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EUROPEAN CENTRAL BANK

EUROSYSTEM

MONTHLY BULLETIN NOVEMBER

MONTHLY BULLETIN 11 | 2008

EUROPEAN CENTRAL BANK

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In 2008 all ECB publications feature a motif taken from the €10 banknote.

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Address
Kaiserstrasse 29
60311 Frankfurt am Main
Germany

Postal address
Postfach 16 03 19
60066 Frankfurt am Main
Germany

Telephone
+49 69 1344 0

Website
http://www.ecb.europa.eu

Fax
+49 69 1344 6000

This Bulletin was produced under the responsibility of the Executive Board of the ECB. Translations are prepared and published by the national central banks.

The cut-off date for the statistics included in this issue was 5 November 2008.

ISSN 1561-0136 (print)
ISSN 1725-2822 (online)

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ABBREVIATIONS

COUNTRIES

BE	Belgium	LU	Luxembourg
BG	Bulgaria	HU	Hungary
CZ	Czech Republic	MT	Malta
DK	Denmark	NL	Netherlands
DE	Germany	AT	Austria
EE	Estonia	PL	Poland
IE	Ireland	PT	Portugal
GR	Greece	RO	Romania
ES	Spain	SI	Slovenia
FR	France	SK	Slovakia
IT	Italy	FI	Finland
CY	Cyprus	SE	Sweden
LV	Latvia	UK	United Kingdom
LT	Lithuania	JP	Japan
		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 Organization
IMF	International Monetary Fund
MFI	monetary financial institution
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCB	national central bank
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

On the basis of its regular economic and monetary analyses, the Governing Council at its meeting on 6 November decided to reduce further the interest rate on the main refinancing operations of the Eurosystem by 50 basis points to 3.25%, with effect from the start of the new reserve maintenance period on 12 November 2008. Additionally, it was decided to lower the interest rates on the marginal lending facility and the deposit facility by 50 basis points, to 3.75% and 2.75% respectively, also becoming effective on 12 November 2008. These decisions followed the coordinated interest rate cut on 8 October 2008.

In the Governing Council's assessment, the outlook for price stability has improved further. Inflation rates are expected to continue to decline in the coming months, reaching a level in line with price stability during the course of 2009. The intensification and broadening of the financial market turmoil is likely to dampen global and euro area demand for a rather protracted period of time. In such an environment, taking into account the strong fall in commodity prices over recent months, price, cost and wage pressures in the euro area should also moderate. At the same time, the underlying pace of monetary expansion has remained strong but has continued to show further signs of deceleration. All in all, the information available and the Governing Council's current analysis indicate a further alleviation of upside risks to price stability at the policy-relevant medium-term horizon, even though they have not disappeared completely. At this juncture, it is therefore crucial that all parties, including public authorities, price-setters and social partners, fully live up to their responsibilities. The level of uncertainty stemming from financial market developments remains extraordinarily high and exceptional challenges lie ahead. The Governing Council expects the banking sector to make its contribution to restore confidence. It will continue to keep inflation expectations firmly anchored in line with its medium-term objective. In so doing, the Governing Council supports sustainable growth and employment and contributes to financial stability. Accordingly, it will continue to monitor very closely all developments over the period ahead.

Current developments in economic activity remain surrounded by an extraordinarily high degree of uncertainty in large part stemming from the intensification and broadening of the financial market turmoil. The world economy as a whole is exposed to the adverse effects, as tensions increasingly spill over from the financial sector to the real economy and from advanced economies to emerging market economies. In the case of the euro area, the latest survey data confirm that momentum in economic activity has weakened significantly, with sluggish domestic and external demand and tighter financing conditions. Looking forward, it will remain crucial to lay sound foundations for a recovery. For this to materialise as early as possible, it is of the utmost importance to maintain discipline and a medium-term perspective in macroeconomic policy-making, as well as to avoid second-round effects. It is equally important for the banking sector to take fully into account the significant support measures adopted by governments to deal with the financial turmoil. These measures should be supporting trust in the financial system and should help to prevent undue constraints in credit supply to companies and households. In combination with the recent broad-based falls in commodity prices, these measures should help to restore confidence.

In the view of the Governing Council, a number of the downside risks to economic activity identified earlier have materialised, particularly those stemming from the financial market tensions. Other downside risks continue to relate to disorderly developments due to global imbalances and rising protectionist pressures, as well as to the possibility of renewed increases in commodity prices.

With regard to price developments, annual HICP inflation has remained considerably above the level consistent with price stability since last autumn. However, it has been steadily

declining since July, falling – according to Eurostat's flash estimate – to 3.2% in October, from 3.6% in September and 3.8% in August. The continued high level of inflation is largely due to both the direct and indirect effects of past surges in energy and food prices at the global level. Moreover, strong wage growth in the first half of the year, in spite of a weaker growth momentum, combined with a deceleration in labour productivity growth during the same period, resulted in a significant increase in unit labour cost.

Looking forward, recent sharp falls in commodity prices, as well as the ongoing weakening in demand, suggest that the annual HICP inflation rate will continue to decline in the coming months and reach a level in line with price stability during the course of 2009. Depending, in particular, on the future path of oil and other commodity prices, some even stronger downside movements in HICP inflation cannot be excluded around the middle of next year, particularly due to base effects. These movements would be short-lived and therefore not relevant from a monetary policy perspective. Looking through such volatility, however, upside risks to price stability at the policy-relevant horizon are alleviating. The remaining upside risks relate to an unexpected increase in commodity prices, as well as in indirect taxes and administered prices, and the emergence of broad-based, second-round effects in price and wage-setting behaviour, particularly in economies where nominal wages are indexed to consumer prices. The Governing Council continues to call for these schemes to be abolished. It is imperative to ensure that medium to longer-term inflation expectations remain firmly anchored at levels in line with price stability.

Turning to the monetary analysis, the annual growth rates of broad money and credit aggregates, while still remaining strong, continued to decline in September. Taking the appropriate medium-term perspective, monetary data up to September confirm that upside risks to price stability are diminishing but that they have not disappeared completely.

A closer examination of the money and credit data indicates that the recent intensification of financial tensions has already had an identifiable impact, particularly in the form of outflows from money market funds and greater inflows into overnight deposits. However, the full impact of investors' uncertainty on their portfolio allocation behaviour is still to be seen in the coming months. Both portfolio shifts between non-monetary and monetary assets and shifts between different types of monetary assets can therefore not be ruled out in the period ahead. Hence, such effects will need to be taken into account when assessing monetary growth and its implications for price stability over the medium term.

There is also some evidence in the September data that the recent intensification and broadening of the financial tensions has triggered a slower provision of bank credit to euro area residents, mostly taking the form of smaller holdings of securities. At the same time, for the euro area as a whole, up to September there were no indications of a drying-up in the availability of bank loans to households and non-financial corporations. In particular, the maturity composition of loans suggests that non-financial corporations continued to obtain funding, also at relatively long maturities. However, more data and further analysis are necessary to form a robust judgement.

To sum up, the intensification and broadening of the financial market turmoil is likely to dampen global and euro area demand for a rather protracted period of time. In such an environment, taking into account the strong fall in commodity prices over recent months, price, cost and wage pressures in the euro area should also moderate. At the same time, the underlying pace of monetary expansion has remained strong but has continued to show further signs of deceleration. A cross-check of the outcome of the economic analysis with that of the monetary analysis confirms that there

is a further alleviation of upside risks to price stability at the policy-relevant medium-term horizon, even though they have not disappeared completely. At this juncture, it is therefore crucial that all parties, including public authorities, price-setters and social partners, fully live up to their responsibilities. The level of uncertainty stemming from financial market developments remains extraordinarily high and exceptional challenges lie ahead. The Governing Council expects the banking sector to make its contribution to restore confidence. It will continue to keep inflation expectations firmly anchored in line with its medium-term objective. In so doing, the Governing Council supports sustainable growth and employment and contributes to financial stability. Accordingly, it will continue to monitor very closely all developments over the period ahead.

In the area of fiscal policy, medium-term challenges, such as population ageing, strongly underline the need for fiscal policy to focus on medium-term sustainability and thereby build confidence. Accordingly, and as recently confirmed by the ECOFIN Council and the European Council, the fiscal policy provisions of the Maastricht Treaty and the Stability and Growth Pact should continue to be applied fully. The fiscal rules are one of the indispensable pillars of EMU and the single currency, which must remain firmly in place so as not to undermine the confidence in fiscal sustainability. Finally, the current situation calls for the high quality and timeliness of statistical information on government interventions to ensure the transparent and accountable use of public funds.

Turning to structural policies, the ongoing period of weak economic activity and high uncertainty about the economic outlook will require a significant degree of resilience from the euro area economy. The current situation should therefore be seen as a catalyst to foster the implementation of necessary domestic reforms so that countries may fully exploit the benefits offered by the enhancement of international trade and market integration, in line with the principle of an open market economy with free competition.

This issue of the Monthly Bulletin contains three articles. The first article explains why, from a monetary policy perspective, it is important to monitor labour cost developments and competitiveness indicators across euro area countries. The second article presents a framework for valuing stock markets and equity risk premia. The third article reviews ten years of TARGET and the launch of TARGET2.

ECONOMIC AND MONETARY DEVELOPMENTS

I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

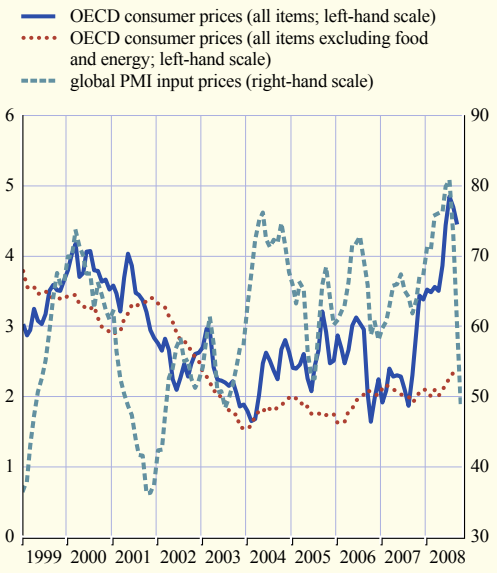
Global economic conditions have further worsened, aggravated by the financial crisis and the severe strains on banking systems and credit conditions worldwide. This is suggested by recent economic indicators, which point to a further weakening in global economic activity, particularly in the manufacturing sector. At the same time, global inflationary pressures have eased, owing to the sharp decrease in commodity prices. The deepening of the financial crisis has led to increased uncertainty concerning the outlook for global economic growth, and risks lie clearly on the downside.

1.1 DEVELOPMENTS IN THE WORLD ECONOMY

Global economic conditions have further worsened, aggravated by the financial crisis and the severe strains on banking systems and credit conditions worldwide. This is suggested by recent economic indicators, which point to a further weakening in global economic activity, particularly in the manufacturing sector. In October 2008 the global all-industry output Purchasing Managers' Index (PMI) pointed to a further contraction of the global economy. In particular, the manufacturing PMI declined to its lowest level since data were first compiled in January 1998. Most of the deterioration in the all-industry index reflects the effects of the financial crisis and deteriorating confidence on activity, new orders and employment. The index remained below the 50-point threshold between economic expansion and contraction for the whole third quarter of 2008, marking the first quarter of continuous contraction since 2001.

Chart 1 International price developments

(monthly data; annual percentage changes; diffusion index)



Sources: OECD and Markit.

Global inflationary pressures have eased, owing to the sharp decrease in commodity prices. Consumer prices in the OECD area rose by 4.5% in the year to September 2008, compared with 4.7% the month before. Excluding food and energy, consumer price inflation was 2.4% in the year to September, compared with 2.3% in the year to August. Recent survey evidence on global input prices suggests a marked decline in cost inflation, reflecting the decline in the price of oil and other commodities (see Chart 1).

UNITED STATES

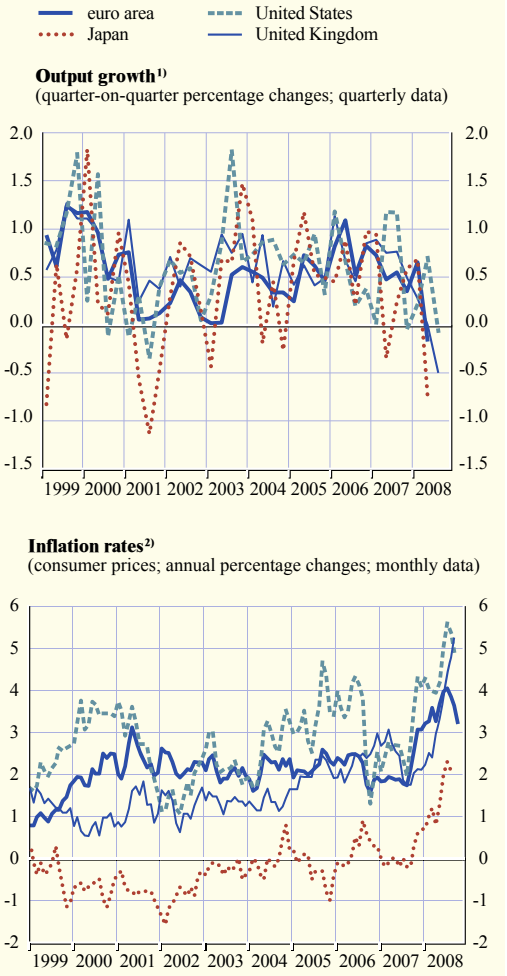
In the United States, according to advance estimates, real GDP contracted at an annualised rate of 0.3% in the third quarter of 2008, compared with an expansion of 2.8% in the preceding quarter. The marked deceleration primarily reflects a negative contribution from personal consumption expenditure as the effect of the US government's fiscal-stimulus package fades, the ongoing housing market correction and weakness in investment in equipment and software. Despite a slowdown in external demand, net trade continued to contribute positively to growth in the third quarter.

Looking ahead, higher borrowing costs, reduced availability of credit as financial deleveraging proceeds, and tighter lending standards continue to exert a significant drag on real economic activity. The outlook for personal consumption is clouded by waning confidence and adverse employment and real income dynamics. The housing market contraction continues to weigh on residential investment and household wealth, and slowing foreign demand also poses risks to the economic outlook.

As regards price developments, annual CPI inflation eased somewhat to 4.9% in September, but remained high by historical standards (see Chart 2). The deceleration reflected mostly a retreat in energy cost pressures. The annual rate of inflation excluding food and energy was unchanged in September from the previous month, standing at 2.5%.

On 29 October 2008 the US Federal Open Market Committee decided unanimously to lower its target for the federal funds rate by 50 basis points to 1%. The decision followed the half-point reduction the Federal Reserve System coordinated with the European Central Bank and four other central banks on 8 October. The Federal Reserve System, in cooperation with the US Treasury and a number of foreign central banks, also announced further initiatives to enhance its liquidity facilities and to provide support to financial markets in view of deteriorating conditions.

Chart 2 Main developments in major industrialised economies



Sources: National data, BIS, Eurostat and ECB calculations.
1) Eurostat data are used for the euro area and the United Kingdom; 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.

JAPAN

In Japan, economic conditions have continued to worsen, reflecting sluggish domestic demand and a further slowdown in exports, although credit conditions have tightened to a lesser extent than in other advanced economies. As a result of the global slowdown and moderating profit growth, business confidence has continued to deteriorate, as shown by the results of the Bank of Japan's September 2008 Tankan survey. The diffusion index of business conditions for large manufacturers moved to negative territory for the first time since 2003, while for large non-manufacturers it decreased sharply. Capital spending plans for the fiscal year 2008 point to a further slowdown in growth in the coming months.

In September 2008 annual CPI inflation was unchanged at 2.1%. Inflation peaked in July at 2.3% and moderated thereafter owing to the decrease in global commodity prices and the slowdown in global activity. Excluding food and energy, annual CPI inflation returned to positive territory

(0.2%) in September, from 0.0% in August. On 31 October, the Bank of Japan decided to lower the Bank's target for the uncollateralised overnight call rate by 20 basis points to 0.3%.

UNITED KINGDOM

Output in the United Kingdom declined by 0.5% quarter on quarter in the third quarter of 2008, after stagnating in the second quarter (see Chart 2). This is the first time in 16 years that the economy has contracted on a quarter-on-quarter basis. Confidence indicators have also generally trended downwards in recent quarters and have remained below long-term averages. The correction in the housing market continued in September. According to both the Nationwide and Halifax indices, house prices fell by around 12% year on year. In line with falling house prices, in the third quarter of 2008 output in construction contracted by 0.8% quarter on quarter. Annual HICP inflation rose to 5.2% in September, from 4.7% in August, reflecting a broad-based increase across HICP components.

On 8 October 2008 the Bank of England's Monetary Policy Committee, in coordination with other central banks, decided to cut its main policy rate by 50 basis points to 4.5%. On 6 November it decided to make a further reduction by 150 basis points to 3.0%. This decision was taken against the background of a substantial shift in the prospects for inflation in the United Kingdom and a very marked deterioration in the outlook for domestic and global economic activity.

OTHER EUROPEAN COUNTRIES

In most of the other larger EU countries outside the euro area, GDP growth was fairly stable in the second quarter of 2008, and inflation decreased in September. However, recent indicators point to a notable deceleration of economic activity.

In Sweden, quarterly growth has continued to decelerate, standing at 0.0% in the second quarter of 2008 (well below the long-term average of 0.8%). In Denmark, quarterly real GDP growth rebounded to 0.4% in the second quarter from -0.6% in the first (compared with the long-term average of 0.5%). The latest consumer and retail confidence indicators showed a continued decline in both countries. In September annual HICP inflation increased slightly further in Sweden, reaching 4.2%, but moderated somewhat to 4.5% in Denmark. Danmarks Nationalbank increased its main policy rate on 7 October by 40 basis points to 5% and on 24 October by 50 basis points to 5.5%. Sveriges Riksbank decreased its main policy rate on 8 October and again on 23 October by a total of 100 basis points to 3.75%.

In three of the four largest central and eastern European countries, economic growth remained broadly stable in the second quarter of 2008, standing at a quarter-on-quarter rate of 0.6% in Hungary, 0.9% in the Czech Republic and 1.5% in Poland. In Romania, the year-on-year growth rate of GDP increased further in the second quarter and reached 9.3%. In recent months indicators for retail sales and consumer confidence were broadly stable or deteriorated slightly in these countries. Annual HICP inflation increased slightly in September in the Czech Republic (to 6.4%) but decreased in Hungary (to 5.6%), Romania (to 7.3%) and Poland (to 4.1%). Fading effects of last year's price increases explain most of the decline in annual inflation rates in the latter three countries, while in the Czech Republic the slight increase mainly reflected the effect of an increased contribution from processed food inflation, which more than offset the effect of decreasing inflation in most other components. On 22 October the Magyar Nemzeti Bank increased its main policy rate by 300 basis points to 11.5%, and on 6 November Česká národní banka decreased its main policy rate by 75 basis points to 2.75%.

EMERGING ASIA

Available data suggest that economic activity has slowed in emerging Asia, especially in small and open economies. Consumer price inflation has continued to decline in several countries, mainly reflecting easing food prices and base effects. Since mid-September conditions have strongly deteriorated in all emerging financial markets as a result of pronounced deleveraging and rising risk aversion at the global level. As inflationary pressures have weakened, several central banks have taken measures to improve liquidity conditions in money markets and lowered policy rates to cope with a potential adverse impact from the financial turmoil on the domestic real economy.

In China, real GDP growth slowed in the third quarter of 2008 to an annual rate of 9.0% from 10.1% in the previous quarter. The weaker GDP number was mainly due to tight macroeconomic policies in the first half of the year and deteriorating external conditions, but also stemmed in part from a temporary suspension of production during the Olympic Games. Annual CPI inflation fell further in September to 4.6%, from 4.9% in August. With inflation moderating and the global financial tensions intensifying, the People's Bank of China cut policy rates twice in October (by 27 basis points each time). This brought the one-year lending rate to 6.66% and the one-year deposit rate to 3.60%. The reserve requirement ratio was also lowered further by 50 basis points.

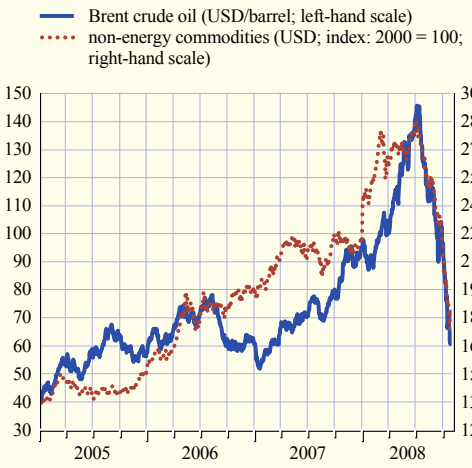
LATIN AMERICA

In Latin America, the pace of economic activity has been showing signs of decelerating, while inflationary pressures are in general showing signs of abating, albeit from elevated levels. In Brazil, industrial production grew at an annual rate of only 1.9% in August 2008, after 8.8% in July. Annual CPI inflation stood at 6.3% in September, up from 6.2% in the previous month. In Argentina, the pace of economic activity has moderated, with industrial production expanding by 3.7% on an annual basis in August, down from the exceptionally high increase of 9.1% in July. CPI inflation has remained at elevated levels, albeit declining slightly to 8.7% in September. Economic activity in Mexico remained weak in August, with industrial production contracting by 1.6% on an annual basis. Annual inflation declined slightly to 5.5% in September, from 5.6% in August. In response to the heightened financial tensions, several central banks in the region have taken a range of measures to improve liquidity conditions in their country.

1.2 COMMODITY MARKETS

Oil prices extended their decline in October 2008, standing at USD 62.6 on 5 November (see Chart 3), which is 34% lower than at the beginning of the year (in euro terms, the decrease is around 24%). As the financial turmoil intensified, prices were pulled down by growing fears of a global recession and the need for financial institutions to liquidate their assets. Over the medium term, however, market participants still expect higher prices, with futures for December 2009 trading at around USD 76.

Chart 3 Main developments in commodity markets



Sources: Bloomberg and HWWI.

The recent financial crisis has heavily affected market participants' expectations for the underlying oil market fundamentals. In particular, there is considerable uncertainty surrounding oil demand prospects. Emerging economies, where demand had so far displayed few signs of moderation, are now feared to be more seriously affected by the global economic slowdown. As inventory figures pointed to an excess of supply, OPEC decided at an extraordinary meeting on 24 October 2008 to reduce supply by 1.5 million barrels per day, but this failed to provide support to falling prices, at least in the short term. Tighter financial market conditions, together with highly volatile prices, may discourage investment in capacity expansion and cause delays in ongoing projects, thereby generating renewed tension in the supply/demand balance in the coming years.

Prices of non-energy commodities have also declined since the beginning of October. Metal prices have been especially hit by fears of a global recession. Most food commodities have been driven down by supply-side factors, with most harvests in the northern hemisphere displaying record yields. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was approximately 19% lower at the end of October than a year earlier.

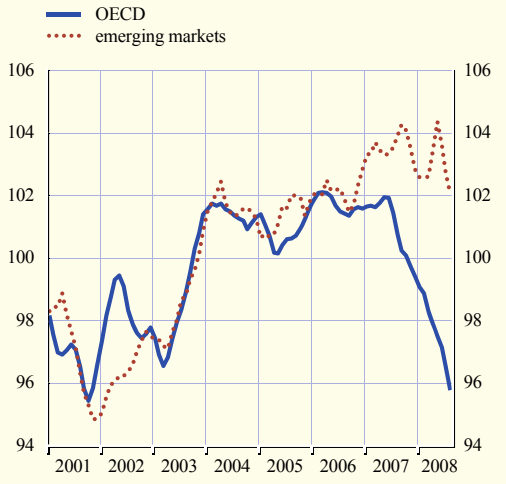
1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

The worsening in global growth conditions is dampening the outlook for foreign demand for euro area goods and services. The OECD composite leading indicator (CLI) for August 2008 signalled a continued slowdown in the OECD area (see Chart 4). This indicator also points to a growth moderation in some major non-OECD countries, especially China and Russia.

