	
June	6,961.9	104.7	1.3	1,128.6	2.1	677.1	1.0	5,156.1	1.2	
July	6,731.4	104.9	1.4	1,099.8	1.7	608.8	1.0	5,022.7	1.4	
Aug.	6,618.1	104.9	1.3	1,060.2	1.6	583.8	0.9	4,974.1	1.3	
Sep.	6,682.2	104.9	1.3	1,048.8	1.9	597.2	0.7	5,036.1	1.2	
Oct.	6,936.7	105.2	1.5	1,072.8	1.3	629.2	3.2	5,234.7	1.3	
Nov.	6,622.4	105.2	1.5	1,032.7	1.1	579.2	3.1	5,010.5	1.4	
Dec.	6,578.8	105.4	1.4	1,017.2	1.2	579.0	2.8	4,982.7	1.3	
2008 Jan.	5,756.8	105.4	1.4	887.9	0.8	497.3	2.6	4,371.5	1.3	
Feb.	5,811.0	105.4	1.3	858.2	0.5	492.4	2.4	4,460.5	1.3	
Mar.	5,557.5	105.4	1.3	858.5	1.1	501.3	2.3	4,197.7	1.2	
Apr.	5,738.4	105.4	1.1	835.2	1.3	519.4	2.2	4,383.7	0.9	

### C19 Annual growth rates for quoted shares issued by euro area residents







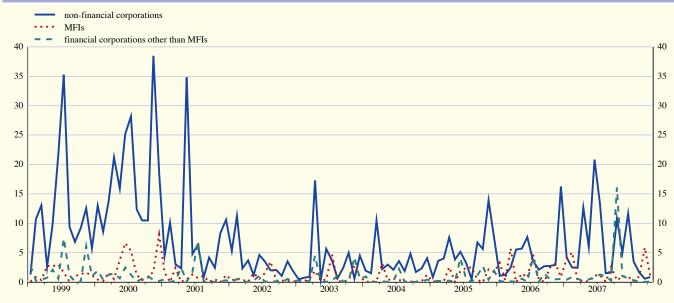
<sup>1)</sup> For the calculation of the index and the growth rates, see the Technical notes.

# **4.4 Quoted shares issued by euro area residents** (EUR billions; market values)

#### 2. Transactions during the month

		Total  Gross issues Redemptions Net issu			MFIs		Financial cor	porations other	er than MFIs	Non-fir	nancial corpora	ations
	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
2006 Apr.	5.6	0.5	5.1	0.0	0.2	-0.1	0.0	0.0	0.0	5.5	0.3	5.2
May	7.7	2.2	5.5	1.4	0.0	1.4	0.6	0.0	0.6	5.7	2.2	3.5
June	8.5	2.7	5.8	0.8	0.3	0.5	0.1	0.1	0.0	7.7	2.4	5.3
July	12.6	6.6	6.0	4.7	0.0	4.7	4.2	3.5	0.7	3.6	3.1	0.6
Aug.	2.6	1.8	0.8	0.5	0.0	0.5	0.0	0.1	-0.1	2.1	1.6	0.5
Sep.	4.2	0.5	3.7	0.0	0.0	0.0	1.5	0.0	1.4	2.7	0.5	2.2
Oct.	5.7	1.2	4.5	2.5	0.0	2.5	0.5	0.0	0.5	2.7	1.2	1.5
Nov.	6.5	2.0	4.5	3.1	0.0	3.1	0.5	0.2	0.3	2.9	1.8	1.1
Dec.	17.7	5.1	12.6	0.9	0.3	0.6	0.5	0.0	0.5	16.3	4.7	11.6
2007 Jan.	8.5	3.9	4.6	4.0	0.1	3.8	0.4	0.0	0.4	4.1	3.8	0.3
Feb.	8.4	2.0	6.3	5.0	0.0	5.0	0.9	0.0	0.9	2.5	2.0	0.5
Mar.	3.2	1.7	1.5	0.2	0.0	0.2	0.6	0.4	0.2	2.4	1.4	1.0
Apr.	12.9	0.4	12.5	0.1	0.3	-0.2	0.2	0.0	0.1	12.7	0.2	12.5
May	6.6	1.9	4.7	0.1	0.0	0.1	0.5	0.0	0.5	6.0	1.9	4.2
June	22.6	1.6	21.0	1.1	0.0	1.1	0.7	0.0	0.7	20.8	1.6	19.3
July	15.8	1.8	13.9	1.2	0.0	1.2	1.3	0.3	1.0	13.3	1.5	11.8
Aug.	2.5	6.6	-4.2	0.0	0.1	-0.1	1.0	1.4	-0.5	1.5	5.1	-3.6
Sep.	4.5	2.5	2.0	2.6	0.0	2.6	0.3	0.3	-0.1	1.6	2.1	-0.5
Oct.	27.2	8.0	19.1	0.3	3.2	-2.9	16.1	0.5	15.5	10.8	4.3	6.5
Nov.	7.0	3.3	3.6	0.9	0.0	0.9	1.0	1.3	-0.3	5.0	2.0	3.0
Dec.	13.2	4.6	8.6	0.9	0.0	0.9	0.7	2.2	-1.5	11.6	2.5	9.2
2008 Jan.	3.9	1.4	2.6	0.1	0.0	0.1	0.3	0.7	-0.4	3.5	0.7	2.8
Feb.	2.7	1.9	0.9	1.0	0.0	1.0	0.1	0.3	-0.2	1.6	1.6	0.1
Mar.	6.5	5.8	0.6	5.9	0.0	5.9	0.0	0.5	-0.4	0.6	5.4	-4.8
Apr.	2.0	3.0	-0.9	1.1	0.0	1.1	0.1	0.5	-0.3	0.8	2.5	-1.7

# C20 Gross issues of quoted shares by sector of the issuer



Source: ECB.

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

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

			Deposits fr	om household	s		Depos	its from non-fi	nancial corpor	rations	Repos
	Overnight 2)	Wit	h agreed matur	ity	Redeemable	at notice 2), 3)	Overnight 2)	Wit	h agreed matur	ity	
		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
2007 May	1.06	3.62	3.51	2.72	2.43	3.25	1.78	3.74	3.80	3.72	3.73
June	1.08	3.78	3.79	2.64	2.42	3.32	1.77	3.94	4.09	4.16	3.90
July	1.10	3.86	3.90	2.97	2.45	3.40	1.81	4.01	4.16	4.51	3.95
Aug.	1.14	3.93	3.93	3.01	2.53	3.46	1.89	4.08	4.33	4.20	3.93
Sep.	1.16	4.07	3.98	2.92	2.58	3.50	1.91	4.14	4.34	4.41	3.97
Oct.	1.17	4.11	4.16	3.31	2.53	3.57	1.97	4.07	4.37	4.63	3.93
Nov.	1.18	4.08	4.22	3.20	2.54	3.64	2.01	4.10	4.41	4.04	3.98
Dec.	1.18	4.28	4.14	3.18	2.57	3.68	1.95	4.26	4.40	4.03	3.95
2008 Jan.	1.20	4.19	4.32	3.43	2.57	3.75	2.01	4.13	4.38	4.68	3.95
Feb.	1.21	4.10	4.18	3.22	2.65	3.77	2.02	4.07	4.18	4.36	3.93
Mar.	1.22	4.14	3.97	3.08	2.69	3.78	2.03	4.20	4.23	4.07	3.96
Apr.	1.23	4.28	4.16	3.15	2.72	3.81	2.04	4.27	4.55	4.61	4.00

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

	Bank overdrafts 2)		Consumer	credit			Lending f	for house pu		Other lending by initial rate fixation			
		By initi	al rate fixation	on	Annual percentage	F	By initial rate	e fixation		Annual percentage	·		
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	rate of charge 4)	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years	rate of charge 4)	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
2007 May	10.32	8.10	6.73	8.30	8.27	4.88	4.80	4.81	4.74	5.02	5.38	5.65	5.32
June	10.38	8.07	6.66	8.25	8.26	5.00	4.93	4.90	4.82	5.15	5.49	5.77	5.37
July	10.49	8.06	6.76	8.30	8.35	5.06	4.93	5.02	4.91	5.26	5.54	5.80	5.41
Aug.	10.55	8.43	6.85	8.31	8.48	5.15	4.98	5.08	4.90	5.24	5.36	5.93	5.47
Sep.	10.53	8.48	6.83	8.39	8.54	5.23	5.04	5.09	5.02	5.31	5.46	5.87	5.51
Oct.	10.64	8.10	6.88	8.40	8.38	5.29	5.07	5.08	5.11	5.38	5.63	6.05	5.59
Nov.	10.50	8.38	6.90	8.36	8.47	5.28	5.03	5.10	5.11	5.38	5.60	5.95	5.49
Dec.	10.46	8.05	6.93	8.17	8.26	5.32	5.03	5.07	5.18	5.40	5.67	5.83	5.43
2008 Jan. Feb. Mar. Apr.	10.46 10.45 10.52 10.55	8.11 8.54 8.39 8.31	7.00 7.24 7.05 6.99	8.47 8.44 8.42 8.45	8.48 8.70 8.54 8.54	5.32 5.26 5.20 5.23	5.02 4.97 4.89 4.91	5.07 5.02 4.96 4.95	5.14 5.11 5.11 5.11	5.37 5.35 5.29 5.31	5.59 5.55 5.65 5.85	5.93 5.87 5.79 5.80	5.49 5.55 5.46 5.40

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

	Bank overdrafts <sup>2)</sup>		ans up to EUR 1 millinitial rate fixation	lion		loans over EUR 1 mi y 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
2007 May	6.12	5.43	5.57	4.95	4.72	5.10	5.12
June	6.17	5.53	5.70	5.03	4.89	5.28	5.17
July	6.30	5.58	5.77	5.09	4.90	4.95	5.17
Aug.	6.35	5.77	5.86	5.17	5.01	5.46	5.29
Sep.	6.49	5.93	5.90	5.23	5.20	5.60	5.41
Oct.	6.53	5.96	6.00	5.26	5.11	5.19	5.31
Nov.	6.50	5.96	5.90	5.29	5.08	5.28	5.36
Dec.	6.62	6.08	5.96	5.30	5.35	5.62	5.48
2008 Jan.	6.62	5.93	5.92	5.27	5.12	5.35	5.25
Feb.	6.56	5.84	5.86	5.24	5.04	5.43	5.14
Mar.	6.56	5.91	5.77	5.23	5.19	5.44	5.34
Apr.	6.54	6.03	5.77	5.22	5.29	5.45	5.39

- Data refer to the changing composition of the euro area. For further information, see the General notes.
   For this instrument category, new business and outstanding amounts coincide. End-of-period.
- 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.

  The annual percentage rate of charge covers the total cost of a loan. The total cost comprises an interest rate component and a component of other (related) charges, such as the
- $cost\ of\ inquiries, administration, preparation\ of\ documents, guarantees, etc.$

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

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

		Depos	sits from househo	olds		Deposits from	n non-financial co	rporations	Repos
	Overnight 1)	With agreed	maturity	Redeemable a	t 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
2007 May	1.06	3.30	3.03	2.43	3.25	1.78	3.72	3.96	3.66
June	1.08	3.39	3.04	2.42	3.32	1.77	3.87	3.99	3.79
July	1.10	3.49	3.02	2.45	3.40	1.81	3.92	4.00	3.85
Aug.	1.14	3.58	3.03	2.53	3.46	1.89	4.03	4.07	3.89
Sep.	1.16	3.68	3.06	2.58	3.50	1.91	4.13	4.09	3.93
Oct.	1.17	3.79	3.04	2.53	3.57	1.97	4.18	4.11	3.93
Nov.	1.18	3.85	3.06	2.54	3.64	2.01	4.21	4.18	3.97
Dec.	1.18	3.95	3.03	2.57	3.68	1.95	4.33	4.17	4.01
2008 Jan.	1.20	3.98	3.06	2.57	3.75	2.01	4.27	4.21	4.01
Feb.	1.21	3.99	3.11	2.65	3.77	2.02	4.23	4.24	3.97
Mar.	1.22	4.01	3.07	2.69	3.78	2.03	4.29	4.23	3.96
Apr.	1.23	4.07	3.06	2.72	3.81	2.04	4.37	4.29	3.89

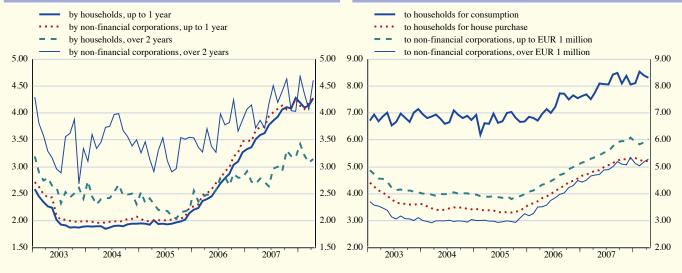
#### 5. Interest rates on loans (outstanding amounts)

			Loans to h		Loans to non-financial corporations				
	Lendi	ng for house purch with maturity	ase,	Consum	er credit and other with maturity	loans,		With maturity	
	5.20 4.53 4.5			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
2007 May	5.16	4.48	4.82	8.71	6.95	5.97	5.50	4.99	4.90
June	5.20	4.53	4.86	8.68	6.94	6.01	5.62	5.09	4.96
July	5.28	4.57	4.89	8.80	6.95	6.06	5.70	5.15	5.00
Aug.	5.35	4.58	4.90	8.85	6.97	6.08	5.76	5.24	5.05
Sep.	5.44	4.64	4.94	8.99	7.00	6.13	5.91	5.35	5.14
Oct.	5.49	4.68	4.98	9.02	7.10	6.16	5.96	5.44	5.22
Nov.	5.48	4.72	4.99	8.86	7.12	6.21	5.96	5.49	5.22
Dec.	5.48 4.72 4.5 5.54 4.75 5.0			8.97	7.13	6.22	6.08	5.57	5.28
2008 Jan.	5.62 4.75 5.0			8.99	7.15	6.24	6.06	5.55	5.27
Feb.	5.60 4.82 5.0			9.05	7.21	6.26	5.99	5.52	5.30
Mar.	5.61	4.80	5.02	9.06	7.19	6.25	5.99	5.51	5.27
Apr.	5.59	4.85	5.03	9.08	7.22	6.28	6.03	5.55	5.29

### C21 New deposits with agreed maturity

(percentages per annum excluding charges: period averages)





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

			Euro area 1),2)			United States	Japan
	Overnight	1-month	3-month	6-month	12-month	3-month	3-month
	deposits						
	(EONIA)	(EURIBOR)	(EURIBOR)	(EURIBOR)	(EURIBOR)	(LIBOR)	(LIBOR)
	1	2	3	4	5	6	
2005	2.09	2.14	2.18	2.23	2.33	3.56	0.06
2006	2.83	2.94	3.08	3.23	3.44	5.19	0.30
2007	3.87	4.08	4.28	4.35	4.45	5.30	0.79
2007 Q2 Q3	3.86 4.05 3.95	3.96 4.28	4.07 4.49 4.72	4.20 4.56	4.38 4.65	5.36 5.45 5.02	0.69 0.89
Q4 2008 Q1 Q2	4.05 4.00	4.37 4.23 4.41	4.72 4.48 4.86	4.70 4.48 4.93	4.68 4.48 5.05	3.02 3.26 2.75	0.96 0.92 0.92
2007 June	3.96	4.10	4.15	4.28	4.51	5.36	0.73
July	4.06	4.11	4.22	4.36	4.56	5.36	0.77
Aug.	4.05	4.31	4.54	4.59	4.67	5.48	0.92
Sep.	4.03	4.43	4.74	4.75	4.72	5.49	0.99
Oct.	3.94	4.24	4.69	4.66	4.65	5.15	0.97
Nov.	4.02	4.22	4.64	4.63	4.61	4.96	0.91
Dec.	3.88	4.71	4.85	4.82	4.79	4.97	0.99
2008 Jan.	4.02	4.20	4.48	4.50	4.50	3.92	0.89
Feb.	4.03	4.18	4.36	4.36	4.35	3.09	0.90
Mar.	4.09	4.30	4.60	4.59	4.59	2.78	0.97
Apr.	3.99	4.37	4.78	4.80	4.82	2.79	0.92
May	4.01	4.39	4.86	4.90	4.99	2.69	0.92
June	4.01	4.47	4.94	5.09	5.36	2.77	0.92

### C23 Euro area money market rates 2)

C24 3-month money market rates

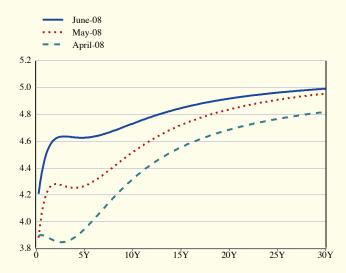


- Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see the General notes. Data refer to the changing composition of the euro area. For further information, see the General notes.

### 4.7 Euro area yield curves (AAA-rated euro area central govern

				Spot rate		Instantaneous forward rates						
	3 months	1 year	2 years	5 years	7 years	10 years	10 years - 3 months (spread) 7	10 years - 2 years (spread) 8	1 year	2 years	5 years	10 years
2006 Dec.	3.44	3.76	3.82	3.83	3.86	3.91	0.47	0.09	3.92	3.85	3.88	4.08
2007 Jan.	3.54	3.84	3.92	3.96	4.00	4.06	0.53	0.15	4.01	3.97	4.05	4.25
Feb.	3.63	3.79	3.80	3.81	3.85	3.92	0.29	0.12	3.85	3.77	3.90	4.13
Mar.	3.70	3.92	3.95	3.93	3.96	4.02	0.33	0.08	4.03	3.93	3.97	4.25
Apr.	3.81	4.01	4.06	4.06	4.08	4.13	0.32	0.07	4.14	4.08	4.08	4.33
May	3.86	4.21	4.31	4.32	4.33	4.37	0.51	0.06	4.44	4.37	4.33	4.51
June	3.90	4.26	4.38	4.43	4.46	4.51	0.61	0.13	4.51	4.48	4.49	4.68
July	3.98	4.23	4.28	4.28	4.30	4.36	0.38	0.08	4.36	4.28	4.32	4.53
Aug.	3.86	3.98	4.03	4.12	4.20	4.32	0.47	0.29	4.07	4.09	4.32	4.67
Sep.	3.80	3.96	4.03	4.15	4.25	4.38	0.57	0.35	4.08	4.13	4.39	4.75
Oct.	3.87	4.01	4.06	4.10	4.17	4.29	0.42	0.23	4.11	4.08	4.25	4.63
Nov.	3.86	3.84	3.82	3.91	4.03	4.21	0.35	0.39	3.81	3.80	4.19	4.76
Dec.	3.85	4.00	4.01	4.11	4.23	4.38	0.52	0.36	4.06	4.02	4.40	4.78
2008 Jan.	3.81	3.55	3.42	3.59	3.79	4.05	0.24	0.62	3.32	3.34	4.08	4.80
Feb.	3.83	3.42	3.20	3.43	3.72	4.06	0.23	0.86	3.04	3.03	4.16	4.99
Mar.	3.87	3.70	3.60	3.70	3.87	4.13	0.26	0.54	3.53	3.49	4.10	4.91
Apr.	3.90	3.89	3.86	3.95	4.10	4.32	0.42	0.46	3.86	3.81	4.29	4.95
May	3.88	4.20	4.28	4.27	4.35	4.52	0.64	0.24	4.41	4.29	4.40	5.03
June	4.21	4.49	4.62	4.63	4.65	4.73	0.52	0.11	4.73	4.72	4.64	5.00

### C25 Euro area spot yield curves



### C26 Euro area spot rates and spreads

1-year rate (left-hand scale)



Source: ECB, underlying data provided by EuroMTS, ratings provided by Fitch Ratings.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.

# 4.8 Stock market indices (index levels in points; period avera

		Benchmark Main industry indices  Dow Jones EURO STOXX indices  Main industry indices											United States	Japan
	Bench	ımark					Main indus	stry 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
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
2006	357.3	3,795.4	402.3	205.0	293.7	419.8	370.3	391.3	345.3	440.0	416.8	530.2	1,310.5	16,124.0
2007	416.4	4,315.8	543.8	235.4	366.5	449.6	408.3	488.4	383.4	561.4	492.7	519.2	1,476.5	16,984.4
2007 Q2	429.0	4,416.2	549.6	246.8	373.0	454.1	434.2	512.5	376.6	556.0	475.8	536.7	1,496.6	17,678.7
Q3	416.4	4,317.6	568.3	233.5	373.3	465.6	399.8	494.4	400.9	556.3	476.7	503.8	1,489.8	16,907.5
Q4	417.8	4,377.9	567.3	228.3	383.8	455.7	381.2	484.1	406.3	620.0	544.8	509.2	1,494.6	16,002.5
2008 Q1	361.8	3,809.4	520.9	194.0	327.1	412.0	318.1	413.3	339.2	573.3	490.1	454.4	1,351.7	13,372.7
Q2	355.9	3,705.6	576.2	185.0	317.8	442.8	313.7	408.2	306.5	557.1	437.7	427.1	1,371.7	13,818.3
2007 June	433.4	4,470.2	571.9	244.2	380.4	471.1	429.4	529.0	393.1	568.2	473.8	529.9	1,514.5	18,001.4
July	431.3	4,449.0	585.9	242.6	384.7	491.4	418.7	529.3	399.8	563.1	467.1	513.1	1,520.9	17,986.8
Aug.	406.4	4,220.6	550.8	227.8	362.5	444.5	393.5	479.0	390.0	544.4	469.2	495.4	1,454.6	16,461.0
Sep.	411.3	4,284.4	569.1	230.1	373.2	461.5	386.3	473.8	414.7	562.7	495.9	503.2	1,496.0	16,233.9
Oct.	427.1	4,430.8	587.6	234.9	394.6	463.8	399.4	492.9	419.5	602.4	527.9	507.6	1,539.7	16,910.4
Nov.	411.4	4,314.9	549.1	225.3	380.2	450.3	369.1	477.1	400.8	624.1	555.0	501.9	1,461.3	15,514.0
Dec.	414.5	4,386.0	564.0	224.1	375.8	452.5	374.0	481.8	397.8	634.9	552.6	518.6	1,480.0	15,520.1
2008 Jan.	380.2	4,042.1	529.7	202.3	338.7	431.4	339.7	426.3	351.2	602.9	528.4	492.9	1,380.3	13,953.4
Feb.	360.6	3,776.6	520.7	194.0	323.8	407.6	311.9	417.7	356.2	573.9	493.2	452.6	1,354.6	13,522.6
Mar.	342.9	3,587.3	511.4	184.7	317.6	395.2	300.8	394.7	308.9	540.2	444.9	414.1	1,317.5	12,586.6
Apr.	359.6	3,768.1	553.9	189.3	324.6	423.2	326.5	406.2	312.8	550.2	449.3	429.6	1,370.5	13,382.1
May	367.1	3,812.8	588.9	189.2	328.2	462.5	325.8	424.3	313.2	567.2	447.5	436.3	1,402.0	14,000.2
June	340.2	3,527.8	586.2	176.1	299.6	442.6	287.6	393.5	292.8	553.8	415.3	414.7	1,341.3	14,084.6

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



Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.



# PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

#### 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

#### 1. Harmonised Index of Consumer Prices 1)

			Total				Гotal (s.a., р		Memo item: Administered prices				
	Index 2005 = 100		Total excl. unprocessed food and energy	Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services		
% of total 3)	100.0	100.0	82.6	59.1	40.9	100.0	11.9	7.6	29.8	9.8	40.9	87.8	12.2
	1	2	3	4	5	6	7	8	9	10	11	12	13
2004 2005 2006 2007	97.9 100.0 102.2 104.4	2.1 2.2 2.2 2.1	2.1 1.5 1.5 2.0	1.8 2.1 2.3 1.9	2.6 2.3 2.0 2.5	- - - -	-	-	-	-	- - -	1.9 2.1 2.1 2.2	3.6 2.5 2.6 2.0
2007 Q1 Q2 Q3 Q4 2008 Q1	102.9 104.4 104.4 105.7 106.4	1.9 1.9 1.9 2.9 3.4	1.9 1.9 2.0 2.3 2.5	1.6 1.5 1.5 3.2 3.9	2.4 2.6 2.5 2.5 2.6	0.5 0.8 0.5 1.0 1.0	0.3 0.5 1.1 2.6 2.0	0.1 0.8 0.9 1.2 0.5	0.4 0.2 0.2 0.3 0.2	1.0 3.3 0.7 2.9 3.4	0.7 0.7 0.6 0.6 0.7	1.8 1.9 1.9 3.1 3.5	2.4 2.1 1.7 1.8 2.2
2008 Jan. Feb. Mar. Apr. May June <sup>4)</sup>	105.8 106.2 107.2 107.6 108.2	3.2 3.3 3.6 3.3 3.7 4.0	2.3 2.4 2.7 2.4 2.5	3.7 3.8 4.1 4.0 4.5	2.5 2.4 2.8 2.3 2.5	0.4 0.2 0.6 0.1 0.6	0.8 0.7 0.3 0.4 0.2	0.3 -0.3 0.7 0.2 0.6	0.0 0.2 0.1 0.0 0.0	1.6 0.1 2.3 1.0 3.6	0.2 0.2 0.5 -0.3 0.4	3.4 3.4 3.7 3.4 3.8	2.1 2.1 2.4 2.3 2.4

			Goods							Services		
	Food (incl. alc	oholic beverage	es and tobacco)		Industrial goods		Hous	ing	Transport	Communication	Recreation and	Miscellaneous
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy		Rents			personal	
% of total 3)	19.5	11.9	7.6	39.6	29.8	9.8	10.1	6.0	6.1	3.3	14.7	6.8
	14	15	16	17	18	19	20	21	22	23	24	25
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 2006	1.6 2.4	2.0 2.1	0.8 2.8	2.4 2.3	0.3 0.6	10.1 7.7	2.6 2.5	2.0 2.1	2.7 2.5	-2.2 -3.3	2.3 2.3	3.1 2.3
2007	2.8	2.8	3.0	1.4	1.0	2.6	2.7	2.0	2.6	-1.9	2.9	3.2
2007 Q1	2.5	2.1	3.1	1.1	1.1	1.1	2.6	2.0	2.9	-2.1	2.8	2.5
Q2	2.5	2.0	3.3	1.0	1.0	0.5	2.7	2.0	2.6	-1.9	2.9	3.6
Q3 Q4	2.5	2.5	2.4	0.9	1.0	0.7	2.7 2.7	2.0	2.4	-1.5	3.0	3.4
2008 Q1	3.9 5.2	4.5 6.4	3.1 3.5	2.8 3.2	1.0 0.8	8.1 10.7	2.7	2.0 1.9	2.6 3.1	-2.1 -2.5	3.0 3.2	3.2 3.2
2007 Dec.	4.3	5.1	3.1	3.0	1.0	9.2	2.6	2.0	2.8	-2.3	3.0	3.2
2008 Jan.	4.9	5.9	3.3	3.1	0.7	10.6	2.6	1.9	3.1	-2.9	3.0	3.3
Feb.	5.2	6.5	3.3	3.1	0.8	10.4	2.5	1.9	3.0	-3.1	3.1	3.2
Mar.	5.6	6.8	3.8	3.4	0.9	11.2	2.5	1.9	3.3	-1.5	3.7	3.1
Apr.	5.4 5.7	7.0 6.9	3.1 3.9	3.2 3.9	0.8 0.7	10.8 13.7	2.4 2.3	1.8 1.9	3.2 3.8	-1.6 -1.7	2.7 3.1	2.1 2.2
May	3./	0.9	3.9	3.9	0.7	13./	2.3	1.9	3.8	-1./	3.1	2.2

Sources: Eurostat and ECB calculations.

- 1) Data refer to the changing composition of the euro area. For further information, see the General notes.
- Each and the second of the sec
- 3) Referring to the index period 2008.
- 4) Estimate based on provisional national releases usually covering around 95% of the euro area, as well as on early information on energy prices.

### 5.1 HICP, other prices and costs

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

			Indust	trial pro	ducer prices e						Construct- ion 1)	Residential property	price	l market s of raw	Oil prices 4) (EUR per
	Total (index	Т	`otal		Industry exc	luding co	nstructio	n and ener	gy	Energy		prices 2)	mate	erials <sup>3)</sup>	barrel)
	2000 = 100)		Manu- facturing	Total	Intermediate goods	Capital goods	(	Consumer	goods				Т	`otal	
			8		8		Total	Durable	Non-durable					Total excluding energy	
% of total 5)	100.0	100.0	89.5	82.4	31.6	21.2	29.6	4.0	25.6	17.6			100.0	32.8	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2004	105.8	2.3	2.6	2.0	3.5	0.7	1.3	0.7	1.4	4.0	4.1	7.5	18.4	10.8	30.5
2005	110.1	4.1	3.2	1.9	2.9	1.4	1.1	1.3	1.1	13.6	2.8	7.8	28.5	9.4	44.6
2006 2007	115.8	5.1 2.8	3.4 3.1	2.8 3.2	4.8 4.8	1.4 1.8	1.7 2.3	1.6 1.9	1.7 2.4	13.3 1.7	4.2 4.0	6.5 4.5	19.7 3.9	24.8 9.2	52.9
	119.1		3.1		4.8				2.4						52.8
2007 Q2	118.5	2.4	2.6	3.2	5.4	2.0	1.7	1.8	1.7	-0.4	4.5	5.0 °		13.8	51.0
Q3	119.3	2.1	2.7	3.0	4.3	1.6	2.4	1.8	2.5	-0.7	3.6	- 0.6	2.0	6.7	54.2
Q4	121.2	4.0	4.5	3.2	3.7	1.5	3.6	1.9	3.9	7.0	3.4	4.0 <sup>6</sup>		1.6	61.0
2008 Q1 Q2	123.6	5.4	5.4	3.6	4.2	1.5	4.4	2.3	4.8	11.7	3.1		36.5 44.0	11.9 7.1	64.2 78.5
2008 Jan.	122.8	5.1	5.2	3.4	3.8	1.4	4.2	2.3	4.6	10.8	-	-	37.5	10.4	62.4
Feb.	123.6	5.4	5.4	3.6	4.2	1.5	4.3	2.3	4.7	11.7	-	-	37.2	15.0	64.1
Mar.	124.5	5.8	5.7	3.8	4.4	1.5	4.6	2.5	5.0	12.7	-	-	34.8	10.3	66.1
Apr.	125.5	6.2	5.5	3.7	4.3	1.7	4.5	2.4	4.9	14.5	-	-	32.7	5.8	69.8
May	127.1	7.1	6.3	3.8	4.3	1.8	4.4	2.3	4.8	18.2	-	-	47.7	6.0	80.1
June											-	-	51.2	9.6	85.9

#### 3. Hourly labour costs 7)

	Total (s.a. index	Total	Вус	component	By sele	cted economic activ	vity	Memo: indicator
	2000 = 100)		Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	of negotiated wages <sup>8)</sup>
% 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
2004 2005 2006 2007	113.6 116.7 119.6 122.8	2.5 2.7 2.5 2.6	2.3 2.8 2.7 2.8	3.2 2.7 2.2 2.1	2.9 2.6 3.3 2.8	2.7 2.4 2.1 3.1	2.3 2.9 2.1 2.5	2.1 2.1 2.3 2.2
2007 Q1 Q2 Q3 Q4 2008 Q1	121.4 122.3 123.2 124.2 125.1	2.3 2.7 2.6 2.9 3.3	2.4 2.8 2.8 3.2 3.7	1.9 2.3 2.3 2.0 2.3	2.5 3.1 2.4 3.1 3.7	1.9 2.9 3.6 3.9 4.0	2.2 2.4 2.6 2.6 3.0	2.0 2.3 2.2 2.1 2.8

Sources: Eurostat, HWWI (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) Input prices for residential buildings.

- Experimental data based on non-harmonised national sources (see the ECB website for further details).
- Refers to the prices expressed in euro.
- 4) Brent Blend (for one-month forward delivery).
- 5) In 2000.
- 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. Hourly labour costs for the whole economy, excluding agriculture, public administration, education, health and services not elsewhere classified. Owing to differences in 6)
- coverage, the estimates for the components may not be consistent with the total.
- 8) Experimental data (see the ECB website for further details).

### 5.1 HICP, other prices and costs

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

(seasonally adjusted)

	Total (index	Total				By economic activity		
	2000 = 100)		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
				J	Jnit labour costs	1)		
2004	107.9	1.0	-11.2	-0.5	3.4	0.5	2.4	2.1
2005	109.0	1.0	7.4	-0.7	3.0	0.8	1.6	2.0
2006	110.0	0.9	1.8	-0.6	1.0	0.2	2.3 3.2	2.5 1.9
2007	111.7	1.5	1.2	-0.3	4.0	0.7	3.2	1.9
2007 Q1	110.8	1.0	0.6	-0.6	1.5	-0.3	2.7	2.3
Q2	111.6	1.3	1.6	0.2	4.4	0.3	3.4	0.9
$\tilde{Q}_3$	111.6	1.5	1.6	-0.9	5.0	1.0	2.8	1.9
O4	112.6	2.3	1.0	0.1	5.2	1.6	3.7	2.7
2008 Q1	113.5	2.4						
				Comp	ensation per emp	oloyee		
2004	110.0	2.1	1.2	2.9	2.9	1.5	1.7	2.4
2005	112.0	1.8	1.8	1.8	2.0	1.7	2.3	1.8
2006	114.5	2.2	2.6	3.5	3.3	1.6	2.2 2.1	1.6
2007	117.3	2.4	2.9	2.7	3.3	2.0	2.1	2.4
2007 Q1	116.4	2.5	2.8	2.5	4.0	2.2	2.3	2.4
Q2	117.1	2.2	3.5	3.1	2.5	2.0	2.0	1.7
O3	117.4	2.2	2.7	2.4	3.3	2.0	1.9	2.3
Q4	118.4	2.7	2.5	3.0	3.6	1.8	2.5	3.0
Q3 Q4 2008 Q1	120.0	3.1					-	
				La	bour productivit	y <sup>2)</sup>		
2004	102.0	1.1	14.0	3.5	-0.5	0.9	-0.7	0.3
2005	102.8	0.8	-5.2	2.5	-0.9	0.9	0.7	-0.2
2006	104.2	1.3	0.8	4.1	2.3	1.4	-0.1	-0.8
2007	105.1	0.9	1.7	3.1	-0.7	1.3	-1.0	0.4
2007 Q1	105.1	1.4	2.2	3.1	2.5	2.5	-0.4	0.2
Q2	104.9	0.9	1.9	2.9	-1.9	1.7	-1.4	0.8
Q3	105.2	0.8	1.1	3.3	-1.6	1.0	-0.9	0.3
Q4	105.2	0.4	1.5	2.9	-1.6	0.2	-1.2	0.4
2008 Q1	105.7	0.6						

#### 5. Gross domestic product deflators

	Total	Total		Domosti	ic demand	I	Exports 3)	Imports 3)
	(s.a. index	Total					Exports	Imports
	2000 = 100)		Total	Private consumption	Government consumption	Gross fixed capital formation		
				consumption	consumption	Tormation		
	1	2	3	4	5	6	7	8
2004	109.5	1.9	2.1	2.1	2.2	2.5	1.0	1.4
2005	111.6	2.0	2.3	2.1	2.5	2.6	2.5	3.5
2006	113.7	1.9	2.4	2.2	1.9	2.9	2.7	3.9
2007	116.2	2.2	2.1	2.1	1.5	2.7	1.4	1.2
2007 Q1	115.3	2.1	1.8	1.9	1.5	3.0	1.4	0.5
Q2	116.1	2.2	1.9	1.9	0.8	2.9	1.6	0.7
Q3	116.6	2.2	2.1	1.9	1.4	2.5	1.2	0.9
Q4	117.0	2.2	2.7	2.7	2.4	2.3	1.5	2.7
2008 Q1	117.7	2.0	2.7	3.1	2.2	2.2	2.2	3.9

Sources: ECB calculations based on Eurostat data.

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

#### 1. GDP and expenditure components

					GDP				
	Total		Γ	Domestic demand			Ex	ternal balance 1)	
		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
				rent prices (EUR bi	llions, seasonally ad	,			
2004 2005 2006 2007	7,809.6 8,101.5 8,499.1 8,915.7	7,660.9 7,992.4 8,406.0 8,786.7	4,479.1 4,650.1 4,844.8 5,024.7	1,594.0 1,658.8 1,723.7 1,790.2	1,578.6 1,672.0 1,814.8 1,944.6	9.1 11.5 22.7 27.3	148.8 109.1 93.1 129.0	2,858.4 3,076.2 3,413.5 3,669.4	2,709.6 2,967.1 3,320.4 3,540.5
2007 Q1 Q2 Q3 Q4 2008 Q1	2,196.5 2,218.1 2,242.8 2,258.2 2,288.7	2,166.2 2,182.5 2,209.7 2,228.3 2,261.7	1,235.5 1,250.7 1,262.9 1,275.6 1,288.3	441.6 445.2 449.8 453.6 457.5	479.1 482.0 488.4 495.1 507.1	10.0 4.6 8.7 4.0 8.7	30.3 35.6 33.1 29.9 27.0	894.1 908.7 930.3 936.3 963.2	863.8 873.1 897.2 906.4 936.2
					age of GDP				
2007	100.0	98.6	56.4	20.1	21.8	0.3	1.4	-	
			Chain-linked vo		e previous year, seas				
					r percentage change	es			
2007 Q1 Q2 Q3 Q4	0.8 0.4 0.7 0.3 0.8	1.1 0.1 0.7 0.1	0.2 0.6 0.4 -0.1	0.9 0.3 0.8 0.0 0.4	1.2 0.0 0.9 1.0	- - -	- - -	0.9 0.9 2.2 0.3 1.9	1.6 0.2 2.4 -0.3 1.8
2008 Q1	0.8	0.8	0.2		1.6	-	-	1.9	1.8
2004	2.1	1.0	1.6		entage changes			7.2	7.0
2004 2005 2006 2007	2.1 1.6 2.8 2.6	1.9 1.9 2.6 2.3	1.6 1.7 1.8 1.6	1.4 1.5 2.0 2.3	2.4 3.1 5.2 4.5	- - -	-	7.2 4.7 7.9 6.0	7.0 5.6 7.6 5.3
2007 Q1 Q2 Q3 Q4	3.2 2.6 2.7 2.1	3.0 2.3 2.2 2.0	1.5 1.8 1.8 1.2	2.3 2.4 2.6 2.0	6.8 3.8 3.9 3.2	- - -	- - -	6.6 5.9 7.2 4.4	6.1 5.2 6.1 4.0
2008 Q1	2.2	1.6	1.2	1.4	3.6	-	-	5.4	4.3
		con	itributions to quart		entage changes of G		points		
2007 Q1 Q2 Q3 Q4 2008 Q1	0.8 0.4 0.7 0.3 0.8	1.0 0.1 0.7 0.1 0.7	0.1 0.3 0.3 0.0 0.1	0.2 0.1 0.2 0.0 0.1	0.3 0.0 0.2 0.2 0.4	0.5 -0.3 0.1 -0.1 0.2	-0.3 0.3 0.0 0.2 0.0	-	- - - -
			contributions to	annual percentage	changes of GDP in	percentage points			
2004 2005 2006 2007	2.1 1.6 2.8 2.6	1.9 1.9 2.6 2.3	0.9 0.9 1.0 0.9	0.3 0.3 0.4 0.5	0.5 0.6 1.1 1.0	0.2 0.0 0.1 0.0	0.2 -0.2 0.2 0.3	- - - -	-
2007 Q1 Q2 Q3 Q4 2008 Q1	3.2 2.6 2.7 2.1 2.2	3.0 2.2 2.2 1.9 1.6	0.9 1.0 1.0 0.7 0.7	0.5 0.5 0.5 0.4 0.3	1.4 0.8 0.8 0.7 0.8	0.2 -0.1 -0.2 0.1 -0.1	0.3 0.3 0.5 0.2 0.5	- - -	- - - -

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 Tables 7.1.2 and 7.3.1.

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 v	alue added (basic p	rices)			Taxes less subsidies on
	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	products
	1	2	Current prices	(EUR billions, season	ally adjusted)	6	7	8
2004	7.010.9	153.5	1,436.4	414.1	1,488.6	1,914.6	1.603.6	798.7
2004 2005 2006 2007	7,010.9 7,260.0 7,590.0 7,962.6	133.3 142.1 139.6 150.8	1,436.4 1,472.6 1,537.8 1,614.3	439.8 482.4 520.6	1,488.0 1,527.1 1,585.4 1,654.4	2,013.0 2,121.0 2,232.5	1,665.4 1,723.9 1,790.0	841.5 909.1 953.1
2007 Q1 Q2 Q3 Q4 2008 Q1	1,957.4 1,981.4 2,005.5 2,018.2 2,046.7	36.7 37.0 38.4 38.7 39.5	397.6 401.9 407.0 407.7 414.8	128.4 129.0 130.8 132.4 136.5	407.5 411.6 417.2 418.1 424.6	546.8 555.9 562.4 567.4 573.5	440.4 446.0 449.7 453.8 457.7	239.0 236.7 237.3 240.1 242.0
			pei	rcentage of value add	'ed			
2007	100.0	1.9	20.3	6.5	20.8	28.0	22.5	-
-		Chain-	linked volumes (prid	ces of the previous ye	ear, seasonally adjusted	d <sup>1)</sup> )		
			quarter-o	n-quarter percentage	changes			
2007 Q1 Q2 Q3 Q4 2008 Q1	0.8 0.5 0.7 0.4 0.7	0.9 -1.0 -1.1 1.3 2.5	0.9 0.6 1.1 0.5 0.6	1.4 -1.4 0.5 0.4 1.9	0.7 0.7 0.8 0.1 1.1	0.9 0.8 0.6 0.5 0.6	0.6 0.5 0.3 0.2 0.2	0.4 -0.7 0.7 -0.2 1.2
			ann	ual percentage chan	ges			
2004 2005 2006 2007	2.2 1.6 2.8 2.8	10.9 -6.0 -0.9 0.8	2.7 1.0 3.4 3.4	0.9 1.6 4.7 3.2	2.3 1.6 2.7 3.0	1.8 3.1 3.6 3.2	1.6 1.3 1.1 1.7	1.0 1.6 3.0 1.4
2007 Q1 Q2 Q3 Q4 2008 Q1	3.3 2.7 2.8 2.4 2.3	2.1 0.4 -0.1 0.1 1.7	3.4 3.2 3.5 3.2 2.9	7.4 2.6 2.0 0.9 1.4	3.7 3.1 3.1 2.3 2.7	3.6 3.1 3.2 2.9 2.6	1.6 1.8 1.7 1.7 1.3	2.2 1.3 1.8 0.1 1.0
					of value added in perc			
2007 Q1 Q2 Q3 Q4 2008 Q1	0.8 0.5 0.7 0.4 0.7	0.0 0.0 0.0 0.0 0.0	0.2 0.1 0.2 0.1 0.1	0.1 -0.1 0.0 0.0 0.1	0.1 0.1 0.2 0.0 0.2	0.2 0.2 0.2 0.1 0.2	0.1 0.1 0.1 0.1 0.1	- - - -
		contributi	ons to annual percen	ntage changes of valu	ie added in percentage	points		
2004 2005 2006 2007	2.2 1.6 2.8 2.8	0.2 -0.1 0.0 0.0	0.6 0.2 0.7 0.7	0.1 0.1 0.3 0.2	0.5 0.3 0.6 0.6	0.5 0.8 1.0 0.9	0.4 0.3 0.3 0.4	-
2007 Q1 Q2 Q3 Q4 2008 Q1	3.3 2.7 2.8 2.4 2.3	0.0 0.0 0.0 0.0 0.0	0.7 0.6 0.7 0.7 0.6	0.5 0.2 0.1 0.1 0.1	0.8 0.6 0.7 0.5 0.6	1.0 0.9 0.9 0.8 0.7	0.4 0.4 0.4 0.4 0.3	- - - -

Sources: Eurostat and ECB calculations.

1) Annual data are not adjusted for the variations in the number of working days.

#### 3. Industrial production

	Total				Indu	stry excluding	construction	1				Construction
		Total (s.a. index	Т	otal		Industry e	xcluding cor	nstruction a	nd energy		Energy	
		2000 = 100)		Manu- facturing	Total	Intermediate goods	Capital goods	-	Consumer go	oods		
				Tueturing		goods	goods	Total	Durable	Non-durable		
% of total 1)	100.0	82.8	82.8	74.8	73.7	29.9	22.2	21.6	3.6	18.0	9.0	17.2
	1	2	3	4	5	6	7	8	9	10	11	12
2005 2006	1.4 4.0	103.9 108.1	1.3 4.0	1.3 4.4	1.1 4.4	0.8 4.9	2.9 5.9	0.4 2.5	-0.9 4.2	0.7 2.2	1.4 0.8	0.7 3.9
2007	3.5	111.8	3.4	4.0	3.7	3.8	5.9	2.3	1.1	2.5	-0.3	3.2
2007 Q2	2.9	111.0	2.8	3.3	3.4	3.2	4.9	2.0	1.3	2.1	-0.2	2.4
Q3 Q4	3.8 2.7	112.7 112.9	4.0 3.1	4.2 2.6	4.0 2.0	3.6 1.9	6.6 5.2	3.1 0.7	2.0 -2.7	3.2 1.3	1.4 5.9	1.8 -0.4
2008 Q1	2.7	113.7	2.8	2.1	2.0	1.6	5.7	0.4	-1.6	0.8	4.5	1.7
2007 Nov. Dec.	2.5 1.0	112.7 112.8	3.0 1.7	2.3 1.4	1.6 0.9	1.6 0.6	5.1 3.2	0.4 -0.3	-3.8 -4.9	1.2 0.5	6.4 4.7	-1.2 -3.5
2008 Jan. Feb.	3.5 3.5	113.7 114.0	3.5 3.3	3.5 3.1	3.2 3.7	2.3 2.0	7.3 6.9	1.8 0.9	-0.2 -0.8	2.1 1.2	3.0 4.3	3.3 4.8
Mar.	1.2 3.1	113.5 114.5	1.6 3.9	0.0 4.5	-0.6 4.2	0.6 2.5	3.4 7.7	-1.3 0.6	-0.8 -3.6 1.3	-0.9 0.5	6.4 5.6	-2.1 -1.7
Apr.	5.1	114.3	3.9					0.0	1.3	0.5	3.0	-1./
						ercentage chang						
2007 Nov. Dec.	-0.7 0.1	-	-0.4 0.1	-0.5 0.3	-0.6 0.3	-0.9 0.7	-0.2 -0.3	-0.5 0.1	-2.0 -0.1	-0.3 0.2	0.2 0.5	-1.8 -0.3
2008 Jan.	1.0	-	0.8	1.2	1.4	0.8	2.6	0.9	2.0	0.7	-4.5	2.4
Feb. Mar.	0.5 -0.9	-	0.3 -0.5	0.2 -0.6	0.5 -1.8	0.3 -0.6	0.5 -1.6	-0.3 -0.7	-0.1 -1.8	-0.4 -0.5	1.4 3.1	1.3 -2.7
Apr.	0.6	-	0.9	0.5	1.9	0.4	2.0	0.4	2.0	0.2	-1.7	-0.6

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

	Industrial ne	ew orders	Industrial t	urnover			F	Retail sales				New passen registrat	
	Manufactu (current p		Manufac (current p		Current prices			Constant	prices			registrat	ions
	Total (s.a. index	Total	Total (s.a. index	Total	Total	Total (s.a. index	Total	Food, beverages,		Non-food		Total (s.a., thousands) <sup>3)</sup>	Total
	2000 = 100)		2000 = 100)			2000 = 100)		tobacco		Textiles, clothing, footwear	Household equipment	, the astalas)	
% 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
2005	109.2	3.9	110.8	3.6	2.2	106.7	1.2	0.6	1.7	2.3	1.2	939	0.9
2006	119.3	9.3	118.9	7.3	2.9	108.4	1.6	0.3	2.6	2.8	4.4	968	3.0
2007	128.9	8.3	126.2	6.3	2.4	109.4	0.9	-0.3	1.8	3.2	2.1	963	-0.5
2007 Q2	129.5	10.6	125.9	6.3	2.2	109.6	1.0	-0.2	1.8	3.1	2.9	957	-2.4
Q3	129.0	6.5	127.4	6.3	2.6	109.9	1.4	-0.6	2.8	5.8	2.8	963	2.1
Q4	131.5	8.3	127.0	5.2	2.1	108.9	-0.4	-0.9	0.1	0.0	-1.3	978	0.3
2008 Q1	131.5	3.9	131.3	4.4	3.1	108.9	-0.1	-1.3	0.6	0.1	-1.2	949	-0.6
2007 Dec.	129.0	2.2	125.8	1.6	1.4	108.8	-1.3	-1.9	-0.7	-1.1	-1.9	1,005	4.1
2008 Jan.	132.0	7.0	132.1	7.5	3.8	109.4	0.8	-1.6	2.4	3.0	0.4	951	-1.3
Feb.	132.0	9.5	131.7	10.2	4.6	109.2	1.4	0.2	2.0	4.3	-0.4	977	5.8
Mar.	130.4	-3.6	129.9	-3.2	1.1	108.2	-2.3	-2.3	-2.4	-6.6	-3.4	918	-4.8
Apr.	133.7	11.9	132.1	13.7	0.4	107.5	-3.0	-3.6	-2.3	-6.0	-2.1	949	2.2
May												898	-9.9
					month-on-n	onth percentag	e changes (	(s.a.)					
2007 Dec.	-	-3.7	-	-1.6	0.3	-	0.1	-0.2	0.1	0.2	0.6	-	5.0
2008 Jan.	_	2.3	_	5.1	0.9	_	0.5	0.1	1.0	1.9	0.3	_	-5.4
Feb.	_	0.0	_	-0.3	0.0	_	-0.2	0.1	-0.4	1.1	-0.3	_	2.7
Mar.	-	-1.2	-	-1.4	-0.7	-	-0.9	-0.2	-1.4	-5.5	-1.3	-	-6.0
Apr.	-	2.5	-	1.7	0.1	-	-0.6	-1.2	-0.3	0.9	0.1	-	3.4
May													-54

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).