The uncertainty surrounding this outlook for global economic growth remains high and is subject to increased downside risks mainly stemming from a scenario of ongoing financial market tensions affecting the real economy more adversely than previously assumed. Other risks relate to the possibility of renewed rises in highly volatile energy and food prices, disorderly developments owing to global imbalances and increasing protectionist measures.

Chart 4 OECD composite leading indicator

(monthly data; amplitude-adjusted)



Source: OECD.
Note: The emerging market indicator is a weighted average of the CLI for Brazil, Russia and China.

2 MONETARY AND FINANCIAL DEVELOPMENTS

2.1 MONEY AND MFI CREDIT

The latest monetary data confirm the ongoing moderation of broad money and credit growth. This reflects the impact of past increases in interest rates and generally tighter financing conditions, as well as slower economic growth. The annual growth rate of M3 declined further in September, but remained strong at 8.6%. The flat yield curve and the term structure of bank deposit rates continue to foster shifts both into and within M3. In addition, the intensification of financial market tensions in mid-September is likely to have increased the preference for at least certain specific liquid monetary assets, as can be seen, for instance, in the strengthening of M1 growth. While monetary dynamics remain strong and thus point to risks to price stability over the longer term, the moderation in monetary growth in the period to September implies a reduction in these risks. Given the current heightened financial and economic uncertainties, the accumulated liquidity is unlikely to translate into inflationary pressures in the shorter term. The September data provide no indication of a break that would imply, for instance, the drying-up of loans to the non-financial private sector. However, more data are needed in order to form a firm judgement on the potential impact of the recent intensification of the financial market tensions.

THE BROAD MONETARY AGGREGATE M3

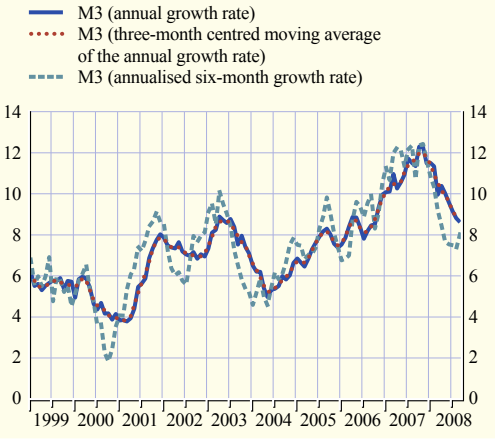
The developments observed in financial markets since mid-September are likely to affect the balance sheet of the MFI sector in a number of ways. While some of the effects should become visible relatively quickly, others may only emerge over the next few months. In this situation, the assessment of MFI balance sheet data needs, to some extent, to focus on monthly flows, in order to identify potential breaks in money and credit series at an early stage.

The annual rate of growth of M3 declined further in September, falling to 8.6%, down from 8.8% in the previous month (see Chart 5). At the same time, with the month-on-month growth rate standing at 0.7%, the annualised three and six-month growth rates continued to hover between 7½% and 8½%. Thus, the short-term dynamics of M3 have remained relatively stable since the spring of 2008 at what are still robust levels.

In the current situation, M3 dynamics are being influenced by a number of factors that need to be taken into account when assessing the underlying strength of monetary growth with a view to analysing risks to price stability. First, while the yield curve steepened in October, the flat yield curve that prevailed until September continued to encourage shifts from longer-maturity assets into similarly remunerated monetary assets, implying an upward impact on headline M3 growth. Second, the intensification of financial market tensions observed since mid-September may have triggered portfolio shifts both between monetary and non-monetary assets and between individual monetary instruments. More data are required in order to properly assess these possible effects and their impact on the various components of monetary growth.

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

Overall, the latest data confirm the moderation in the growth rates of broad money and credit aggregates, reflecting the impact of past increases in interest rates, generally tighter financing conditions and slower economic growth. The intensification of financial tensions observed since mid-September has had a visible impact on specific components and counterparts of M3, but the latest data provide no indication of a break that would imply, for instance, the drying-up of loans to the non-financial private sector.

MAIN COMPONENTS OF M3

The moderation in annual M3 growth observed in September 2008 was driven by declines in the contributions of both short-term deposits other than overnight deposits (i.e. M2-M1) and marketable instruments. At the same time, the contribution of M1 increased from the very low level observed in the previous month.

The annual growth rate of M1 rebounded to stand at 1.2% in September, having been fairly subdued in the previous month (see Table 1). This rise in the growth rate of M1 was driven by significant increases in the monthly flows of both sub-components, largely reflecting an increased preference for liquid assets in the current environment. As a result, caution is warranted when interpreting this development in M1 as indicating a turning-point in real economic activity (see also Box 1, entitled "The informational content of real M1 growth for real GDP growth in the euro area", in the October 2008 issue of the Monthly Bulletin).

The annual rate of growth of currency in circulation rose to 8.2% in September, up from 7.2% in August. At the same time, the annual growth rate of overnight deposits also increased significantly, but remained negative (standing at -0.2% in September, up from -1.1% in the previous month). This development might be explained by two countervailing forces: the poor remuneration of such deposits exerting downward pressure on M1; and the increased preference for liquidity exerting upward pressure on M1.

Table 1 Summary table of monetary variables

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

	Outstanding amount as a percentage of M3 [1]	Annual growth rates					
		2007 Q4	2008 Q1	2008 Q2	2008 Q3	2008 Aug.	2008 Sep.
M1	**42.1**	**5.9**	**3.8**	**2.3**	**0.6**	**0.2**	**1.2**
Currency in circulation	7.2	8.0	7.8	7.8	7.5	7.2	8.2
Overnight deposits	34.9	5.5	3.0	1.2	-0.7	-1.1	-0.2
M2 - M1 (= other short-term deposits)	43.1	16.8	18.4	19.3	18.9	18.9	17.7
Deposits with an agreed maturity of up to two years	26.6	40.6	41.4	40.3	37.5	37.2	34.4
Deposits redeemable at notice of up to three months	16.5	-3.9	-3.3	-2.3	-2.0	-1.8	-2.0
M2	**85.2**	**10.7**	**10.3**	**10.0**	**9.1**	**8.9**	**8.9**
M3 - M2 (= marketable instruments)	14.8	19.6	16.3	10.4	8.8	8.4	7.1
M3	**100.0**	**12.0**	**11.2**	**10.1**	**9.0**	**8.8**	**8.6**
Credit to euro area residents		**9.2**	**10.0**	**9.6**	**9.1**	**9.3**	**8.5**
Credit to general government		-4.1	-2.5	-1.2	0.6	1.6	0.8
Loans to general government		-1.8	-0.9	0.8	2.1	1.9	2.9
Credit to the private sector		12.2	12.7	11.9	10.8	10.8	10.1
Loans to the private sector		11.1	11.1	10.5	9.1	8.8	8.5
Longer-term financial liabilities (excluding capital and reserves)		**8.5**	**6.9**	**4.5**	**3.4**	**3.3**	**2.8**

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

Growth in short-term deposits other than overnight deposits continued to account for most of the growth in M3 in September, although the annual growth rate of such deposits declined somewhat to stand at 17.7% in that month, down from 18.9% in August. This decline reflects some moderation in the main sub-component, namely deposits with an agreed maturity of up to two years (i.e. short-term time deposits), which nevertheless continued to grow at a very strong annual rate of 34.4% in September, down from 37.2% in August. Deposits redeemable at notice of up to three months (i.e. short-term savings deposits) continued to decline in September, with the rate of decline increasing slightly.

The remuneration of short-term time deposits – unlike that of overnight and short-term savings deposits – has mirrored the rise in money market rates fairly closely. The differentials in the interest rates paid on different types of deposit and monetary asset have made short-term time deposits particularly attractive compared with other instruments in M3 and longer-maturity assets. This, in turn, has encouraged shifts into short-term time deposits from both sides of the term structure.

The annual growth rate of marketable instruments (i.e. M3-M2) also declined further to stand at 7.1% in September, down from 8.4% in August. This decline reflects the fact that the annual growth rate of money market fund shares/units – the largest sub-component – declined to stand at 3.6% in September, down from 4.1% in the previous month. Substantial outflows were observed from money market fund shares/units in September, reflecting investors' renewed concerns regarding the safety of some funds in the context of intensifying financial tensions in the second half of the month.

Turning to other categories of marketable instrument, a further marked decline was observed in the annual growth rate of debt securities with a maturity of less than two years (i.e. short-term debt securities), which fell by almost half to stand at 5.5% in September. Finally, a marginal deceleration was observed in September for repurchase agreements, bringing the annual growth rate of this instrument to 16.5%, down from 16.7% in August.

The annual growth rate of M3 deposits – which comprise short-term deposits and repurchase agreements and represent the broadest monetary aggregate for which a sectoral breakdown is available – declined in September to stand at 9.7%, down from 10.4% in August. This development was broadly in line with the overall moderation in M3 growth. Although households remained the largest contributor to overall annual M3 deposit growth, the annual growth rate of households' M3 deposits declined to 8.6%, down from 9.3% in the previous month. Similarly, the annual growth rate of the M3 deposit holdings of financial intermediaries other than MFIs declined to 19.1% in September, down from 19.6% in August. This, however, masks the fact that in September this sector exhibited its largest ever monthly flow into overnight deposits, driven mainly by OFIs. Given the current market environment, this may partly reflect increases in investment funds' cash buffers in order to accommodate possible redemptions. Finally, a further deceleration was observed in September for M3 deposits held by non-financial corporations, bringing the annual growth rate of such deposits to 5.9%, down from 6.4% in August. Again, looking at monthly flows and looking beyond seasonal factors, for non-financial corporations too there was a shift in September from short-term time deposits to overnight deposits.

MAIN COUNTERPARTS OF M3

Turning to the counterparts of M3, the growth rate of total MFI credit to euro area residents declined to stand at 8.5% in September, down from 9.3% in August (see Table 1). Within total MFI credit,

the growth rate of credit to general government resumed its downward trend, reaching 0.8% in September, down from 1.6% in August. This reflected the decline in credit institutions' holdings of government securities and was probably linked to the deleveraging of credit institutions, given the liquidity of the government bond markets and the favourable price developments. To a lesser extent, it also reflected the shedding of such assets by money market funds as they reduced their portfolios in the context of redemptions.

At the same time, the annual growth rate of MFI credit to the private sector declined further to stand at 10.1% in September, down from 10.8% in August. The annual growth rate of loans – the largest component of credit to the private sector – continued to fall (reaching 8.5%, down from 8.8% in August), but remained vigorous. All sectors – non-financial corporations, households, insurance corporations and pension funds, and other non-monetary financial intermediaries – contributed to this moderation, albeit with growth rates at very different levels (see Table 2).

The annual growth rate of MFI loans to non-financial corporations declined somewhat further in September, reaching 12.1%, down from 12.6% in August. The annualised three-month growth rate (an indicator of shorter-term dynamics) remained lower than the annual growth rate, but continued to be strong. Looking at the maturity breakdown, this moderation in the dynamics of loans to non-financial corporations was driven mainly by developments at short and medium-term maturities. In terms of monthly flows, lending at long maturities (i.e. more than five years) accounted for more than half of the total flow in September. This suggests that non-financial corporations continued to obtain funding also at relatively long maturities. This may partly reflect some frontloading of borrowing, possibly in anticipation of a future deterioration in the availability of credit, and would be consistent with the increases observed in non-financial corporations' holdings of overnight deposits. It may also reflect some shifts from debt securities to loans in MFIs' financing of non-financial corporations. As regards future prospects, a further gradual moderation in the growth of MFI lending to non-financial corporations would be in line with the current cyclical environment and tighter financing conditions. In this respect, the October 2008 bank lending survey for the euro area points to both a tightening of credit standards for loans to enterprises and a decline in demand

Table 2 MFI loans to the private sector

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

	Outstanding amount as a percentage of the total [1]	Annual growth rates					
		2007 Q4	2008 Q1	2008 Q2	2008 Q3	2008 Aug.	2008 Sep.
Non-financial corporations	**44.0**	**14.0**	**14.6**	**14.5**	**12.8**	**12.6**	**12.1**
Up to one year	28.9	11.9	12.9	12.9	10.9	10.8	10.1
Over one and up to five years	20.0	21.0	22.6	20.9	18.6	18.4	17.5
Over five years	51.1	12.7	12.8	13.0	11.8	11.6	11.3
Households [2]	**45.6**	**6.6**	**5.9**	**5.0**	**4.0**	**3.9**	**3.8**
Consumer credit [3]	12.9	5.3	5.4	5.2	4.3	4.0	4.3
Lending for house purchase [3]	71.6	7.6	6.7	5.6	4.2	4.1	4.0
Other lending	15.5	3.1	2.7	2.2	2.5	2.5	2.5
Insurance corporations and pension funds	**0.9**	**22.0**	**6.5**	**-1.6**	**-7.8**	**-8.5**	**-9.2**
Other non-monetary financial intermediaries	**9.4**	**23.4**	**24.7**	**24.8**	**22.2**	**20.7**	**18.9**

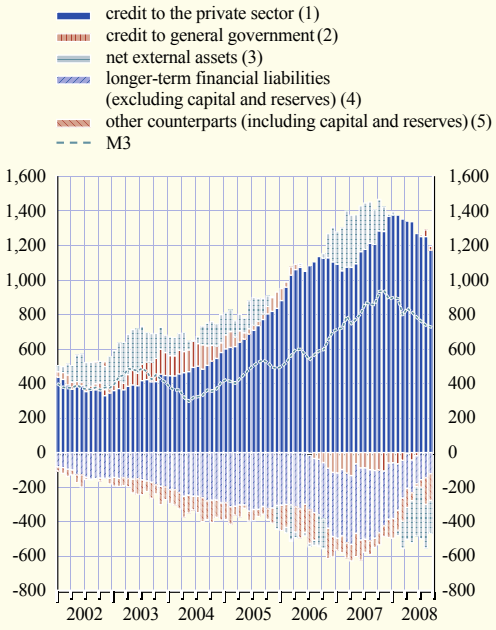
Source: ECB.
Notes: MFI sector including the Eurosystem; sectoral classification based on the ESA 95. For further details, see the relevant technical notes.
1) As at the end of the last month available. Sector loans as a percentage of total MFI loans to the private sector; maturity breakdown and breakdown by purpose as a percentage of MFI loans to the respective sector. Figures may not add up due to rounding.
2) As defined in the ESA 95.
3) The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.

in the third quarter of 2008 by comparison with the second quarter (for details, see Box 1, entitled "The results of the October 2008 bank lending survey for the euro area").

The annual growth rate of loans to households declined marginally further to stand at 3.8% in September, down from 3.9% in August, in line with weakening economic and housing market prospects and tighter financing conditions. Shorter-term dynamics, as measured by the annualised three-month growth rate, strengthened somewhat. However, this development should be interpreted with caution, since it mainly reflects a decline in the derecognition of loans owing to securitisation, which previously dampened loan dynamics. The moderation observed in annual loan growth in September was driven mainly by lending for house purchase (the annual growth rate of which declined to 4.0%, down from 4.1% in August), which is the largest component of loans to households. By contrast, the annual growth rate of consumer credit increased somewhat.

Chart 6 Counterparts of M3

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



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

Among the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities excluding capital and reserves decreased further to stand at 2.8% in September, down from 3.3% in August. This reflected both a decline in the annual growth rate of deposits with a maturity of more than two years and a further moderation in the dynamics of debt securities with a maturity of more than two years and deposits redeemable at notice of more than three months.

The annual growth rate of capital and reserves increased to 13.0% in September, up from 11.3% in August. Part of this large monthly inflow (which totalled €30 billion) can be explained by additional equity capital raised via private placement and capital injections by governments in order to strengthen the balance sheets of credit institutions.

Finally, MFIs' net external asset position recorded a monthly inflow of €28 billion in September. The inflows observed in the past two months have offset somewhat the successive monthly outflows observed in the period to July, with the result that the annual outflow fell to €190 billion in September, down from €253 billion in August (see Chart 6).

To sum up, the ongoing moderation of the annual growth of MFI loans to the non-financial private sector largely reflects the effects that developments in economic activity, interest rates and credit conditions are having on demand for loans. The September data do not point to a disruption of the flow of credit to the private sector, but more data are needed in order to form a firm judgement on the potential impact of the recent intensification of financial market tensions.

Box 1

THE RESULTS OF THE OCTOBER 2008 BANK LENDING SURVEY FOR THE EURO AREA

This box describes the main results of the October 2008 bank lending survey for the euro area conducted by the Eurosystem.[1] When assessing the survey results, it should be borne in mind that this survey round was conducted from 23 September until 7 October (i.e. before the meeting of the euro area Heads of State or Government in Paris on 12 October on rescue measures for banks).

In the third quarter of 2008 the net percentage of banks reporting a tightening of credit standards for loans to enterprises increased significantly compared with the second quarter.[2] The net tightening continued to be stronger for large firms than for small and medium-sized enterprises (SMEs). The net tightening of credit standards for loans to households for house purchase and for consumer credit increased somewhat in the third quarter of 2008, although by less than the net tightening of credit standards for loans to enterprises. With regard to demand for loans, banks reported that the net demand for loans to enterprises and households had declined further and continued to be negative in the third quarter of 2008.[3]

This survey round also contained a set of ad hoc questions following up on the ad hoc questions included in previous survey rounds and addressing the effect of the financial turmoil (see the last section of this box). Banks reported that in particular their short-term wholesale funding via money markets and short-term debt securities was considerably more hampered than in the second quarter. Access to securitisation continued to be hampered, remaining broadly unchanged from the second quarter.

Loans or credit lines to enterprises

Credit standards: In the third quarter of 2008 the net percentage of banks reporting a tightening of credit standards for loans to enterprises increased significantly (by 22 percentage points, to 65%; see Chart A). The most important factors behind the net tightening continued to be expectations about future economic activity and the industry or firm-specific outlook. The impact of banks' ability to access market financing also contributed to the net tightening. Moreover, the impact on the net tightening of credit standards from banks' costs related to their capital positions as well as banks' liquidity positions increased somewhat compared with the second quarter of 2008 and returned broadly to the levels reached in the first quarter of the year.

As regards the terms and conditions of granting loans to enterprises, banks reported that they had further increased their margins on average loans and on riskier loans in the third quarter, to 68% (from 53%) and to 76% (from 64%) respectively in net terms (see Chart B). In addition, non-price terms and conditions were also tightened further. These conditions deteriorated in particular with regard to the size of the loan or credit line (by 16 percentage points, to 45% in

1 A comprehensive assessment of the results of the October 2008 bank lending survey for the euro area was published on 7 November 2008 on the ECB's website.
2 The reported net percentage refers to the difference between the proportion of banks reporting that credit standards have been tightened and the proportion of banks reporting that they have been eased. A positive net percentage indicates that banks have tended to tighten credit standards ("net tightening"), whereas a negative net percentage indicates that banks have tended to ease credit standards ("net easing").
3 The term "net demand" refers to the difference between the proportion of banks reporting an increase in loan demand and the proportion of banks reporting a decline.

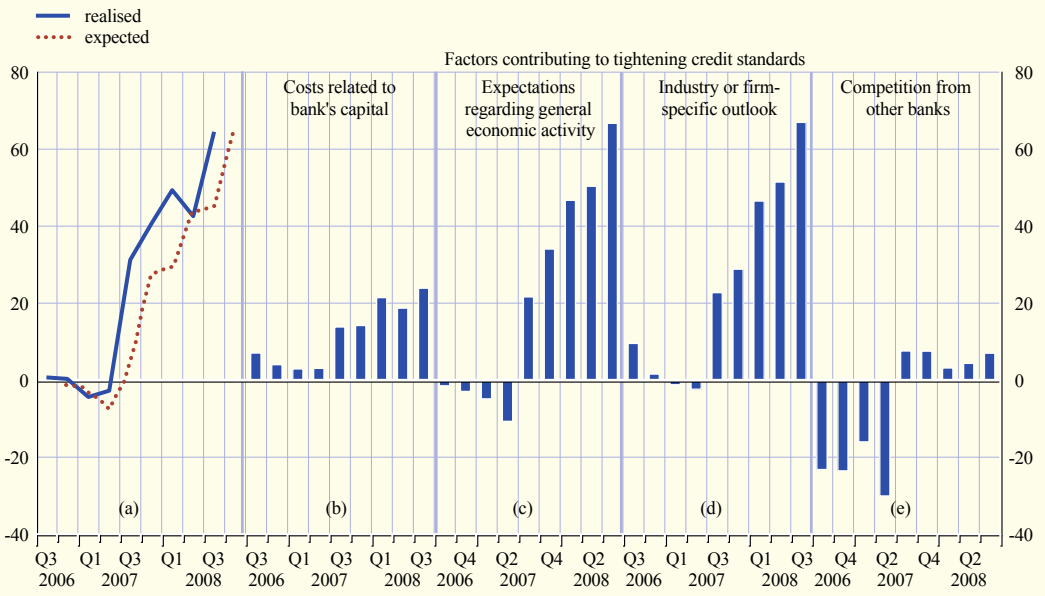
net terms in the third quarter) and the maturity of the loan (by 15 percentage points, to 40% in net terms in the third quarter). Collateral requirements further increased (by 10 percentage points, to 46% in net terms in the third quarter).

The net tightening of credit standards continued to be stronger for large enterprises (68%, compared with 44% in the second quarter) than for SMEs (56%, compared with 34% in the second quarter). While some stabilisation had occurred in the second quarter, the net tightening increased considerably for both firm size categories in the third quarter of 2008. As regards the factors underlying the changes in credit standards, for both large enterprises and SMEs, expectations regarding general economic activity and the industry or firm-specific outlook were the most important factors. At the same time, banks' cost of funds and balance sheet constraints played a more important role in the net tightening for large firms than in that for SMEs, which is likely to be related to the greater importance of market-based bank funding for loans to large firms. With respect to price terms and conditions, while the net increase in margins on average loans was more pronounced for loans to large firms, in the case of riskier loans it was broadly identical for large firms and SMEs. With respect to non-price terms and conditions, both large firms and SMEs experienced a further net tightening in all categories.

Looking ahead to the fourth quarter of 2008, expectations point to a broadly unchanged net tightening of credit standards (66%) compared with that seen in the third quarter of 2008 (see Chart A).

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

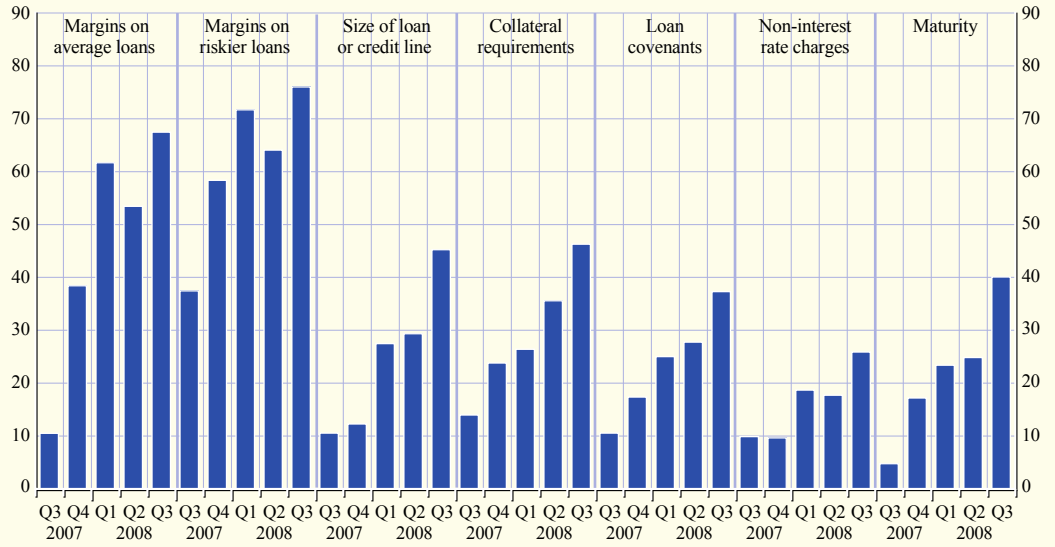
(net percentages)



Notes: In panel (a), the net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably". The net percentages for the questions related to the factors are the difference between the percentage of banks reporting that the given factor contributed to tightening and the percentage reporting that it contributed to easing. "Realised" values refer to the period in which the survey was conducted. "Expected" values refer to the expected changes over the next three months.

Chart B Changes in terms and conditions applied to the approval of loans or credit lines to enterprises

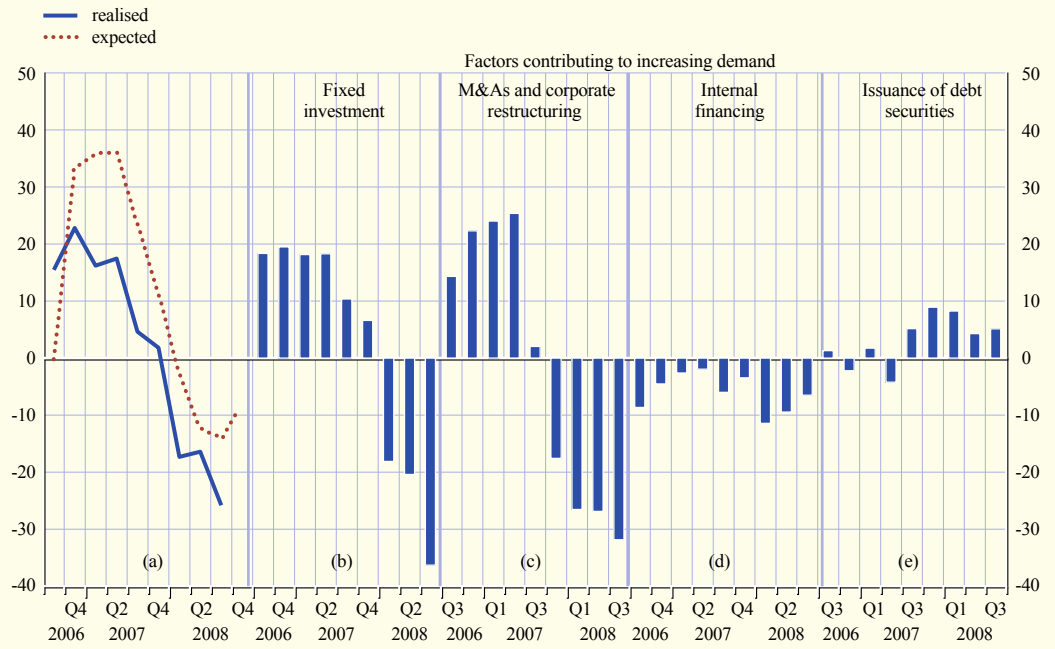
(net percentages)



Notes: The net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably".

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

(net percentages)



Notes: In panel (a), the net percentages refer to the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably". The net percentages for the questions related to the factors are the difference between the percentage of banks reporting that the given factor contributed to an increase in demand and the percentage reporting that it contributed to a decline. "Realised" values refer to the period in which the survey was conducted. "Expected" values refer to the expected changes over the next three months.

Loan demand: Net demand for loans to enterprises declined considerably and continued to be negative in the third quarter of 2008 (-26%, compared with -16% in the second quarter; see Chart C). The negative net demand was driven by a decline in financing needs for fixed investment (to -36%, from -20% in the second quarter) and by a continued negative contribution to loan demand stemming from mergers and acquisitions and corporate restructuring (-32%, compared with -27% in the second quarter). In addition, internal financing continued to contribute to a reduction in the net demand for loans to enterprises, but less so than in the second quarter. By contrast, debt securities issuance continued to contribute positively to the net demand for loans to enterprises, reflecting market conditions and the increased cost of market-based debt financing. In terms of borrower size, while net loan demand was negative for both large firms and SMEs, it was somewhat weaker for large firms, in line with the results for previous quarters. Net demand was negative across the maturity spectrum.

For the fourth quarter of 2008, net demand for loans to enterprises is expected to be less negative (-8%) than in the third quarter (see Chart C).

Loans to households for house purchase

Credit standards: In the third quarter of 2008 the net percentage of banks reporting a tightening of credit standards for loans to households for house purchase increased somewhat (to 36%, from 30% in the second quarter; see Chart D). Expectations regarding general economic activity and housing market prospects continued to be the main factors contributing to the net tightening of credit standards. In addition, for the first time since the start of the bank lending survey, competition from other banks did not contribute to an easing of credit standards for loans to households for house purchase, but was neutral (0%, compared with -7% in the second quarter).

As regards the terms and conditions for loans to households for house purchase, banks reported a net increase in the margins on average loans (35%, compared with 23% in the second quarter). Banks also reported a net increase in the margins on riskier loans (43%, from 30% in the second quarter). By contrast, the net tightening of non-price terms and conditions, such as collateral requirements and loan-to-value ratios, did not increase further, but remained at levels similar to those in the second quarter.

For the fourth quarter of 2008, credit standards for loans for house purchase are expected to be tightened somewhat further (45%) as compared with the third quarter (see Chart D).

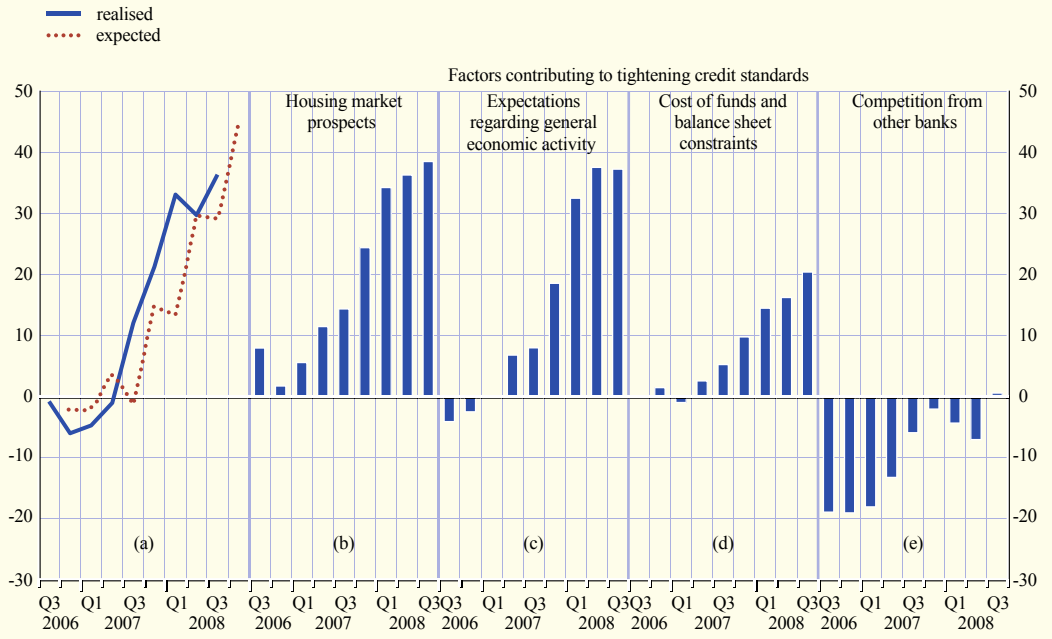
Loan demand: Net demand for housing loans declined in the third quarter of 2008 and remained negative (-64%, compared with -56% in the second quarter; see Chart E). This mainly reflected housing market prospects and deteriorating consumer confidence. For the fourth quarter of 2008, net loan demand is expected to be somewhat more negative (-70%) than in the third quarter.

Loans for consumer credit and other lending to households

Credit standards: In the third quarter of 2008 the net percentage of banks reporting a tightening of credit standards for consumer credit and other lending continued to increase (30%, up from 24% in the previous quarter; see Chart F). At the same time, the net tightening of credit standards for consumer credit and other lending remained at a lower level than that reported for loans to households for house purchase. The main factor behind the further increase in the net tightening

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

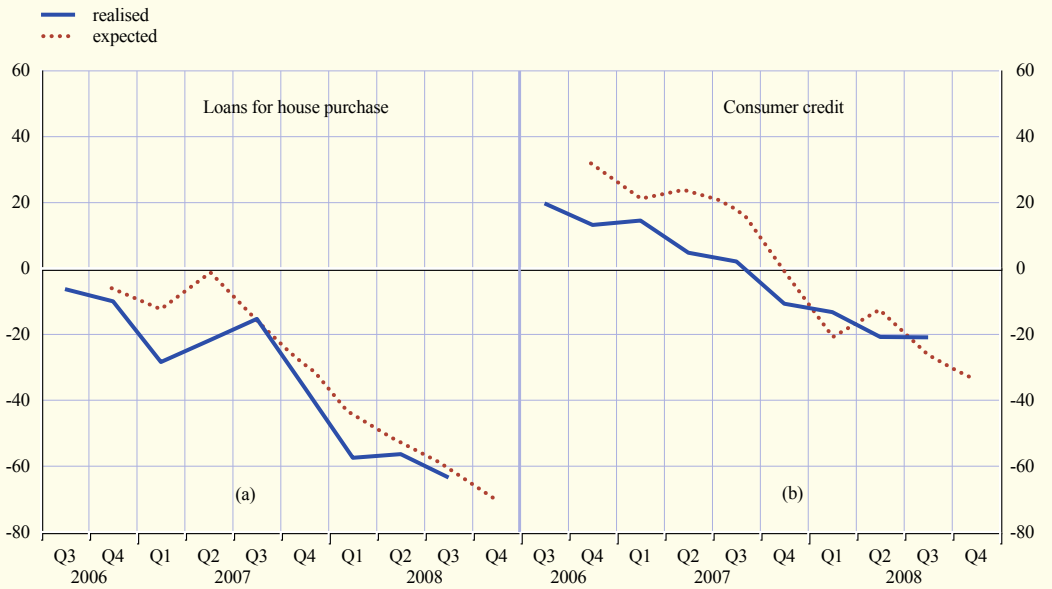
(net percentages)



Note: See footnote for Chart A.

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

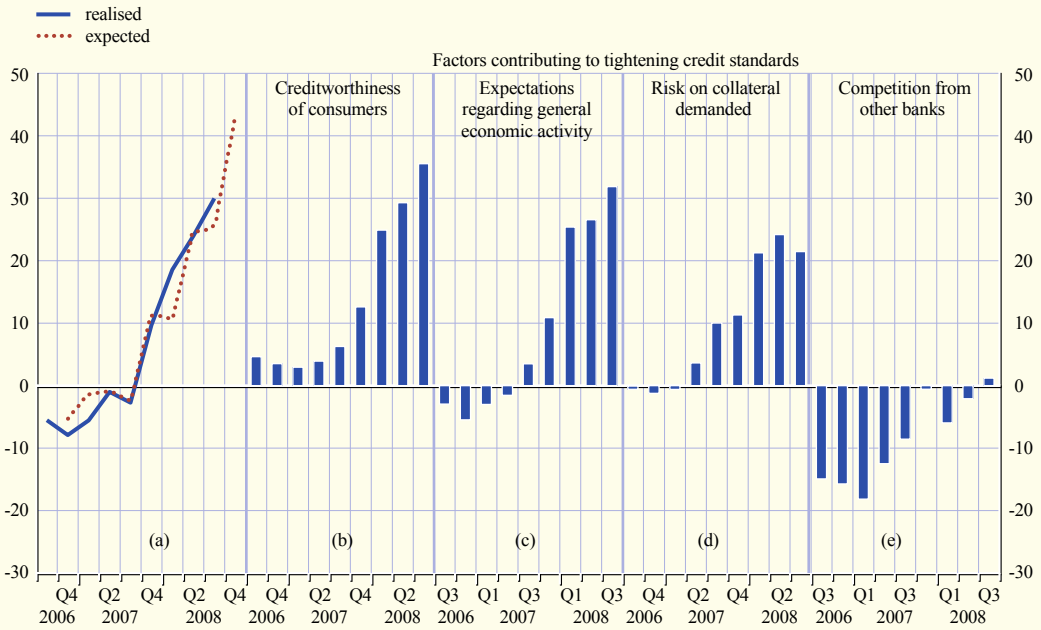
(net percentages)



Notes: The net percentages refer to the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably". "Realised" values refer to the period in which the survey was conducted. "Expected" values refer to the expected changes over the next three months.

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

(net percentages)



Note: See footnote for Chart A.

was banks' perception of risk, mainly related to expectations regarding general economic activity and the creditworthiness of consumers. As regards the terms and conditions for consumer credit, banks reported a net increase in the margins on both average and riskier loans (to 32% and 38% respectively).

For the fourth quarter of 2008, credit standards for consumer credit and other lending to households are expected to be tightened further (to 43%) compared with the third quarter (see Chart F).

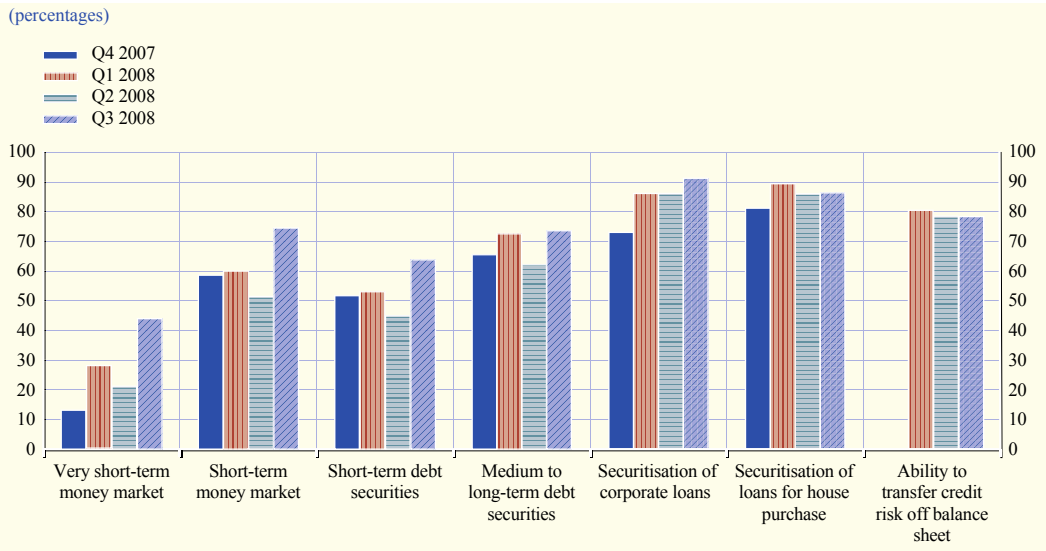
Loan demand: Net demand for consumer credit and other lending to households remained negative and at an unchanged level compared with the second quarter of 2008 (-21%; see Chart E). This level continued to be less negative than that of the net demand for loans to households for house purchase. Banks reported that the main factor dampening demand was deteriorating consumer confidence. For the fourth quarter of 2008, net demand is expected to remain negative and to decline (-34%) compared with the third quarter.

Ad hoc questions on the financial turmoil

The October 2008 survey round contained the same set of ad hoc questions included in previous surveys addressing the impact of the financial market tensions experienced since the second half of 2007.

With regard to banks' funding via wholesale markets, in the third quarter of 2008 banks reported that their access to money markets and debt securities markets had, as a result of the turmoil in

Chart G Access to wholesale funding



Notes: Figures indicate the percentage of banks reporting that access to particular sources of wholesale funding has been hampered.

financial markets, become considerably more hampered than it had been in the second quarter (see Chart G). Following the improvement in the second quarter, access thus worsened again. In contrast to the last survey round, when banks had stated that they had greater difficulties in raising funds through medium to long-term bonds than through short-term debt securities or money markets, banks now reported that access to short-term money markets was most strongly hampered. For all categories of short-term funding (very short-term money market, short-term money market and short-term debt securities), banks reported a considerable worsening of access. Access to securitisation continued to be hampered at similar levels to those seen in the second quarter. Around 80% to 90% of the sub-set of responding banks for which securitisation activities were relevant reported that their access to securitisation was hampered. Over the next three months, access to funding via money markets and debt securities markets is expected to become more hampered than in the third quarter of 2008. Access to securitisation is expected to be hampered at similar levels to those seen in the third quarter.

In line with the deteriorated access to money markets and debt securities markets, banks reported that the impact that these funding options had on bank lending had increased as regards both quantities and margins. The impact continued to be stronger for the margins than for the amount of loans granted to borrowers. By contrast with money market and debt securities funding, the impact on bank lending from the hampered access to securitisation was identical for margins and quantities. With respect to the next three months, banks expect that their hampered access to money markets and debt securities markets will have a greater impact on their willingness to lend and on margins, while the reduced access to securitisation is likely to result in a similar impact to that seen in the third quarter.

Finally, as regards the impact on banks' lending policies of the change in costs related to their capital positions, in the third quarter of 2008 43% of the reporting banks indicated a considerable impact or some impact on capital and lending, which was an increase of 7 percentage points compared with the second quarter.

2.2 SECURITIES ISSUANCE

The annual growth rate of debt securities issued by euro area residents increased slightly in August 2008. This increase was primarily the result of increasing growth rates for debt securities issued by central governments and non-financial corporations, while the growth rate of debt securities issued by MFIs declined slightly. The growth rate of the issuance of quoted shares remained broadly unchanged in August.

DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents increased again in August 2008, edging upwards to stand at 7.6%, up from 7.1% in July (see Table 3). As regards the maturity structure of debt securities issuance, the annual growth rate of short-term securities remained broadly unchanged at 22.1% in August and that of long-term securities moderately increased by 0.5 percentage point to stand at 5.9%. Issuance of longer-term securities can be broken down further into securities issued at floating and fixed rates. On account of demand factors, floating rates tend to be favoured over fixed rates in periods marked by a flat yield curve. This partly explains the fact that in August the annual rate of growth of floating rate securities was again significantly higher, at 12.9%, than the rate of growth of fixed rate securities, which stood at 3.4% in that month.

The annual growth rate of debt securities issued by non-financial corporations increased in August to 4.5%, up from 2.6% in July, thereby interrupting the decline observed since the beginning of 2008. Viewed from a longer-term perspective, the current issuance activities are significantly lower than before the outbreak of the crisis. In July 2007 debt security issuance of non-financial corporations recorded an annual growth rate of 10%. In terms of the maturity structure of issuance, the annual growth rate of long-term debt securities issued by non-financial corporations increased by 1.9 percentage points to 2.7% in August, while the growth rate of short-term issuance increased to 13% in August, up from about 6% in July. With respect to July 2007, the main driver behind the overall marked decline was lower issuance of corporate bonds with short maturities, which declined by 13.3 percentage points.

Table 3 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) 2008 Aug.	Annual growth rates [1] 2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 July	2008 Aug.
Debt securities:	**12,687**	**9.1**	**8.9**	**8.2**	**6.9**	**7.1**	**7.6**
MFIs	5,319	10.9	10.7	9.2	7.7	8.5	8.3
Non-monetary financial corporations	1,641	28.2	26.8	25.3	22.5	22.7	23.3
Non-financial corporations	695	9.4	8.8	9.7	6.3	2.6	4.5
General government	5,032	3.3	3.0	2.7	2.2	2.1	3.0
of which:							
Central government	4,711	3.3	2.9	2.6	2.2	2.0	2.9
Other general government	321	2.9	4.5	2.8	2.1	3.9	4.4
Quoted shares:	**5,038**	**1.4**	**1.4**	**1.3**	**1.0**	**0.7**	**0.8**
MFIs	663	1.8	1.3	0.8	1.5	2.8	2.8
Non-monetary financial corporations	438	0.9	2.7	2.6	2.3	2.5	2.6
Non-financial corporations	3,936	1.3	1.3	1.3	0.8	0.1	0.2

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

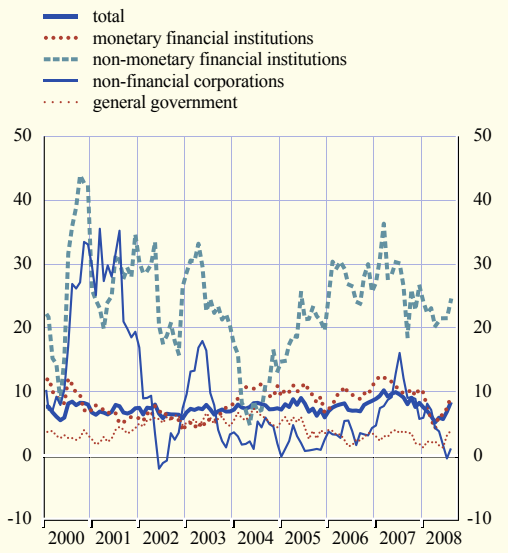
Turning to seasonally adjusted data (which are more suitable for gauging short-term trends), the six-month annualised growth rate of debt securities issued increased to 8.3% in August, up from 6.8% in July, mainly owing to a larger decrease in redemptions than in previous months. All sectors contributed to the overall increase. In particular, the six-month annualised growth rate of debt securities issued by non-financial corporations became positive again, standing at 1% in that month, compared with -0.5% in July (see Chart 7). The recovery in the issuance activity visible in the seasonally adjusted data is mainly due to the strong issuance of short-term debt securities.

As regards the financial sector, the annual growth rate of debt securities issued by MFIs declined moderately to stand at 8.3% in August, down from 8.5% in July. In line with the trend observed since the beginning of the financial market turmoil, issuance of short-term securities remained strong, with an annual growth rate of 26.9% in August, which was, however, lower than that recorded in the previous three months. The annual growth rate of MFIs' issuance of long-term debt securities remained broadly unchanged at 5.3% in August. The fact that the issuance of short-term debt securities continued to be more robust than that of long-term securities can be attributed to the repricing that has affected financial sector issuers since the onset of the financial market turmoil which has rendered long-term borrowing relatively more expensive. The extent of this effect can be gauged more accurately by examining seasonally adjusted data. Indeed, six-month seasonally adjusted data indicate that the growth rate of long-term debt securities issued by MFIs was 7.8% in August, while the growth rate of short-term issuance was significantly higher, standing at 16.8% in that month.

The annual growth rate of debt securities issued by non-monetary financial corporations increased slightly to stand at 23.3% in August, up from 22.7% in July, confirming the robust issuance activity in this sector. A large part of this issuance activity is related to the various securitisation activities undertaken by special-purpose vehicles (entities, usually sponsored by banks, which are set up

Chart 7 Sectoral breakdown of debt securities issued by euro area residents

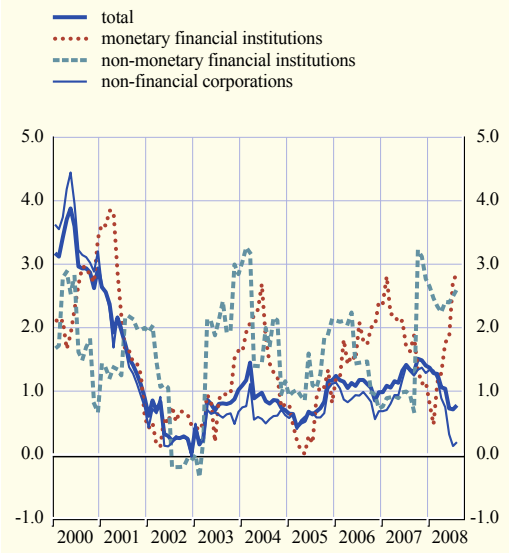
(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

Chart 8 Sectoral breakdown of quoted shares issued by euro area residents

(annual growth rates)



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

to fulfil temporary objectives). The short-term dynamics evidenced by the six-month annualised growth rate show that the slowdown in issuance activity in this sector has been pronounced since the summer of 2007.