Includes manufacturing industries working mainly on the basis of orders, representing 62.6% of total manufacturing in 2000. Annual and quarterly figures are averages of monthly figures in the period concerned.

#### 5. Business and Consumer Surveys

	Economic sentiment		Manu	ufacturing ind	lustry			Consun	ner confidence	indicator	
	indicator 2) (long-term		dustrial confid	ence indicator		Capacity utilisation 3)	Total <sup>4)</sup>	Financial situation	Economic situation	Unemployment situation	Savings over next
	average = 100)	Total 4)	Order books	Stocks of finished products	Production expectations	(percentages)		over next 12 months	over next 12 months	over next 12 months	12 months
	1	2	3	4	5	6	7	8	9	10	11
2004	98.7	-5	-15	. 8	10	81.5	-14	-4	-14	30	-9
2005	97.4	-7	-17	11	6	81.2	-14	-4	-15	28	-9
2006	106.3	2	0	6	13	83.2	-9	-3	-9	15	-9
2007	108.4	4	5	5	13	84.2	-5	-2	-4	5	-8
2007 Q2	111.0	6	8	4	15	84.3	-3	-1	0	2	-7
Q3	108.7	4	5	6	13	84.0	-4	-2	-3	3	-7
Q4	104.3	2	1	7	11	84.0	-8	-4	-10	7	-10
2008 Q1	100.5	0	-1	7	10	83.7	-12	-7	-17	11	-12
Q2	96.5	-3	-6	9	7		-15	-10	-22	13	-14
2008 Jan.	101.7	1	-1	7	12	83.9	-12	-7	-17	11	-11
Feb.	100.2	0	-2	7	10	-	-12	-7	-18	12	-12
Mar.	99.6	0	-1	7	8	-	-12	-7	-17	11	-13
Apr.	97.1	-2	-5	9	8	83.5	-12	-8	-19	11	-12
May	97.6	-2	-5	8	7	-	-15	-10	-21	13	-15
June	94.9	-5	-9	10	5	-	-17	-12	-25	14	-16

	Construction	n confidence	indicator	Reta	il trade confid	lence indicator		Ser	vices confide	nce indicator	
	Total 4)	Order books	Employment expectations	Total 4)	Present business situation	Volume of stocks	Expected business situation	Total 4)	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2004 2005 2006	-12 -7	-19 -11	-4 -2 5	-8 -7	-12 -12	14 13 14	2 4	11 11 18	6 5	8 10 18	18 18 24
2007	-1	-8	7	i	4	15	12	19	16	19	23
2007 Q2 Q3 Q4 2008 Q1	0 0 -3 -7	-6 -8 -11 -14	6 7 4 -1	2 1 0 -1	4 7 4 2	13 14 16 16	14 11 13 12	22 20 15 10	19 16 11 4	22 20 14 12	25 24 20 15
Q2 2008 Jan. Feb. Mar. Apr. May June	-11 -6 -7 -9 -12 -9 -11	-17 -13 -13 -15 -18 -16 -18	-4 1 -2 -3 -6 -2 -4	-3 1 1 1 -5 -1 -4	-1 -2 5 5 -4 3 -3	16 18 16 15 18 14 17	10 14 11 6 8 7	8 13 10 9 7 8 9	6 3 2 1 4 4	12 13 11 7 9	13 19 13 13 12 13 14

Source: European Commission (Economic and Financial Affairs DG).

- 1) Difference between the percentages of respondents giving positive and negative replies.
- 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 1990 to 2007.

  3 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
- 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)

#### 1. Employment

	Whole ed	conomy	By employ	ment status			By ec	onomic activity		
	Millions (s.a.)		Employees	Self- employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy		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	85.0	15.0	4.0	17.1	7.7	25.4	15.8	30.0
	1	2	3	4	5	6	7	8	9	10
2004 2005 2006 2007	138.375 139.691 141.917 144.423	0.7 1.0 1.6 1.8	0.7 1.1 1.7 2.0	0.9 0.4 0.8 0.7	-2.8 -0.8 -1.5 -1.0	-1.4 -1.1 -0.4 0.3	1.3 2.6 2.6 3.8	1.2 0.8 1.5 1.7	2.4 2.4 3.8 4.2	1.3 1.5 2.0 1.3
2007 Q1 Q2 Q3 Q4 2008 Q1	143.461 144.198 144.804 145.231 145.676	1.8 1.7 1.9 1.8 1.6	2.0 1.9 2.0 2.0 1.7	0.5 0.6 1.3 0.5 0.7	-0.1 -1.3 -1.2 -1.4	0.2 0.4 0.2 0.3	4.9 4.5 3.6 2.4	1.1 1.3 2.2 2.2	4.1 4.6 4.1 4.1	1.4 1.0 1.4 1.3
				quarter	on-quarter per	centage changes (	(s.a.)			
2007 Q1 Q2 Q3 Q4	0.755 0.737 0.606 0.426	0.5 0.5 0.4 0.3	0.5 0.5 0.5 0.5	0.4 0.5 0.1 -0.6	0.8 -0.6 -1.0 -0.6	0.1 0.1 0.0 0.2	1.9 0.4 -0.1 0.3	0.4 0.8 0.8 0.1	1.3 1.3 0.7 0.8	0.1 0.3 0.5 0.4
2008 Q1	0.446	0.3	0.2	0.6						

## **2. Unemployment** (seasonally adjusted)

	Tota	al		В	y age <sup>3)</sup>			By	gender 4)	
	Millions	% of labour force	Ac	lult	Yo	outh	N	lale	Fe	male
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total 2)	100.0		78.1		21.9		49.6		50.4	
	1	2	3	4	5	6	7	8	9	10
2004 2005	13.100 13.286	8.8 8.8	10.159 10.341	7.7 7.8	2.941 2.945	17.0 17.1	6.558 6.697	7.9 8.0	6.543 6.589	10.0 9.9
2006 2007	12.513 11.380	8.2 7.4	9.773 8.902	7.3 6.5	2.740 2.478	16.1 14.8	6.215 5.596	7.4 6.6	6.298 5.784	9.3 8.4
2007 Q1 Q2	11.628 11.422	7.6 7.5	9.091 8.950	6.7 6.6	2.536 2.472	15.2 14.8	5.702 5.589	6.8 6.6	5.926 5.834	8.7 8.5
Q3 Q4 2008 Q1	11.289 11.183 11.090	7.4 7.3 7.2	8.845 8.722 8.644	6.5 6.4 6.3	2.444 2.461 2.445	14.5 14.7 14.5	5.569 5.527 5.499	6.6 6.5 6.5	5.720 5.656 5.591	8.3 8.2 8.1
2007 Dec.	11.137	7.2	8.680	6.3	2.457	14.6	5.513	6.5	5.624	8.1
2008 Jan. Feb. Mar. Apr. May	11.118 11.081 11.070 11.132 11.199	7.2 7.2 7.2 7.2 7.2	8.677 8.638 8.618 8.638 8.670	6.3 6.3 6.3 6.3	2.441 2.443 2.452 2.494 2.529	14.5 14.5 14.6 14.8 15.0	5.502 5.493 5.501 5.566 5.637	6.5 6.4 6.5 6.5 6.6	5.616 5.589 5.569 5.566 5.562	8.1 8.1 8.0 8.0

- 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 2006.

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

  4) Rates are expressed as a percentage of the labour force for the relevant gender.



### **GOVERNMENT FINANCE**

### 6.1 Revenue, expenditure and deficit/surplus 1)

#### 1. Euro area - revenue

	Total					Curre	ent revenue					Capital	revenue	Memo: fiscal
		Γ	Direct			Indirect		Social			Sales		Capital	burden 2)
			taxes	Households	Corporations	taxes	Received by EU	contributions	Employers	Employees			taxes	
			2		۔	,	institutions	0		10		10	1.2	1.4
	1	2	3	4	3	6	1	8	9	10	11	12	13	14
1999	47.0	46.7	12.5	9.3	2.9	14.1	0.6	16.1	8.3	4.9	2.3	0.3	0.3	43.0
2000	46.5	46.2	12.7	9.4	3.0	13.9	0.6	15.8	8.2	4.8	2.2	0.3	0.3	42.6
2001	45.7	45.5	12.3	9.2	2.7	13.5	0.5	15.6	8.1	4.7	2.2	0.2	0.3	41.7
2002	45.2	44.8	11.8	9.1	2.5	13.5	0.4	15.6	8.2	4.6	2.1	0.3	0.3	41.2
2003	45.0	44.4	11.4	8.8	2.3	13.5	0.4	15.7	8.2	4.6	2.1	0.6	0.5	41.1
2004	44.6	44.1	11.3	8.5	2.5	13.5	0.3	15.6	8.1	4.5	2.1	0.5	0.4	40.8
2005	44.9	44.4	11.6	8.6	2.6	13.7	0.3	15.4	8.1	4.5	2.2	0.5	0.3	41.0
2006	45.5	45.2	12.1	8.8	3.0	13.9	0.3	15.4	8.1	4.5	2.1	0.3	0.3	41.6
2007	45.6	45.4	12.5	9.0	3.2	13.9	0.3	15.2	8.0	4.4	2.1	0.3	0.3	41.9

#### 2. Euro area – expenditure

	Total			•	Current e	expenditure					Capital ex	penditure		Memo: primary
		Total	Compensation of	Intermediate consumption	Interest	Current transfers	Social	Subsidies			Investment	Capital transfers	Paid by EU	expenditure 3)
			employees	r			payments		Paid by EU institutions				institutions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999	48.4	44.5	10.6	4.8	4.1	25.1	22.1	2.1	0.5	3.9	2.5	1.4	0.1	44.3
2000	46.5	43.8	10.4	4.8	3.9	24.7	21.7	2.0	0.5	2.8	2.5	1.3	0.0	42.6
2001	47.6	43.7	10.3	4.8	3.8	24.8	21.7	1.9	0.5	3.9	2.5	1.4	0.0	43.8
2002	47.7	43.9	10.4	4.9	3.5	25.1	22.2	1.9	0.5	3.8	2.4	1.4	0.0	44.2
2003	48.1	44.2	10.5	4.9	3.3	25.4	22.6	1.9	0.5	3.9	2.5	1.4	0.1	44.8
2004	47.5	43.6	10.4	5.0	3.1	25.1	22.4	1.8	0.5	3.9	2.5	1.4	0.0	44.4
2005	47.4	43.5	10.4	5.1	3.0	25.1	22.3	1.7	0.5	3.9	2.5	1.4	0.0	44.4
2006	46.8	43.0	10.2	5.0	2.9	24.9	22.1	1.7	0.5	3.9	2.5	1.4	0.0	43.9
2007	46.2	42.5	10.1	5.0	3.0	24.5	21.7	1.6	0.4	3.8	2.5	1.3	0.0	43.3

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

		Deficit (	-)/surplu	ıs (+)		Primary deficit (-)/			(	Government o	consumption 4)			
	Total	Central	State	Local	Social	surplus (+)	Total						Collective	Individual
		gov.	gov.	gov.	security			Compensation	Intermediate		Consumption		consumption	consumption
					funds			of employees	consumption	in kind	of fixed	(minus)		
										via market	capital			
					_		-			producers				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999	-1.4	-1.7	-0.1	0.1	0.4	2.7	19.9	10.6	4.8	4.9	1.8	2.3	8.3	11.6
2000	0.0	-0.4	-0.1	0.1	0.5	3.9	19.7	10.4	4.8	4.9	1.8	2.2	8.2	11.6
2001	-1.8	-1.7	-0.4	-0.1	0.3	2.0	19.8	10.3	4.8	5.0	1.8	2.2	8.1	11.7
2002	-2.6	-2.1	-0.5	-0.2	0.2	0.9	20.2	10.4	4.9	5.1	1.8	2.1	8.2	12.0
2003	-3.1	-2.4	-0.5	-0.2	0.0	0.2	20.5	10.5	4.9	5.2	1.8	2.1	8.3	12.2
2004	-2.9	-2.5	-0.4	-0.3	0.2	0.2	20.4	10.4	5.0	5.1	1.9	2.1	8.3	12.1
2005	-2.6	-2.2	-0.3	-0.2	0.2	0.4	20.5	10.4	5.1	5.2	1.9	2.2	8.2	12.3
2006	-1.3	-1.4	-0.1	-0.2	0.4	1.6	20.3	10.2	5.0	5.2	1.9	2.1	8.0	12.3
2007	-0.6	-1.1	0.0	0.0	0.5	2.4	20.1	10.1	5.0	5.2	1.9	2.1	7.9	12.2

#### 4. Euro area countries - deficit (-)/surplus (+) 5)

	<b>BE</b> 1	<b>DE</b> 2	<b>IE</b> 3	GR 4	<b>ES</b> 5	<b>FR</b> 6	<b>IT</b> 7	<b>CY</b> 8	LU 9	MT 10	<b>NL</b> 11	<b>AT</b> 12	<b>PT</b> 13	<b>SI</b> 14	<b>FI</b> 15
2004	0.0	-3.8	1.4	-7.4	-0.3	-3.6	-3.5	-4.1	-1.2	-4.6	-1.7	-3.7	-3.4	-2.3	2.4
2005	-2.3	-3.4	1.6	-5.1	1.0	-2.9	-4.2	-2.4	-0.1	-3.0	-0.3	-1.5	-6.1	-1.5	2.9
2006	0.3	-1.6	3.0	-2.6	1.8	-2.4	-3.4	-1.2	1.3	-2.5	0.5	-1.5	-3.9	-1.2	4.1
2007	-0.2	0.0	0.3	-2.8	2.2	-2.7	-1.9	3.3	2.9	-1.8	0.4	-0.5	-2.6	-0.1	5.3

- Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit/surplus.

  1) The data refer to the Euro 15. Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions involving the EU budget are included and consolidated. Transactions among Member States' governments are not consolidated.
- The fiscal burden comprises taxes and social contributions.
   Comprises total expenditure minus interest expenditure.

- Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
   Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.

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

	Total		Financial in	struments				Holders		
		Currency and	Loans	Short-term securities	Long-term securities		Domestic c	reditors 2)		Other creditors 3)
		deposits				Total	MFIs	Other financial corporations	Other sectors	
	1	2	3	4	5	6	7	8	9	10
1998	72.8	2.8	15.2	5.3	49.6	52.5	26.5	14.5	11.5	20.4
1999	72.0	2.9	14.4	4.3	50.5	48.8	25.3	13.8	9.7	23.2
2000	69.3	2.7	13.1	3.7	49.7	44.2	22.0	12.4	9.8	25.1
2001	68.2	2.8	12.4	4.0	49.0	42.0	20.6	11.1	10.4	26.2
2002	68.0	2.7	11.8	4.5	49.0	40.2	19.3	10.7	10.1	27.9
2003	69.2	2.1	12.4	5.0	49.7	39.4	19.5	11.2	8.7	29.7
2004	69.6	2.2	11.9	5.0	50.5	37.6	18.4	10.8	8.3	32.0
2005	70.2	2.4	11.8	4.7	51.3	35.5	17.2	11.1	7.2	34.7
2006	68.5	2.5	11.4	4.1	50.5	33.8	17.5	9.4	6.9	34.6
2007	66.3	2.2	10.8	4.3	49.1	32.3	17.0	8.5	6.9	34.0

#### 2. Euro area - by issuer, maturity and currency denomination

	Total		Issued	by <sup>4)</sup>		(	Original matu	ırity	R	esidual maturi	ity	Currence	ies
		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
1998	72.8	61.2	6.1	5.2	0.4	8.2	64.6	7.8	15.5	26.4	30.9	71.0	1.8
1999	72.0	60.5	6.0	5.1	0.4	7.3	64.7	6.8	13.6	27.9	30.6	69.9	2.1
2000	69.3	58.1	5.9	4.9	0.4	6.5	62.7	6.1	13.4	27.8	28.0	67.3	1.9
2001	68.2	57.0	6.1	4.7	0.4	7.0	61.2	5.2	13.7	26.5	28.0	66.5	1.7
2002	68.0	56.6	6.3	4.7	0.4	7.6	60.4	5.1	15.3	25.0	27.7	66.6	1.5
2003	69.2	57.0	6.5	5.1	0.6	7.8	61.4	5.0	14.8	25.8	28.6	68.0	1.1
2004	69.6	57.4	6.6	5.1	0.4	7.8	61.7	4.7	14.7	26.2	28.7	68.5	1.1
2005	70.2	57.7	6.7	5.3	0.5	7.9	62.3	4.6	14.9	25.7	29.6	68.9	1.2
2006	68.5	56.0	6.5	5.4	0.5	7.5	61.0	4.5	14.4	24.5	29.6	67.5	1.0
2007	66.3	54.2	6.3	5.3	0.5	7.5	58.9	4.2	14.2	23.4	28.8	65.5	0.8

#### 3. Euro area countries

	BE	DE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2004 2005 2006 2007	94.2 92.1 88.2 84.9	65.6 67.8 67.6 65.0	29.5 27.4 25.1 25.4	98.6 98.0 95.3 94.5	46.2 43.0 39.7 36.2	64.9 66.4 63.6 64.2	103.8 105.8 106.5 104.0	70.2 69.1 64.8 59.8	6.3 6.1 6.6 6.8	72.6 70.4 64.2 62.6	52.4 52.3 47.9 45.4	63.8 63.5 61.8 59.1	58.3 63.6 64.7 63.6	27.6 27.5 27.2 24.1	44.1 41.3 39.2 35.4

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

  1) The data refer to the Euro 15. 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.
- Holders resident in the country whose government has issued the debt.

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

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

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

### 6.3 Change in debt 1)

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

	Total		Source of cl	nange		F	inancial	instrument	s		Hol	ders	
		Borrowing requirement 2)	Valuation effects 3)	Other changes in volume <sup>4)</sup>	Aggregation effect 5)	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>6)</sup>	MFIs	Other financial corporations	Other creditors 7)
	1	2	3	4	5	6	7	8	9	10	11	12	13
1999	2.0	1.6	0.4	0.0	-0.1	0.2	-0.2	-0.9	2.8	-1.6	-0.2	-0.2	3.6
2000	1.0	1.1	0.0	-0.1	0.0	0.0	-0.5	-0.3	1.9	-2.1	-2.0	-0.6	3.1
2001	1.9	1.9	-0.1	0.1	0.0	0.2	-0.2	0.4	1.4	-0.3	-0.5	-0.8	2.2
2002	2.1	2.7	-0.5	0.0	0.0	0.0	-0.2	0.7	1.6	-0.5	-0.5	-0.1	2.6
2003	3.1	3.3	-0.2	0.0	0.0	-0.6	0.9	0.6	2.1	0.4	0.7	0.8	2.7
2004	3.1	3.2	-0.1	0.0	0.0	0.2	0.1	0.1	2.7	-0.3	-0.3	0.1	3.4
2005	3.1	3.1	0.0	0.0	0.0	0.3	0.3	-0.1	2.6	-0.8	-0.6	0.7	3.9
2006	1.5	1.4	0.1	0.0	0.0	0.2	0.1	-0.4	1.5	0.0	1.1	-1.2	1.5
2007	1.1	1.1	0.0	0.0	0.0	-0.1	-0.1	0.4	0.9	0.1	0.3	-0.5	1.0

#### 2. Euro area - deficit-debt adjustment

		Deficit (-) / surplus (+) 8)						Deficit-de	bt adjustment 9)					
		/	Total		Transactio	ons in mai	n financial asse	ts held by ger	neral government	t	Valuation effects	Exchange	Other changes in	Other 10)
				Total	Currency	Loans	Securities 11)	Shares and			Circus	rate	volume	
					and			other	Privatisations	Equity injections		effects		
					deposits			equity		injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999	2.0	-1.4	0.6	0.0	0.5	0.1	0.0	-0.5	-0.7	0.1	0.4	0.2	0.0	0.2
2000	1.0	0.0	1.0	1.0	0.7	0.2	0.2	0.0	-0.4	0.2	0.0	0.1	-0.1	0.1
2001	1.9	-1.8	0.0	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	-0.1	0.0	0.1	0.6
2002	2.1	-2.6	-0.5	0.1	0.1	0.0	0.0	0.0	-0.3	0.1	-0.5	-0.1	0.0	-0.1
2003	3.1	-3.1	0.0	0.1	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.1	0.0	0.1
2004	3.1	-2.9	0.2	0.3	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	-0.1	0.0	0.0
2005	3.1	-2.6	0.5	0.7	0.4	0.1	0.1	0.1	-0.3	0.2	0.0	0.0	0.0	-0.2
2006	1.5	-1.3	0.1	0.4	0.4	-0.1	0.3	-0.1	-0.3	0.1	0.1	0.0	0.0	-0.3
2007	1.1	-0.6	0.5	0.5	0.2	0.0	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	0.0

- The data refer to the Euro 15 and 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). The borrowing requirement is by definition equal to transactions in debt.