The annual growth rate of debt securities issued by the general government sector increased to 3% in August, up from 2.1% in July. This development broadly reflected an increase in the growth rate of debt securities issued by the central and local government sector.

QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents was 0.8% in August, broadly unchanged from July (see Table 3). This development broadly reflects a moderate increase in the growth rate of quoted shares issued by non-financial corporations to 0.2%, while the growth rate of issuance by non-monetary financial institutions increased slightly from 2.5% to 2.6%. The annual growth rate of quoted shares issued by MFIs remained unchanged at 2.8% in August (see Chart 8).

2.3 MONEY MARKET INTEREST RATES

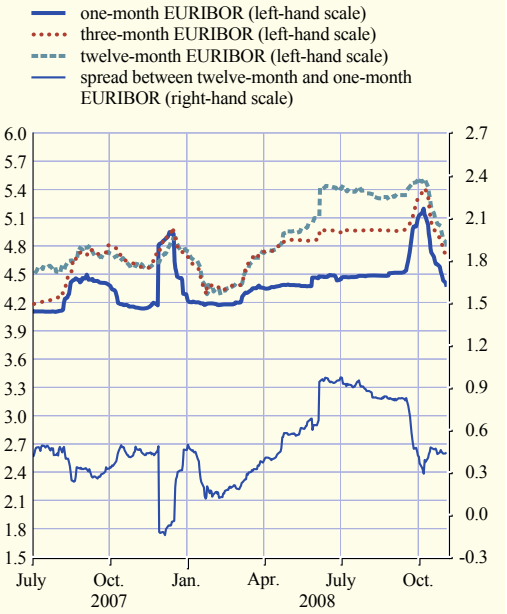
Secured money market rates declined sharply in October, in line with the downward revision of markets' expectations regarding future key ECB interest rates. However, unsecured interest rates decreased by less. As a result, spreads between unsecured and secured money market rates widened further amid the intensification of financial market tensions. Changes to the Eurosystem's liquidity management framework facilitated the provision of liquidity in October.

Unsecured money market rates decreased significantly between 1 October and 5 November 2008. On 5 November the one-month, three-month, six-month and twelve-month EURIBOR rates stood at 4.37%, 4.70%, 4.75% and 4.81% respectively, i.e. 72, 59, 65 and 70 basis points below the levels observed on 1 October (see Chart 9).

The decline was broadly the same for all maturities, with the result that the spread between the twelve-month and one-month EURIBOR rates stood at 44 basis points on 5 November, broadly unchanged from 1 October (see Chart 9). At the same time, EONIA swap rates decreased markedly in the course of the month, in line with the interest rate cut of 8 October and reflecting markets' expectations of further cuts in key ECB interest rates. Consequently, the spread between the unsecured EURIBOR and the EONIA swap index increased, as the decline in the EURIBOR rates failed to match the fall in the EONIA rates. More precisely, at the

Chart 9 Money market interest rates

(percentages per annum; daily data)



Sources: ECB and Reuters.

three-month maturity, the spread between the EURIBOR and the EONIA swap index increased from 118 basis points on 1 October to 177 basis points on 5 November.

On 5 November the interest rates implied by the prices of three-month EURIBOR futures maturing in December 2008, March 2009 and June 2009 stood at 3.730%, 3.225% and 2.955% respectively, representing declines of 122, 113 and 113 basis points respectively by comparison with 1 October, partly reflecting sharp falls in expectations for key ECB interest rates.

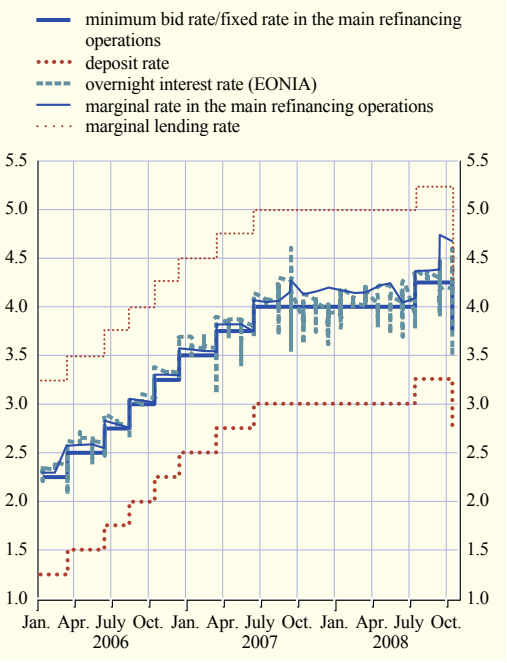
On 2 October the Governing Council decided to keep the key ECB interest rates unchanged, with the minimum bid rate in the Eurosystem's main refinancing operations remaining at 4.25%. On 8 October the Governing Council cut the key ECB interest rates by 50 basis points in a coordinated move together with other major central banks. On the same day, changes were made to the Eurosystem's liquidity management framework, with the announcement that subsequent main refinancing operations would be carried out through fixed rate tender procedures with full allotment at the interest rate on the main refinancing operation. It was also announced that the width of the standing facilities corridor around the interest rate on the main refinancing operation would be symmetrically reduced from 200 basis points to 100 basis points with immediate effect. These two measures will remain in place for as long as is necessary, and at least until the first maintenance period of 2009 ends on 20 January. Furthermore, on 15 October the ECB announced an enlargement of the collateral framework for the Eurosystem's credit operations, as well as the enhancement of its long-term refinancing operations with the introduction of three and six-month long-term refinancing operations to be conducted monthly until March 2009 with a fixed rate and full allotment.

At the start of the tenth maintenance period of the year (which ended on 12 November) the EONIA reached levels around 4.5% (see Chart 10) owing to increasing tensions in the money markets in the first few days of October. Soon after, the EONIA began to fall considerably, in line with the cut in key interest rates and as a result of the changes to the liquidity framework. The decline continued over the maintenance period, albeit at a diminishing pace. On 5 November the EONIA stood at 3.442%.

To contain the impact of tensions on euro overnight interest rates and to accommodate counterparties' desire 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. Specifically, in the Eurosystem's regular weekly main refinancing operations on 7, 14, 21 and 28 October and 4 November the ECB allotted €209.5 billion, €357.4 billion, €358.5 billion, €309.6 billion

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



Sources: ECB and Reuters.

and €243.4 billion in excess of the respective benchmark amounts. In addition, the Eurosystem provided €24.7 billion of liquidity at a fixed rate of 3.75% over a one-week horizon in a fine-tuning operation on 9 October.

Recourse to the marginal deposit facility followed a steep upward trend between 10 October and 5 November and averaged around €224 billion per day over that period, a significant increase by comparison with the previous month. Average daily recourse to the marginal lending facility remained broadly unchanged at around €14 billion. This would suggest an average net liquidity absorption of around €210 billion per day through the standing facilities. These developments are in line with the provision of large amounts of liquidity and the narrower corridor around the interest rate on the main refinancing operations.

Furthermore, using the reciprocal currency arrangements (swap lines) with the Federal Reserve, the Eurosystem continued to provide US dollar funding against collateral eligible in the Eurosystem, with operations with an overnight maturity conducted on 7, 8, 9, 14 and 15 October, operations with a maturity of seven days conducted on 15, 22 and 29 October and 5 November, an operation with a maturity of 28 days conducted on 21 October and an operation with a maturity of three months conducted on 4 November. The ECB also provided Eurosystem counterparties with US dollar and Swiss franc funding against euro cash via foreign exchange swap operations. The ECB provided USD 3.8 billion, USD 14.5 billion and USD 0.96 billion for one week on 22 and 29 October and 5 November respectively, USD 22.6 billion for one month on 21 October and USD 0.65 billion for three months on 4 November. The ECB also provided CHF 15.3 billion, CHF 13.6 billion and CHF 15.1 billion for one week on 20 and 27 October and 3 November respectively, and CHF 0.9 billion for three months on 5 November.

In the Eurosystem's supplementary longer-term refinancing operation on 8 October (which was conducted with a fixed allotment amount of €50 billion and a maturity of six months), the marginal rate was 5.36% and the weighted average rate was 5.57%. In the longer-term refinancing operation on 29 October (which was conducted with full allotment at the fixed rate of 3.75% and a maturity of three months), the allotted amount was €103 billion.

2.4 BOND MARKETS

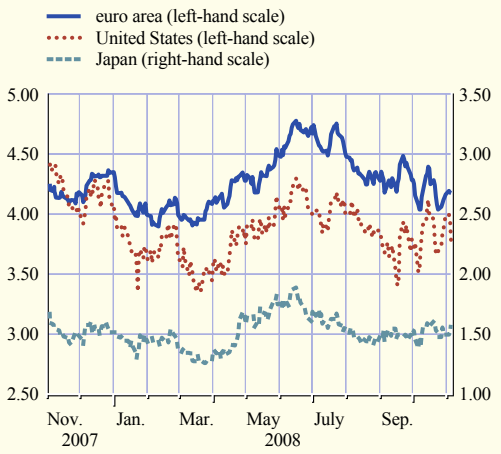
In October long-term government bond yields were highly volatile, and overall over the period yields fell in the euro area and the United States while remaining broadly unchanged in Japan. These developments most likely reflect flight-to-safety and flight-to-liquidity behaviour as stresses in financial markets surged to new heights over the past month. Against this background, implied bond market volatility increased significantly across the major markets. Market participants' long and medium-term euro area inflation expectations (and associated risk premia), as reflected in break-even inflation rates, declined strongly, reflecting falling oil prices and increasing concerns about the world economic outlook. In addition, dislocations in inflation-linked bond markets led to sharply increasing real yields contributing to the decline in break-even inflation rates. Finally, corporate bond spreads for the euro area widened significantly amid continuing tensions in markets.

Between end-September and 5 November ten-year government bond yields decreased by around 10 basis points in the euro area and by around 5 basis points in the United States. On 5 November ten-year government bond yields stood at 4.2% in the euro area and 3.8% in the United States.

Accordingly, the ten-year nominal interest rate differential between US and euro area government bonds narrowed, standing at about -40 basis points on 5 November. In Japan the ten-year government bond yield remained unchanged, standing at 1.5% at the end of the review period. Market participants' uncertainty as regards short-term developments in bond yields, as measured by the implied bond market volatility, increased significantly across the major markets in the context of intensifying strains in the global financial markets.

Chart 11 Long-term government bond yields

(percentages per annum; daily data)



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

US and euro area government bond yields continued to exhibit volatile behaviour in October with large day-to-day movements both upwards and downwards. These developments relate to the surging financial market unrest stemming from continued market concerns about the profitability of financial institutions, the general stability of the financial system, and the global macroeconomic outlook. Against this background, yields may have been depressed by flight-to-safety and flight-to-liquidity behaviour, which leads investors to purchase government bonds, thereby pushing prices upwards and yields downwards. However, the possible costs of the US Troubled Asset Relief Program (TARP) and the numerous rescue plans proposed by European governments may have led market participants to upwardly revise their expectations for future government funding needs, thereby resulting in an upward shock to the expected supply of government bonds. Such a shock would imply lower bond prices and increasing long-term bond yields, thereby partly countering flight-to-safety and flight-to-liquidity effects and resulting in lower yield declines than would otherwise have been experienced. Box 2 briefly reviews the recent widening in sovereign yield spreads.

Box 2

RECENT WIDENING IN EURO AREA SOVEREIGN BOND YIELD SPREADS

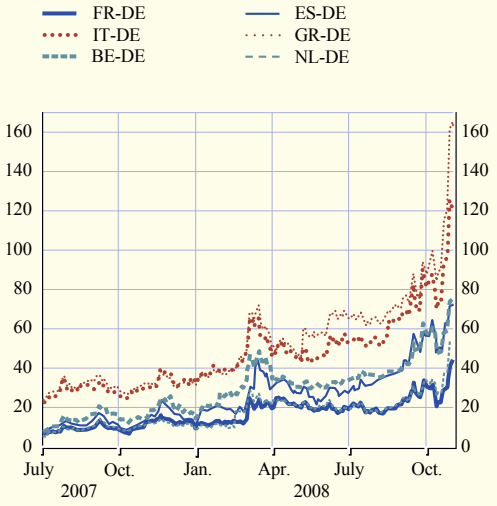
This box looks at recent developments in euro area countries' sovereign bond yield spreads and the potential roles played by credit and liquidity risk. Moreover, spread developments are analysed in relation to the countries' fiscal situation and outlook, taking account of recent government interventions to ensure the orderly functioning of financial markets. The analysis illustrates how investors discriminated between countries reflecting flight-to-quality behaviour.

In recent months, the differences between German and other euro area government bond yields have increased substantially further. Following the strong upsurge observed in the spring of this year,[1] they reached new highs in October in a general climate of major unrest on global money,

1 See Box 3 entitled "Recent developments in government bond yield spreads" in the May 2008 Monthly Bulletin.

Chart A Ten-year government bond yield spreads against Germany

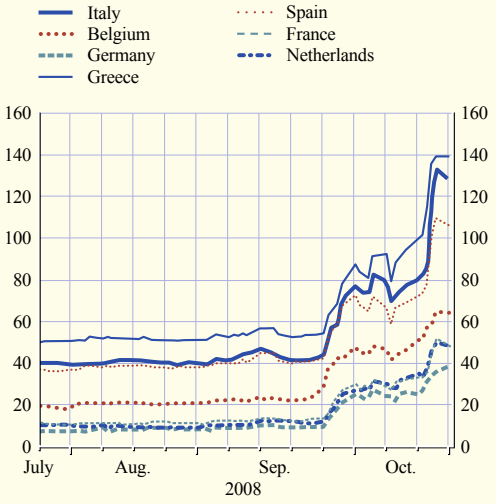
(in basis points)



Source: Bloomberg.

Chart B Countries' five-year CDS premia

(in basis points)



Source: Bloomberg.

credit and equity markets (Chart A).[2] After the announcement by a large number of governments of a series of measures aimed at alleviating tensions in money and credit markets, yield spreads versus Germany tightened initially quite sharply (e.g. by 15-20 basis points between Italian and German ten-year government bonds), as investors momentarily regained some confidence. However, this movement was short-lived. After these government interventions yield spreads resumed their widening trend, while in some cases the perception of risk switched from the banking sector to the government sector as shown by developments in the credit default swap (CDS) premium, a measure for the default risk of sovereign bonds (Chart B).

Indeed, some of the most affected banks saw their CDS premia decline to some extent in the wake of announcements by various governments, while sovereign debt spreads moved upwards. Even Germany's CDS premia increased after the announcement of the government rescue, while bank CDS premia decreased. Overall, both sovereign bond yields and CDS premium levels vis-à-vis Germany have moved upwards in a context of increasing differentiation between the euro area countries.

Credit risk and liquidity risk as explanatory factors

The renewed widening of sovereign spreads can be attributed to differences in the creditworthiness of the issuers (credit risk premium) and the relative liquidity of the respective bonds (the lower the liquidity yield premium, the more easily a bond can be generally traded).

Looking at these two factors in more detail, first, the recent further repricing of the euro area countries' sovereign risk is consistent with the significant rise in risk aversion observed in global

2 The charts refer to the five largest euro area countries (France, Germany, Italy, the Netherlands and Spain) as well as to the high-debt countries (Belgium, Greece and Italy).

financial markets in recent weeks and months. Spreads for all classes of risky financial assets, which had already widened since the start of the sub-prime crisis, increased further in recent weeks, in particular after the failure of Lehman Brothers in September. All euro area countries have seen their credit risk premium increase, as indicated by the CDS premium (see Chart B).

Second, since the beginning of the turmoil in August 2007, liquidity in the secondary euro area government bond market has been concentrated mostly in the German government bond futures market (in the Eurex exchange), which has benefited German debt relative to other euro area sovereign debt especially at each peak in the turbulence. This might explain the fact that Germany has outperformed other euro area countries that are perceived as having the same or even a better fiscal outlook.

The drying-up of liquidity in the euro area government bond market observed in the first half of March returned in an even more severe way in the early weeks of October. On several days, market participants reported that market-making activity in all euro area government bonds except for some German ones had effectively come to a halt and that transactions could only be executed on a match-making basis, whereby a government bond dealer tries to match buyers and sellers amongst his client base without taking a position himself.

As during the period of widening yield spreads observed in the spring of this year, it is likely that both the credit risk premium and the liquidity premium have contributed to the recent further widening of sovereign bond yield spreads versus German government bonds. However, it is difficult to assess which of the two factors has had the strongest impact.

The initial sharp reduction in government bond spreads after the announcement by governments and central banks of a number of measures to alleviate tensions in the money and credit markets suggests that liquidity premium factors may have played a fairly strong role in recent weeks.

Widening spreads as a reflection of discrimination in flight-to-quality behaviour

As reported in the May 2008 issue of the Monthly Bulletin, the returns on euro area government bonds and those on the Dow Jones EURO STOXX 50 stock price index had been showing a strong negative correlation since the beginning of 2008, giving a distinct indication of flight-to-quality behaviour on the part of investors. Moreover, the fanning-out of the correlation measures in March and April (compared with the beginning of the year) was interpreted as reflecting increased discrimination among investors with respect to their flight-to-quality destinations.

From May until August – amid tentative signs of an easing of the financial market situation – correlation measures were on an upward trend, suggesting a gradual reversal of flight-to-quality tendencies. Over the same period, the degree of discrimination declined. However, in September, when the financial crisis culminated in several banks being liquidated or restructured, flight-to-quality behaviour resumed. Accordingly, the correlation metrics showed another sharp decline. Again, German (and also Dutch) government bonds seemed to once again be preferred during this phase, while Italian bonds experienced the least impact from flight-to-quality flows (see Chart C). With the announcement of rescue packages in the beginning of October, the flight-to-quality flows once again reversed sharply. However, the dispersion among issuing countries remained. While Italian and Greek bond returns are currently showing rather weak correlations with the stock

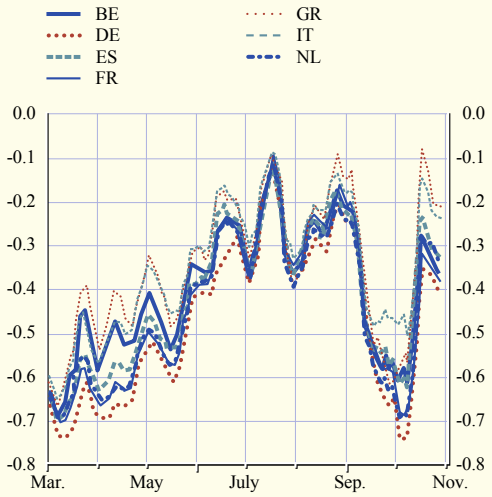
market, the respective measure for German bonds (and to a similar degree for the other countries considered) is markedly stronger.

The sustainability of public finances

The widening in sovereign bond yield spreads also reflects country-specific risk factors, notably the sustainability of fiscal positions. The latest available information (Autumn 2008 European Commission Economic Forecasts) projects, for the countries covered in this box, budget deficits of 2% of GDP or more for France, Italy, Portugal and Greece in 2008, marking a reversal of previous consolidation achievements in the former two countries. For 2009, the Commission projects a budget deficit above 3% of GDP for France, while little or no consolidation will take place in the high-deficit countries. General government debt levels remain high in Italy, Greece and Belgium.

Chart C Time-varying correlation between daily returns on the Dow Jones EURO STOXX 50 stock price index and ten-year government bonds

(five-day averages, 1 March 2008 to 27 October 2008)



Sources: Thomson Financial Datastream, ECB calculations.
Note: The correlations are computed using a bivariate GARCH-type model (BEKK).

There is an additional risk that fiscal pressures may also emerge in relation to the costs of direct government intervention in support of financial institutions. Depending on the specific arrangements for such interventions (nationalisation, capital injections) and their financing, government expenditure, deficits and debt levels could rise, with possible second-round effects via higher interest burdens.[3] In addition, many governments have taken on large contingent liabilities in the form of deposit and credit guarantees. Potentially lower real GDP growth over several years would put a further burden on fiscal sustainability.

A weaker fiscal consolidation outlook, together with lower growth prospects, may signal to capital markets the potential need for additional sovereign borrowing and put upward pressure on long-term interest rates through a higher credit risk premium in particular for countries with fiscal imbalances. On the other hand, given the heightened levels of risk aversion, investors have increased their demand for government debt relative to risky assets such as stocks. This is reflected in the aforementioned measures of flight-to-quality behaviour, and in estimates of nominal term premia embedded in long-term bonds, which are currently at very low levels. Finally, the rise in government debt that is likely to be needed to finance bailout packages will increase the supply of bonds and will therefore, ceteris paribus, tend to decrease government bond prices and increase their yields.

Summing up, in recent months the differences between German and other euro area government bond yields have increased further. Moreover, the CDS premia for insuring against default on government bonds have also increased considerably. Similar to developments in spring 2008,

3 The fiscal costs of the current financial turmoil are extremely difficult to assess. At the beginning of November 2008, the potential direct effect of announced government bailouts on euro area general government debt is estimated at €288.6 billion (about 3% of euro area GDP); the impact on the euro area government deficit of executed measures is estimated at €2.5 billion (about 0.03% of euro area GDP) and the impact on government contingent liabilities is estimated at €2 trillion (or 21% of euro area GDP).

General government balance and debt

(as a percentage of GDP)

	Balance			Debt		
	2007	2008	2009	2007	2008	2009
Belgium	-0.3	-0.5	-1.4	83.9	86.5	86.1
Germany	-0.2	0.0	-0.2	65.1	64.3	63.2
Ireland	0.2	-5.5	-6.8	24.8	31.6	39.2
Greece	-3.5	-2.5	-2.2	94.8	93.4	92.2
Spain	2.2	-1.6	-2.9	36.2	37.5	41.1
France	-2.7	-3.0	-3.5	63.9	65.4	67.7
Italy	-1.6	-2.5	-2.6	104.1	104.1	104.3
Cyprus	3.5	1.0	0.7	59.5	48.2	44.7
Luxembourg	3.2	2.7	1.3	7.0	14.1	14.6
Malta	-1.8	-3.8	-2.7	62.2	63.1	63.2
Netherlands	0.3	1.2	0.5	45.7	48.2	47.0
Austria	-0.4	-0.6	-1.2	59.5	57.4	57.1
Portugal	-2.6	-2.2	-2.8	63.6	64.3	65.2
Slovenia	0.5	-0.2	-0.7	23.4	21.8	21.1
Finland	5.3	5.1	3.6	35.1	31.6	30.2
Euro area	-0.6	-1.3	-1.8	66.1	66.6	67.2
Euro area *	-0.6	-1.0	-1.1	66.4	65.2	64.3

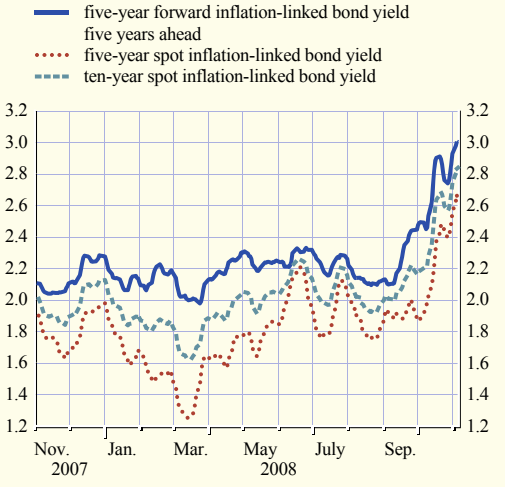
Source: Autumn 2008 European Commission Economic Forecasts.
* Spring 2008 European Commission Economic Forecasts.

both the credit premium and the liquidity premium have contributed to the recent further widening of sovereign bond yield spreads vis-à-vis Germany. With the government interventions in support of financial institutions in October, the flight-to-quality flows reversed temporarily, although the discrimination across issuing countries continued to some extent. Moreover, together with higher perceived country-specific risks related to the fiscal and macroeconomic outlook, overall risks to long-run fiscal sustainability clearly increased.

Yields on long-term inflation-linked government bonds in the euro area increased markedly during October, a development which is somewhat counterintuitive relative to market sentiment about the outlook for the real economy. During October five and ten-year spot real yields increased by 80 and 68 basis points respectively (see Chart 12). The net effect of lower nominal bond yields and increasing real yields has been a strong decrease in break-even inflation rates. Although falling oil prices and a moderating outlook for the real economy have played a part in driving inflation expectations down, technical factors in the inflation-linked bond markets blurred the picture and make precise interpretation of the degree of moderation in market-based inflation expectations difficult. Box 3 investigates the driving factors behind these developments and the implications for break-even inflation rate developments.

Chart 12 Euro area zero coupon inflation-linked bond yields

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



Sources: Reuters and ECB calculations.

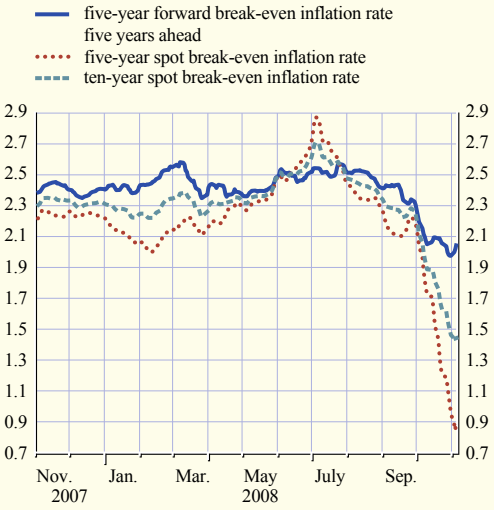
In October implied forward break-even inflation rates in the euro area – under normal conditions a quite reliable indicator of market participants' long-term inflation expectations and associated risk premia – declined by 25 basis points. At the end of the review period the five-year forward break-even inflation rate five years ahead stood at 2.06%. The decline in break-even inflation rates was even more pronounced when considering spot rates. Over the period under consideration, the five and ten-year spot break-even inflation rates decreased by 135 and 80 basis points respectively. Falling oil prices and concerns that turbulence in financial markets will impact the real economy negatively contributed to pushing inflation expectations down. However, as previously noted the development in break-even inflation measures also partly reflects technical factors causing dislocations in the inflation-linked bond markets.

Between end-September and early November the implied nominal forward overnight interest rate curve for the euro area experienced a strong downward shift at the two-year horizon. Rates at long-term horizons remained broadly unchanged (see Chart 14).

During October corporate bond spreads for the euro area continued to widen for all rating categories apart from triple-A-rated corporate bonds. Over the past month BBB and high-yield corporate bond spreads increased by about 164 and 602 basis points respectively. When distinguishing between financial and non-financial sectors, over the period under review the increase in BBB-rated corporate bond spreads was equal to about 270 and 162 basis points respectively. These developments reflect market uncertainty about the situation in the financial sector as well as the increasing impact of the financial market turmoil on the macroeconomic outlook.

Chart 13 Euro area zero coupon break-even inflation rates

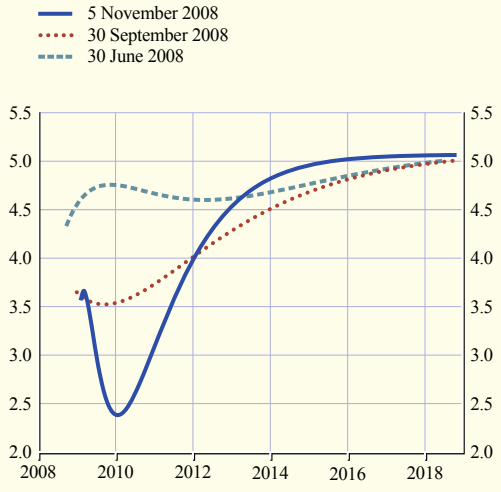
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Reuters and ECB calculations.

Chart 14 Implied forward euro area overnight interest rates

(percentages per annum; daily data)



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.

For triple-A-rated corporate bonds, the fall in spreads on aggregate reflects a significant increase of 32 basis points for non-financial corporate bonds, while for financials the spread decreased by 12 basis points. The tightening of triple-A-rated corporate bond spreads in the financial sector follows the introduction of a number of government-sponsored rescue plans for the financial sector over the period.

Box 3

RECENT INCREASES IN REAL YIELDS AND THEIR IMPLICATIONS FOR THE ANALYSIS OF INFLATION EXPECTATIONS

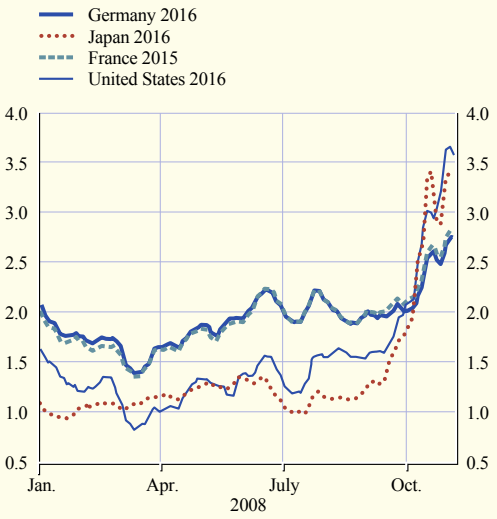
Between mid-September and end-October real yields on inflation-linked bonds in major markets increased sharply (see Chart A). The yield increases were most pronounced for US and Japanese inflation-linked bonds, although the yields on bonds linked to the euro area HICP (excluding tobacco) also increased significantly. Under normal market conditions, developments in real yields reflect, among other things, revisions in investors' longer-term outlook for the real economy. However, such an interpretation of the recent movements would lead to the implausible conclusion that investors have become more sanguine about the economic outlook. This assessment would clearly be at odds with most other timely indicators of the global economic outlook. This box provides an alternative interpretation, linking the recent increases in global real yields to the current turbulent market conditions, which are characterised by investors' efforts to reduce risk and leverage and a strong preference for the most liquid assets. It also highlights the implications of such "distortions" in index-linked bond yields for break-even inflation rates, the bond market-based measures of inflation expectations and related inflation risk premia.

The recent increases in real yields appear to be related to the ongoing process of deleveraging among shorter-term investors in the context of the intensification of the financial crisis. According to market sources, several investors with leveraged positions in inflation-linked securities have recently been forced to liquidate their positions in the face of margin calls and increased funding costs. Amid general market expectations of sharply declining inflation over the coming year, demand from longer-term investors, such as pension funds, has not been sufficient to absorb the selling pressure without sizeable declines in inflation-linked bond prices.

Another potential source of the decline in inflation-linked bond prices is the comparatively lower market liquidity of these instruments. Even under normal market conditions,

Chart A Real yields on inflation-linked bonds

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

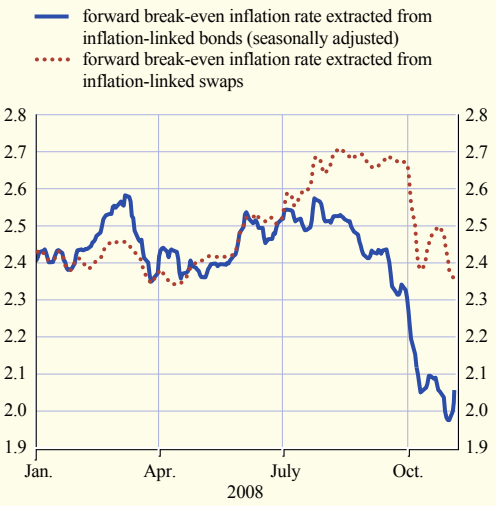


Sources: Bloomberg, ECB calculations.
Notes: The yields on the US and Japanese bonds have been annualised. 2015 and 2016 refer to the year in which the bonds mature.

inflation-linked bonds are somewhat less liquid than their nominal counterparts, but this liquidity disadvantage tends to be aggravated during periods of financial market stress. This makes inflation-linked bonds considerably less attractive for investors seeking short-term shelter from the volatility of riskier assets. The fact that investors currently have an exceptionally strong appetite for the most liquid assets is evidenced by the very steep increase in the differential between the yield on recently issued ten-year US Treasury notes and an "off-the-run" yield curve estimated from less liquid, seasoned Treasury notes and bonds. This yield differential is a common gauge of liquidity premia.

Chart B Five-year forward euro area break-even inflation rates five years ahead extracted from inflation-linked bonds and swaps

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



Sources: Reuters and ECB calculations.
Note: The data used are zero coupon rates.

Technical market factors aside, market expectations of an increase in government funding needs in the wake of the announced financial sector rescue packages could in principle also have led to some upward pressure on longer-term interest rates in the major markets (see Box 2). However, real yields increased more abruptly than corresponding nominal yields, and this sharp increase occurred at the same time as the surge in liquidity premia. These circumstances suggest that the effects of an expected increase in the future supply of government bonds played only a secondary role in the recent spike in global inflation-linked bond yields. It is noteworthy, however, that both nominal and real government bond yields have withstood the downward pressure stemming from safe haven flows into the safest and most liquid government bonds.

Break-even inflation rates are obtained by subtracting the real yield on an inflation-linked bond from the yield on a conventional nominal bond of comparable maturity. Therefore, an important consequence of the seemingly distorted levels of real yields is that spot break-even inflation rates are probably now lower than the true compensation investors require in return for exposure to their anticipated rate of inflation and the associated risk of a loss in general purchasing power entailed by holding a nominal bond. As a result, not all of the recent decline in bond market-based break-even inflation rates should be attributed to declines in inflation expectations (and inflation risk premia), although the evidence from inflation-linked swaps (see Chart B) does suggest some genuine declines in long-term inflation expectations as well.

2.5 INTEREST RATES ON LOANS AND DEPOSITS

In August 2008 short and long-term MFI interest rates on new loans to households increased considerably, while comparable rates on loans to non-financial corporations remained almost unchanged. Short-term market interest rates remained broadly stable in the same period, whereas long-term market rates declined considerably.

In August 2008 short-term MFI interest rates on new loans to households increased considerably, while comparable rates on loans to non-financial corporations remained almost unchanged (see Table 4 and Chart 15). The stability in non-financial corporate short-term lending rates in August 2008 most likely reflects the broadly unchanged rates in the unsecured money market during the preceding months. In August interest rates on short-term deposits (i.e. deposits with an agreed maturity of up to one year) remained broadly unchanged with respect to July for both non-financial corporations and households. Interest rates on new short-term loans to households for consumption with a floating rate and an initial rate fixation period of up to one year increased slightly by 4 basis points in August, while interest rates on equivalent loans for house purchase increased somewhat more by 10 basis points. At the same time, short-term MFI interest rates on new loans to non-financial corporations of up to €1 million remained unchanged and MFI interest rates on bank overdrafts of non-financial corporations increased slightly by 3 basis points.

Table 4 MFI interest rates on new business

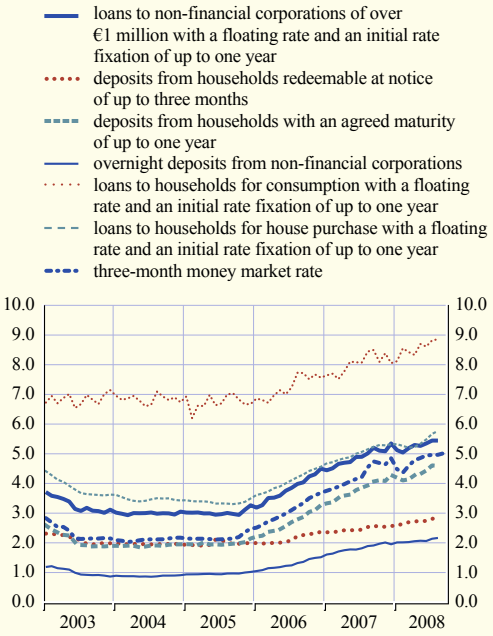
(percentages per annum; basis points)

							Change in basis points up to Aug. 2008 [1]		
	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 July	2008 Aug.	2008 Jan.	2008 Apr.	2008 July
MFI interest rates on deposits									
Deposits from households									
with an agreed maturity of up to one year	4.07	4.28	4.14	4.43	4.61	4.59	40	31	-2
with an agreed maturity of over two years	2.92	3.18	3.08	3.28	3.37	3.45	2	31	8
redeemable at notice of up to three months	2.58	2.57	2.69	2.74	2.81	2.87	30	15	6
redeemable at notice of over three months	3.50	3.68	3.78	3.88	3.94	3.98	23	17	4
Overnight deposits from non-financial corporations	1.91	1.95	2.03	2.06	2.14	2.17	16	12	3
Deposits from non-financial corporations									
with an agreed maturity of up to one year	4.14	4.26	4.20	4.28	4.46	4.46	33	19	0
with an agreed maturity of over two years	4.41	4.03	4.07	4.01	4.57	4.55	-13	-9	-2
MFI interest rates on loans									
Loans to households for consumption									
with a floating rate and an initial rate fixation of up to one year	8.49	8.05	8.43	8.61	8.82	8.86	74	53	4
Loans to households for house purchase									
with a floating rate and an initial rate fixation of up to one year	5.23	5.32	5.20	5.48	5.67	5.77	45	54	10
with an initial rate fixation of over five and up to ten years	5.09	5.07	4.96	5.08	5.22	5.29	22	34	7
Bank overdrafts to non-financial corporations	6.49	6.62	6.56	6.67	6.74	6.77	15	23	3
Loans to non-financial corporations of up to €1 million									
with a floating rate and an initial rate fixation of up to one year	5.93	6.08	5.91	6.16	6.26	6.27	34	24	1
with an initial rate fixation of over five years	5.23	5.30	5.23	5.43	5.53	5.49	22	29	-4
Loans to non-financial corporations of over €1 million									
with a floating rate and an initial rate fixation of up to one year	5.20	5.35	5.19	5.35	5.45	5.44	32	14	-1
with an initial rate fixation of over five years	5.41	5.48	5.34	5.52	5.55	5.56	33	17	1
Memo items									
Three-month money market interest rate	4.74	4.85	4.60	4.94	4.96	4.97	49	19	1
Two-year government bond yield	4.10	4.06	3.54	4.72	4.61	4.26	52	40	-35
Five-year government bond yield	4.19	4.14	3.65	4.75	4.70	4.28	42	28	-42

Source: ECB.
1) Figures may not add up due to rounding.

Chart 15 Short-term MFI interest rates and a short-term market rate

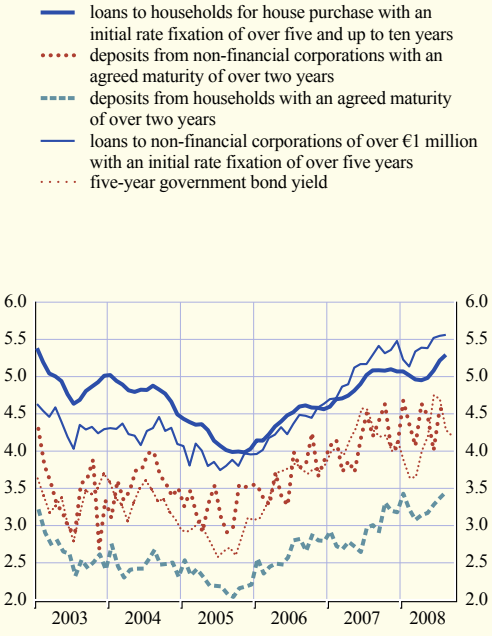
(percentages per annum; rates on new business)



Source: ECB.

Chart 16 Long-term MFI interest rates and a long-term market rate

(percentages per annum; rates on new business)



Source: ECB.

Taking a longer-term perspective, the three-month money market rate rose by 75 basis points between July 2007 and August 2008, while short-term MFI interest rates on deposits from households and non-financial corporations increased by 73 and 44 basis points respectively. Interest rates on loans to households for consumption with a floating rate and an initial rate fixation period of up to one year increased by 78 basis points, while interest rates on equivalent loans for house purchase increased slightly less by 70 basis points. Short-term MFI interest rates on loans to non-financial corporations of up to €1 million increased by 69 basis points over that period. In general, while the increases in banks' costs for wholesale and securitised funding as a result of the persistent tightening in the interbank markets have not yet been fully passed on, there is some evidence to suggest that the pass-through has been somewhat stronger for the household sector than for non-financial corporations. At the same time, households can be seen to have benefited from increased competition amongst banks to attract deposits.

In August 2008 long-term MFI interest rates on deposits with a maturity of over two years taken from non-financial corporations remained basically unchanged, while interest rates for deposits taken from households increased by 8 basis points (see Table 4 and Chart 16). At the same time, long-term MFI interest rates on loans for house purchase increased by 7 basis points, while interest rates on loans to non-financial corporations of over €1 million remained broadly unchanged. These developments took place against a background of significant declines in government bond yields reflecting increased risk aversion effects. In particular, two-year and five-year government bond yields fell by 35 and 42 basis points respectively in that month. As a result, spreads between long-term MFI interest rates and market rates of corresponding maturities widened again in August 2008.

Turning to developments over a longer time horizon, long-term MFI deposit and lending rates for households increased moderately between July 2007 and August 2008. MFI interest rates on loans to households for house purchase with an initial rate fixation period of over five years and up to ten years rose by 27 basis points, while interest rates on deposits from households with an agreed maturity of over two years increased by 48 basis points over the same period. At the same time, interest rates on loans to non-financial corporations of over €1 million with an initial rate fixation period of over five years increased by 39 basis points, while rates on deposits from non-financial corporations with an agreed maturity of over two years increased considerably less by only 5 basis points. Conversely, government bond yields declined somewhat, with five-year yields being 27 basis points lower than in July 2007. As a result, the spread between long-term MFI lending rates and government bond yields increased on average by around 25-55 basis points.

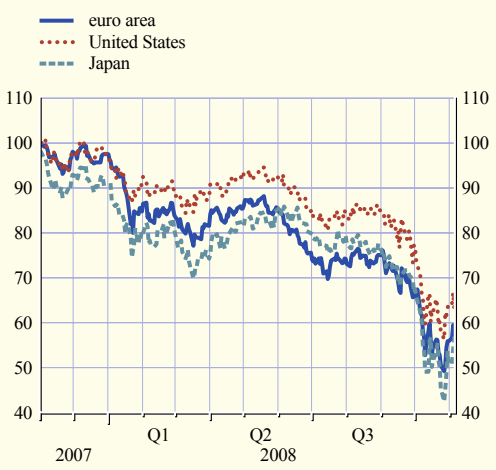
2.6 EQUITY MARKETS

Between end-September and 5 November broad stock price indices declined significantly worldwide. In the euro area prices fell by 12%, while the US markets shed 18%. The developments reflect increased market concerns about the health of the banking sector and the stability of the financial system. The potential fallout from the ongoing crisis on the real economy also weighed on equity valuations. Against this background, stock market uncertainty, as measured by implied volatility, increased to levels not observed since the 1987 stock market crash.

Between end-September and 5 November the downward trend in global stock markets accelerated, with markets experiencing strong falls. In the euro area and the United States, broad-based stock price indices, as measured by the Dow Jones EURO STOXX and the Standard and Poor's 500, declined by 12% and 18% respectively, amid the increasing financial market turmoil (see Chart 17). Over the same period, stock prices in Japan, as measured by the Nikkei 225 index, fell by 15%.

Chart 17 Stock price indices

(index: 1 November 2007 = 100; daily data)



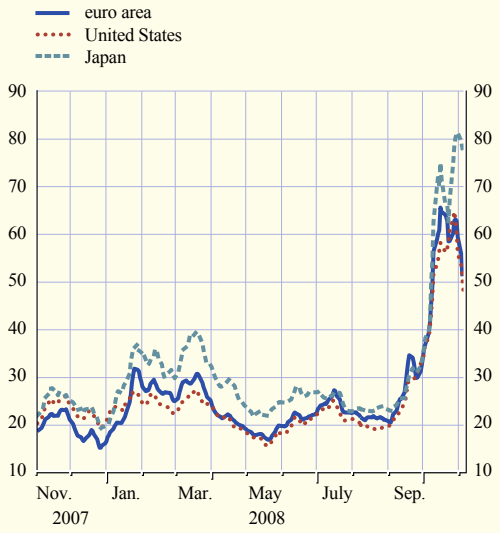
Sources: Reuters and Thomson Financial Datastream.
Note: The indices used are the Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 index for the United States and the Nikkei 225 index for Japan.

During the period under review stock markets were characterised by an extreme degree of uncertainty, as measured by the implied volatility extracted from stock options (see Chart 18). Equity volatility surged from already elevated levels to peak in October at levels not observed since the stock market crash of 1987. Against this background, equity risk premia across major equity markets have increased, contributing to depressing equity prices. While the trend in stock markets was clearly down over the past month, daily stock market returns were highly volatile both in the euro area and the United States. Box 4 elaborates on this.

Stock market developments in October were initially impacted by uncertainty regarding the approval of the US Treasury's proposed USD 700 billion Troubled Asset Relief Program (TARP), resulting in sharp stock market losses. In addition, government-sponsored rescue plans were initiated for a number of European financial institutions, underlining a spreading of the financial turmoil beyond the US banking sector. These developments resulted in highly volatile stock market developments. On 8 October a coordinated rate cut by the ECB, together with the Federal Reserve, the Bank of England, the Bank of Canada, the Swiss National Bank and Sveriges Riksbank, led to a short rebound in stock markets. However, volatility quickly re-emerged and the downward trend in stock market prices continued. In mid-October governments intervened with a range of measures to support and stabilise the financial system. Among other things, they provided deposit guarantees to private account holders, offered guarantee schemes for interbank lending, took bank recapitalisation measures and undertook efforts to strengthen bank liquidity. Uncertainty continued to weigh on markets however.

Chart 18 Implied stock market volatility

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



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.

In the euro area, the heaviest losses occurred in the financial sector, although the non-financial sector also experienced significant losses. Overall, the non-financial sector declined by around 17% and 9% in the United States and the euro area respectively, while the share prices of the financial industry decreased by about 14% in both the United States and the euro area.

The negative stock market trend during October was compounded by earnings developments. Actual annual earnings growth, computed in terms of earnings per share of the Dow Jones EURO STOXX index, was negative for the second month in a row, falling to -4% in October. The forecast growth rate of earnings per share 12 months ahead fell from 9% in September to 7% in October, while the forecast growth rate over the longer term decreased from 7% to 6% over the same period.

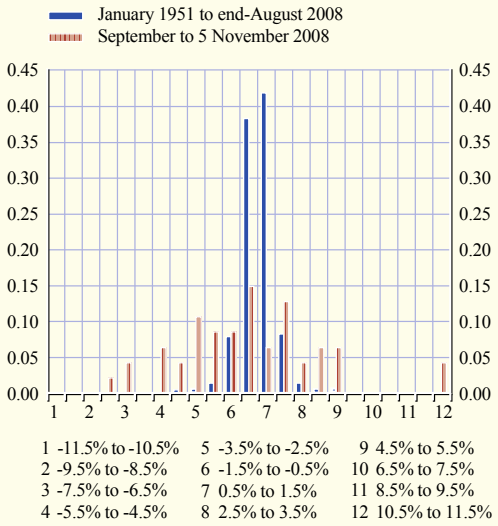
Box 4

ABNORMAL VOLATILITY IN GLOBAL STOCK MARKETS

In September and early October the declining trend in global stock prices accelerated when investors became extremely concerned about the health of the banking sector and its potential wider implications for the financial sector and the real economy as a whole. In particular, investors feared a meltdown of the global financial system. In an effort to restore confidence in the financial system, governments intervened with a range of measures. They provided deposit

guarantees to private account holders, offered guarantee schemes for interbank lending and bank recapitalisation measures, and undertook efforts to strengthen bank liquidity. Central banks on both sides of the Atlantic stepped up their liquidity-enhancing measures, while at the same time reducing their policy rates. Global stock prices generally increased as an immediate reaction to the announcement of the proposed government measures. This notwithstanding, stock market volatility remained high in subsequent weeks, reflecting market participants' extreme sensitivity to news on the financial situation of banks and on economic activity in particular. Against this background, this box examines the abnormally high stock market volatility during recent weeks in the euro area and the United States.