  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).
- 3)
- Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 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.
- Holders resident in the country whose government has issued the debt.
- Includes residents of euro area countries other than the country whose government has issued the debt.
- Including proceeds from sales of UMTS licences.
- 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** (as a percentage of GDP)

#### 1. Euro area - quarterly revenue

	Total			Current revenue	e			Capital re	evenue	Memo: fiscal
			Direct taxes	Indirect taxes	Social contributions	Sales	Property income		Capital taxes	burden <sup>2)</sup>
	1	2	3	4	5	6	7	8	9	10
2001 Q4	49.0	48.5	13.5	13.8	16.3	2.9	1.1	0.5	0.3	43.9
2002 Q1	41.9	41.4	10.1	12.7	15.4	1.7	0.8	0.4	0.2	38.4
Q2	45.4	44.9	12.4	12.7	15.4	1.9	1.5	0.5	0.3	40.9
Q3	43.5	43.1	11.2	12.8	15.4	1.9	0.8	0.4	0.3	39.7
Q4	49.0	48.4	13.4	14.0	16.2	2.9	0.9	0.6	0.3	43.9
2003 Q1	41.9	41.5	9.8	12.8	15.5	1.7	0.7	0.5	0.2	38.4
Q2	45.7	44.3	12.0	12.7	15.7	2.0	1.3	1.5	1.2	41.5
Q3	42.9	42.4	10.8	12.7	15.5	1.9	0.7	0.5	0.2	39.3
Q4	49.2	48.2	13.1	14.2	16.2	2.9	0.8	1.0	0.3	43.7
2004 Q1	41.4	40.9	9.6	12.8	15.3	1.7	0.6	0.4	0.3	38.0
Q2	44.9	44.1	12.1	13.0	15.3	2.0	0.9	0.8	0.6	41.0
Q3	42.7	42.2	10.6	12.7	15.4	1.9	0.7	0.5	0.3	39.0
Q4	49.1	48.1	12.9	14.3	16.2	2.9	0.8	1.0	0.4	43.8
2005 Q1	42.0	41.5	9.9	13.0	15.3	1.7	0.6	0.5	0.3	38.4
Q2	44.5	43.9	11.8	13.2	15.1	2.0	1.0	0.6	0.3	40.5
Q3	43.3	42.7	11.0	12.9	15.2	1.9	0.8	0.7	0.3	39.5
Q4	49.2	48.4	13.4	14.3	16.1	2.9	0.9	0.8	0.3	44.1
2006 Q1	42.5	42.1	10.2	13.3	15.2	1.7	0.8	0.5	0.3	39.0
Q2	45.6	45.2	12.5	13.6	15.2	2.0	1.2	0.4	0.3	41.5
Q3	43.7	43.3	11.5	13.0	15.3	1.9	0.8	0.5	0.3	40.0
Q4	49.5	48.9	14.1	14.3	15.9	2.9	0.9	0.6	0.3	44.6
2007 Q1	42.4	42.0	10.3	13.5	14.9	1.7	0.9	0.4	0.3	38.9
Q2	46.1	45.6	13.0	13.6	15.1	2.0	1.2	0.4	0.3	41.9
Q3	43.8	43.4	12.1	12.8	15.0	1.9	0.8	0.4	0.3	40.2
Q4	49.9	49.3	14.5	14.2	15.8	2.9	0.9	0.6	0.3	44.9

#### ${\bf 2. \, Euro \, area-quarterly \, expenditure \, and \, deficit/surplus}$

	Total			Curren	ıt expendi	ture			Capi	tal expenditu	ire	Deficit (-)/ surplus (+)	Primary deficit (-)/
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies		Investment	Capital transfers	sar pras (1)	surplus (+)
	1	2	3	4	5	6	7	8	9	10	11	12	13
2001 Q4	51.1	46.1	11.0	5.6	3.6	25.9	22.1	1.7	4.9	3.2	1.8	-2.0	1.5
2002 Q1	46.2	42.7	10.2	4.4	3.7	24.4	21.1	1.4	3.4	2.0	1.5	-4.3	-0.6
Q2	46.4	43.0	10.3	4.8	3.5	24.3	21.1	1.3	3.4	2.3	1.1	-1.1	2.5
Q3	46.9	43.2	10.1	4.7	3.5	24.9	21.4	1.4	3.7	2.5	1.2	-3.3	0.2
Q4	50.7	46.3	11.0	5.6	3.3	26.4	22.7	1.6	4.4	2.8	1.6	-1.7	1.6
2003 Q1	46.8	43.3	10.3	4.6	3.5	25.0	21.5	1.3	3.5	1.9	1.6	-4.9	-1.4
Q2	47.2	43.6	10.4	4.8	3.4	25.1	21.7	1.3	3.5	2.3	1.2	-1.4	2.0
Q3	47.1	43.4	10.3	4.8	3.3	25.1	21.6	1.3	3.7	2.5	1.2	-4.2	-0.9
Q4	51.1	46.3	11.0	5.6	3.1	26.5	22.9	1.5	4.8	3.3	1.6	-1.9	1.2
2004 Q1	46.4	43.0	10.3	4.6	3.2	25.0	21.4	1.2	3.4	1.9	1.5	-5.0	-1.9
Q2	46.6	43.2	10.4	4.8	3.3	24.8	21.4	1.3	3.3	2.3	1.0	-1.7	1.6
Q3	46.1	42.7	10.0	4.7	3.1	24.9	21.5	1.3	3.4	2.4	1.0	-3.4	-0.3
Q4	50.9	45.7	11.0	5.7	2.9	26.1	22.6	1.4	5.2	3.1	2.1	-1.7	1.2
2005 Q1	46.9	43.2	10.2	4.7	3.1	25.2	21.4	1.2	3.7	1.9	1.8	-4.8	-1.7
Q2	46.2	42.8	10.2	4.9	3.2	24.5	21.3	1.1	3.4	2.3	1.1	-1.7	1.5
Q3	45.8	42.4	9.9	4.8	2.9	24.7	21.3	1.2	3.4	2.5	1.0	-2.5	0.4
Q4	50.6	45.8	11.1	5.8	2.8	26.1	22.6	1.4	4.8	3.1	1.6	-1.4	1.4
2006 Q1	45.4	42.2	10.0	4.5	2.9	24.8	21.2	1.2	3.1	1.9	1.2	-2.8	0.1
Q2	45.6	42.3	10.3	4.8	3.1	24.2	21.2	1.1	3.2	2.3	0.9	0.1	3.1
Q3	45.4	42.0	9.9	4.7	2.9	24.5	21.1	1.2	3.5	2.5	1.0	-1.7	1.2
Q4	50.5	45.1	10.7	5.8	2.7	25.9	22.3	1.3	5.4	3.2	2.2	-1.0	1.7
2007 Q1	44.5	41.3	9.8	4.5	3.0	24.0	20.6	1.1	3.1	2.0	1.2	-2.1	0.8
Ŏ2	44.8	41.7	10.0	4.8	3.2	23.7	20.7	1.1	3.1	2.3	0.8	1.3	4.5
$\tilde{Q}_3$	44.8	41.4	9.7	4.7	3.0	24.0	20.8	1.2	3.4	2.5	0.9	-0.9	2.0
Q4	50.5	45.2	10.7	5.8	2.8	26.0	22.2	1.4	5.3	3.3	1.9	-0.7	2.1

Source: ECB calculations based on Eurostat and national data.

1) The data refer to the Euro 15. 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.

### 6.5 Quarterly debt and change in debt 1)

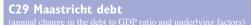
#### 1. Euro area - Maastricht debt by financial instrument<sup>2)</sup>

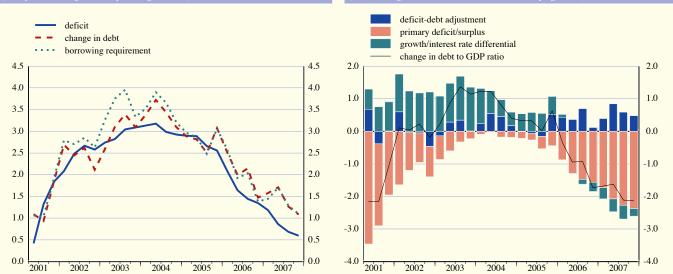
	Total		Financial in	struments	
	1	Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2005 Q1 Q2 Q3 Q4	70.9 71.5 71.1 70.2	2.2 2.3 2.4 2.4	12.0 11.7 11.8 11.8	5.2 5.2 5.2 4.7	51.5 52.3 51.8 51.3
2006 Q1 Q2 Q3 Q4	70.5 70.6 70.1 68.5	2.5 2.5 2.5 2.5 2.5	11.7 11.6 11.6 11.4	4.9 4.9 4.7 4.1	51.4 51.6 51.3 50.5
2007 Q1 Q2 Q3 Q4	68.8 69.0 68.0 66.3	2.4 2.2 2.1 2.2	11.4 11.2 11.0 10.8	4.8 5.1 5.2 4.3	50.2 50.5 49.7 49.1

#### 2. Euro area - deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)				Deficit-de	ebt adjustment				Memo: Borrowing
			Total	Transacti	ons in main fina	ncial assets he	eld by general go	overnment	Valuation effects and other changes	Other	requirement
				Total	Currency and deposits	Loans	Securities	Shares and other equity	in volume		
	1	2	3	4	5	6	7	8	9	10	11
2005 Q1	7.3	-4.8	2.4	2.4	1.3	0.3	0.3	0.5	-0.1	0.1	7.3
Q2	5.4	-1.7	3.7	3.3	2.5	0.0	0.3	0.5	0.1	0.3	5.3
Q3	0.6	-2.5	-1.9	-2.4	-2.3	0.0	0.3	-0.4	0.1	0.4	0.5
Q4	-0.6	-1.4	-2.0	-0.4	0.0	0.0	-0.3	-0.1	0.0	-1.5	-0.6
2006 Q1	4.8	-2.8	2.0	1.3	1.0	0.1	0.7	-0.5	-0.4	1.1	5.2
Q2	3.3	0.1	3.3	3.1	2.5	0.0	0.4	0.2	0.6	-0.5	2.6
Q3	1.2	-1.7	-0.5	-0.8	-0.7	-0.1	0.2	-0.2	0.2	0.1	1.0
Q4	-3.1	-1.0	-4.1	-2.1	-1.2	-0.6	-0.2	-0.2	-0.1	-1.9	-3.0
2007 Q1	5.1	-2.1	3.0	2.0	1.0	0.1	0.6	0.2	-0.1	1.1	5.2
Q2	3.7	1.3	5.0	4.7	4.1	0.0	0.5	0.1	0.1	0.1	3.6
Q3	-0.6	-0.9	-1.5	-1.6	-2.1	0.0	0.4	0.1	0.0	0.1	-0.6
Q4	-3.6	-0.7	-4.3	-2.9	-2.0	-0.1	-0.6	-0.1	-0.1	-1.3	-3.5

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





Source: ECB calculations based on Eurostat and national data.

- The data refer to the Euro 15.
- 2) The stock data in quarter t are expressed as a percentage of the sum of GDP in t and the previous three quarters.

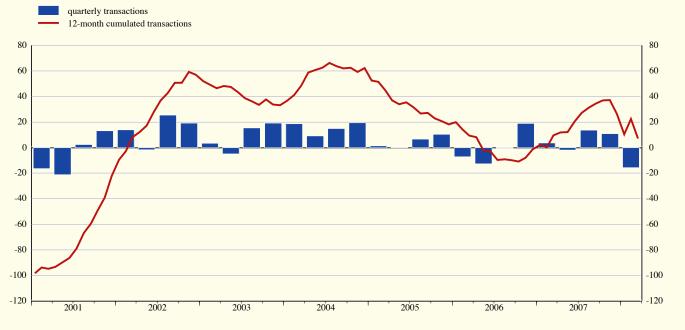


### **EXTERNAL TRANSACTIONS AND POSITIONS**

# 7.1 Summary balance of payments 1) (EUR billions; net transactions)

		Cur	rrent acco	unt		Capital	Net lending/			Financial	account			Errors and
	Total	Goods	Services	Income	Current transfers	account	borrowing to/from rest of the world (columns 1+6)	Total	Direct investment		Financial derivatives	Other investment	Reserve assets	omissions
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2005 2006 2007	18.1 -1.3 26.4	48.3 19.2 55.6	37.3 42.3 51.5	5.4 15.1 3.0	-72.9 -77.9 -83.6	11.4 9.2 14.1	29.6 7.9 40.5	9.2 112.4 102.8	-216.4 -144.7 -94.8	131.4 266.3 253.8	-18.2 2.4 -110.1	94.5 -10.3 59.2	18.0 -1.3 -5.4	-38.8 -120.3 -143.3
2007 Q1 Q2 Q3 Q4 2008 Q1	3.7 -2.0 13.6 11.0 -15.5	8.6 20.1 17.1 9.7 -1.7	9.4 14.0 17.2 10.9 10.5	6.9 -19.4 5.0 10.4 1.3	-21.3 -16.7 -25.6 -20.1 -25.6	4.6 2.1 1.6 5.8 5.5	8.4 0.1 15.2 16.8 -10.0	29.4 49.8 97.5 -74.0 14.0	-14.3 -57.9 -40.9 18.2 -66.3	142.4 90.4 65.1 -44.1 68.6	-15.2 -19.7 -26.8 -48.3 -3.9	-81.9 41.2 104.4 -4.6 21.0	-1.6 -4.2 -4.4 4.8 -5.5	-37.8 -50.0 -112.7 57.2 -4.0
2007 Apr. May June July Aug. Sep. Oct.	-2.5 -13.2 13.7 6.3 1.1 6.2 4.6	4.9 4.0 11.2 7.8 3.6 5.7 6.9	3.7 3.8 6.5 5.6 4.3 7.2 4.1	-3.4 -16.0 0.0 0.7 1.6 2.8 3.6	-7.7 -5.0 -4.0 -7.7 -8.5 -9.4 -10.0	0.6 1.5 0.0 0.9 0.2 0.4 1.3	-1.9 -11.7 13.8 7.2 1.3 6.7 6.0	51.8 6.9 -8.8 48.0 66.5 -17.0	-5.1 -25.9 -26.9 -0.1 0.5 -41.2 29.5	6.5 11.3 72.6 20.6 3.8 40.7	-9.5 -1.9 -8.3 -12.9 -5.2 -8.8 -6.0	61.3 24.1 -44.2 43.4 66.4 -5.3 -28.7	-1.5 -0.7 -1.9 -3.0 1.0 -2.3 0.1	-49.8 4.8 -5.0 -55.3 -67.8 10.3 43.2
Nov. Dec.	3.6 2.7	5.1 -2.3	3.5	1.7 5.1	-6.6 -3.4	1.0 3.5	4.7 6.1	-1.6 -23.2	9.5 -20.8	10.0 -10.1	-31.4 -11.0	10.1 14.0	0.2	-3.0 17.1
2008 Jan. Feb. Mar. Apr.	-17.9 8.1 -5.7 -9.2	-7.3 4.2 1.3 3.0	2.6 4.5 3.3 2.7	-3.2 3.8 0.7 -6.9	-10.1 -4.4 -11.1 -7.9	2.4 2.3 0.8 0.5	-15.5 10.5 -4.9 -8.6	27.3 -24.9 11.6 21.4	-29.9 -20.0 -16.3 -24.2	49.3 19.4 -0.1 0.5	-13.0 1.8 7.3 -14.2	27.7 -30.7 24.0 62.7	-6.8 4.7 -3.3 -3.4	-11.7 14.4 -6.7 -12.8
							nth cumulated							
2008 Apr.	0.5	43.3	51.5	-6.2	-88.2	15.0	15.5	57.0	-165.9	174.0	-103.4	163.4	-11.0	-72.5

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



Source: ECB.

1) The sign convention is explained in the general notes.

External transactions and positions

# 7.2 Current and capital accounts (EUR billions; transactions)

#### 1. Summary current and capital accounts

						Curre	nt accoun	t						Capital a	eccount
		Total		Goo	ods	Servi	ces	Incon	ne		Current t	ransfers			
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Cre	edit	De	bit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	Workers remit- tances 11	12	Workers remit- tances 13	14	15
2005 2006 2007	2,090.7 2,401.1 2,639.4	2,072.6 2,402.4 2,613.0	18.1 -1.3 26.4	1,220.3 1,391.2 1,503.6	1,172.0 1,372.0 1,448.1	405.9 437.0 494.8	368.5 394.8 443.3	378.7 483.7 550.8	373.3 468.6 547.8	85.8 89.2 90.2	5.3 5.4 6.1	158.8 167.0 173.8	14.6 16.9 20.1	24.3 23.7 25.7	12.9 14.5 11.6
2007 Q1 Q2 Q3 Q4 2008 Q1	627.5 656.0 665.5 690.3 668.9	623.7 658.0 651.9 679.4 684.4	3.7 -2.0 13.6 11.0 -15.5	361.5 373.6 376.1 392.4 386.6	352.8 353.5 359.0 382.7 388.3	111.4 120.2 135.4 127.8 114.0	101.9 106.2 118.2 116.9 103.5	127.6 142.7 137.6 142.9 140.3	120.6 162.0 132.6 132.6 139.0	27.0 19.5 16.4 27.1 28.0	1.4 1.6 1.7 1.4	48.3 36.2 42.1 47.2 53.6	4.6 4.9 5.2 5.3	7.7 4.6 4.3 9.1 8.4	3.1 2.5 2.8 3.2 2.8
2008 Feb. Mar. Apr.	231.7 223.8 235.3	223.5 229.6 244.4	8.1 -5.7 -9.2	131.8 130.2 137.8	127.5 128.8 134.9	37.8 38.7 40.0	33.3 35.4 37.3	46.1 49.9 49.9	42.3 49.2 56.9	16.0 5.0 7.5	•	20.3 16.2 15.4		3.0 2.0 1.5	0.7 1.2 1.0
						Seaso	nally adju	sted							
2007 Q1 Q2 Q3 Q4 2008 Q1	639.8 652.2 675.5 669.8 684.0	630.4 642.0 665.7 673.6 697.6	9.3 10.1 9.8 -3.8 -13.6	366.3 372.7 384.4 380.8 392.8	351.6 354.5 368.7 374.7 389.4	120.7 121.1 125.7 127.2 124.0	106.7 110.1 111.6 114.6 108.8	130.6 136.1 144.0 140.3 144.6	130.3 136.9 141.7 138.5 151.5	22.1 22.3 21.5 21.6 22.7		41.8 40.5 43.8 45.9 47.9			
2007 Nov. Dec.	224.3 220.3	223.4 227.5	0.9 -7.2	128.0 124.4	124.2 127.8	42.9 42.6	38.0 38.9	47.5 44.5	47.4 44.6	5.9 8.8	:	13.7 16.2			•
2008 Jan. Feb. Mar. Apr.	225.6 236.8 221.7 234.8	233.6 229.2 234.8 235.1	-7.9 7.5 -13.2 -0.3	131.4 133.7 127.7 135.6	129.6 129.2 130.6 129.7	40.8 41.7 41.5 41.6	36.0 35.8 37.1 38.2	47.6 50.2 46.8 47.8	51.7 49.1 50.6 49.8	5.8 11.1 5.7 9.9		16.2 15.1 16.5 17.4		:	:

### C31 B.o.p. goods

### C32 B.o.p. services



# 7.2 Current and capital accounts (EUR billions)

#### 2. Income account

(transactions)

	Comper of emp								Investmen	nt income						
	Credit	Debit	Tot	al			Direct in	nvestment				Portfolio i	nvestment		Other inve	stment
			Credit	Debit		Equ	ity		Del	ot	Equ	ity	Deb	ot	Credit	Debit
					Cı	edit	D	ebit	Credit	Debit	Credit	Debit	Credit	Debit		
						Reinv.		Reinv.								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2005	15.7	9.3	363.1	364.0	140.2	38.5	97.6	-14.3	15.4	14.4	31.5	69.4	82.2	81.1	93.8	101.5
2006	16.5	10.0	467.2	458.6	171.4	36.8	106.0	39.0	19.7	17.3	39.1	99.2	102.2	85.6	134.7	150.5
2007	17.3	10.6	533.5	537.2	168.5	53.2	100.6	18.9	24.6	20.7	45.1	115.5	118.0	106.1	177.3	194.4
2006 Q4	4.3	2.6	127.6	118.7	47.8	10.3	28.4	8.8	5.5	5.0	8.2	19.0	28.2	23.1	37.9	43.2
2007 Q1	4.2	2.0	123.4	118.6	39.7	18.4	27.0	6.5	5.5	4.8	9.8	18.3	27.9	24.1	40.4	44.4
Q2	4.2	2.6	138.5	159.4	44.4	6.2	27.7	1.0	6.3	5.4	15.2	52.5	28.9	26.4	43.7	47.5
Q3	4.3	3.2	133.3	129.4	40.4	16.4	23.5	10.7	5.9	5.0	10.9	23.9	30.4	26.7	45.7	50.2
Q4	4.6	2.7	138.3	129.8	44.0	12.2	22.4	0.7	6.9	5.5	9.0	20.8	30.8	28.9	47.5	52.2

# **3. Geographical breakdown** (cumulated transactions)

	Total	Eu	ropean U	Jnion 27 (	outside th	ie euro are	a)	Brazil	Canada	China	India	Japan	Russia	Switzer- land	United States	Other
		Total	Den-	Sweden	United	Other EU	EU							10110	States	
			mark		Kingdom	countries	insti-									
2007 Q1 to							tutions									
2007 Q4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
								Cı	edits							
Current account	2,639.4	1,005.3	54.6	84.9	531.4	275.7	58.8	32.3	34.7	76.2	30.6	57.0	87.9	171.6	410.1	733.6
Goods	1,503.6	545.2	34.4	55.0	236.7	219.0	0.0	18.3	18.3	60.1	22.9	34.0	67.3	84.8	194.9	457.7
Services	494.8	174.8	9.8	13.4	117.9	28.1	5.7	5.2	7.0	13.1	5.9	10.8	11.2	48.0	84.0	134.8
Income	550.8	219.4	9.7	15.2	162.4	25.7	6.5	8.7	8.7	2.8	1.8	11.7	9.2	32.8	123.2	132.5
investment income	533.5	213.5	9.6	15.1	160.4	25.5	2.9	8.6	8.6	2.7	1.8	11.7	9.2	26.3	121.5	129.7
Current transfers	90.2	65.9	0.7	1.3	14.4	2.8	46.5	0.2	0.7	0.2	0.0	0.5	0.2	6.0	8.0	8.5
Capital account	25.7	22.3	0.0	0.1	1.1	0.1	20.9	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	2.2
								Г	Debits							
Current account	2,613.0	865.2	44.1	80.5	427.1	214.2	99.2	-	29.2	-	-	95.0	-	166.6	361.2	-
Goods	1,448.1	423.8	28.1	50.5	174.1	171.2	0.0	24.9	12.9	164.4	18.4	56.1	90.2	74.4	135.2	447.7
Services	443.3	142.2	9.5	11.2	92.1	29.2	0.2	4.2	6.8	10.4	3.9	8.1	8.2	35.4	91.9	132.2
Income	547.8	190.1	5.9	17.4	149.7	9.7	7.4	-	7.5	-	-	30.4	-	51.1	126.7	-
investment income	537.2	183.7	5.8	17.3	148.3	4.9	7.4	-	7.4	-	-	30.3	-	50.6	125.6	-
Current transfers	173.8	109.1	0.7	1.5	11.1	4.2	91.6	1.5	2.0	2.4	0.7	0.4	0.5	5.7	7.4	44.1
Capital account	11.6	1.9	0.0	0.1	1.0	0.3	0.5	0.1	0.1	0.1	0.2	0.1	0.1	0.6	1.2	7.3
									Net							
Current account	26.4	140.2	10.5	4.4	104.3	61.4	-40.4	-	5.5	-	-	-38.0	-	4.9	49.0	-
Goods	55.6	121.4	6.3	4.6	62.6	47.9	0.0	-6.7	5.4	-104.3	4.5	-22.1	-22.9	10.5	59.7	10.1
Services	51.5	32.6	0.4	2.2	25.7	-1.1	5.5	1.0	0.2	2.7	2.0	2.7	3.0	12.6	-7.8	2.6
Income	3.0	29.3	3.8	-2.2	12.6	16.0	-0.9	-	1.2	-	-	-18.6	-	-18.3	-3.5	-
investment income	-3.7	29.7	3.7	-2.2	12.1	20.6	-4.5	-	1.2	-	-	-18.6	-	-24.4	-4.1	-
Current transfers	-83.6	-43.2	0.0	-0.1	3.3	-1.4	-45.0	-1.3	-1.3	-2.1	-0.6	0.0	-0.3	0.2	0.6	-35.6
Capital account	14.1	20.4	0.0	0.0	0.1	-0.1	20.5	-0.1	-0.1	0.0	-0.2	-0.1	0.0	-0.2	-0.4	-5.2

External transactions and positions

# 7.3 Financial account (EUR billions and annual growth rate

#### 1. Summary financial account

		Total 1)		as	Total a % of GD	P	Dir invest		Porti invest		Net financial derivatives	Otl invest		Reserve assets
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities	derivatives	Assets	Liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
					utstanding a			investment j	position)					
2003 2004	7,817.7 8,609.8	8,608.3 9,497.9	-790.7 -888.1	104.0 110.1	114.5 121.4	-10.5 -11.4	2,169.3 2,314.6	2,084.2 2,242.0	2,655.4 3,042.9	3,585.9 4,076.4	-19.8 -37.3	2,706.1 3,008.7	2,938.3 3,179.5	306.7 281.0
2005 2006	10,737.9 12,195.1	11,575.7 13,226.4	-837.8 -1,031.3	132.5 143.6	142.8 155.7	-10.3 -12.1	2,796.4 3,050.2	2,444.5 2,654.1	3,887.8 4,459.3	5,105.7 5,960.7	-46.2 -43.6	3,779.7 4,403.4	4,025.5 4,611.5	320.1 325.8
2007 O3	13,646.2	14,948.0	-1,301.8	154.8	169.6	-14.8	3,385.9	2,896.4	4,785.0	6,707.8	-0.5	5,135.2	5,343.9	340.5
<u>Q</u> 4	13,709.3	15,052.9	-1,343.6	153.9	168.9	-15.1	3,428.3	2,987.8	4,731.3	6,705.1	45.1	5,157.3	5,360.1	347.3
2003	509.9	593.8	-83.9	6.8	7.9	hanges to o	162.6	257.7	363.5	341.4	-7.2	50.4	-5.2	-59.4
2004	792.2	889.6	-97.4	10.1	11.4	-1.2	145.3	157.8	387.5	490.6	-17.6	302.6	241.2	-25.7
2005 2006	2,128.0 1,457.3	2,077.8 1,650.7	50.3 -193.5	26.2 17.2	25.6 19.4	0.6 -2.3	481.8 253.8	202.5 209.6	844.9 571.5	1,029.3 855.1	-8.8 2.6	771.1 623.7	846.0 586.1	39.1 5.7
2007 Q3	233.7	366.0	-132.4	10.6	16.6	-6.0	68.9	79.3	-21.1	49.3	11.1	159.7	237.5	15.2
Q4	63.1	104.9	-41.8	2.7	4.5	-1.8	42.3	91.4	-53.7	-2.7	45.6	22.1	16.2	6.8
2004	812.4	798.3	14.2	10.4	10.2	0.2	161.5	93.9	345.6	416.5	8.3	309.4	287.8	-12.5
2005	1,326.1	1,335.3 1,710.8	-9.2	16.4	16.5	-0.1	364.7 346.0	148.3	412.6	544.0 802.2	18.2	548.6	643.0	-18.0
2006 2007	1,598.4 1,807.3	1,710.8	-112.4 -102.8	18.8 20.3	20.1 21.4	-1.3 -1.2	401.8	201.3 307.0	535.9 422.6	676.4	-2.4 110.1	717.7 867.5	707.3 926.6	1.3 5.4
2007 Q3	390.7	488.3	-97.5	17.7	22.2	-4.4	115.8	75.0	33.8	99.0	26.8	209.9	314.3	4.4
Q4 2008 Q1	310.9 430.6	236.9 444.6	74.0 -14.0	13.4 19.2	10.2 19.8	3.2 -0.6	78.3 100.6	96.6 34.3	94.6 45.5	50.4 114.1	48.3 3.9	94.5 275.2	89.9 296.2	-4.8 5.5
2007 Dec.	-97.2	-120.5	23.2				24.8	4.0	-22.1	-32.2	11.0	-106.3	-92.3	-4.6
2008 Jan. Feb.	282.0 135.4	309.3 110.5	-27.3 24.9				46.0	16.0	14.9	64.2 47.4	13.0	201.4	229.0 49.9	6.8 -4.7
Mar.	13.3	24.9	-11.6				33.2 21.4	13.2 5.1	28.0 2.6	2.5	-1.8 -7.3	80.6 -6.7	17.3	3.3
Apr.	83.2	104.6	-21.4		•		-18.5	-42.7	30.2	30.7	14.2	53.9	116.6	3.4
2004	-20.2	91.3	-111.6	-0.3	1.2	-1.4	er changes -16.2	63.9	41.9	74.1	-25.9	-6.8	-46.7	-13.3
2005	802.0	742.5	59.5	9.9	9.2	0.7	117.1	54.3	432.3	485.2	-27.0	222.5	203.0	57.1
2006 2007	-141.1 -293.1	-60.0 -83.5	-81.1 -209.5	-1.7 -3.3	-0.7 -0.9	-1.0 -2.4	-92.2 -23.7	8.3 26.6	35.6 -150.6	52.9 67.9	5.0 -21.4	-94.0 -113.5	-121.3 -178.1	4.4 16.1
2007 Q3	-157.1	-122.2	-34.9	-7.2	-5.5	-1.6	-47.0	4.3	-55.0	-49.7	-15.7	-50.2	-76.8	10.8
Q4	-247.7	-131.9	-115.8	-10.6	-5.7	-4.9 hanges due	-36.0	-5.2 e rate chanș	-148.3	-53.1	-2.7	-72.4	-73.7	11.7
2003	-433.3	-179.7	-253.6	-5.8	-2.4	-3.4	-101.9	26.9	-103.8	-49.8		-195.5	-156.9	-32.1
2004	-182.4	-138.3	-44.0	-2.3	-1.8	-0.6	-34.5	8.2	-67.5	-92.0		-70.9	-54.5	-9.4
2005 2006	371.9 -292.6	221.6 -140.6	150.3 -151.9	4.6 -3.4	2.7 -1.7	1.9 -1.8	83.2 -66.0	-21.0 14.5	120.7 -85.0	125.3 -51.0		149.4 -126.4	117.2 -104.0	18.7 -15.2
					Otl	er changes	due to pric	e changes						
2003 2004	218.9 119.1	158.4 243.0	60.5 -123.9	2.9	2.1 3.1	0.8 -1.6	74.1 37.7	32.5 28.2	165.4 110.4	125.8 214.8	-21.0 -25.9	-		0.4 -3.1
2005	285.2	351.1	-65.9	1.5 3.5 3.7	4.3	-0.8	73.5	55.8	196.5	295.3	-27.0	•	•	42.2
2006	317.1	272.2	44.9	3.7	3.2	0.5	74.8	46.1	220.8	226.0	5.0			16.4
2003	59.6	-34.3	93.9	0.8	-0.5	1.2	43.5	adjustments 61.7	20.5	-72.0		-4.5	-24.0	0.2
2004	43.0	-13.4	56.4	0.6	-0.2	0.7	-19.3	27.5	-1.0	-48.7		64.1	7.8	-0.7
2005 2006	144.9 -165.7	169.8 -191.6	-24.9 25.9	1.8 -2.0	2.1 -2.3	-0.3 0.3	-39.6 -101.0	19.4 -52.3	115.1 -100.3	64.6 -122.1		73.1 32.4	85.8 -17.2	-3.7 3.3
						wth rates of	outstandin	g amounts						
2003 2004	9.3 10.3	8.2 9.2	-				7.5 7.4	7.4 4.4	12.6 12.8	10.5 11.4		9.5 11.3	6.1 9.7	-7.9 -4.1
2005	14.9	13.7	-	:			15.4	6.6	13.0	12.8		17.7	19.7	-5.9
2006	15.1	14.9	-				12.6	8.3	13.9	15.8		19.3	17.7	0.3
2007 Q3 Q4	17.0 14.8	16.7 14.4	-				13.4 13.1	9.0 11.5	11.1 9.5	15.6 11.3		25.1 19.7	22.8 20.2	3.9 1.7
2008 Q1 Source: FCR	12.6	12.2					12.9	9.5	7.1	8.0		16.4	19.4	2.8

Source: ECB.

1) Net financial derivatives are included in assets.

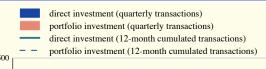
# 7.3 Financial account (EUR billions and annual)

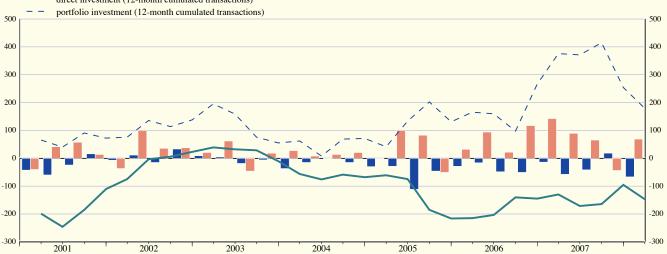
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period

#### 2. Direct investment

			By resid	ent units a	broad				By	y non-resid	ent units in	the euro ar	ea	
	Total		ity capital vested earn	ings		ther capital ter-company	loans)	Total		quity capita invested ear			Other capita nter-compar	
		Total	MFIs	Non- MFIs	Total	MFIs	Non- MFIs	-	Total	into MFIs	into Non-MFIs	Total	to MFIs	to Non-MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		•			Oustanding	amounts (in	ternational	investment p	position)					
2005 2006	2,796.4 3,050.2	2,278.8 2,484.8	176.0 203.3	2,102.8 2,281.6	517.6 565.3	4.0 3.7	513.5 561.7	2,444.5 2,654.1	1,839.6 2,037.8	56.2 61.7	1,783.4 1,976.0	605.0 616.4	8.5 7.9	596.4 608.4
2007 Q3 Q4	3,385.9 3,428.3	2,735.1 2,773.0	239.3 235.0	2,495.8 2,538.1	650.9 655.2	7.8 8.4	643.1 646.8	2,896.4 2,987.8	2,204.9 2,252.9	60.5 61.7	2,144.4 2,191.2	691.5 735.0	12.8 13.7	678.6 721.2
						Tr	ansactions							
2006 2007	346.0 401.8	271.5 310.1	38.6 26.0	232.9 284.1	74.5 91.7	0.0 -0.5	74.5 92.2	201.3 307.0	171.7 210.3	5.8 1.4	165.9 208.9	29.5 96.7	0.1 1.3	29.5 95.4
2007 Q3 Q4 2008 Q1	115.8 78.3 100.6	85.9 65.4 66.4	18.0 -6.9 10.7	68.0 72.2 55.6	29.9 12.9 34.2	-0.6 0.6 2.3	30.5 12.3 31.9	75.0 96.6 34.3	51.7 53.6 17.5	0.4 1.4 -0.1	51.3 52.2 17.5	23.3 43.0 16.9	0.3 0.7 -0.1	22.9 42.3 17.0
2007 Dec.	24.8	21.4	0.8	20.6	3.4	1.6	1.8	4.0	5.8	1.0	4.8	-1.8	0.2	-2.0
2008 Jan. Feb. Mar. Apr.	46.0 33.2 21.4 -18.5	33.3 16.8 16.3 -24.5	6.9 3.8 0.0 4.4	26.4 13.0 16.2 -28.9	12.6 16.4 5.2 6.0	0.3 -0.5 2.6 -0.1	12.4 16.9 2.6 6.1	16.0 13.2 5.1 -42.7	6.9 1.7 8.8 -32.4	0.3 0.4 -0.8 0.5	6.6 1.4 9.6 -32.9	9.1 11.4 -3.7 -10.3	0.9 0.2 -1.2 0.0	8.3 11.2 -2.5 -10.3
						Gr	owth rates							
2005 2006	15.4 12.6	15.8 12.1	13.4 23.2	16.0 11.2	13.4 14.7	-1.1 -2.2	13.5 14.8	6.6 8.3	7.0 9.3	1.7 10.4	7.2 9.3	5.2 5.0	-4.4 -0.2	5.3 5.0
2007 Q3 Q4 2008 Q1	13.4 13.1 12.9	12.2 12.4 12.2	24.2 12.4 13.9	11.2 12.4 12.0	18.7 15.9 16.0	-38.4 -43.5 68.2	18.9 16.2 15.5	9.0 11.5 9.5	8.7 10.3 8.5	2.1 2.3 0.7	8.9 10.6 8.7	10.1 15.4 12.7	1.7 8.1 15.8	10.2 15.4 12.7

## C33 B.o.p. net direct and portfolio investment





External transactions and positions

# 7.3 Financial account (EUR billions and annual growth ra

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

#### 3. Portfolio investment assets

	Total			Equity	y						Debt inst	ruments				
								В	onds and	notes			Mone	y market ii	nstruments	;
		Total	M	FIs	Non	-MFIs	Total	MF	Is	Non	-MFIs	Total	M	FIs	Non	-MFIs
				Euro- system		General government			Euro- system		General government			Euro- system		General government
	1	2	3	4	5	4 utstanding an	7 nounts (int	ernationa	9 1 investm	10 ent positio	n)	12	13	14	15	16
2005 2006	3,887.8 4,459.3	1,726.5 2,014.1	102.5 122.0	3.0 2.8	1,624.0 1,892.1	27.2 37.0	1,845.3 2,067.8	710.9 846.3	9.0 11.3	1,134.4 1,221.5	11.6 13.4	316.0 377.4	263.0 310.4	0.8 8.7	53.0 67.0	0.4 0.3
2007 Q3 Q4	4,785.0 4,731.3	2,120.5 2,049.6	139.7 144.4	2.8 2.8	1,980.9 1,905.1	42.6 41.8	2,263.6 2,278.0	935.9 929.4	12.0 11.7	1,327.7 1,348.6	15.3 15.5	400.9 403.7	315.1 323.5	8.1 8.2	85.8 80.2	9.6 0.4
							Tra	nsactions								
2006 2007	535.9 422.6	153.0 46.7	18.3 28.8	0.0 0.0	134.7 17.9	6.1 5.3	314.5 326.7	173.2 149.6	2.6 1.8	141.3 177.1	1.1 2.3	68.4 49.2	56.2 40.1	8.0 0.2	12.2 9.1	-0.1 0.3
2007 Q3 Q4 2008 Q1	33.8 94.6 45.5	7.5 11.4 -43.4	-8.3 13.4 -39.7	0.0 0.0 0.1	15.8 -1.9 -3.7	2.1 0.9	42.3 77.1 14.5	12.2 20.1 18.0	0.3 0.3 -1.1	30.1 57.1 -3.5	0.7 0.3	-16.0 6.0 74.4	-14.2 18.3 65.0	0.0 0.8 -0.1	-1.7 -12.3 9.4	-0.2 -9.1
2007 Dec.	-22.1	-8.0	1.5	0.0	-9.6		-3.8	-27.2	-0.1	23.5		-10.3	-7.1	0.9	-3.3	
2008 Jan. Feb. Mar. Apr.	14.9 28.0 2.6 30.2	-19.2 -7.4 -16.8 1.2	-10.0 -2.9 -26.8 1.1	0.0 0.0 0.1 -0.1	-9.2 -4.5 10.0 0.1		-3.4 21.6 -3.7 26.8	9.7 12.0 -3.7 18.4	-0.3 -0.2 -0.6 0.4	-13.1 9.6 0.0 8.3		37.5 13.9 23.1 2.2	37.9 14.6 12.4 1.6	0.0 0.0 -0.1 0.3	-0.4 -0.7 10.6 0.6	: : :
							Gro	owth rates								
2005 2006	13.0 13.9	9.8 8.9	18.2 18.3	5.9 0.9	9.3 8.3	19.7 21.7	17.0 17.4	20.9 24.9	9.7 29.7	14.7 12.7	8.0 10.6	5.9 21.9	6.2 22.3	-6.6 1,022.8	3.5 22.1	-8.3 -20.8
2007 Q3 Q4 2008 Q1	11.1 9.5 7.1	3.4 2.3 -0.7	29.1 23.7 -22.3	0.1 0.4 5.5	1.9 0.9 0.8	17.3 13.8	17.3 16.0 11.7	21.6 17.9 13.3	53.0 17.0 -1.2	14.3 14.6 10.6	24.0 16.9	19.0 13.1 22.5	14.4 13.2 26.8	11.3 1.9 8.9	40.7 13.6 6.1	157.3 70.1

#### 4. Portfolio investment liabilities

	Total		Equity Debt instruments									
						Bonds ar	nd notes		M	oney market	instrument	s
		Total	MFIs	Non-MFIs	Total	MFIs	Non	-MFIs	Total	MFIs	Non	-MFIs
								General government				General government
	1	2	3	4	5	6	7	8	9	10	11	12
				Outstanding	amounts (inte	rnational inve	estment posi	tion)				
2005 2006	5,105.7 5,960.7	2,433.7 2,931.4	533.5 671.0	1,900.1 2,260.4	2,365.6 2,732.3	723.0 845.3	1,642.6 1,887.0	1,175.6 1,253.7	306.4 297.0	108.5 127.6	198.0 169.4	158.5 138.6
2007 Q3 Q4	6,707.8 6,705.1	3,300.5 3,232.0	783.1 743.7	2,519.1 2,494.0	3,039.9 3,129.7	1,047.5 1,061.4	1,992.4 2,067.2	1,285.9 1,303.7	367.4 343.4	148.7 180.1	218.8 164.6	193.8 147.0
					Tran	sactions						
2006 2007	802.2 676.4	302.4 212.0	95.1 55.4	207.3 156.4	498.1 407.1	212.9 178.8	285.1 226.7	149.1 135.3	1.6 57.3	28.2 52.3	-26.5 5.7	-20.1 13.8
2007 Q3 Q4 2008 Q1	99.0 50.4 114.1	33.3 -6.8 60.0	21.7 -37.5 72.8	11.8 30.9 -12.8	50.1 78.9 39.1	28.4 20.5 22.5	21.7 56.8 16.6	24.8 28.5	15.6 -21.7 15.0	4.1 26.3 -3.2	11.5 -47.3 18.2	12.4 -43.5
2007 Dec.	-32.2	-10.0			-3.2				-19.0			
2008 Jan. Feb. Mar. Apr.	64.2 47.4 2.5 30.7	36.5 28.0 -4.5 -19.7	:	:	24.9 18.7 -4.6 28.7	:	:	: : :	2.8 0.7 11.5 21.7	:		:
					Grov	vth rates						
2005 2006	12.8 15.8	13.0 12.3	17.7	10.8	11.2 21.8	31.4	17.7	13.1	23.6 0.5	26.7	-13.1	-12.5
2007 Q3 Q4 2008 Q1	15.6 11.3 8.0	10.6 7.1 5.2	17.4 8.2 9.7	8.6 6.8 3.8	20.3 15.0 10.2	31.9 21.3 14.0	15.3 12.1 8.3	13.3 11.0	24.4 19.2 15.4	39.8 40.8 31.5	16.0 3.7 4.9	23.6 10.2
Source: ECB.												

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

#### 5. Other investment assets

	Total		Eurosystem		(exclu	MFIs ding Eurosy	stem)		Gene govern				Other se	ectors	
		Total	Loans/ currency and	Other assets	Total	Loans/ currency and	Other assets		Trade credits	Loans/c and de			Trade credits		currency
		2	deposits	4		deposits	7			10	Currency and deposits	12	12		Currency and deposits
	I	2	3	4	ع Outstanding	6 g amounts (in	- 1	investment	position)	10	11	12	13	14	15
2005 2006	3,779.7 4,403.4	7.9 11.3	7.2 10.6	0.7 0.7	2,522.1 2,946.2	2,466.0 2,887.1	56.2 59.1	127.6 117.1	19.7 14.2	60.8 57.8	11.8 15.4	1,122.1 1,328.7	188.9 187.2	802.7 990.3	347.9 377.7
2007 Q3 Q4	5,135.2 5,157.3	21.3 23.3	20.9 22.7	0.5 0.7	3,359.1 3,355.2	3,291.7 3,283.4	67.4 71.8	108.5 108.1	13.6 13.4	48.2 48.3	13.3 13.2	1,646.3 1,670.7		1,317.0 1,345.2	446.7 422.8
						Tr	ansactions								
2006 2007	717.7 867.5	3.3 10.6	3.3 10.6	$0.0 \\ 0.0$	521.4 560.7	517.2 549.3	4.2 11.4	-2.0 -5.9	0.0 -0.3	-2.7 -7.2	3.1 -2.0	194.9 302.0	5.2 10.5	176.2 278.2	25.0 16.3
2007 Q3 Q4 2008 Q1	209.9 94.5 275.2	1.8 0.7 5.2	1.8 0.7	0.0 0.0	75.9 57.5 211.3	78.7 55.8	-2.8 1.8	-18.2 2.3 -4.0	-0.1 -0.2	-18.4 1.7	-14.1 -0.1 -1.0	150.4 33.9 62.7	3.1 3.6	147.1 31.4	5.1 -21.2 15.0
2007 Dec.	-106.3	0.3			-98.2			3.3			0.1	-11.7			-14.6
2008 Jan. Feb. Mar. Apr.	201.4 80.6 -6.7 53.9	2.3 0.6 2.3 2.2			186.2 61.9 -36.8 50.4			-3.6 1.0 -1.4 1.6			-3.8 4.1 -1.3 1.4	16.5 17.0 29.2 -0.4			10.6 -5.3 9.7 -16.2
						Gr	owth rates								
2005 2006	17.7 19.3	21.0 41.9	23.1 45.7	3.3 3.1	19.3 21.1	19.7 21.3	6.0 7.6	-3.5 -1.6	0.2 0.0	-9.1 -4.5	12.7 26.1	17.1 17.5	5.2 2.8	20.3 22.3	1.3 7.0
2007 Q3 Q4 2008 Q1	25.1 19.7 16.4	111.9 94.0 70.3	119.5 100.3	3.1 -4.1 -	26.0 19.1 15.2	26.2 19.1	15.1 18.9	-2.7 -5.1 -2.3	-0.8 -2.2 -	-7.6 -12.5 -	11.4 -13.3 20.9	24.7 22.3 19.8	4.7 5.5	30.4 26.9	7.9 4.7 -0.5

#### 6. Other investment liabilities

	Total		Eurosyste	m	(exclu	MFIs iding Euros	system)			neral nment			Other s	sectors	
		Total	Loans/ currency and deposits	Other liabilities	Total	Loans/ currency and deposits	Other liabilities	Total	Trade credits	Loans	Other liabilities	Total	Trade credits	Loans	Other liabilities
	1	2	3	4		6	7	8	9	10	11	12	13	14	15
					Out		ounts (inter								
2005 2006	4,025.5 4,611.5	82.4 100.2	82.2 100.0	0.2 0.2	3,114.2 3,487.0	3,061.8 3,433.1	52.4 53.9	44.9 48.3	0.0 0.0	41.1 44.4	3.8 3.8	784.0 976.1	133.1 144.5	581.0 744.1	70.0 87.5
2007 Q3 Q4	5,343.9 5,360.1	114.2 138.2	113.9 137.9	0.3 0.2	3,958.6 3,944.2	3,896.1 3,875.3	62.6 68.9	55.3 54.4	0.0	49.1 49.1	6.1 5.3	1,215.7 1,223.3	155.6 158.7	938.0 954.0	122.1 110.7
							Trans	actions							
2006 2007	707.3 926.6	18.6 40.1	18.5 40.1	0.0 0.0	496.1 640.9	492.8 635.7	3.2 5.2	2.0 2.9	0.0 0.0	2.1 3.1	-0.1 -0.1	190.8 242.7	11.7 11.6	167.2 247.7	11.9 -16.5
2007 Q3 Q4 2008 Q1	314.3 89.9 296.2	-1.3 25.0 9.1	-1.3 25.1	0.0 -0.1	139.1 52.5 271.9	138.4 52.2	0.8 0.3	3.8 -1.7 0.7	0.0 0.0	3.1 -0.7	0.7 -0.9	172.6 14.0 14.5	3.1 4.4	174.7 27.0	-5.2 -17.3
2007 Dec.	-92.3	15.8			-100.7			-6.2				-1.1			
2008 Jan. Feb. Mar. Apr.	229.0 49.9 17.3 116.6	6.9 -12.8 15.0 9.1	: : :		200.3 101.3 -29.7 117.0		: : :	4.0 -3.2 -0.2 -0.2	:			17.8 -35.5 32.2 -9.4	: : :	:	:
							Grow	th rates							
2005 2006	19.7 17.7	8.9 22.6	8.9 22.6	4.3 6.6	19.2 16.2	19.5 16.3	4.3 6.1	-4.6 4.2	10.3 -24.1	-4.4 5.0	-7.2 -3.2	24.9 24.0	11.5 8.7	30.2 28.3	13.1 16.8
2007 Q3 Q4 2008 Q1	22.8 20.2 19.4	20.6 40.2 41.8	20.6 40.3	8.4 -3.3	20.3 18.5 17.6	20.5 18.6	10.5 9.6	3.4 5.8 5.7	17.8 42.3	2.1 6.8	9.9 -8.2 -	33.2 24.7 24.9	7.4 7.8 -	42.3 33.3	5.1 -13.1

External transactionsand positions

7.3 Financial account

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

#### 7. Reserve assets

							Reserve	assets							I	Лето
															Assets	Liabilities
	Total	Monet	ary gold	Special drawing	Reserve position				Foreign	exchang	ge .			Other claims	Claims on euro	Predetermined short-term
		In EUR billions	In fine troy ounces	rights	in the IMF	Total	Currency deposi			Sec	urities		Financial derivatives	Ciamis	area residents in	net drains in
			(millions)				With monetary authorities and the BIS	With banks	Total	Equity	and	Money market instruments			foreign currency	foreign currency
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
					Ou	tstandin	ig amounts (in	ternation	al invest	ment posi	ition)					
2004 2005	281.0 320.1	125.4	389.998	3.9 4.3	18.6 10.6	133.0 141.7	12.5 12.6	25.5 21.4	94.7 107.9	0.5	56.6 69.4	37.6 38.0	0.4	0.0	19.1 25.6	-12.8 -17.9
2005	325.8	163.4 176.3	375.861 365.213	4.5	5.2	139.7	6.3	22.5	1107.9	0.6 0.5	79.3	30.8	-0.2 0.3	0.0	23.6	-17.9 -21.5
2007 Q2 Q3 Q4	325.3 340.5 347.3	172.8 187.0 201.0	358.768 356.925 353.688	4.7 4.7 4.6	4.3 3.8 3.6	143.5 144.9 138.2	5.7 7.5 7.2	27.7 27.5 22.0	110.1 109.6 108.5	0.2 0.3 0.4	85.4 85.8 87.7	24.5 23.5 20.4	0.0 0.4 0.5	0.0 0.0 0.0	26.6 26.2 44.1	-24.6 -26.8 -38.5
2008 Mar. Apr. May	356.3 348.7 349.2	208.4 197.8 201.4	353.060 352.868 352.697	4.3 4.3 4.3	3.4 3.4	140.1 143.1 139.3	6.6 8.0 6.7	26.8 25.4 23.8	105.9 109.8 109.0	-	-	-	0.9 0.0 -0.1	0.1 0.0 0.0	36.7 44.7 59.8	-37.3 -48.1 -60.0
							Tr	ansaction	s							
2005 2006 2007	-18.0 1.3 5.4	-3.9 -4.2 -2.9		0.2 0.5 0.3	-8.6 -5.2 -0.8	-5.7 10.2 8.8	-0.2 -6.1 2.8	-7.2 2.7 1.0	1.6 13.7 5.0	0.0 0.0 0.0	4.8 19.4 14.2	-3.2 -5.7 -9.1	0.0 0.0 0.0	0.0 0.0 0.0	-	
2007 Q3 Q4 2008 Q1	4.4 -4.8 5.5	-0.3 -1.5	-	0.1 0.1	-0.3 -0.2	4.9 -3.2	2.0	0.9 -5.2	2.1 0.5	0.1 0.1	2.3 3.9	-0.2 -3.5	0.0 0.1	0.0	-	-
	2.0						Gr	owth rate	S							
2004 2005 2006	-4.1 -5.9 0.3	-0.9 -2.8 -2.4	-	-10.4 4.4 11.6	-17.0 -44.6 -49.0	-4.6 -4.1 7.7	30.2 -2.0 -48.4	-10.7 -25.3 12.7	-6.1 1.5 13.4	-46.6 2.2 0.0	-22.4 7.1 29.2	45.1 -7.9 -15.4	-55.8 20.5 -73.2	-	-	-
2007 Q3 Q4 2008 Q1	3.9 1.7 2.8	-1.4 -1.6		10.7	-32.6 -17.5	12.5 6.3	74.5 43.9	15.1 3.4	9.2 4.7	-29.8 1.1	18.8 18.1	-14.6 -30.3	-86.9 -59.1	-	-	