Chart A Distribution of recent and historical stock returns in the United States



Sources: Thomson Financial Datastream and ECB calculations.
Note: Stock returns calculated as daily percentage changes in the Dow Jones Industrial Average index.

One way of illustrating the unusual nature of the recent stock market volatility is to compare it with historical patterns. To this end, Chart A shows two histograms in which the vertical axis represents the relative frequency of various outcomes of daily stock returns, spanning a range from a decline of 11.5% to an increase of 11.5%. This range is shown on the horizontal axis and is divided into 23 equally sized segments, with each segment representing a daily return within a 1 percentage point interval.

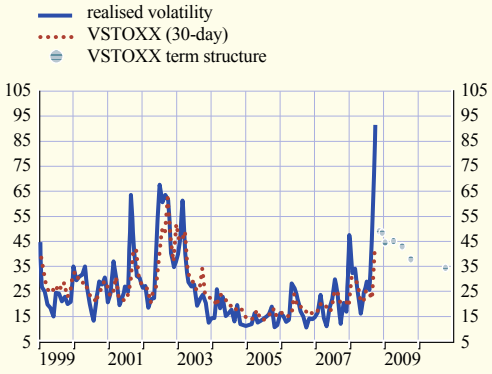
The blue bars are the histogram for daily percentage stock returns on the US Dow Jones Industrial Average index between 1 January 1951 and 31 August 2008. As seen in the chart, the bulk of the historical frequency distribution of daily stock returns is clustered in two segments, covering the interval between a decline of 0.5% and an increase of 1.5%. Since 1951 daily US stock returns have remained within this 2 percentage point interval on around seven out of ten days on average. At the same time, daily stock returns of below -3.5% or above +3.5% are extremely rare, occurring on only 0.5% of the trading days. The second histogram (the red bars) is computed for daily returns during the period from September to 5 November 2008. This histogram is much more widely dispersed than the histogram based on data since 1951. Daily stock returns that were historically very rare have recently become almost the norm. Daily stock returns of below -3.5% or above +3.5% have, since the end of August, occurred on around one-third of trading days. A similarly unusual stock price pattern can be observed for the euro area.

Chart B further illustrates the abnormal degree of stock price fluctuations during recent weeks and indicates that market participants are expecting high volatility conditions to persist in the euro area in the foreseeable future. The chart shows realised stock price volatility in a

given month and expected (implied) volatility for that month as measured by the options price-based VSTOXX index at the end of the previous month.[1] The dots represent the "term structure" of average expected volatility for horizons ranging from one month to two years ahead as measured by VSTOXX sub-indices based on the prices of options with corresponding times to expiry as at 5 November 2008.

Chart B Realised and expected stock market volatility in the euro area

(percentages per annum)



Sources: Thomson Financial Datastream, STOXX and ECB calculations.
Note: The data are explained in footnote 1 and the main text of this box.

Three main features can be inferred from Chart B. First, there is a close relationship between actual and expected volatility. This suggests that, to a large extent, investors tend to revise their views about near-term volatility according to the level of the most recent stock price fluctuations. Second, implied stock market volatility tends, on average, to hover slightly above realised volatility. This implies that risk-averse investors demand a premium for bearing the risk of holding volatility-dependent instruments. Third, the volatility forecasts as at 5 November 2008 suggest that investors believe that stock market volatility will, over the next two years, gradually decline from the current extremely high levels. This gradual moderation notwithstanding, euro area stock market volatility is still expected to remain at relatively high levels by historical standards following an extended period of predominantly below-average volatility up to mid-2007. For instance, the latest reading of expected volatility one year ahead (38%) and two years' ahead (34%) suggests that market participants expect average yearly volatility in a year's time to remain at 31%. This expected level of stock price fluctuations is still above the average realised volatility of around 20% per annum observed since 1986.

1 Realised volatility is calculated as the square root of the monthly average of squared daily stock returns (daily changes in the natural logarithm of the Dow Jones EURO STOXX 50 index), expressed in terms of percentage per annum. The VSTOXX index is based on Dow Jones EURO STOXX 50 options prices and is designed to reflect the market expectations of near-term (30-day) volatility as measured by the square root of the annualised implied variance across all options of a given time to expiration. See http://www.stoxx.com/index.html for more information.

3 PRICES AND COSTS

Euro area HICP inflation has continued to fall from its peak in the middle of the year, standing at 3.6% in September 2008 and, according to Eurostat's flash estimate, 3.2% in October. Recent falls in prices for commodities and the ongoing weakening in demand suggest that annual HICP inflation rates will continue to decline in the coming months, reaching levels in line with price stability in the course of 2009. Stronger downside movements in HICP inflation resulting from base effects cannot be excluded around the middle of next year, but these would be short-lived. Looking through such volatility, upside risks to price stability over the medium term are alleviating. The remaining upside risks relate to an unexpected increase in commodity prices, as well as in indirect taxes and administered prices, and the emergence of broad-based second-round effects in price and wage-setting behaviour, particularly in economies where nominal wages are indexed to consumer prices.

3.1 CONSUMER PRICES

According to Eurostat's flash estimate, euro area HICP inflation declined further to 3.2% in October 2008, down from 3.6% in September (see Table 5). Although official estimates of the breakdown of the HICP for October have not yet been published, available evidence at the country level suggests that much of the decline was due to a continued fall in the annual growth rate of energy and, to a lesser extent, food prices.

For September, the detailed breakdown indicates that the mild slowdown in annual HICP inflation from 3.8% in August was primarily attributable to slower growth in energy and food prices (see Chart 19).

The annual growth rate of energy prices declined further in September, by 1.1 percentage points. This decline was mainly on account of a base effect, given a modest month-on-month decline of 0.4%. Within the energy component of the HICP, a strong decline in oil energy prices (including car fuel and heating fuel) was offset to some extent by a further increase in the annual rate of change in the non-oil energy components, such as gas and electricity. The annual rate of increase in gas prices was particularly large, reaching 16.7% in September, the highest rate since 2001.

The annual rate of change in unprocessed food prices decreased marginally in September, with a small decline in the annual growth rate of meat and fruit prices offsetting some rise in the annual

Table 5 Price developments

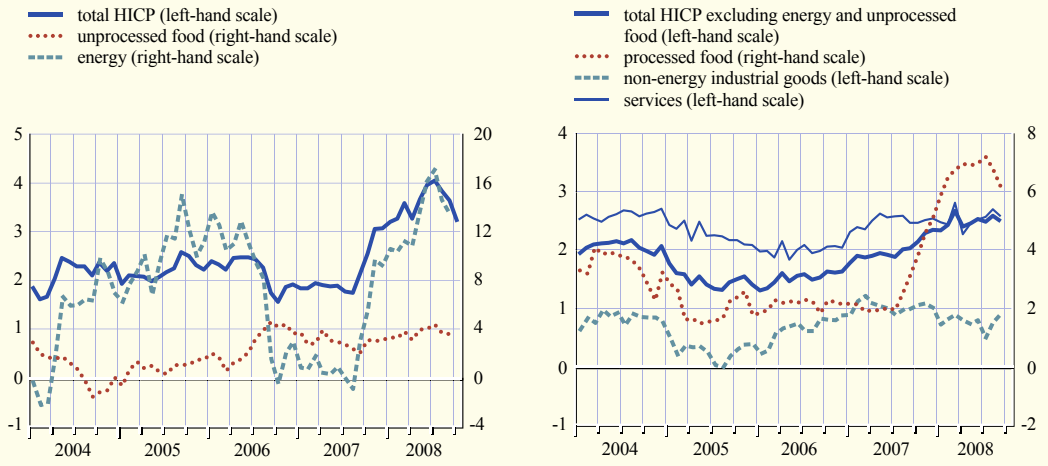
(annual percentage changes, unless otherwise indicated)

	2006	2007	2008 May	2008 June	2008 July	2008 Aug.	2008 Sep.	2008 Oct.
HICP and its components								
Overall index[1)]	2.2	2.1	3.7	4.0	4.0	3.8	3.6	*3.2*
Energy	7.7	2.6	13.7	16.1	17.1	14.6	13.5	.
Unprocessed food	2.8	3.0	3.9	4.0	4.4	3.7	3.6	.
Processed food	2.1	2.8	6.9	7.0	7.2	6.8	6.2	.
Non-energy industrial goods	0.6	1.0	0.7	0.8	0.5	0.7	0.9	.
Services	2.0	2.5	2.5	2.5	2.6	2.7	2.6	.
Other price indicators								
Industrial producer prices	5.1	2.8	7.1	8.0	9.2	8.5	7.9	.
Oil prices (EUR per barrel)	52.9	52.8	80.1	85.9	85.3	77.0	70.0	55.2
Non-energy commodity prices	24.8	9.2	6.0	9.6	9.8	10.5	5.5	-7.4

Sources: Eurostat, HWWI and ECB calculations based on Thomson Financial Datastream data.
1) HICP inflation in October 2008 refers to Eurostat's flash estimate.

Chart 19 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

growth rate of vegetable prices. The annual rate of change in processed food prices also declined in September. This further decline was consistent with seasonally adjusted monthly changes moving back towards historical averages, although the magnitude of past rises in food commodities may still imply some remaining supply chain price pressures.

Excluding all food and energy items, or 30% of the HICP basket, HICP inflation remained unchanged at 1.9% in September, reflecting counterbalancing movements in non-energy industrial goods and services prices. The increase in non-energy industrial goods price inflation to 0.9% from 0.7% in the previous month mainly reflected unusual seasonal developments in textile prices along with a rise in the annual rate of change in car prices. The annual growth rate of services prices declined to 2.6% in September, down by 0.1 percentage point from the previous month. This fall was mainly driven by air transport and package holiday prices. The decline in September could potentially reflect factors such as the latest drop in oil prices and extraordinary seasonal discounting, although such interpretations can only be made tentatively as these components tend to exhibit fairly volatile seasonal dynamics.

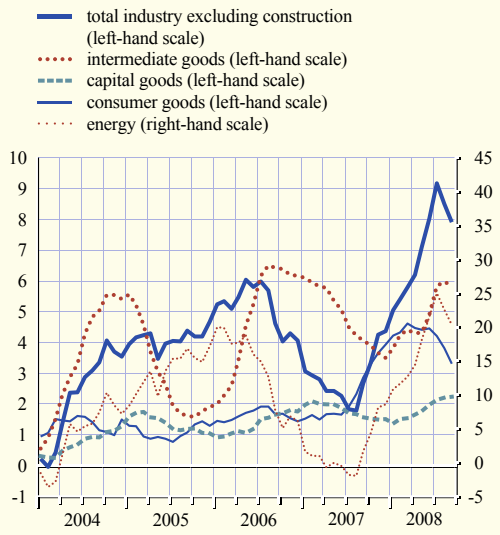
3.2 INDUSTRIAL PRODUCER PRICES

In September 2008 the annual rate of change in total industrial producer prices (excluding construction) declined to 7.9% from 8.5% in August (see Chart 20). Despite the decline, annual producer price inflation remained at a historically high rate, with strong contributions from energy and intermediate goods prices. The annual growth rate of PPI energy declined to 20.2% in September, from 22.6% in August. Excluding energy (and construction), producer price inflation declined to 4.1%, owing in particular to lower annual growth rates in intermediate and consumer goods. The decline in the annual rate of growth of intermediate goods prices, to 5.8%, most likely reflected some easing over the period in industrial raw material prices.

The latest data on firms' price-setting behaviour from the Purchasing Managers' Index signal an ongoing easing in short-term inflationary pressures in recent months. According to

Chart 20 Breakdown of industrial producer prices

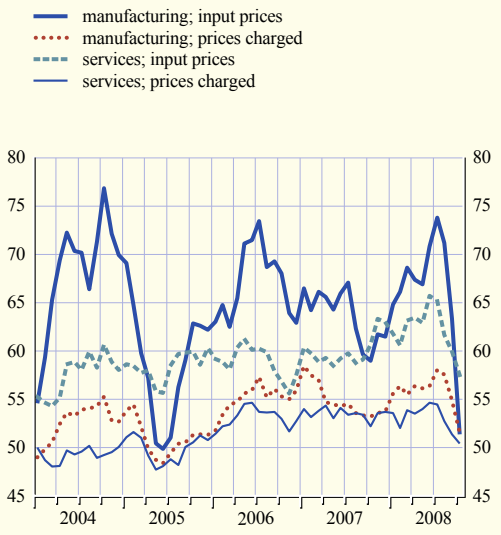
(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

Chart 21 Producer input and output price surveys

(diffusion indices; monthly data)



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

the survey, price pressures eased considerably in October in both the manufacturing and services industries (see Chart 21). In the manufacturing sector, the input price index dropped sharply for the third month in a row, bringing the series to its lowest level since July 2005. The decline in the index for input prices in the services sector over this period was also marked. The index for prices charged decreased again in October in both the manufacturing and services sectors. In general, factors cited for the more subdued price pressures include lower oil and other commodity prices, as well as measures by firms to boost sales in the context of weakening demand.

3.3 LABOUR COST INDICATORS

Available labour cost indicators suggest that wage growth continued at a fast pace throughout the first half of 2008 which, when combined with weakening productivity growth, corresponded to a significant rise in unit labour cost growth over this period (see Table 6).

Table 6 Labour cost indicators

(annual percentage changes, unless otherwise indicated)

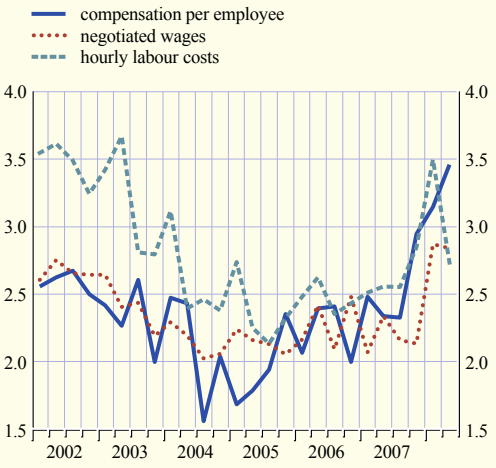
	2006	2007	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2
Negotiated wages	2.3	2.2	2.3	2.2	2.1	2.9	2.8
Total hourly labour costs	2.5	2.6	2.6	2.5	2.9	3.5	2.7
Compensation per employee	2.2	2.5	2.3	2.3	2.9	3.1	3.5
Memo items:							
Labour productivity	1.2	0.8	0.9	0.7	0.4	0.6	0.2
Unit labour costs	1.0	1.7	1.5	1.6	2.5	2.6	3.2

Sources: Eurostat, national data and ECB calculations.

In the first half of 2008 the annual growth rates of negotiated wages, compensation per employee and hourly labour costs all remained elevated (see Chart 22). The annual growth rate of compensation per employee rose to 3.5% in the second quarter of 2008, a level that has not been witnessed in the euro area since the mid-1990s. In the same period, the annual growth rate of euro area negotiated wages also remained elevated, at 2.8%, broadly unchanged from the first quarter of the year. The annual rate of change in hourly labour costs fell from 3.5% in the first quarter of the year to 2.7% in the second quarter, but this was affected by the early timing of Easter in 2008, which dampened hours worked in the first quarter. Given slowing productivity growth, strong wage dynamics fed directly into a strong acceleration of annual unit labour costs to 3.2% in the second quarter, their highest rate in over a decade. In this context, the risk of broader-based second-round effects still remains, particularly in those euro area countries where some form of automatic price indexation of wages exists.

Chart 22 Selected labour cost indicators

(annual percentage changes; quarterly data)

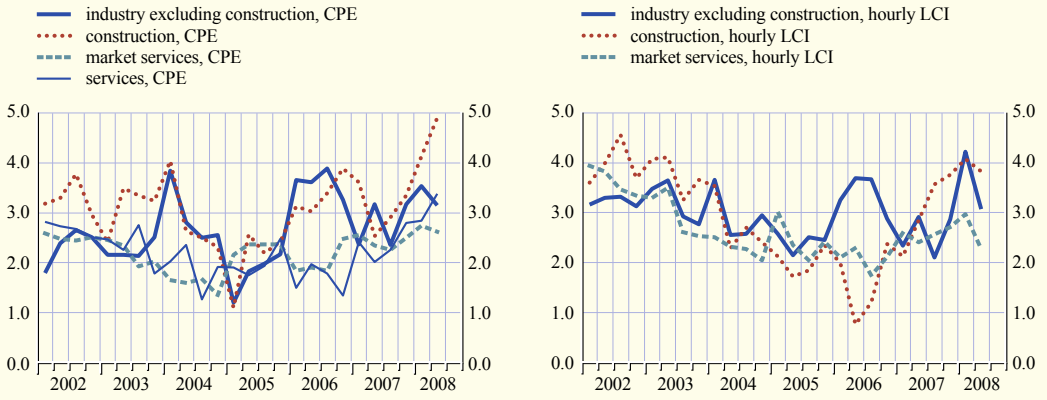


Sources: Eurostat, national data and ECB calculations.

Disaggregated data on labour cost developments indicate a heterogeneous sectoral contribution to the strong labour cost growth witnessed in the first half of the year, although developments may have been distorted somewhat by the early timing of Easter (see Chart 23). All sectoral labour cost indicators point to a particularly pronounced annual growth rate of labour costs in the construction sector, while compensation per employee growth in services also increased considerably. By contrast, labour cost growth in industry has displayed a very high degree of volatility in recent quarters.

Chart 23 Sectoral labour cost developments

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.
Note: CPE stands for "compensation per employee" and LCI stands for "labour cost index".

3.4 THE OUTLOOK FOR INFLATION

Although remaining considerably above the level consistent with price stability since autumn 2007, euro area annual HICP inflation has been steadily declining since July. A continued high level of inflation has resulted largely from both the direct and indirect effects of past surges in energy and food prices at the global level. Moreover, strong wage growth in the first half of the year, in spite of weaker economic growth momentum and a deceleration in labour productivity growth, resulted in a sharp increase in unit labour costs. Looking ahead, recent falls in prices for commodities as well as the ongoing weakening in demand suggest that, on the basis of current futures prices for commodities, annual HICP inflation rates will continue to decline in the coming months, reaching levels in line with price stability in the course of 2009. While there is a possibility of stronger downside movements in HICP inflation resulting from base effects around the middle of next year, these would be short-lived.

The latest ECB Survey of Professional Forecasters (see Box 5) indicates a downward revision of private sector inflation expectations for all horizons relative to the previous survey. As a result, in the near term, inflation expectations stand at 3.4% for 2008 and 2.2% for 2009, while inflation expectations for 2010 stand at 2.0%. Average expectations for inflation five years ahead also declined slightly, but nonetheless remained at 2.0% (rounded).

Looking through any short-term volatility, upside risks to price stability over the medium term are alleviating. The remaining upside risks relate to an unexpected increase in commodity prices, as well as in indirect taxes and administered prices, and the emergence of broad-based second-round effects in price and wage-setting behaviour, particularly in economies where nominal wages are indexed to consumer prices.

Box 5

RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE FOURTH QUARTER OF 2008

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the fourth quarter of 2008. The survey was conducted between 15 and 17 October 2008. The SPF gathers information on expectations for euro area inflation, GDP growth and unemployment from experts affiliated with financial or non-financial institutions based in the EU. Given the diversity of the panel of participants, aggregate SPF results can reflect a relatively heterogeneous set of subjective views and assumptions.

Inflation expectations for 2008, 2009 and 2010

SPF participants' inflation expectations for 2008, 2009 and 2010 have all been revised downwards since the previous round (conducted in July), and now stand at 3.4%, 2.2% and 2.0% respectively. The downward revision was largest for 2009, at 0.4 percentage point (see the table).[1] The respondents attributed their downward revisions mainly to (oil and food) commodity price developments, as well as to weaker demand. By contrast, many mentioned exchange rates as an upward factor. Labour costs (in particular when adjusted for productivity growth, i.e. unit labour costs) were also cited as an upward factor.

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

The SPF inflation expectations for 2008 and 2009 are at the bottom of, or just below, the ranges reported in the September 2008 ECB staff macroeconomic projections for the euro area (finalised in late August 2008). The SPF inflation expectations for 2008-10 are broadly in line with the projections published in the October 2008 issues of Consensus Economics and Euro Zone Barometer (both finalised around the middle of October).

SPF participants were also asked to assess the probability of the future outcome falling within specific intervals. The aggregate probability distribution obtained by averaging the forecasters' responses provides a summary of their assessments. It also provides information about how survey participants gauge, on average, the risk of the actual outcome being above or below the most likely range. Reflecting the lower point estimates, the probability distributions associated with the forecast outcomes were revised down for each of the years in the period 2008-10, with the largest revision being made for 2009 (see Chart A). Nonetheless, for both 2009 and 2010 there remains, at 65% and 54% respectively, a considerable amount of probability associated with outcomes being at or above 2%. Overall, according to the participants' aggregated probability distributions, risks to the forecasts over the next two years are assessed to be broadly balanced. Based on their qualitative responses, participants believe that the main downside risks stem in particular from commodity prices and weak demand, and that upside risks emanate from exchange rate and labour cost developments.

Indicators of longer-term inflation expectations

Longer-term inflation expectations (for the year 2013) were revised slightly downwards, by 0.04 percentage point, from 2.03% to 1.99%. These point expectations are in line with the latest long-term inflation projections provided by the Euro Zone Barometer (for 2012) and Consensus Economics (for 2013). The disagreement about longer-term inflation expectations (measured as the standard deviation) also decreased slightly.

Results from the SPF, ECB staff macroeconomic projections, Consensus Economics and Euro Zone Barometer

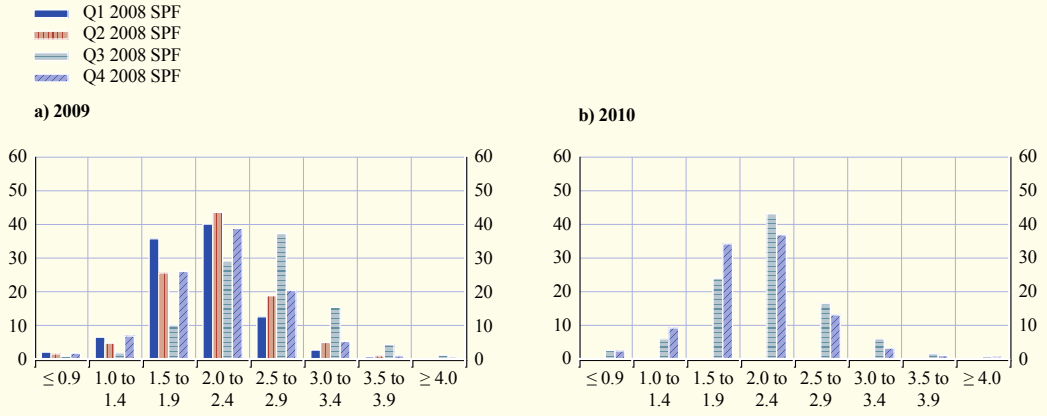
(annual percentage changes, unless otherwise indicated)

		Survey horizon				
HICP inflation	**2008**	**Sep. 2009**	**2009**	**Sep. 2010**	**2010**	**Longer term [2]**
SPF Q4 2008	3.4	1.9	2.2	2.0	2.0	2.0
Previous SPF (Q3 2008)	*3.6*	-	*2.6*	-	*2.1*	*2.0*
ECB staff macroeconomic projections	3.4-3.6	-	2.3-2.9	-	-	-
Consensus Economics (October 2008)	3.4	-	2.2	-	2.0	2.0
Euro Zone Barometer (October 2008)	3.5	-	2.3	-	2.0	2.0
Real GDP growth	**2008**	**Q2 2009**	**2009**	**Q2 2010**	**2010**	**Longer term [2]**
SPF Q4 2008	1.2	0.1	0.3	1.2	1.4	2.0
Previous SPF (Q3 2008)	*1.6*	-	*1.3*	-	*1.8*	*2.1*
ECB staff macroeconomic projections	1.1-1.7	-	0.6-1.8	-	-	-
Consensus Economics (October 2008)	1.2	-	0.5	-	1.6	2.0
Euro Zone Barometer (October 2008)	1.2	-	0.3	-	1.6	2.0
Unemployment rate [1]	**2008**	**Aug. 2009**	**2009**	**Aug. 2010**	**2010**	**Longer term [2]**
SPF Q4 2008	7.4	8.1	8.0	8.1	8.1	7.1
Previous SPF (Q3 2008)	*7.2*	-	*7.4*	-	*7.4*	*6.9*
Consensus Economics (October 2008)	7.4	-	-	-	-	-
Euro Zone Barometer (October 2008)	7.4	-	8.0	-	8.0	7.4

1) As a percentage of the labour force.
2) Longer-term inflation expectations refer to 2013 in the SPF and Consensus Economics and 2012 in the Euro Zone Barometer.

Chart A Probability distribution for average annual inflation in 2009 and 2010 in the latest SPF rounds [1)]

(probability in percentages)

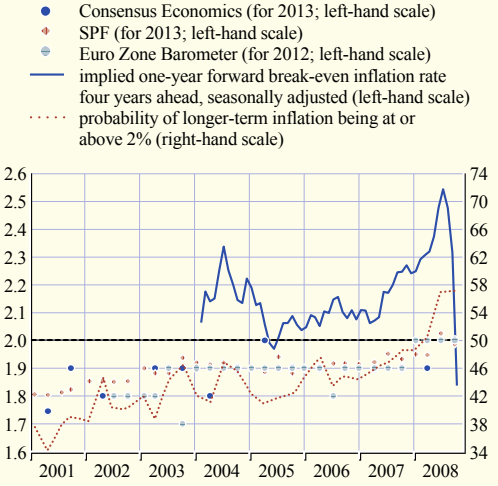


Source: ECB.
1) Corresponds to the average of individual probability distributions provided by SPF forecasters.

Despite the slight fall in average point expectations, the probability of longer-term inflation standing at 2% or above remained unchanged at around 57%, according to survey respondents (see Chart B). These survey results can be compared with the break-even inflation rate, an indicator of longer-term inflation expectations among market participants calculated as the yield spread between nominal and inflation-linked bonds.[2] Until recently, movements in the probability assigned to an outcome that inflation will stand at 2% or above in the next five years were, on average, broadly in line with developments in a corresponding financial market-based indicator of inflation expectations (the implied one-year forward break-even inflation rate four years ahead, seasonally adjusted) (see Chart B).[3] For example, both showed an upward tendency from early 2007 to the middle of 2008. However, since September and the further intensification of financial market turmoil, financial market-based inflation expectations seem to have fallen sharply, in contrast to survey-based measures. Market-based measures have also been influenced by investors' efforts to reduce risk and leverage and their strong preference for more secure and liquid assets.[4]

Chart B Longer-term inflation expectations from surveys and break-even inflation rates

(average annual percentage changes; percentage probability)



Sources: Consensus Economics, Euro Zone Barometer, ECB, Reuters and ECB calculations.

2 See also the article entitled "Measures of inflation expectations in the euro area" in the July 2006 issue of the Monthly Bulletin.
3 Break-even inflation rates should not be interpreted as direct measures of inflation expectations, since they may also incorporate various risk premia (such as inflation uncertainty and liquidity premia).
4 For a further discussion of the impact of the current financial market turmoil on market-based measures of inflation expectations, see the box entitled "Recent increases in real yields and their implications for the analysis of inflation expectations" in this issue of the Monthly Bulletin.

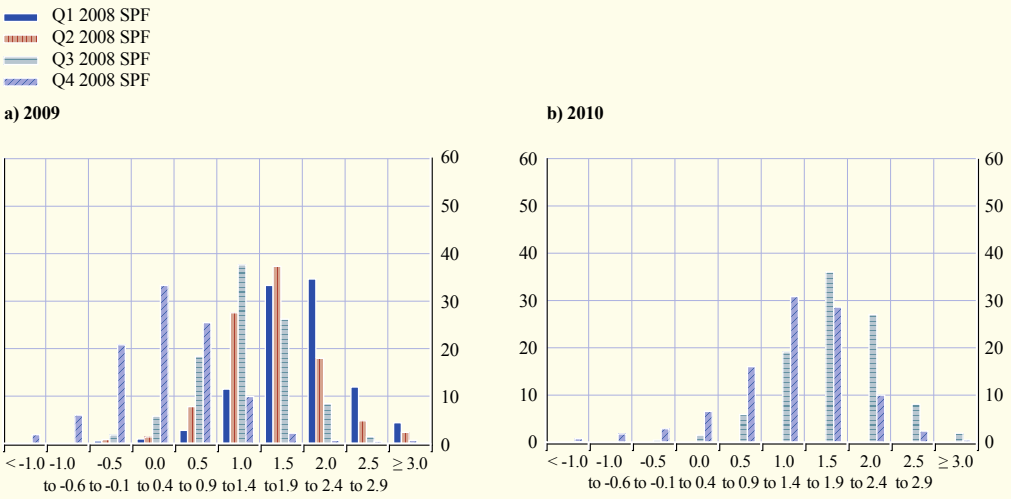
Real GDP growth expectations

Compared with the previous SPF round, expectations for real GDP growth have been revised down sharply for each of the years in the period 2008-10, with the most significant downward revision (of 1.0 percentage point) being for 2009. This represents the largest revision from one round to the next for the "next calendar year forecast" since the start of the SPF in 1999, with almost all of the respondents revising down their GDP growth forecasts for 2009. The main factor behind the weaker outlook is cited as being the current financial market developments and their direct and indirect impact on activity. Respondents expect growth in exports, investment and private consumption to be weaker owing to financial market developments, a deterioration in consumer and business sentiment, the slowdown in the global economy and a worsening in labour market conditions. Factors cited as providing some support for activity are policy interventions by monetary authorities and governments, a weaker euro exchange rate and lower commodity prices.

In line with the downward revision of average point estimates, the probability distributions for expected real GDP growth in 2009 and 2010 have shifted towards lower outcomes than in previous SPF rounds. The progressive deterioration in the outlook for 2009 is clearly illustrated in the left-hand panel of Chart C, which shows the evolution of the associated probability distribution over the latest four rounds. In the first quarter of 2008 the largest probability was associated with an outcome in the range of 2.0%-2.4%. In the latest round, there is a close to zero probability attached to such an outcome, and the greatest probability is associated with an outcome in the range of 0.0%-0.4%. Furthermore, SPF respondents associate a 29% probability with output growth being negative on average in 2009. An additional noteworthy feature is that, despite the significant downward revisions, SPF respondents still report the balance of risks to these forecasts to be on the downside. These downward risks mainly relate to the fact that either some of the factors mentioned above may deteriorate further or their impact may be more severe than anticipated.

Chart C Probability distribution for average annual real GDP growth in 2009 and 2010 in the latest SPF rounds [1)]

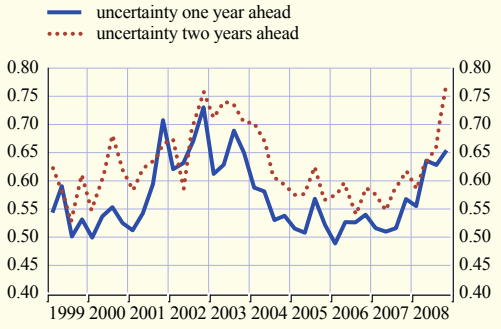
(probability in percentages)



Source: ECB.
1) Corresponds to the average of individual probability distributions provided by SPF forecasters.

It is also worth stressing that SPF respondents' uncertainty about the outlook for economic activity is at an elevated level. Aggregate uncertainty (measured as the standard deviation of the aggregate probability distribution) surrounding real GDP forecasts one and two years ahead has strongly increased since the beginning of 2008, and for two-years-ahead forecasts it has exceeded the previous peak reached in the fourth quarter of 2002 (see Chart D).

Chart D Uncertainty surrounding SPF real GDP forecasts [1)]



Source: ECB.
1) Corresponds to one standard deviation of the aggregate probability distribution.

Growth expectations for 2008 and 2009 in the SPF are at the bottom of, or below, the ranges reported in the September 2008 ECB staff macroeconomic projections for the euro area. SPF expectations for real GDP growth in 2009 and 2010 follow broadly the same development as the average of the projections published in the latest issues of the Euro Zone Barometer and Consensus Economics, although at slightly lower levels.

SPF expectations for longer-term real GDP growth (in 2013) are at 2.0%, down 0.1 percentage point from the previous round. Notwithstanding the fact that this represents the lowest longer-term forecast reported thus far by SPF respondents, they also perceive the balance of risks to this outcome as being on the downside.

Expectations for the euro area unemployment rate

Unemployment rate expectations in the SPF have been revised up for each of the years in the period 2008-10. According to the forecasters, these revisions are mainly due to lower euro area economic growth prospects. A deterioration is envisaged in labour market conditions generally, but particularly in the industry and construction sectors. Most respondents expect the unemployment rate to start levelling off only towards the end of 2009 and to start to decline around the end of 2010. Unemployment rate expectations in the latest SPF round are in line with those of Consensus Economics and the Euro Zone Barometer for the period 2008-10.

Longer-term unemployment rate expectations have also been revised upwards, by 0.2 percentage point, and now stand at 7.1% for 2013. This is somewhat below the Euro Zone Barometer but is based on a larger number of responses. SPF respondents perceive the balance of risks as being on the upside. A number of respondents referred to the need to continue with labour market reforms in order to ensure that the expected pick-up in unemployment in the shorter term does not translate into longer-term unemployment.

4 OUTPUT, DEMAND AND THE LABOUR MARKET

The latest survey data confirm that momentum in economic activity in the euro area has weakened significantly, with sluggish domestic and external demand and tighter financing conditions. The measures adopted by governments to deal with the financial turmoil should support trust in the financial system and help to prevent undue constraints in the supply of credit to companies and households. In combination with the recent broad-based falls in commodity prices, these measures should help to restore confidence. Overall, the intensification and broadening of the financial market turmoil is likely to dampen euro area demand for a rather protracted period of time. A number of downside risks to economic activity identified earlier have now materialised – particularly those stemming from the financial market tensions. Other downside risks continue to relate to disorderly developments due to global imbalances and rising protectionist pressures, as well as to the possibility of renewed increases in commodity prices.

4.1 OUTPUT AND DEMAND DEVELOPMENTS

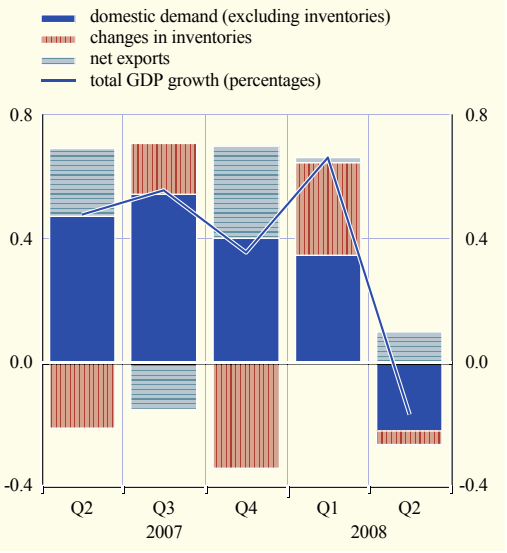
REAL GDP AND DEMAND COMPONENTS

Eurostat's second estimate of euro area real GDP growth confirmed that activity fell by 0.2% quarter on quarter in the second quarter of 2008, following growth of 0.7% in the previous quarter. The decline was largely due to a decrease in domestic demand excluding inventories (see Chart 24). Compared with the previous release there were small revisions to trade data (exports were revised slightly upwards and imports downwards), so that the contribution of net trade was estimated at 0.1 percentage point (compared with zero previously).

A primary factor in the weakness in domestic demand in the second quarter of 2008 was a sharp drop in investment, which fell by 1%. The breakdown of gross fixed capital formation for the second quarter shows a sharp decline in construction investment (which dropped by 1.6% quarter on quarter) and a small fall in non-construction investment (which fell by 0.3% quarter on quarter). As discussed in previous issues of the Monthly Bulletin, it is likely that construction investment was boosted by the mild weather conditions in the first quarter of the year – a factor that is not properly reflected in seasonal adjustments and which largely explains the decline observed in the second quarter. A slowdown was also seen in business investment growth, which is likely to have reflected tighter financing conditions and the weakening outlook for demand and profitability. A further decline in capacity constraints is also likely to have contributed to the moderation seen in business investment, with capacity utilisation in the industrial sector falling below its long-run average in October according to the European Commission Business Survey. Looking ahead, the expected deterioration in the domestic and external economic outlook and heightened uncertainty, together with higher financing costs,

Chart 24 Real GDP growth and contributions

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



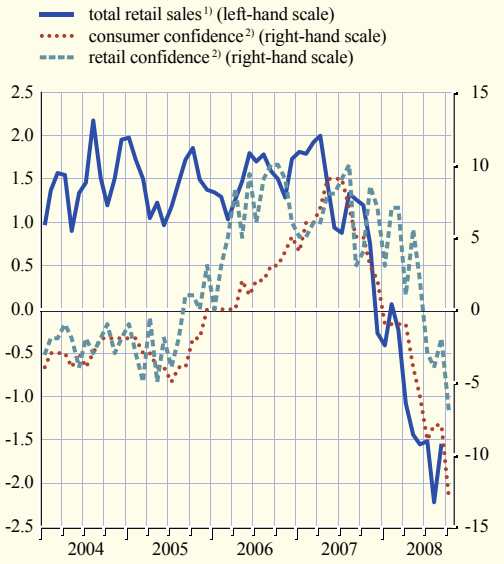
Sources: Eurostat and ECB calculations.

are expected to continue to dampen investment growth in the coming quarters.

Consumption fell in the second quarter of 2008 as households reacted to significant increases in commodity prices, which squeezed real incomes, as well as a decline in financial wealth. Available indicators suggest that private consumption remained subdued in the third quarter. The volume of euro area retail sales rose by 0.1% quarter on quarter in the third quarter of 2008, while new passenger car registrations fell by 1.2% quarter on quarter in the same period (see Chart 25).

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

(monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.
1) Annual percentage changes; three-month moving averages; working day-adjusted.
2) Percentage balances; seasonally and mean-adjusted.

Looking ahead, the recent broad-based falls in commodity prices should lend support to disposable incomes and thereby stimulate household spending. That may help to counteract some of the negative effects of the financial turmoil on household confidence. However, the outlook remains highly uncertain and information about the prospects for household consumption since the intensification of the financial turmoil is as yet very limited. The only indicator available so far for the fourth quarter is consumer confidence in October, which recorded the second largest monthly fall since the survey began in 1985 and dropped to its lowest level since 1994, as consumers registered concerns about the general economic situation and labour market prospects.

Consumer confidence is usually a reasonable guide to developments in private consumption – for example, it correlates closely with year-on-year growth in household spending. However, consumer confidence is an indicator of sentiment and households are not specifically asked about either recent or intended expenditure. So it is possible that, on this occasion, sentiment may not accurately mirror real developments in household expenditure. As discussed in Box 6, there have been occasions in the past – in particular during periods of financial turmoil such as in 1992 and in 1998 – when a decline in consumer confidence was not matched by a similar reduction in private consumption. However, since the start of the financial turmoil in August 2007, consumer confidence has continued to provide a fairly good guide to developments in household consumption. It seems, therefore, that the decline in confidence in October also signals a worsening in prospects for household spending in the near term. Nevertheless, a high level of uncertainty continues to surround the extent of the negative impact of the financial market turbulence on consumption, and on real economic developments more generally.

Box 6

THE RELIABILITY OF SURVEY DATA DURING PERIODS OF FINANCIAL TURMOIL

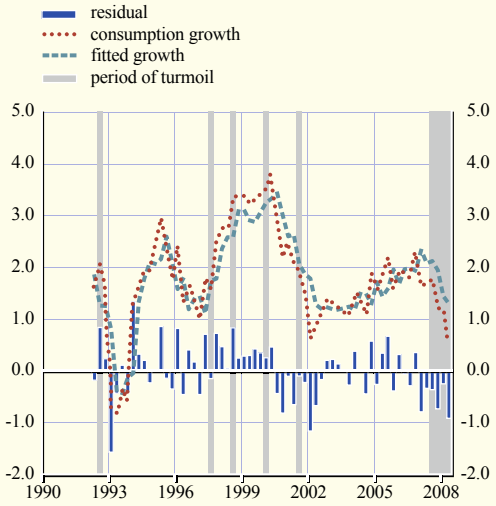
Survey indicators for the euro area from the European Commission (EC surveys) and the Purchasing Managers' Index (PMI) have always been relatively closely linked to developments in real activity. As these indicators become available before the euro area national accounts data are released, they are useful as early signals of developments in real activity. However, movements in these indicators must always be interpreted with caution. Large positive or negative shocks to the economy may be interpreted overly strongly by survey participants and lead to overreactions observable in the indicators. It is unclear, for instance, to what extent the financial turmoil that started at the end of the summer of 2007 may have affected the historical relationship of these indicators with real activity. One possibility is that survey respondents may be unduly negatively influenced by events in financial markets or by adverse news. A downward movement in a survey indicator would then not only reflect a movement in real activity but also psychological effects stemming from the financial turmoil. This would make the reading of the indicators more difficult in such periods. This box looks at recent developments in some surveys, using data up to September 2008, and compares them with previous periods of financial turmoil.

In order to investigate whether periods of financial turmoil negatively affect survey indicators more than is warranted by real activity movements, the historical relationship of selected indicators with year-on-year growth rates of real activity during and outside such periods must be examined. Five historical episodes of financial turmoil are considered: the Exchange Rate Mechanism (ERM) crisis (September 1992), the Asian crisis (July 1997), the Long-Term Capital Management (LTCM) crisis (September 1998), the bursting of the technology stock bubble (March 2000) and the terrorist attacks in the United States (September 2001). The current financial turmoil covers the period from the third quarter of 2007.

To match the frequency with real data, survey indicators can be averaged over the quarter. This also eliminates some of the usual monthly fluctuations of survey indicators. Charts A to E show the historical fit of regressions of the year-on-year growth rate of activity on selected survey indicators.[1] If survey results overreact (i.e. fall too far) during periods of financial turmoil, there should be large positive residuals (i.e. actual growth minus fitted growth should be positive) in these periods. The periods of financial turmoil are indicated by grey bars in the charts.

Chart A The relationship between the EC consumer confidence indicator and consumption growth

(annual percentage changes)

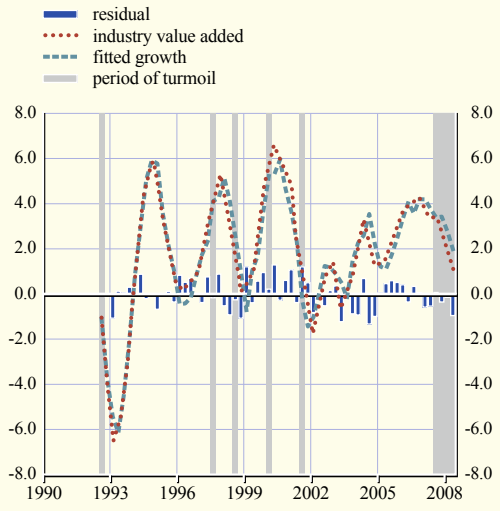


Sources: European Commission Business and Consumer Surveys, Eurostat and ECB calculations.

1 In the regressions, lags of the year-on-year growth rates of real activity are also included.

Chart B The relationship between the EC industrial confidence indicator and value added growth in industry

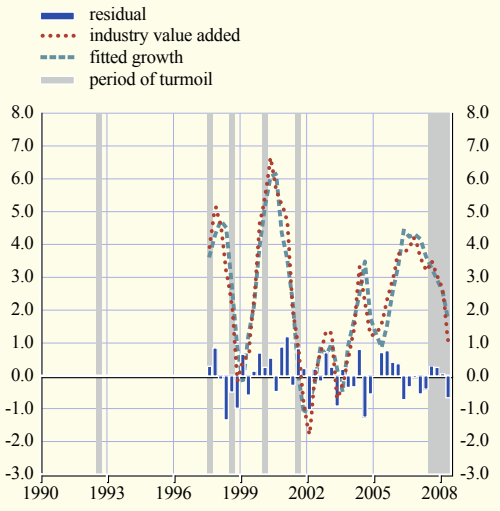
(annual percentage changes)



Sources: European Commission Business and Consumer Surveys, Eurostat and ECB calculations.

Chart C The relationship between the manufacturing PMI and value added growth in industry

(annual percentage changes)



Sources: Eurostat, Markit and ECB calculations.

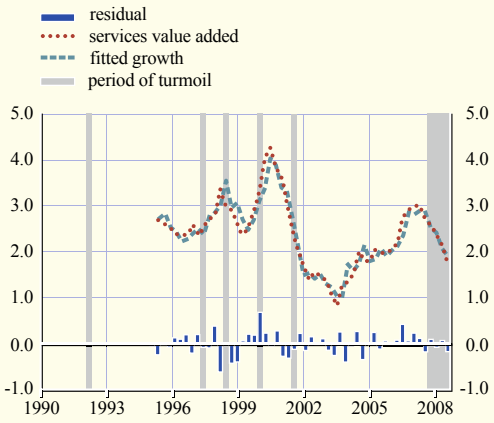
Chart A shows year-on-year private consumption growth and fitted growth from a simple regression of private consumption growth on the overall EC consumer confidence indicator; it also shows the residuals from this regression. There are large positive residuals during the ERM crisis and the LTCM crisis, indicating a possible overreaction. Overall, however, the EC consumer confidence indicator has broadly followed private consumption growth and there is little evidence that this relationship broke down significantly during the latest episode of financial turmoil. On the contrary, consumption growth seems to have fallen more strongly than the EC consumer confidence indicator would suggest (as indicated by the negative residuals).

Charts B and C show year-on-year industry value added growth and fitted growth from a simple regression of value added growth on the EC industrial confidence indicator and the Markit PMI for manufacturing. The only period of turmoil in which a large positive residual can be observed is following the terrorist attacks in the United States in September 2001. There is no evidence that either the EC or PMI surveys have so far provided misleading signals in the current financial turmoil. This is also confirmed by analysis of residuals from regressions, which appear to be similar to those seen in the past. In any case, as the residuals tend to be negative (especially in the case of the EC surveys) they certainly do not suggest overreaction, but rather, if anything, suggest that the survey results have fallen too little compared with real activity.

Finally, Charts D and E show year-on-year services value added growth and fitted growth from a simple regression of services value added growth on the EC services confidence indicator and the Markit PMI services business activity index. During the bursting of the technology bubble in 2000, the regression shows a large positive residual. Again, an inspection of the residuals shows that the indicators have not, so far, appeared to overreact during the recent period of turmoil.

Chart D The relationship between the EC services confidence indicator and value added growth in services

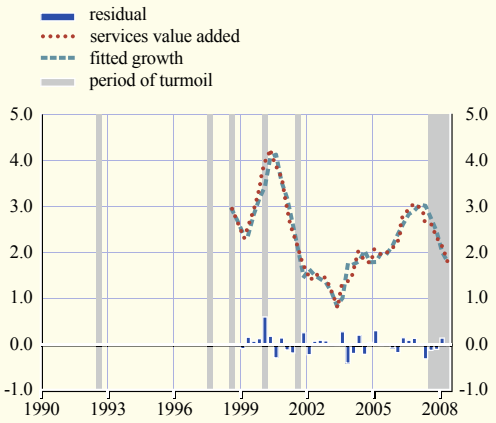
(annual percentage changes)



Sources: European Commission Business and Consumer Surveys, Eurostat and ECB calculations.