7.3 Financial account
(EUR billions; outstanding amounts at end of period, transactions during period)

#### 8. Geographical breakdown

	Total	1	European Union 27 (outside the euro area					Canada	China	Japan	Switzer- land	United States	Offshore financial		Other countries
		Total	Denmark	Sweden	United	Other EU	EU						centres	tions	
					Kingdom	countries	institutions								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2006					(	Outstanding	amounts (in	nternation	al invest	ment pos	sition)				
Direct investment	396.0	-63.7	-7.2	-21.0	-219.6	184.4	-0.3	37.0	22.1	-6.2	77.4	-24.8	-6.1	-0.2	360.5
Abroad	3,050.2	1,120.0	35.1	83.4	804.4	197.0	0.0	90.2	24.9	68.2	300.3	608.0	329.7	0.0	508.9
Equity/reinvested earnings	2,484.8	906.9	32.0	58.1	644.9	171.8	0.0	71.0	20.1	63.5	250.4	453.1	307.4	0.0	412.4
Other capital	565.3	213.1	3.1	25.3	159.4	25.3	0.0	19.2	4.8	4.7	49.9	154.9	22.3	0.0	96.5
In the euro area	2,654.1	1,183.7	42.3	104.5	1,024.0	12.7	0.3	53.1	2.7	74.4	222.9	632.8	335.8	0.3	148.4
Equity/reinvested earnings	2,037.8	951.9	36.8	86.3	826.7	1.8	0.2	47.3	0.3	60.7	164.8	477.1	209.6	0.0	126.1
Other capital	616.4	231.8	5.5	18.2	197.2	10.9	0.1	5.9	2.5	13.7	58.0	155.7	126.2	0.3	22.3
Portfolio investment assets		1,375.3	65.7	141.4	1.006.1	93.5	68.6	85.1	37.6	262.8	141.2	1.455.5	529.2	32.2	540.3
Equity	2,014.1	486.5	12.3	58.4	393.2	22.4	0.1	22.6	35.2	181.0	128.7	671.0	216.6	1.4	271.1
Debt instruments	2,445.2		53.4	83.0	612.9	71.2	68.4	62.4	2.4	81.8	12.5	784.5	312.6	30.8	269.3
Bonds and notes	2,067.8	732.6	48.6	71.1	474.4	70.4	68.2	60.2	2.3	62.3	8.5	660.3	273.0	29.8	238.8
Money market instruments		156.3	4.9	11.9	138.5	0.8	0.2	2.3	0.0	19.6	4.0	124.2	39.5	1.0	30.5
Other investment	-208.2	92.8	86.4	13.5	116.3	25.2	-148.6	-1.6	3.9	-37.5	-50.2	-5.1	-215.7	-20.0	25.2
Assets		2,291.6	111.4	69.2	1,988.1	113.3	9.5	19.5	25.3	73.7	263.5	586.7	438.6	45.7	659.0
General government	117.1	25.2	2.1	0.1	14.2	1.5	7.4	0.0	1.9	0.2	0.1	3.1	1.4	38.5	46.7
MFIs		1,718.0	95.7	47.9	1,490.9	82.8	0.8	11.0	12.0	38.9	162.7	344.7	274.7	6.6	389.0
Other sectors	1,328.7	548.3	13.6	21.2	483.0	29.1	1.4	8.4	11.4	34.7	102.7	238.9	162.5	0.6	223.3
Liabilities		2,198.8	25.0	55.7 0.3	1,871.8 2.4	88.1 0.0	158.1 21.4	21.0	21.3	111.2 0.7	313.6	591.8 6.2	654.3 0.2	65.7 2.7	633.8
General government	48.3	24.1	0.0								0.0				14.3
MFIs		1,659.8	19.5	35.0	1,440.4	67.9	97.0	14.2	8.5	60.3	253.7	416.6	583.6	60.4	530.2
Other sectors	976.1	514.9	5.5	20.4	429.0	20.2	39.8	6.8	12.8	50.3	59.9	169.0	70.5	2.6	89.3
2007 Q1 to 2007 Q4							Cumulated	l transacti	ons						
Direct investment	94.8	37.9	-2.2	2.4	12.3	25.4	0.0	16.8	0.8	-7.7	10.8	-47.4	24.5	-0.2	59.3
Abroad	401.8	134.1	0.3	2.9	100.2	30.7	0.0	20.6	1.2	0.7	29.6	69.5	70.3	-0.1	75.9
Equity/reinvested earnings	310.1	97.1	-0.5	1.0	70.9	25.7	0.0	13.0	-0.8	2.5	16.7	54.2	59.8	0.0	67.6
Other capital	91.7	37.0	0.7	2.0	29.3	5.0	0.0	7.6	1.9	-1.8	12.9	15.4	10.5	-0.1	8.3
In the euro area	307.0	96.2	2.5	0.5	87.8	5.3	0.0	3.8	0.4	8.4	18.8	117.0	45.8	0.1	16.6
Equity/reinvested earnings	210.3	81.0	2.4	2.3	75.8	0.5	0.0	-0.6	0.4	8.5	8.9	76.8	24.8	0.0	10.5
Other capital	96.7	15.2	0.1	-1.7	12.0	4.8	0.0	4.4	0.0	-0.1	9.9	40.2	21.1	0.1	6.1
Portfolio investment assets	422.6	98.5	5.2	15.7	67.8	4.6	5.2	8.6	-6.3	-12.2	-5.6	171.7	61.4	-2.1	108.7
Equity	46.7	-15.8	1.4	1.0	-16.1	-2.3	0.1	-1.3	-7.0	-9.6	-7.1	23.5	32.1	0.0	31.9
Debt instruments	375.9	114.3	3.8	14.7	83.8	6.9	5.1	9.9	0.7	-2.6	1.4	148.2	29.3	-2.1	76.8
Bonds and notes	326.7	87.9	3.7	11.5	61.5	6.8	4.5	7.9	0.4	4.0	2.4	122.8	21.1	-2.3	82.6
Money market instruments	49.2	26.4	0.1	3.2	22.4	0.1	0.6	2.0	0.3	-6.6	-0.9	25.4	8.2	0.2	-5.8
Other investment	-59.2	-11.7	35.2	-6.7	-70.2	42.4	-12.4	0.6	6.6	-28.4	-64.5	-115.3	51.8	10.0	91.8
Assets	867.5	320.5	15.8	1.4	247.9	51.8	3.5	2.9	5.6	-2.6	-33.2	290.7	124.6	12.0	146.9
General government	-5.9	-4.5	-1.4	0.0	-3.9	-0.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	-2.5
MFIs	571.3	237.6	17.1	4.2	163.6	52.8	0.0	-0.2	2.3	8.6	-32.8	118.6	107.5	10.8	119.0
Other sectors	302.0	87.4	0.2	-2.8	88.2	-0.7	2.5	3.1	3.3	-11.2	-0.4	172.1	17.2	0.0	30.5
Liabilities	926.6	332.2	-19.4	8.1	318.1	9.4	15.9	2.3	-1.0	25.8	31.3	406.0	72.8	2.0	55.2
General government	2.9	3.1	-0.3	0.1	-2.4	0.0	5.7	0.0	0.0	-0.2	0.8	0.2	0.1	-0.8	-0.3
MFIs	681.0	315.1	-0.3 -19.1	6.1	317.4	5.0	5.8	1.7	-1.9	26.4	15.5	221.1	62.7	-0.8 2.8	-0.3 37.5
Other sectors	242.7	13.9	0.0	2.0	3.1	4.4	4.4	0.6	0.8	-0.5	15.1	184.8	10.0	0.1	17.9

# 7.4 Monetary presentation of the balance of payments (EUR billions; transactions)

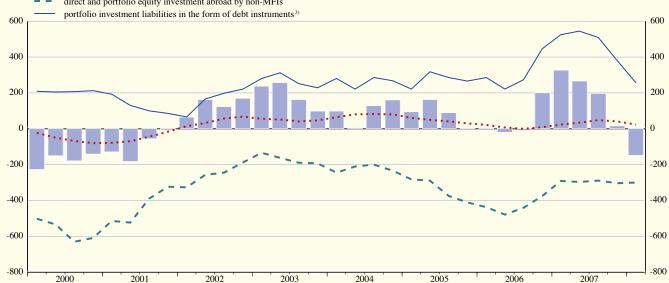
	B.o.p. items balancing transactions in the external counterpart of M3												
	Current and	Direct inv	estment	Po	ortfolio inves	tment	Other in	nvestment	Financial	Errors	Total	Transactions in the	
	capital	D	D	A	т:.	1.11141	A4-	Liabilities	derivatives	and	of	external	
	accounts balance	By resident	By non- resident	Assets	Lia	bilities	Assets	Liabilities		omissions	columns 1 to 10	counterpart of M3	
	Datatice	units	units				1				1 10 10	01 1/13	
		abroad	in the	Non-MFIs	Equity 2)	Debt	Non-MFIs	Non-MFIs					
		(non-MFIs)	euro area			instruments 3)		- ,					
	1	2	3	4	5	6	7	8	9	10	11	12	
2005	29.9	-349.1	149.6	-264.8	212.4	266.2	-150.8	148.2	-18.2	-33.9	-10.6	-0.1	
2006	9.7	-313.5	206.6	-288.3	242.1	445.2	-192.9	192.8	2.4	-114.8	189.4	200.3	
2007	41.4	-377.0	305.8	-205.5	166.2	380.3	-296.2	245.7	-110.2	-136.3	14.4	16.1	
2007 Q1	8.7	-90.2	80.0	-52.4	91.4	165.4	-70.9	10.5	-15.2	-36.1	91.1	88.2	
Q2	-0.1	-101.3	53.8	-67.4	65.6	134.1	-56.8	46.7	-19.8	-56.7	-2.0	-0.2	
$\overline{Q3}$	14.9	-99.5	76.1	-42.9	25.3	48.0	-132.1	176.7	-26.8	-104.8	-65.3	-67.3	
Q4	18.0	-86.1	96.0	-42.7	-16.0	32.8	-36.3	11.9	-48.3	61.4	-9.5	-4.7	
2008 Q1	-10.2	-87.0	34.5	-0.9	19.3	41.0	-58.9	16.6	-3.9	-3.8	-53.1	-76.1	
2007 Apr.	-2.0	-23.2	20.7	-20.2	-11.9	41.2	-8.7	23.1	-9.5	-50.6	-41.1	-42.3	
May	-11.9	-42.7	21.5	-19.8	12.1	47.3	-24.9	6.2	-1.9	4.7	-9.6	-13.5	
June	13.8	-35.4	11.5	-27.4	65.3	45.7	-23.1	17.4	-8.4	-10.8	48.7	55.7	
July	7.0	-25.5	26.7	-22.3	33.1	19.5	32.2	4.9	-12.9	-53.7	9.0	8.2	
Aug.	1.2	-28.5	33.3	-11.1	-14.7	23.6	-12.6	31.8	-5.1	-66.9	-48.9	-51.1	
Sep.	6.6	-45.5	16.0	-9.5	7.0	4.8	-151.7	139.9	-8.8	15.8	-25.3	-24.4	
Oct.	6.2	-36.8	55.3	-22.3	-17.8	2.4	-29.3	6.5	-6.0	44.6	3.0	11.9	
Nov.	5.1	-26.4	37.0	-9.6	0.6	62.0	-15.5	12.8	-31.4	-1.0	33.7	28.6	
Dec.	6.7	-22.9	3.6	-10.9	1.1	-31.5	8.4	-7.5	-11.0	17.8	-46.2	-45.1	
2008 Jan.	-15.6	-38.8	15.2	22.8	3.0	15.4	-12.9	21.8	-13.0	-11.7	-13.8	-21.3	
Feb.	10.4	-29.9	13.0	-4.3	20.3	18.0	-18.1	-38.7	1.8	14.5	-13.0	-13.9	
Mar.	-5.0	-18.8	6.3	-20.7	-3.0	6.6	-27.7	32.0	7.3	-6.6	-29.6	-40.9	
Apr.	-8.7	22.8	-42.7	-9.1	-35.7	45.7	-1.3	-9.6	-14.2	-12.7	-65.4	-70.4	
					12-mont	h cumulated tran	isactions						
2008 Apr.	15.9	-328.4	196.9	-144.2	71.3	259.5	-276.5	217.7	-103.5	-66.1	-157.3	-176.3	

#### C34 Main b.o.p. transactions underlying the developments in MFI net external assets 1)

MFI net external assets

current and capital accounts balance

direct and portfolio equity investment abroad by non-MFIs



- 1) Data refer to the changing composition of the euro area. For further information, see the General notes.
- Excluding money market fund shares/units.
   Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

### 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.)							
				Tota	al		Memo:		Tota	al		Memo:			
	Exports	Imports	Γ	Intermediate	Capital	Consumption	Manufactures		Intermediate	Capital	Consumption	Manufactures	Oil		
	1	2	3	4	5	6	7	8	9	10	11	12	13		
					(EUR bill	ions; annual per	centage changes	s for colum							
2004 2005	9.0 7.8	9.3 13.4	1,142.4 1,236.9	543.6 589.8	246.4 269.1	313.7 333.8	995.0 1,068.7	1,075.8 1,227.3	604.7 705.8	184.3 208.3	256.7 277.0	771.1 846.6	130.0 187.0		
2006	11.6	13.7	1,383.7	686.4	296.5	365.6	1,182.8	1,397.3 1,474.4	856.6 897.6	216.5	304.5	943.5	224.6		
2007	8.4	5.6	1,499.5	736.7	323.7	393.6	1,275.9			224.2	323.6	1,010.2	222.2		
2006 Q4 2007 Q1	12.3 9.0	7.6 5.2	362.9 367.7	181.9 180.7	77.4 79.6	95.5 96.7	312.4 312.0	356.7 359.1	218.9 216.3	54.0 57.0	78.3 79.8	246.4 250.3	51.8		
2007 Q1 Q2	9.0 9.4	3.6	369.6	180.7	80.1	96.7 96.8	312.0	360.0	220.2	53.7	79.8 79.2	230.3 249.5	47.5 52.5 57.5		
Q3 Q4	10.1 5.4	6.4 7.3	380.7 381.5	187.2 187.6	81.8 82.3	100.2 100.0	325.8 321.5	375.1 380.2	227.1 234.0	57.3 56.2	82.4 82.2	259.4 250.9	57.5 64.6		
2008 Q1	6.8	9.4	395.8	194.2	83.9	100.0	332.2	395.9	247.0	56.5	81.4	255.7	69.2		
2007 Nov.	5.0	7.4	128.3	62.7	28.0	33.4	108.9	127.1	78.2	18.8	27.5	83.9	21.7		
Dec.	-0.3	5.0	124.6	61.3	26.4	32.9	103.9	125.9	79.3	18.0	26.7	82.2	22.8		
2008 Jan.	10.2	12.7	132.4	65.3	28.2	35.1	111.1	133.9 131.9	82.9	19.3	27.9	86.2	24.6		
Feb. Mar.	13.1 -1.8	10.2 5.4	134.4 129.0	66.1 62.9	28.5 27.1	35.2 33.8	113.3 107.8	130.1	82.1 82.0	18.7 18.6	27.2 26.3	86.2 83.3	20.8 23.9		
Apr.	16.3	16.3	137.0				112.0	134.8	•			83.2			
							percentage char								
2004 2005	9.0 4.7	6.4 5.0	117.4 123.5	114.9 119.7	120.2 129.8	118.5 123.6	118.6 124.6	108.0 114.0	104.1 107.5	108.8 123.6	117.6 123.6	109.0 117.1	106.2 110.6		
2006	7.8	6.0	133.5	119.7 133.6	140.2	131.3	134.4	121.0	117.8	128.5	131.3	126.1	110.0		
2007	6.0	4.1	141.5	138.8	150.9	139.4	142.1	125.9	119.9	136.6	138.3	133.7	107.1		
2006 Q4	9.6	6.0	139.3	140.5	145.9	137.0	140.8	125.2	122.6	130.1	134.8	131.0	111.4		
2007 Q1 Q2	7.2 6.5	6.3 3.4	140.0 139.1	137.4 136.1	148.9 148.9	137.1 137.3	139.4 140.5	126.2 124.3	121.2 119.4	137.5 131.8	137.0 136.9	132.4 132.2	108.0 105.8		
Q3 Q4	7.4	5.3	143.2	140.5	152.2	141.4	144.7	126.7	119.5	140.0	139.2	136.6	106.5		
	3.3	1.6	143.6	141.0	153.5	141.8	143.6	126.3	119.4	137.0	140.0	133.6	108.0		
2008 Q1 2007 Nov.	3.9 2.9	-0.9 1.2	146.6 144.9	142.7 141.4	154.1 157.4	145.9 142.2	147.2 146.2	125.9 126.2	119.6 119.1	136.9 137.5	137.0 140.9	134.4 133.8	108.1		
Dec.	-2.2	-1.3	144.9	138.5	147.0	142.2	139.3	124.3	119.1	131.9	136.0	131.5	110.0		
2008 Jan.	6.9	2.1	147.6	144.6	155.3	148.3	148.2	128.3	121.6	139.9	139.8	135.7	116.8		
Feb. Mar.	9.9 -4.1	0.0 -4.7	149.1 143.1	145.6 137.9	158.2 148.8	147.4 142.0	150.4 143.1	126.3 123.2	119.9 117.3	135.0 135.8	137.1 134.1	135.6 131.8	98.6 109.0		
Apr.															
									or columns 1 and						
2004 2005	-0.1 2.9	2.7 8.0	97.6 100.4	96.6 100.6	95.7 96.8	101.2 103.3	97.3 99.4	97.4 105.2	98.3 111.1	92.3 91.8	99.0 101.5	96.3 98.5	99.6 137.7		
2006	3.6	7.4	100.4	104.9	98.7	105.5	102.0	113.0	123.1	91.8	101.5	101.9	166.5		
2007	2.3	1.4	106.3	108.4	100.2	108.0	104.1	114.6	126.8	89.5	106.1	102.9	169.2		
2006 Q4	2.6	1.5	104.5	105.8	99.0	106.6	102.9	111.5	121.0	90.5	105.3	102.4	151.5		
2007 Q1	1.7 2.8	-1.0 0.2	105.4 106.6	107.5 108.8	99.8 100.5	107.9 107.8	103.8 104.5	111.4 113.3	120.9 124.9	90.3 88.9	105.6 104.9	103.0 102.8	143.5 162.1		
Q2 Q3 Q4	2.5 2.0	1.0	106.7	108.8	100.3	108.3 107.9	104.4	115.9 117.8	128.7 132.8	89.3	107.3 106.4	103.5	176.2 195.2		
		5.7	106.6	108.7	100.1		103.8			89.4		102.3			
2008 Q1	2.8	10.4	108.3	111.2	101.7	109.2	104.6	123.0	139.9	90.1	107.7	103.7	208.7		
2007 Nov. Dec.	2.0 1.9	6.1 6.4	106.6 106.8	108.8 108.4	99.7 100.8	107.8 107.8	103.6 103.8	118.2 118.9	133.5 134.6	89.6 89.4	106.3 106.9	102.5 102.1	200.0 202.6		
2008 Jan.	3.1	10.5	108.0	110.7	101.7	108.7	104.3	122.5	138.5	90.1	108.7	103.8	205.9		
Feb. Mar.	2.9 2.4	10.3 10.6	108.5 108.5	111.2 111.7	101.1 102.2	109.7 109.1	104.8 104.8	122.6 123.9	139.2 142.0	90.5 89.6	107.9 106.6	103.9 103.3	206.0 214.1		
Apr.	2.4	10.0			102.2	109.1	104.0	143.9	172.0		100.0	103.3			

Source: Eurostat.

# 7.5 Trade in goods (EUR billions, unless o

(EUR billions, unless otherwise indicated; seasonally adjusted)

#### 2. Geographical breakdown

	Total	Total European Union 27 (outside the euro area)			euro area)	Russia	Switzer- land	Turkey	United States		Asia		Africa	Latin	Other countries
		Denmark	Sweden	United Kingdom	Other EU countries		Ianu		States		China	Japan		America	countries
				Ringdom	countries										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
							Exports (								
2004 2005	1,142.4 1,236.9	25.8 29.0	42.1 45.2	204.5 203.3	133.9 153.2	35.9 43.7	66.6 70.8	31.8 34.7	172.7 185.3	225.7 244.2	40.4 43.3	33.3 34.1	64.6 73.4	40.7 46.9	98.2 107.2
2006 2007	1,383.7 1,499.5	31.7 33.8	49.9 55.3	216.8 228.8	189.8 219.8	55.2 67.1	77.2 81.9	38.8 40.9	199.8 195.2	271.7 296.2	53.7 60.2	34.5 34.2	77.7 87.2	54.4 61.3	120.6 132.1
2007 2006 Q4	362.9	8.2	13.2	54.8	51.3	15.7	20.8	9.7	51.2	72.0	14.8	8.7	20.1	14.2	31.8
2007 Q1	367.7	8.3	13.5	56.7	52.4	15.7	20.5	10.2	49.9	72.2	14.4	8.7	21.4	14.8	32.3 32.4
Q2 Q3	369.6 380.7	8.4 8.5	13.9 14.2	56.0 58.7	53.8 56.3	16.7 17.2	20.0 20.6	9.9 10.3	48.6 49.4	73.0 75.0	14.8 15.3	8.8 8.5	21.4 22.2	15.4 15.6	32.4 32.7
Q3 Q4	381.5	8.5	13.7	57.4	57.3	17.6	20.8	10.5	47.3	76.0	15.7	8.2	22.2	15.6	34.7
2008 Q1	395.8	8.9	13.9	57.4	60.5	19.3	20.8	11.8	48.6	78.6	16.8	8.5	23.8	16.0	36.2
2007 Nov. Dec.	128.3 124.6	2.8 2.8	4.5 4.5	19.2 18.9	19.2 18.9	5.9 5.8	7.0 6.8	3.6 3.5	15.9 15.1	25.3 25.5	5.1 5.3	2.7 2.8	7.3 7.5	5.2 5.0	12.4 10.1
2008 Jan.	132.4	2.9	4.6	19.7	20.2	6.3	6.9	4.0	16.5	26.2	5.8	2.9	7.8	5.3	12.0
Feb. Mar.	134.4 129.0	3.0 3.0	4.7 4.6	19.2 18.5	20.4 19.9	6.5 6.6	6.9 7.0	4.0 3.8	16.9 15.3	26.4 26.0	5.5 5.5	2.9 2.8	8.0 7.9	5.4 5.3	13.0 11.2
Apr.	137.0					6.7	7.3	3.8	16.1	26.7	5.9	2.8	8.1	5.3	
2007	100.0	2.2	2.7	15.0	147		share of to		12.0	10.0	4.0	2.2	5.0	4.1	0.0
2007	100.0	2.3	3.7	15.3	14.7	4.5	5.5 Imports (	2.7	13.0	19.8	4.0	2.3	5.8	4.1	8.8
2004	1,075.8	25.4	39.8	144.8	115.5	56.6	53.4		113.4	309.3	92.4	54.1	72.9	45.2	76.2
2005 2006	1,227.3 1,397.3	26.4 28.5	42.3 47.9	153.2 167.2	127.8 152.3	76.3 95.6	58.1 62.3	23.2 25.5 29.4	120.2 125.9	363.6 418.6	118.2 144.5	53.2 57.0	96.0 110.5	53.8 66.3	76.2 84.2 93.0
2007	1,474.4	28.1	51.6	167.7	174.4	97.4	67.1	32.2	131.1	445.3	170.1	58.5	112.6	74.6	92.2
2006 Q4	356.7	7.1	12.7	40.9	41.0	22.1	16.0	7.6	32.5	108.1	39.8	14.4	27.8	17.4	23.5
2007 Q1 Q2	359.1 360.0	7.0 7.1	12.9 12.8	40.8 41.6	41.4 42.5	22.6 23.8	16.9 16.5	7.9 7.9	33.4 32.1	110.7 107.6	42.5 39.9	14.9 14.3	26.5 26.9	18.1 18.3	20.9 23.0
Q3	375.1	7.3 6.7	12.8	42.8	44.9	23.6	17.2	8.1	33.3	114.5	44.6	14.8	28.1	18.8	23.7
Q4 2008 Q1	380.2 395.9	7.2	13.2	42.5 43.6	45.7 48.1	27.4	16.5 16.9	8.3 8.4	32.2	112.6 116.1	43.3	14.4	31.1	19.4 19.5	24.5
2007 Nov.	127.1	2.3	4.4	14.2	15.4	9.2	5.5	2.8	11.0	37.1	14.4	4.6	10.2	6.5	8.5
Dec.	125.9	2.2	4.5	14.0	14.9	9.2	5.4	2.8	10.5	37.6	14.1	4.8	11.4	6.4	7.0
2008 Jan. Feb.	133.9 131.9	2.3 2.6	4.7 4.7	14.9 14.5	15.9 16.1	9.5 9.2	5.5 5.8	2.8 2.8	11.5 11.1	39.5 38.3	14.9 14.5	4.8 5.0	11.5 11.3	6.6 6.4	9.2 9.1
Mar.	130.1 134.8	2.3	4.7	14.2	16.1	9.4 9.8	5.5 5.7	2.8 2.9	11.3 11.0	38.3 38.3	14.0 14.4	4.8 4.8	11.1 12.3	6.5 6.7	7.9
Apr.	154.6		•		•		share of to		11.0	30.3	14.4	4.0	12.3	0.7	•
2007	100.0	1.9	3.5	11.4	11.8	6.6	4.6	2.2	8.9	30.2	11.5	4.0	7.6	5.1	6.2
							Balan	ice							
2004 2005	66.7 9.5	0.4	2.3 2.9	59.6 50.1	18.4 25.4	-20.7 -32.5	13.3 12.7	8.6	59.2 65.1	-83.6 -119.4	-52.0 -74.8	-20.8	-8.3 -22.6	-4.5 -6.9	22.0 23.0
2006	-13.6	2.6 3.2 5.7	2.0	49.7	37.6	-40.4	15.0	9.2 9.4	74.0	-146.9	-90.8	-19.1 -22.4	-32.8	-11.9	27.6
2007 2006 Q4	25.2 6.2	1.1	0.5	61.1	45.4 10.3	-30.3 -6.4	14.8	8.7 2.1	64.1 18.7	-149.2 -36.1	-110.0 -25.0	-24.2 -5.6	-25.5 -7.7	-13.3 -3.2	40.0 8.3
2007 Q1	8.6	1.3	0.6	15.9	11.0	-7.0	3.6	2.3	16.4	-38.5	-23.0		-5.2	-3.2	11.3
Q2	9.6 5.6	1.4	1.2	14.5 15.9	11.3 11.4	-7.1 -6.4	3.5	2.0 2.2	16.5	-34.5 -39.5	-25.1 -29.2	-6.2 -5.5	-5.5 -5.9	-3.0	9.4 9.0
Q3 Q4	1.4	1.8	0.5	14.9	11.4	-0.4 -9.8	4.3	2.2	16.1 15.1	-36.7	-27.6	-6.3 -6.2	-8.9	-3.2 -3.8	10.2
2008 Q1	-0.1	1.7	-0.1	13.8	12.4	-8.8	4.0	3.3	14.7	-37.5	-26.6	-6.2	-10.2	-3.5	10.1
2007 Nov. Dec.	1.3 -1.3	0.6 0.6	0.1 0.0	5.0 4.8	3.8 4.0	-3.3 -3.3	1.5 1.4	0.8 0.7	4.9 4.6	-11.9 -12.1	-9.2 -8.8	-1.9 -2.0	-2.8 -3.9	-1.3 -1.4	3.9 3.1
2008 Jan.	-1.5	0.7	0.0	4.8	4.3	-3.3	1.4	1.1	5.0	-13.3	-9.1	-2.0	-3.7	-1.3	2.8
Feb. Mar.	2.5 -1.1	0.4 0.7	0.0	4.7 4.3	4.3 3.8	-2.7 -2.8	1.2 1.4	1.2 0.9	5.7 4.0	-11.9 -12.3	-9.0 -8.5	-2.1 -2.1	-3.3 -3.1	-1.0 -1.2	3.9 3.3
Apr.	2.2					-3.1	1.5	0.9	5.2	-11.6	-8.5	-1.9	-4.1	-1.4	

Source: Eurostat.



### **EXCHANGE RATES**

# **8.1 Effective exchange rates** (period averages; index 1999 Q1=100)

			<b>EER-22</b>				<b>EER-42</b>	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1			4		6		8
2005 2006	103.3	104.2	102.5	102.2	98.2 98.7	101.9	109.7	103.8
2006	103.6 107.7	104.6 108.3	103.0 106.8	102.2 106.0	101.6	101.5 104.7	110.0 114.2	103.5 106.6
2007 Q2	107.1	107.7	106.1	105.5	101.8	104.4	113.5	106.0
Q3	107.6	108.2	106.8	106.0	101.3	104.7	114.1	106.5
Q4	110.5	111.2	109.6	108.5	104.1	107.5	117.0	109.0
2008 Q1	112.7	113.1	111.3	110.7	105.9	109.5	119.4	110.8
Q2	115.7	115.8	113.6		•	•	122.6	113.5
2007 June	106.9	107.4	105.9	-	-	-	113.2	105.6
July	107.6	108.1	106.5	-	-	-	113.9	106.3
Aug.	107.1	107.7	106.4	-	-	-	113.7	106.0
Sep.	108.2	108.8	107.5	-	-	-	114.8	107.1
Oct.	109.4	110.1	108.7	-	-	-	115.8	108.0
Nov.	111.0	111.7	110.0	-	-	-	117.6	109.7
Dec.	111.2	111.7	110.0	-	-	-	117.6	109.5
2008 Jan.	112.0	112.3	110.4	_	_	_	118.3	109.9
Feb.	111.8	111.9	110.5	_	_	_	118.2	109.5
Mar.	114.6	115.0	112.8	-	-	-	121.5	112.9
Apr.	116.0	116.1	114.0	-	-	-	123.1	113.9
May	115.5	115.7	113.4	-	-	-	122.4	113.4
June	115.4	115.6	113.4	-	-	-	122.4	113.3
			% change versu	s previous month				
2008 June	0.0	-0.1	0.0	-	-	-	0.0	-0.1
			% change vers	us previous year				
2008 June	7.9	7.6	7.1	-	-	-	8.1	7.3

# C35 Effective exchange rates (monthly averages; index 1999 Q1=100)

# C36 Bilateral exchange rates (monthly averages; index 1999 Q1=100)



Source: ECB.

1) For the definition of the trading partner groups and other information, please refer to the General notes.

	ral exchang	ge rates f national currency	per euro)								
					1 6 1	3 A E		l a:	0 "	NT	
	Danish krone	Swedish Rouse Sterl		Japanese yen		South Korean won		Singapore dollar	Canadian dollar	Norwegian krone	Australian dollar
	1	2	3 4	5	6	7	8	9	10	11	12
2005 2006	7.4518	9.2822 0.683		136.85 146.02	1.5483	1,273.61	9.6768	2.0702	1.5087	8.0092	1.6320
2006	7.4591 7.4506	9.2544 0.68 9.2501 0.684		161.25		1,198.58 1,272.99	9.7545 10.6912	1.9941 2.0636	1.4237 1.4678	8.0472 8.0165	1.6668 1.6348
2007 Q4 2008 Q1 Q2	7.4557 7.4534 7.4599	9.2899 0.70° 9.3996 0.756 9.3517 0.792	598 1.4976	163.83 157.80 163.35	1.6014	1,334.12 1,430.84 1,590.82	11.2639 11.6737 12.1845	2.1061 2.1107 2.1346	1.4201 1.5022 1.5769	7.8778 7.9583 7.9401	1.6279 1.6533 1.6559
2007 Dec.	7.4599	9.4319 0.720		163.55		1,356.79	11.3619	2.1108	1.4620	8.0117	1.6703
2008 Jan.	7.4505	9.4314 0.74	725 1.4718	158.68	1.6203	1,387.66	11.4863	2.1062	1.4862	7.9566	1.6694
Feb. Mar.	7.4540 7.4561	9.3642 0.750 9.4020 0.774	194 1.5527	157.97 156.59	1.5720	1,392.57 1,523.14	11.4996 12.0832	2.0808 2.1489	1.4740 1.5519	7.9480 7.9717	1.6156 1.6763
Apr. May	7.4603 7.4609	9.3699 0.794 9.3106 0.792		161.56 162.31		1,555.98 1,613.18	12.2728 12.1341	2.1493 2.1259	1.5965 1.5530	7.9629 7.8648	1.6933 1.6382
June	7.4586	9.3739 0.79		166.26	1.6139	1,604.95	12.1425	2.1278	1.5803	7.9915	1.6343
2000 1	0.0	0.7	0.1 0.0			revious month	0.1	0.1	1.0	1.6	0.2
2008 June	0.0	0.7 -	0.1 0.0	2.4 % ci	-0.7 hange versus j	-0.5	0.1	0.1	1.8	1.6	-0.2
2008 June	0.2	0.5 1	7.2 15.9	1.0		28.9	15.8	3.2	10.6	-0.8	2.6
	Czech koruna	Estonian kroon	Latvian Li lats	thuanian litas	Hungarian forint	Polish zloty	Slovak koruna	Bulgarian lev	New Roma- nian leu	Croatian Ne	ew Turkish lira
	13	14	15	16	17	18	19	20	21	22	23
2005 2006 2007	29.782 28.342 27.766	15.6466 15.6466 15.6466	0.6962 0.6962 0.7001	3.4528 3.4528 3.4528	248.05 264.26 251.35	4.0230 3.8959 3.7837	38.599 37.234 33.775	1.9558 1.9558 1.9558	3.6209 3.5258 3.3353	7.4008 7.3247 7.3376	1.6771 1.8090 1.7865
2007 Q4	26.826	15.6466	0.7005	3.4528	252.86	3.6584	33.424	1.9558	3.4489	7.3281	1.7261
2008 Q1 Q2	25.564 24.830	15.6466 15.6466	0.6973 0.6997	3.4528 3.4528	259.30 248.04	3.5759 3.4070	33.069 31.403	1.9558 1.9558	3.6887 3.6521	7.2852 7.2556	1.8036 1.9717
2007 Dec.	26.317	15.6466	0.6975	3.4528	253.18	3.6015	33.404	1.9558	3.5351	7.3178	1.7195
2008 Jan. Feb.	26.050 25.377	15.6466 15.6466	0.6982 0.6967	3.4528 3.4528	256.03 262.15	3.6092 3.5768	33.546 33.085	1.9558 1.9558	3.6937 3.6557	7.3155 7.2707	1.7322 1.7632
Mar.	25.208	15.6466	0.6970	3.4528	259.94	3.5363	32.499	1.9558	3.7194	7.2662	1.9309
Apr. May	25.064 25.100	15.6466 15.6466	0.6974 0.6987	3.4528 3.4528	253.75 247.69	3.4421 3.4038	32.374 31.466	1.9558 1.9558	3.6428 3.6583	7.2654 7.2539	2.0500 1.9408
June	24.316	15.6466	0.7032	3.4528	242.42	3.3736	30.322	1.9558	3.6556	7.2469	1.9206
2008 June	-3.1	0.0	0.6	% ch	ange versus p -2.1	revious month -0.9	-3.6	0.0	-0.1	-0.1	-1.0
2008 Julie	-3.1	0.0	0.0		-2.1 hange versus p		-3.0	0.0	-0.1	-0.1	-1.0
2008 June	-14.8	0.0	1.0	0.0	-3.1	-11.4	-10.8	0.0	13.4	-1.2	8.3
	Brazilian real <sup>1)</sup>	Chinese yuan renminbi	Icelandic krona	Indonesian rupiah	Malaysia ringg		New Zeala dol	nd Philippine lar pese			
	24	25	26	27		28 29	•	30 3	•	1	
2005 2006 2007	3.0360 2.7333 2.6594	10.1955 10.0096 10.4178	78.23 87.76 87.63	12,072.83 11,512.37 12,528.33	4.711 4.604 4.707	14 13.6936	1.93	73 64.379	34.1117	8.5312	47.594
2007 Q4	2.5863	10.7699	88.69	13,374.03	4.861		1.89	65 62.330	35.6947	9.8088	
2008 Q1 Q2	2.6012 2.5882	10.7268 10.8687	101.09 119.09	13,861.78 14,460.45	4.832 5.018		1.89 2.01			11.2736 12.1648	
2007 Dec.	2.6050	10.7404	90.82	13,620.45	4.857						
2008 Jan. Feb.	2.6111 2.5516	10.6568 10.5682	94.50 98.06	13,839.19 13,542.26	4.809 4.754						44.758 46.085
Mar.	2.6445	10.9833	112.08	14,241.09	4.945	55 16.6678	1.93	44 64.031	36.8259	12.3712	48.848
Apr. May	2.6602 2.5824	11.0237 10.8462	116.65 117.46	14,497.21 14,436.99	4.981 5.008					12.2729 11.8696	
June	2.5185	10.7287	123.28	14,445.41	5.066	66 16.0617			36.7723	12.3467	51.649
2008 June	-2.5	-1.1	5.0	% ch		.2 -1.1	,	2.1 3.0	) -0.4	4.0	3.4
2000 Julic	-2.3	-1.1	5.0		hange versus j		•	2.1 3.0	, -0.4	4.0	3.4
2008 June	-2.9	4.8	46.3	19.8	0 1	.6 10.4	1:	5.1 11.2	2 5.7	28.3	18.8

Source: ECB.

1) For these currencies the ECB computes and publishes euro reference exchange rates as from 1 January 2008. Previous data are indicative.



### **DEVELOPMENTS OUTSIDE THE EURO AREA**

# 9.1 In other EU Member States (annual percentage changes, unless otherwise indicated)

#### 1. Economic and financial developments

	Bulgaria	Czech Republic	Denmark	Estonia	Latvia	Lithuania	Hungary	Poland	Romania	Slovakia	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11	12
2006	7.4	2.1	1.0	4.4		HICP	4.0	1.2		4.2	1.5	2.2
2006 2007	7.4 7.6	2.1 3.0	1.9 1.7	4.4 6.7	6.6 10.1	3.8 5.8	4.0 7.9	1.3 2.6	6.6 4.9	4.3 1.9	1.5 1.7	2.3 2.3
2007 Q3 Q4	9.0 11.2	2.7 4.9	1.0 2.2	6.7 9.2	10.4 13.7	5.9 7.9	7.3 7.1	2.4 3.7	5.1 6.8	1.4 2.4	1.4 2.3	1.8 2.1
2008 Q1	12.4	7.6	3.2	11.3	16.3	10.8	6.9	4.5	8.0	3.4	3.1	2.4
2008 Jan. Feb.	11.7 12.2	7.9 7.6	3.0 3.3	11.3 11.5	15.6 16.5	10.0 10.9	7.4 6.7	4.4 4.6	7.3 8.0	3.2 3.4	3.0 2.9	2.2 2.5 2.5 3.0
Mar.	13.2	7.1	3.3	11.2	16.6	11.4	6.7	4.4	8.7	3.6	3.2	2.5
Apr. May	13.4 14.0	6.7 6.8	3.4 3.6	11.6 11.4	17.4 17.7	11.9 12.3	6.8 6.9	4.3 4.3	8.7 8.5	3.7 4.0	3.2 3.9	3.0 3.3
							s (+) as a % of					
2005	1.8	-3.6	5.0	1.8	-0.4	-0.5	-7.8	-4.3	-1.2	-2.8	2.2	-3.4
2006 2007	3.0 3.4	-2.7 -1.6	4.8 4.4	3.4 2.8	-0.2 0.0	-0.5 -1.2	-9.2 -5.5	-3.8 -2.0	-2.2 -2.5	-3.6 -2.2	2.3 3.5	-2.6 -2.9
				Genera	al governme	nt gross debt	as a % of GDP					
2005 2006	29.2 22.7	29.7 29.4	36.4 30.4	4.5 4.2	12.4 10.7	18.6 18.2	61.6 65.6	47.1 47.6	15.8 12.4	34.2 30.4	50.9 45.9	42.1 43.1
2007	18.2	28.7	26.0	3.4	9.7	17.3	66.0	45.2	13.0	29.4	40.6	43.8
				ng-term goveri	nment bond	yield as a % p	er annum, peri	od average				
2007 Dec.	5.08	4.68	4.33	-	5.10	4.94	6.93	5.86	7.05	4.61	4.31	4.70
2008 Jan. Feb.	5.07 5.24	4.56 4.53	4.15 4.08	-	5.71 5.11	4.73 4.51	7.11 7.58	5.81 5.82	7.15 7.29	4.48 4.36	4.09 4.02	4.26 4.45
Mar.	4.85	4.68	4.04	-	5.25	4.36	8.41	5.99	7.34	4.34	3.92	4.42
Apr. May	4.80 4.95	4.72 4.84	4.29 4.42	-	5.93 5.93	4.59 4.80	8.02 8.08	5.99 6.10	7.35 7.26	4.46 4.52	4.06 4.18	4.62 4.84
				3-month in	terest rate a	s a % per anni	ım, period ave	rage				
2007 Dec.	6.56	4.05	4.92	7.23	10.78	7.07	7.63	5.67	7.93	4.31	4.74	6.36
2008 Jan. Feb.	6.55 6.65	3.96 3.94	4.73 4.61	7.03 6.62	9.01 7.52	5.69 4.90	7.78	5.64 5.74	8.43 9.67	4.32 4.28	4.52 4.62	5.66 5.64
Mar.	6.68	4.04	4.81	6.35	6.49	4.82	8.21	6.03	10.54	4.29	4.84	5.89
Apr. May	6.77 6.88	4.11 4.14	5.00 5.14	6.33 6.39	5.96 5.74	5.05 5.17	8.54 8.40	6.29 6.41	11.59 10.87	4.28 4.32	4.86 4.96	5.92 5.83
						Real GDP						
2006 2007	6.3 6.2	6.8 6.6	3.9 1.8	11.2 7.1	12.2 10.3	7.7 8.8	3.9 1.3	6.2 6.7	7.9 6.0	8.5 10.4	4.1 2.7	2.9 3.1
2007 Q3	4.9	6.5	1.6	6.4	10.9	10.4	1.0	6.3	5.7	9.4	2.6	3.1
Q4 2008 Q1	6.9 7.0	6.3 5.3	1.9	4.8 0.1	8.1 3.3	8.5 6.8	0.5 0.8	6.7 6.4	6.6 8.2	14.3 8.7	2.6 2.3	2.8 2.3
2000 Q1	7.0	3.3	•				ce as a % of Gl		0.2	0.7	2.3	2.3
2006	-17.1	-2.9	2.9	-13.2	-21.3	-9.6	-5.4	-2.1	-10.5	-7.1	7.8	-3.8
2007 2007 Q3	-20.3 -11.8	-2.0 -4.4	2.4	-16.6 -16.5	-20.9 -24.5	-11.9 -10.1	-3.8 -2.8	-2.7 -2.0	-13.5 -10.8	-4.7 -6.3	8.1 7.0	-4.1
Q4	-25.1	-2.1	1.6	-14.2	-13.2	-10.2	-2.4	-1.9	-13.5	-6.8	9.1	-5.2 -2.5
2008 Q1	-22.7	3.8	-2.1	-11.2	-18.3	-14.0	-1.3	-3.3	-14.1	-0.5	10.4	-2.2
2006	4.4	1.7	1.7	8.1	15.3	8.8	1.4	0.2		1.7	-0.2	2.6
2007	14.2		3.7	18.9	24.9	7.0	6.8			0.2	4.3	1.4
2007 Q3 O4	16.7 14.5	2.5 1.1	4.2 3.1	20.7 19.1	-	5.9 7.9	-	-	-	0.3 -1.6	3.6 5.3	2.1 2.1
2008 Q1	16.8	5.1	•	19.1	-	13.1	-	-	-	5.5	1.8	2.6
2006	9.0	7.0	2.0		unemploym 6.8		of labour forc		7.2	12.4	7.0	5.2
2006	6.9	7.2 5.3	3.9 3.8	5.9 4.7	6.0	5.6 4.3	7.5 7.4	13.9 9.6	7.3 6.4	13.4 11.1	7.0 6.2	5.3 5.3
2007 Q3	6.7	5.1	3.9	4.4	6.1	4.1	7.3	9.2	6.3	11.2	5.9	5.2
Q4 2008 Q1	6.1 6.2	4.9 4.5	3.4 3.0	4.2 4.2	5.6 6.0	4.2 4.6	7.8 7.6	8.5 7.8	6.2 6.0	10.6 10.4	6.0 5.7	5.1 5.1
2008 Jan.	6.3	4.6	3.2	4.1	6.1	4.6	7.7	8.0	6.0	10.5	5.7	5.1
Feb. Mar.	6.2 6.1	4.5 4.4	3.0 2.9	4.3 4.2	6.0 6.0	4.6 4.5	7.7 7.6	7.7 7.5	6.0 6.0	10.4 10.3	5.7 5.6	5.1 5.2
Apr.	5.7 5.7	4.4 4.4	2.9 2.7 2.7	4.2 4.2	5.5	4.4 4.3	7.6	7.6		10.5 10.5	5.4 5.2	
May	5./	4.4	2.1	4.1	5.6	4.3	7.6	7.5		10.5	3.2	

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

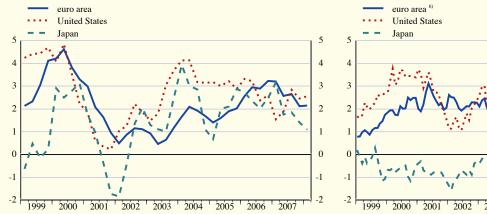
### 9.2 In the United States and Japan

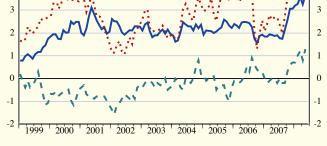
#### 1. Economic and financial developments

	Consumer price index	Unit labour costs 1)	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money 2)	deposit rate <sup>3)</sup>	10-year zero coupon government bond yield <sup>3)</sup> end-of- period	Exchange rate <sup>4)</sup> as national currency per euro	Fiscal deficit (-)/ surplus (+) as a % of GDP	Gross public debt <sup>5)</sup> as a % of GDP
	1	2	3	4	United States	6	7	8	9	10	11_
2004 2005	2.7 3.4	-0.2 -0.6	3.6 3.1	3.1	5.5 5.1	4.7 4.4	1.62 3.56	4.80 5.05	1.2439 1.2441	-4.4 -3.6	48.9
2005	3.4	-0.6 1.7	2.9	4.2 2.8	4.6	4.4	5.19	5.26	1.2441	-3.6 -2.6	49.2 48.6
2007	2.9	2.1	2.2	1.8	4.6	5.9	5.30	4.81	1.3705	-3.0	49.2
2007 Q2	2.7	2.9	1.9	1.8	4.5	6.1	5.36	5.78	1.3481	-2.7	48.3
Q3	2.4	2.3	2.8	2.2	4.7	6.3	5.45	5.34	1.3738	-3.1	48.7
Q4	4.0	0.4	2.5	2.5	4.8	5.8	5.02	4.81	1.4486	-3.3	49.2
2008 Q1	4.1	-0.2	2.5	2.0	4.9	6.4	3.26	4.24	1.4976		-
Q2							2.75	4.81	1.5622		
2008 Feb.	4.0	-	-	1.9	4.8	6.7	3.09	4.47	1.4748	-	-
Mar.	4.0	-	-	1.3	5.1	7.0	2.78	4.24	1.5527	-	-
Apr.	3.9	-	-	0.0	5.0	6.5	2.79	4.59	1.5751	-	-
May June	4.2	-	-	-0.1	5.5	6.3	2.69 2.77	4.82 4.81	1.5557 1.5553	-	-
June	•	-		•	· · ·	•	2.11	4.61	1.3333		
					Japan						
2004	0.0	-3.2	2.7	4.8	4.7		0.05	1.53	134.44	-6.2	156.8
2005	-0.3	-2.1	1.9	1.4	4.4	1.8	0.06	1.66	136.85	-6.7	163.2
2006 2007	0.2 0.1	-0.6 -1.7	2.4 2.0	4.5	4.1	1.0 1.6	0.30	1.85	146.02	-1.4	159.5
				2.8	3.8		0.79	1.70	161.25	•	•
2007 Q2	-0.1	-1.4	1.7	2.3	3.8	1.5	0.69	2.11	162.89		
Q3	-0.1	-1.5	1.8	2.6	3.8	1.9	0.89	1.88	161.90		
Q4 2008 Q1	0.5 1.0	-2.0	1.4 1.3	3.4 2.3	3.8 3.9	2.0 2.2	0.96 0.92	1.70 1.48	163.83 157.80	•	•
Q2		•				2.2	0.92	1.48	163.35	•	•
		•	•							•	•
2008 Feb. Mar.	1.0 1.2	•	-	5.1 -0.6	3.9 3.8	2.3 2.2	0.90 0.97	1.60 1.48	157.97 156.59	-	-
Mar. Apr.	0.8			-0.6 1.9	3.8 4.0	1.9	0.97	1.48	150.59		
May	1.3			1.2	4.0	2.0	0.92	2.00	162.31	_	_
June			-				0.92	1.88	166.26	-	-

### C37 Real gross domestic product

### C38 Consumer price indices





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).

- Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector.
- 2)
- Average-of-period values; M2 for US, M2+CDs for Japan.

  Percentages per annum. For further information on 3-month interbank deposit rate, see Section 4.6. For more information, see Section 8.2.
- 4)
- Gross consolidated general government debt (end of period).
- Data refer to the changing composition of the euro area. For further information, see the General notes.



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## TECHNICAL NOTES

#### **RELATING TO THE EURO AREA OVERVIEW**

# CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

The average growth rate for the quarter ending in month t is calculated as:

a) 
$$\left(\frac{0.5I_{t} + \sum_{i=1}^{2} I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^{2} I_{t-i-12} + 0.5I_{t-15}} - 1\right) \times 100$$

where  $I_t$  is the index of adjusted outstanding amounts as at month t (see also below). Likewise, for the year ending in month t, the average growth rate is calculated as:

b) 
$$\left(\frac{0.5I_{t} + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1\right) \times 100$$

#### **RELATING TO SECTIONS 2.1 TO 2.6**

#### **CALCULATION OF TRANSACTIONS**

Monthly transactions are calculated from monthly differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If  $L_t$  represents the outstanding amount at the end of month t,  $C_t^M$  the reclassification adjustment in month t,  $E_t^M$  the exchange rate adjustment and  $V_t^M$  the other revaluation adjustments, the transactions  $F_t^M$  in month t are defined as:

$$c) \quad F_t^{\scriptscriptstyle M} = (L_{\scriptscriptstyle t} - L_{\scriptscriptstyle t-1}) - C_t^{\scriptscriptstyle M} - E_t^{\scriptscriptstyle M} - V_t^{\scriptscriptstyle M}$$

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<sup>t-3</sup> 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:

$$e) \qquad I_{t} = I_{t-1} \times \left(1 + \frac{F_{t}^{M}}{L_{t-1}}\right)$$

The base of the index (of the non-seasonally adjusted series) is currently set as December 2006 = 100. Time series of the index of adjusted outstanding amounts are available on the ECB's website (www.ecb.europa.eu) under the "Money, banking and financial markets" subsection 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) 
$$a_{t} = \left[ \prod_{i=0}^{11} \left( 1 + F_{t-i}^{M} \right) L_{t-1-i} - 1 \right] \times 100$$

g) 
$$a_t = \begin{pmatrix} I_t \\ I_{t-12} \end{pmatrix} \times 100$$

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.

Growth rates for intra-annual periods may be derived by adapting formula g). For example, the month-on-month growth rate  $a_t^M$  may be calculated as:

h)  $a_t^M = \begin{pmatrix} I_t \\ I_{t-1} \end{pmatrix} \times 100$ 

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:

$$i) \qquad I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}}\right)$$

The annual growth rate in the four quarters ending in month t, i.e. a<sub>t</sub>, may be calculated using formula g).

## SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS |

The approach used relies on a multiplicative decomposition through X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-theweek adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.<sup>3</sup> The resulting estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and

revaluations, in turn yielding seasonally adjusted transactions. Seasonal (and trading day) factors are revised at annual intervals or as required.

#### **RELATING TO SECTIONS 3.1 TO 3.5**

#### **EQUALITY OF USES AND RESOURCES**

In Table 3.1 the data conform to a basic accounting identity. As regards non-financial transactions, total uses equal total resources for each transaction category. Likewise in the financial account, this accounting identity is also reflected, i.e. for each financial instrument category, total transactions in financial assets equal total transactions in liabilities. In the other changes in assets account and the financial balance sheets, total financial assets equal total liabilities for each financial instrument category, with the exception of monetary gold and special drawing rights, which are by definition not a liability of any sector.

#### **CALCULATION OF BALANCING ITEMS**

The balancing items at the end of each account in Tables 3.1 and 3.2 are computed as follows:

The trade balance equals imports minus exports of goods and services vis-à-vis the euro area rest of the world.

- 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.europa.eu), 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.
- 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.

Net operating surplus and mixed income is defined for resident sectors only and is calculated as gross value added (gross domestic product at market prices for the euro area) minus compensation of employees (uses) minus other taxes less subsidies on production (uses) minus consumption of fixed capital (uses).

Net national income is defined for resident sectors only and is computed as net operating surplus and mixed income plus compensation of employees (resources) plus taxes less subsidies on production (resources) plus net property income (resources minus uses).

Net disposable income is also only defined for resident sectors and equals net national income plus net current taxes on income and wealth (resources minus uses) plus net social contributions (resources minus uses) plus net social benefits other than social transfers in kind (resources minus uses) plus net other current transfers (resources minus uses).

Net saving is defined for resident sectors and is calculated as net disposable income plus the net adjustment for the change in net equity of households in pension funds reserves (resources minus uses) minus final consumption expenditure (uses). For the rest of the world, current external account is compiled as the trade balance plus all net income (resources minus uses).

Net lending/net borrowing is computed from the capital account as net saving plus net capital transfers (resources minus uses) minus gross capital formation (uses) minus acquisitions less disposals of non-produced non-financial assets (uses) plus consumption of fixed capital (resources). It can also be calculated in the financial account as total transactions in financial assets minus total transactions in liabilities (also known as changes in netfinancial worth (wealth) due to transactions). For the household and non-financial corporation sectors, there is a statistical discrepancy between these balancing items computed from the capital account and the financial account, respectively.

Changes in net worth (wealth) are calculated as changes in net worth (wealth) due to savings and capital transfers plus other changes in net financial worth (wealth). It currently excludes other changes in non-financial assets due to unavailability of data.

Net financial worth (wealth) is calculated as total financial assets minus total liabilities, whereas changes in net financial worth (wealth) are equal to the sum of changes in net financial worth (wealth) due to transactions (lending/ net borrowing from the financial account) and other changes in net financial worth (wealth).

Finally, changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities and other changes in net financial worth (wealth) are calculated as total other changes in financial assets minus total other changes in liabilities.

#### **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  $N_{\rm t}^{\rm M}$  represents the transactions (net issues) in month t and  $L_{\rm t}$  the level outstanding at the end of the month t, the index  $I_{\rm t}$  of notional stocks in month t is defined as:

$$j) \qquad I_{t} = I_{t-1} \times \left(1 + \frac{N_{t}}{L_{t-1}}\right)$$

As a base, the index is set equal to 100 on December 2001. The growth rate a<sub>t</sub> 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:

k) 
$$a_{t} = \left[ \prod_{i=0}^{11} \left( 1 + N_{t-i}^{M} \right) L_{t-1-i} - 1 \right] \times 100$$

1) 
$$a_t = \begin{pmatrix} I_t \\ I_{t-12} \end{pmatrix} \times 100$$

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:

m) 
$$\left(\frac{0.5I_{t} + \sum_{i=1}^{2} I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^{2} I_{t-i-12} + 0.5I_{t-15}} - 1\right) \times 100$$

where I<sub>t</sub> 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:

n) 
$$\left(\frac{0.5I_{t} + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1\right) \times 100$$

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values and the basis for the calculation are financial transactions, which exclude reclassifications, revaluations or any other changes that do not arise from transactions. Exchange rate variations are not included as all quoted shares covered are denominated in euro.

## 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 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:

0) 
$$a_{t} = \left[ \prod_{i=0}^{5} \left( 1 + \frac{N_{t-i}^{M}}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$p) \quad a_t = \begin{pmatrix} I_t \\ I_{t-6} \end{pmatrix} \times 100$$

### **RELATING TO TABLE I 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 S78). 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.

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.europa.eu), under the "Money, banking and financial markets" sub-section.

#### **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 S78). The raw data for goods, services and income are pre-adjusted to take a working-day effect into account. The working-day adjustment in goods and services 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.

#### **RELATING TO SECTION 7.3**

# CALCULATION OF GROWTH RATES FOR THE QUARTERLY AND ANNUAL SERIES

The annual growth rate for quarter t is calculated on the basis of quarterly transactions  $(F_t)$  and positions  $(L_t)$ , as follows:

$$a_{\scriptscriptstyle t} = \left( \prod_{\scriptscriptstyle i=t-3}^{t} \left( 1 + \frac{F_{\scriptscriptstyle i}}{L_{\scriptscriptstyle i-1}} \right) - 1 \right) \times 100$$

The growth rate for the annual series is equal to the growth rate in the last quarter of the year.



## **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.europa.eu). This allows user-friendly access to data via the ECB's Statistical Data Warehouse (http://sdw.ecb.europa.eu/), which includes search and download facilities. Further services available under the "Data services" sub-section include the subscription to different datasets and a repository of compressed Comma Separated Value (CSV) files. For further information, please contact us at: statistics@ecb.europa.eu.

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 ECB's Governing Council. For this issue, the cut-off date was 4 June 2008.

Unless otherwise indicated, all data series covering observations for 2008 relate to the Euro 15 (i.e. the euro area including Cyprus and Malta) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), the statistical series refer to the changing composition of the euro area. Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for 2001, 2007 and 2008, calculated from bases in 2000, 2006 and 2007, use a series which takes into account the impact of the entry of Greece, Slovenia, and Cyprus and Malta, respectively, into the euro area. Historical data referring to the euro area before the entry of Cyprus and Malta are available on the ECB's website at http:// www.ecb.europa.eu/stats/services/downloads/ html/index.en.html.

The statistical series referring to the changing composition of the euro area are based on the euro area composition at the time to which the statistics relate. Thus, data prior to 2001 refer to the Euro 11, i.e. the following 11 EU Member States:

Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Data from 2001 to 2006 refer to the Euro 12, i.e. the Euro 11 plus Greece. Data for 2007 refer to the Euro 13, i.e. the Euro 12 plus Slovenia, and data after 2008 refer to the Euro 15, i.e. the Euro 13 plus Cyprus and Malta.

Given that the composition of the European currency unit (ECU) does not coincide with the former currencies of the countries that have adopted the single currency, pre-1999 amounts originally expressed in the participating currencies and converted into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States that 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 Bulgaria, the Czech Republic, Denmark, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, Sweden and the 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 visà-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks (NCBs) 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 MROs (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 NCBs 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 an analysis, by sector and instrument, 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 that do not arise from transactions. Section 2.7 shows selected revaluations that 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 "Monetary Financial Institutions and Markets Statistics Sector Manual - Guidance for the statistical classification of customers. Third Edition" (ECB, March 2007). The "Guidance Notes to the Regulation ECB/2001/13 on the MFI Balance Sheet Statistics" November 2002) explains practices that NCBs recommended to follow. Since 1 January 1999, the statistical information has been collected and compiled on the basis of Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the Monetary Financial Institutions sector<sup>1</sup>, as last amended by Regulation ECB/2003/10<sup>2</sup>.

In line with this Regulation, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

Section 2.9 shows end-of-quarter outstanding amounts for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and therefore includes, among the liabilities, holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond funds, mixed funds, real estate funds and other funds) and by type of investor (general public funds and special investors' funds). Section 2.10 shows the aggregated balance sheet for each investment fund sector, as identified by investment policy and type of investor.

<sup>1</sup> OJ L 356, 30.12.1998, p. 7.

<sup>2</sup> OJ L 250, 2.10.2003, p. 19

#### **EURO AREA ACCOUNTS**

Section 3.1 shows quarterly integrated euro area accounts data, which provide comprehensive information on the economic activities of households (including non-profit institutions serving households), non-financial corporations, financial corporations and general government, as well as on the interaction between these sectors and both the euro area and the rest of the world. The non-seasonally adjusted data on current prices are displayed for the last available quarter, following a simplified sequence of accounts in accordance with the methodological framework of the European System of Accounts 1995 (ESA 95).

In short, the sequence of accounts (transactions) comprises: (1) the generation of income account, which shows how the production activity translates into various categories of income; (2) the allocation of primary income account, which records receipts and expenses relating to various forms of property income (for the economy as a whole, the balancing item of the primary income account is the national income); (3) the secondary distribution of income account, which shows how the national income of an institutional sector changes because of current transfers; (4) the use of income account, which shows how disposable income is spent on consumption or saved; (5) the capital account, which shows how savings and net capital transfers are spent in the acquisition of non-financial assets (the balancing item of the capital account is net lending/ net borrowing); and (6) the financial account, which records the net acquisitions of financial assets and the net incurrence of liabilities. As each non-financial transaction is mirrored by a financial transaction, the balancing item of the financial account conceptually also equals net lending/net borrowing as calculated from the capital account.

In addition, opening and closing financial balance sheets are presented, which provide a picture of the financial wealth of each individual sector at a given point in time. Finally, other changes in financial assets and liabilities (e.g. those resulting from the impact of changes in asset prices) are also shown.

The sector coverage of the financial account and of the financial balance sheets is more detailed for the financial corporations sector, showing a breakdown into MFIs, other financial intermediaries (including financial auxiliaries), and insurance corporations and pension funds.

Section 3.2 shows four-quarter cumulated flows (transactions) for the so-called non-financial accounts of the euro area (i.e. accounts (1) to (5) above) also following the simplified sequence of accounts.

Section 3.3 shows four-quarter cumulated flows (transactions and other changes) for households' income, expenditure and accumulation accounts, and outstanding amounts for the financial balance sheet accounts, following a more analytical presentation. Sector-specific transactions and balancing items are arranged so as to more easily depict financing and investment decisions of households, whilst respecting the account identities as presented in Sections 3.1 and 3.2.

Section 3.4 displays four-quarter cumulated flows (transactions) for non-financial corporations' income and accumulation accounts, and outstanding amounts for the financial balance sheet accounts, following a more analytical presentation.

Section 3.5 shows four-quarter cumulated financial flows (transactions and other changes) and outstanding amounts for the financial balance sheets of insurance corporations and pension funds.

#### 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 (changing composition), with the exception of statistics on securities issues (Tables 4.1 to 4.4), which relate to the Euro 15 (i.e. the Euro 13 plus Cyprus and Malta) for the whole time series (fixed composition).

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 broken down further 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 re-fixed 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. The 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 in 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 in 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 in 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 that 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 that 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 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, ranging 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.

Table 4.7 shows end-of-period rates estimated from nominal spot yield curves based on AAA-rated euro-denominated bonds issued by euro area central governments. The yield curves are estimated using the Svensson model<sup>3</sup>. Spreads between the ten-year rates and the three-month and two-year rates are also released. Additional yield curves (daily releases, including charts and tables) and the corresponding methodological information are available at http://www.ecb.europa.eu/stats/money/yc/html/index.en.html. Daily data may also be downloaded.

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

3 Svensson, L. E., 1994, "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051. car registrations are adjusted for the variations in the number of working days.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 1 in 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 by households on final consumption in the economic territory of the euro area. The table includes seasonally adjusted HICP data and experimental HICP-based estimates of administered prices, 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 statistics4. 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<sup>5</sup>. Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial production reflects the value added of the industries concerned.

World market prices of raw materials (Table 2 in Section 5.1) measures price changes of eurodenominated euro area imports compared with the base period.

The labour cost indices (Table 3 in Section 5.1) measure the changes in labour costs per hour worked in industry (including construction) and market services. Their methodology is laid down in Regulation (EC) No 450/2003 of the European Parliament and of the Council of 27 February 2003 concerning the labour cost index<sup>6</sup> and in

the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003<sup>7</sup>. A breakdown of hourly labour costs for the euro area is available by labour cost component (wages and salaries, and employers' social contributions plus employment-related taxes paid by the employer less subsidies received by the employer) and by economic activity. The ECB calculates the indicator of negotiated wages (memo item in Table 3 of Section 5.1) on the basis of non-harmonised, national-definition data.

Unit labour cost components (Table 4 in Section 5.1), GDP and its components (Tables 1 and 2 in Section 5.2), GDP deflators (Table 5 in Section 5.1) and employment statistics (Table 1 in Section 5.3) are results of the ESA 95 quarterly national accounts.

Industrial new orders (Table 4 in Section 5.2) measure the orders received during the reference period and cover industries working mainly on the basis of orders – in particular the 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), except repairs. New passenger car registrations cover registrations of both private and commercial passenger cars. The series for the euro area excludes Cyprus and Malta.

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 Organization (ILO) guidelines. They refer to persons actively

OJ L 162, 5.6.1998, p. 1.

<sup>5</sup> OJ L 86, 27.3.2001, p. 11.

<sup>6</sup> OJ L 69, 13.3.2003, p. 1.

<sup>7</sup> OJ L 169, 8.7.2003, p. 37.

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 on the basis of 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 20008 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 excessive deficit procedure B.9, as defined by Commission Regulation (EC) No 351/2002 of 25 February 2002 amending Council Regulation (EC) No 3605/93 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit - the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents

quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002 on quarterly non-financial accounts for general government<sup>9</sup>. 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 No 222/2004 and data provided by the NCBs.

#### **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)10 and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)11. 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" (May 2007), and in the following Task Force reports: "Portfolio investment collection systems" (June 2002), "Portfolio investment income" (August 2003) and "Foreign direct investment" (March 2004), all of which can be downloaded from the ECB's website. In addition, the report by the ECB/European 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

<sup>8</sup> OJ L 172, 12.7.2000, p. 3.

<sup>9</sup> OJ L 179, 9.7.2002, p. 1.

<sup>10</sup> OJ L 354, 30.11.2004, p. 34.

<sup>11</sup> OJ L 159, 20.6.2007, p. 48.

based on the Task Force's recommendations, is available on the ECB's website.

The tables in Sections 7.1 and 7.4 follow the sign convention in the IMF Balance of Payments Manual, i.e. surpluses in the current account and in the capital account have a plus sign, while in the financial account a plus sign denotes an increase in liabilities or a decrease in assets. In the tables in Section 7.2, both credit and debit transactions are presented with a plus sign. Furthermore, starting with the February 2008 issue of the Monthly Bulletin, the tables in Section 7.3 have been restructured in order to allow the data on balance of payments, the international investment position and related growth rates to be presented together; in the new tables, transactions in assets and liabilities that correspond to increases in positions are shown with a plus sign.

The euro area b.o.p. is compiled by the ECB. 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 7.2, Table 1 also contains seasonally adjusted data for the current account. Where appropriate, the adjustment also covers workingday, leap-year and/or Easter effects. Table 3 in Section 7.2 and Table 8 in Section 7.3 present a breakdown of the euro area b.o.p. and i.i.p. 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. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives and international reserves. In addition, separate data

are not provided for investment income payable to Brazil, mainland China, India and Russia. 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 b.o.p. financial account and i.i.p. in Section 7.3 are based on transactions and 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, Box 5 in the January 2007 issue of the Monthly Bulletin and Box 6 in the January 2008 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 for unquoted shares, and other investments (e.g. loans and deposits). 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, asset prices and foreign exchange developments.

Table 1 in Section 7.3 summarises the i.i.p. and financial transactions in the euro area b.o.p. The breakdown of the change in the annual i.i.p. is obtained by applying a statistical model to the i.i.p. changes other than transactions with information from the geographical breakdown and currency composition of assets and liabilities, as well as price indices for different financial assets. In this table, Columns 5 and 6 refer to direct investment by resident units abroad and direct investment by non-resident units in the euro area.

In Table 5 in Section 7.3, the breakdown into "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.

The outstanding amounts of the Eurosystem's international reserves and related assets and liabilities are shown in Section 7.3, Table 7. 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 7 are in line with the recommendations for the 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, which was 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 reserves" Eurosystem's international (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 7.4 contains a monetary presentation of the euro area balance of payments, in which the balance of payments transactions mirror the transactions in the external counterpart to M3. In portfolio investment liabilities (Columns 5 and 6), the transactions include sales and purchases of equity and debt securities issued by MFIs in the euro area, excluding 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 balance of payments 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 7.5 shows data on euro area external trade in goods. The source is Eurostat. Unit value indices are shown without any adjustment, while value data and volume indices are seasonally and working day-adjusted. 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. 4 definition. The geographical breakdown (Table 2 in Section 7.5) shows main trading partners individually or in regional groups. China excludes Hong Kong. On account of 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 b.o.p. statistics (Sections 7.1 and 7.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported.

#### **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 thirdmarket 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-22 group of trading partners is composed of the 12 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-42 group includes the EER-22 and the following countries: Algeria, Argentina, Brazil, Chile, Croatia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela. 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.

General notes

For more detailed information on the calculation of the EERs, see Box 8 entitled "The effective exchange rates of the euro following the recent euro area and EU enlargements" in the March 2007 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. The 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'

#### 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

1 The chronology of monetary policy measures taken by the Eurosystem between 1999 and 2005 can be found in the ECB's Annual Report for the respective years.



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.

#### 7 DECEMBER 2006

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.50%, starting from the operation to be settled on 13 December 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 4.50% and 2.50%, both with effect from 13 December 2006.

#### **21 DECEMBER 2006**

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 2007 from €40 billion to €50 billion. This increased amount takes the following aspects into consideration: the liquidity needs of the euro area banking system have grown strongly in recent years and are expected to increase further in the year 2007. Therefore 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 allotmennt amount again at the beginning of 2008.

#### II JANUARY AND 8 FEBRUARY 2007

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 3.50%, 4.50% and 2.50% respectively.

#### 8 MARCH 2007

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.75%, starting from the operation to be settled on 14 March 2007. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.75% and 2.75%, both with effect from 14 March 2007.

#### 12 APRIL AND 10 MAY 2007

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 3.75%, 4.75% and 2.75% respectively.

#### 6 JUNE 2007

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4%, starting from the operation to be settled on 13 June 2007. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5% and 3% respectively, with effect from 13 June 2007.

5 JULY, 2 AUGUST, 6 SEPTEMBER, 4 OCTOBER, 8 NOVEMBER AND 6 DECEMBER 2007, AND 10 JANUARY, 7 FEBRUARY, 6 MARCH, 10 APRIL, 8 MAY AND 5 JUNE 2008

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.00%, 5.00% and 3.00% respectively.

## 3 JULY 2008

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4.25%, starting from the operation to be settled on 9 July 2008. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5.25% and 3.25% respectively, with effect from 9 July 2008.



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- "Annual Report 2007", April 2008.

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## **GLOSSARY**

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website (www.ecb.europa.eu/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.

**Balance of payments (b.o.p.):** a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

**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.

**Capital account:** a b.o.p. account that covers all capital transfers and acquisitions/disposals of non-produced, non-financial assets between residents and non-residents.

**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.

**Current account:** a b.o.p. account that covers all transactions in goods and services, income and current transfers between residents and non-residents.

**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) on 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 an NCB.

**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-22 (comprising the 12 non-euro area EU Member States and the 10 main trading partners outside the EU) and the EER-42 (composed of the EER-22 and 20 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 establishing the European Community.

**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 ECB and the NCBs 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 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.

**Financial account:** a b.o.p. account that covers all transactions in direct investment, portfolio investment, other investment, financial derivatives and reserve assets, between residents and non-residents.

**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 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.

**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.

**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 an NCB 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.

**Minimum bid rate:** the lower limit to the interest rates at which counterparties may submit bids in the variable tenders

**Other investment:** an item in the b.o.p. and the i.i.p. that covers the financial transactions/ positions with non-residents in trade credits, deposits and loans, and other accounts receivable and payable.

**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 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.

**Purchasing power parity (PPP):** the rate at which one currency is converted into another so as to equalise the purchasing power of the two currencies by eliminating the differences in the price levels prevailing in the countries concerned. In their simplest form, PPPs show the ratio of the prices in national currency of the same good or service in different countries.

**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  $4\frac{1}{2}\%$ .

**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.

**Write-down:** a downward adjustment to the value of loans recorded in the balance sheets of MFIs when it is recognised that the loans have become partly unrecoverable.

**Write-off:** the removal of the value of loans from the balance sheets of MFIs when the loans are considered to be totally unrecoverable.

**Yield curve:** a graphical representation of the relationship between the interest rate or yield and the residual 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 or yield at two selected maturities.