Chart E The relationship between the services PMI and value added growth in services

(annual percentage changes)



Sources: Eurostat, Markit and ECB calculations.

Overall, it appears that the quarterly averaged survey indicators have not yet overreacted or provided a particularly false signal about real economic developments during the recent financial turmoil. In particular, an analysis of residuals from simple regressions of year-on-year growth on the quarterly averaged survey results does not provide evidence that the survey results have tended to fall too significantly. The residuals during the periods of financial turmoil are not unusually large; they are actually often negative. Although large positive residuals during earlier periods of turmoil can at times be found, this is exceptional. Against this background, the falls in such survey indicators in recent months are likely to reflect real economic developments that should subsequently be reflected in quantitative statistics, confirming weak economic activity for the second half of 2008.

SECTORAL OUTPUT

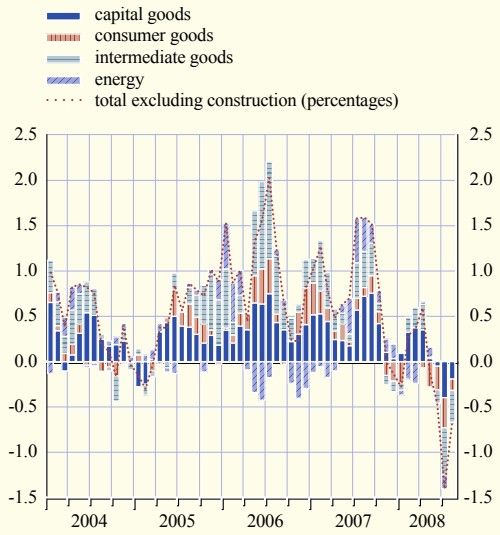
The drop in euro area output in the second quarter of 2008 reflected a fall in value added in the industrial and construction sectors, which was partly offset by more resilient growth in the services sector.

Available indicators of industrial and services sector output suggest that growth was weak during the third quarter. Industrial production (excluding construction) rose strongly in August but the downward trend continued to prevail, with the average level of production in July and August being below the level seen in the second quarter (see Chart 26). Construction production rose slightly in August but the change on a three-month-on-three-month basis was still negative. Surveys of industrial and services sector activity confirm the picture of dampened activity in the third quarter.

Turning to the fourth quarter, surveys of business activity registered broad-based falls in October. According to the European Commission's October survey, industrial confidence declined to the lowest level seen since November 2001, while confidence in the services sector reached its lowest level since the survey began in 1995. The Purchasing Managers' Index (PMI) also recorded further very sharp falls in October 2008, with the composite index declining to its lowest level since the survey began in 1998.

Chart 26 Industrial production growth and contributions

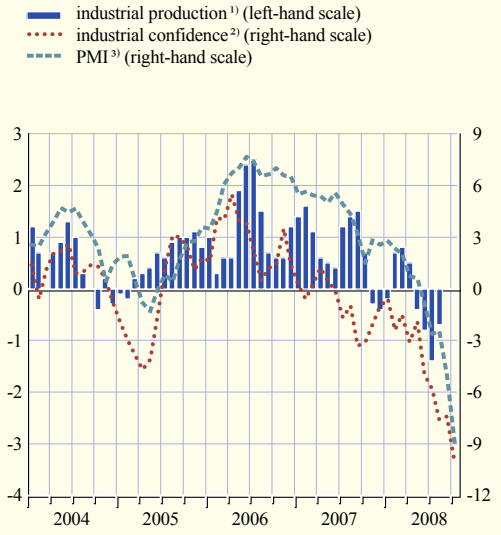
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



Sources: Eurostat and ECB calculations.
Notes: Data shown are calculated as three-month moving averages against the corresponding average three months earlier.

Chart 27 Industrial production, industrial confidence and the PMI

(monthly data; seasonally adjusted)



Sources: Eurostat, European Commission Business and Consumer Surveys, Markit and ECB calculations.
Note: All series refer to manufacturing.
1) Three-month-on-three-month percentage changes.
2) Percentage balances; changes compared with three months earlier.
3) Purchasing Managers' Index; deviations from an index value of 50.

4.2 LABOUR MARKET

Having shown significant improvements over the past few years, prospects in the euro area labour market have deteriorated in recent months. The unemployment rate has increased since the start of 2008 and, according to surveys, employment expectations have moderated.

Table 7 Employment growth

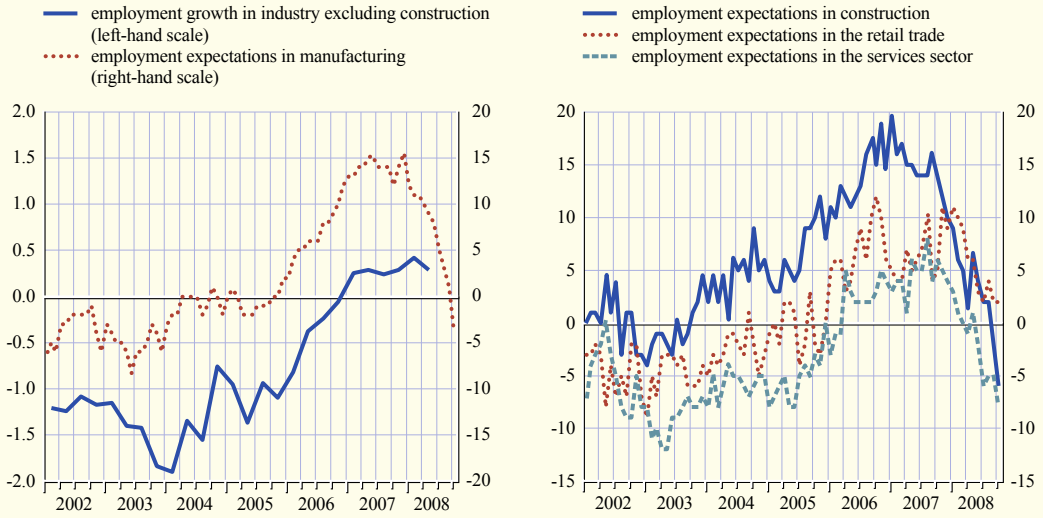
(percentage changes compared with the previous period; seasonally adjusted)

	Annual rates		Quarterly rates				
	2006	2007	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2
Whole economy	1.6	1.8	0.5	0.4	0.3	0.3	0.2
of which:							
Agriculture and fishing	-1.9	-1.2	-0.4	-1.2	-0.5	0.5	-1.0
Industry	0.5	1.4	0.2	0.0	0.1	0.2	-0.3
Excluding construction	-0.4	0.3	0.1	0.0	0.1	0.2	0.0
Construction	2.6	3.9	0.5	0.0	0.0	0.1	-1.1
Services	2.2	2.1	0.7	0.6	0.4	0.4	0.4
Trade and transport	1.6	1.8	0.9	0.7	0.1	0.4	0.4
Finance and business	3.9	4.1	1.3	0.8	0.7	0.9	0.4
Public administration 1)	1.9	1.3	0.1	0.5	0.4	0.0	0.5

Sources: Eurostat and ECB calculations.
1) Also includes education, health and other services.

Chart 28 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)



Sources: Eurostat and European Commission Business and Consumer Surveys.
Note: Percentage balances are mean-adjusted.

EMPLOYMENT

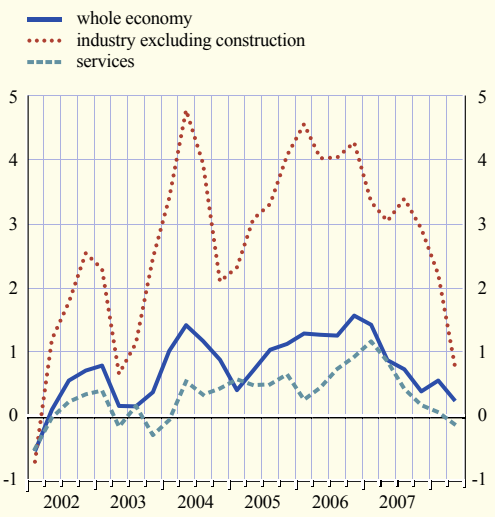
Eurostat's second estimate confirmed that euro area employment rose by 0.2% quarter on quarter in the second quarter of the year, after increasing by 0.3% in the previous period (see Table 7). The decline in growth in the second quarter reflected a marked deterioration in construction employment.

Turning to more recent developments, employment expectations moderated further in October. The PMI indicates that employment has fallen over the past four months, with the index for employment remaining below 50 since July 2008. The European Commission survey has also recorded a decline in employment expectations, with indicators for the services and industrial sectors at low levels not seen since early 2004. Overall – and given the expected moderation in economic activity – employment growth is likely to be very weak during the second half of 2008 (see Chart 28).

Reflecting the decline in output and the ongoing increases in employment, labour productivity declined in the second quarter of 2008. Year-on-year growth in labour productivity was estimated at 0.2% in the second quarter (see Chart 29). Recent PMI data suggest that labour productivity has continued to be weak.

Chart 29 Labour productivity

(annual percentage changes)



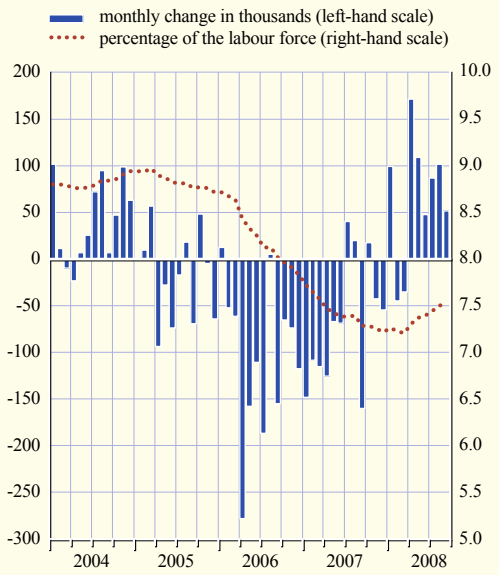
Sources: Eurostat and ECB calculations.

UNEMPLOYMENT

The euro area unemployment rate was stable in September 2008, at 7.5% (see Chart 30). However, the numbers of unemployed persons rose by over 50,000 in September – the sixth consecutive monthly increase.

Chart 30 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

The outlook for economic activity is extraordinarily uncertain, in large part stemming from the intensification and broadening of the financial market turmoil. The latest survey data confirm that momentum in economic activity in the euro area has weakened significantly, with sluggish domestic and external demand and tighter financing conditions. The measures adopted by governments to deal with the financial turmoil should support trust in the financial system and help to prevent undue constraints in the supply of credit to companies and households. In combination with the recent broad-based falls in commodity prices, these measures should help to restore confidence.

A number of downside risks to economic activity identified earlier have now materialised – particularly those stemming from the financial market tensions. Other downside risks continue to relate to disorderly developments due to global imbalances and rising protectionist pressures, as well as to the possibility of renewed increases in commodity prices.

5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

5.1 EXCHANGE RATES

In recent weeks volatility has reached historical peaks in foreign exchange markets. After picking up in the second half of September, the euro weakened again in October. On 5 November the single currency stood 8.3% lower, in nominal effective terms, than its level at the end of July and 1.8% below its 2007 average.

EFFECTIVE EXCHANGE RATE OF THE EURO

On 5 November 2008 the nominal effective exchange rate of the euro – as measured against the currencies of 22 of the euro area's important trading partners – stood 8.3% below its level at the end of July and 1.8% lower than its 2007 average (see Chart 31).

There has been a strong increase in volatility in the effective exchange rate of the euro in the context of a broad-based weakening of the single currency during the past three months. This followed mainly from a significant depreciation of the euro vis-à-vis the Japanese yen, the US dollar, the Chinese renminbi and the Swiss franc. These developments were counterbalanced slightly by the appreciation of the euro vis-à-vis the pound sterling, the Swedish krona, the Norwegian krone and the currencies of some of the countries that have joined the EU since 2004.

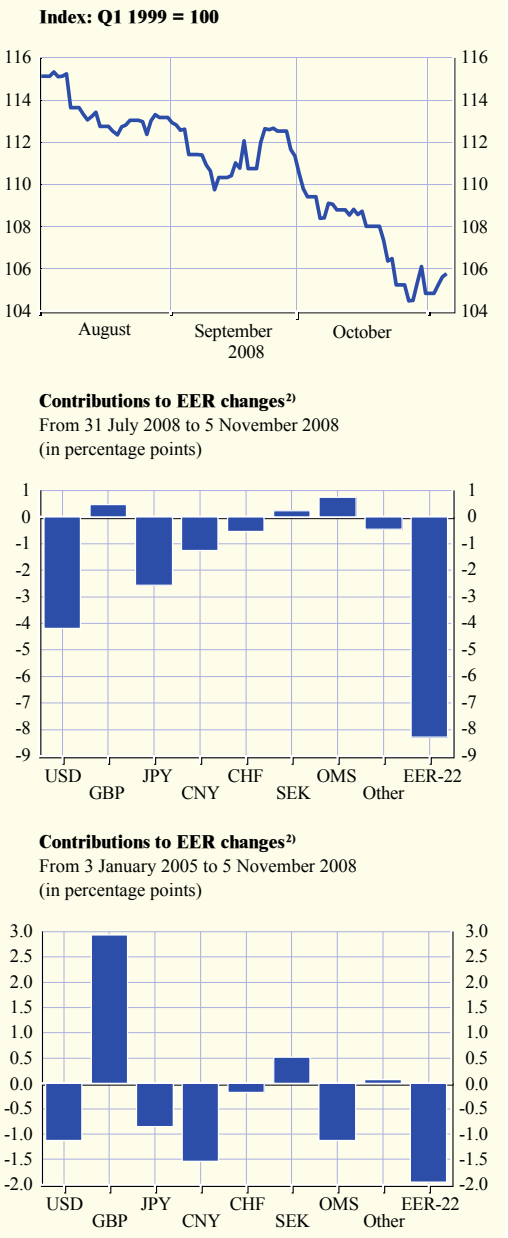
US DOLLAR/EURO

In recent months the euro has depreciated vis-à-vis the US dollar amid high volatility. It depreciated particularly sharply in October, reaching its lowest level in more than two years. At the same time expected volatility reached historical peaks.

The sharp depreciation of the euro in October occurred at the same time as stock markets plunged in an environment of heightened global risk aversion. It appears that the weakening of the euro can be partly explained by the massive repatriation of foreign investments into the United States. Amid reduced liquidity in money markets, another factor weakening the

Chart 31 Euro effective exchange rate and its decomposition [1)]

(daily data)



Source: ECB.
1) An upward movement of the index represents an appreciation of the euro against the currencies of 22 of the 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 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.

euro has been reported to emanate from large dollar purchases required to service very large cross-border bank liabilities denominated in US dollars. In this context some European banks with US dollar needs reportedly found it cheaper to borrow in euro and subsequently exchange these funds into US dollars. The decision of the US Federal Open Market Committee to cut the federal funds rate in October had only a limited impact on the US dollar exchange rate.

On 5 November 2008 the euro traded at USD 1.29, 17.6% below its level at the end of July and 6.1% weaker than its average level in 2007 (see Chart 32).

JAPANESE YEN/EURO

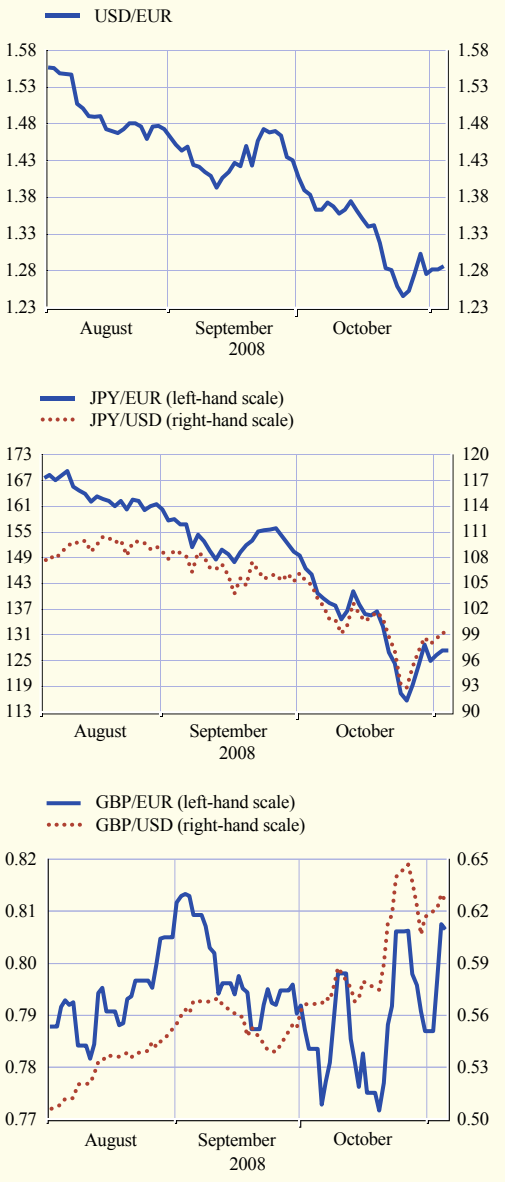
In October, the euro depreciated significantly more vis-à-vis the Japanese currency than against the US dollar. The rapid depreciation of the euro against the yen has occurred against the backdrop of a historically strong increase in expected exchange rate volatility. This development has supported the yen as it has reduced the attractiveness of borrowing yen as a means of funding carry trade strategies, i.e. trades that consist of borrowing in a low-yielding currency (such as the yen) and investing in a high-yielding currency. The decision of the Bank of Japan to lower its target rate by 20 basis points did not have a notable impact on the Japanese currency. Overall, the euro has weakened by 24.6% against the yen since the end of July to trade at JPY 127.4 on 5 November.

EU MEMBER STATES' CURRENCIES

In recent months, most currencies participating in ERM II have been stable vis-à-vis the euro and have continued to trade at, or close to, their respective central rates (see Chart 33). Following the revaluation of its central rate within ERM II with effect from 29 May of this year, the Slovak koruna has consistently traded slightly weaker than its new central rate of SKK 30.1260 to the euro, standing 0.7% below this rate on 5 November. Over the same period, the Latvian lats has weakened slightly vis-à-vis the euro to trade at 0.9% below its central rate on 5 November. In October Danmarks Nationalbank twice increased its lending rate by a total of 90 basis points to 5.5% in order to withstand pressures amid increased turbulence in financial markets.

Chart 32 Patterns in exchange rates

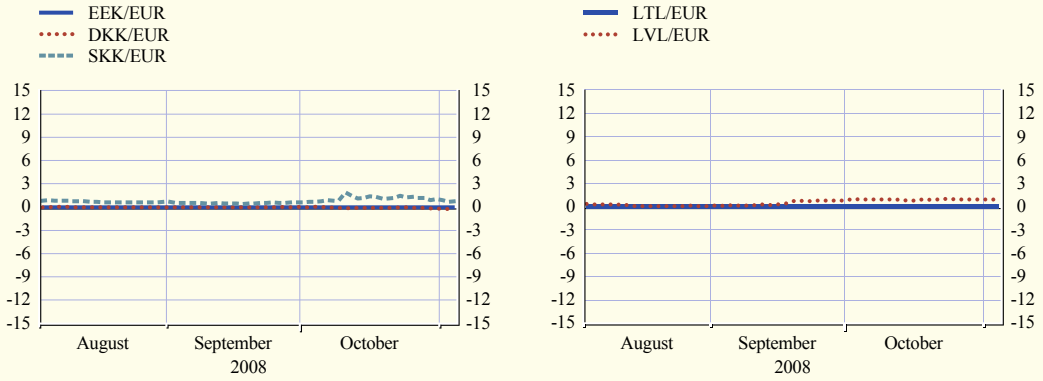
(daily data)



Source: ECB.

Chart 33 Patterns in exchange rates in ERM II

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



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 ±2.25%; for all other currencies, the standard fluctuation band of ±15% applies. The central rate of the Slovak koruna in ERM II was revalued by 17.6472% with effect from 29 May 2008.

With regard to the currencies of other EU Member States not participating in ERM II, the euro appreciated by 2.2% vis-à-vis the pound sterling between the end of July and 5 November 2008, against the background of market expectations of a prolonged downturn in the UK economy. The single currency also appreciated by 5% against the Swedish krona. At the same time, it appreciated by 9.7% vis-à-vis the Polish zloty and by 12.1% against the Hungarian forint, as markets were concerned about Hungary's external vulnerabilities. Furthermore, the euro appreciated by 5.5% against the Romanian leu.

OTHER CURRENCIES

Between the end of July and 5 November 2008, the euro depreciated by about 8% against the Swiss franc, which has been perceived by market participants as a safe haven currency amid the current financial turbulence and the consequent rise in risk aversion. The euro also depreciated by about 18% against the Hong Kong dollar and the Chinese renminbi, which are linked to the US dollar, by about 11% against the Singapore dollar and by about 7% against the Canadian dollar. At the same time, it appreciated by about 13% against the Australian dollar, by about 8% against the Norwegian krone and by about 2% against the Korean won.

5.2 BALANCE OF PAYMENTS

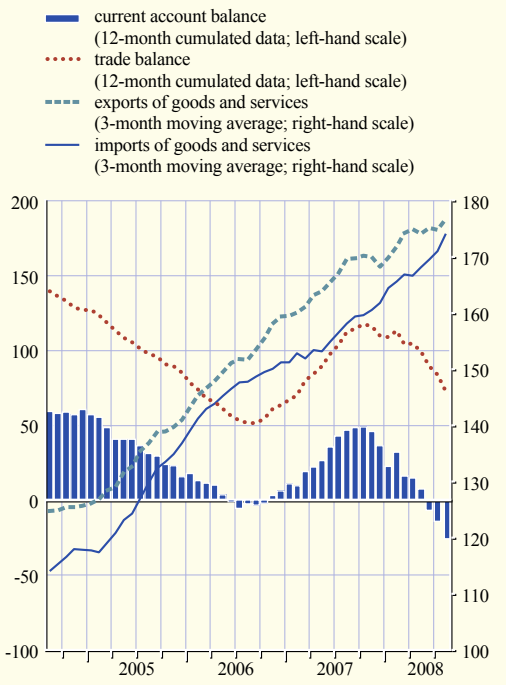
The 12-month cumulated current account to August 2008 recorded a deficit of €25.6 billion (0.3% of GDP), compared with a surplus of €46.9 billion a year earlier. This largely reflected a decrease in the surplus in goods owing to higher oil prices and an increase in the deficit in current transfers. In the financial account, combined direct and portfolio investment registered cumulative net outflows of €134 billion in the 12-month period to August 2008, compared with net inflows of €167 billion a year earlier. This shift resulted largely from lower net purchases of euro area portfolio securities by non-resident investors.

TRADE AND THE CURRENT ACCOUNT

In August 2008, the 12-month cumulated current account recorded a deficit, which amounted to €25.6 billion (working day and seasonally adjusted data) or 0.3% of GDP. This compared with a surplus of €46.9 billion a year earlier. The shift was largely accounted for by a contraction in the surplus in goods, a widening deficit in current transfers and a shift from surplus to deficit in the income account, all of which were only marginally offset by an increase in the surplus in services (see Chart 34).

Chart 34 The euro area current account and trade balances

(EUR billions; monthly data; seasonally adjusted)



Source: ECB.

The 12-month cumulated deficit in current transfers (€91.8 billion) resulted mainly from a structural deficit vis-à-vis the EU institutions and non-G10 countries outside the European Union and was, to a large extent, driven by outflows of foreign aid and workers' remittances. The decline in the goods surplus (by €48.5 billion in the 12-month period to August 2008) is a more recent phenomenon, resulting mainly from a combination of weakening exports and robust growth in import values. Higher oil and non-oil commodity prices accounted for the strong growth in the value of imports. More specifically, on a 12-month cumulated basis, the oil trade deficit amounted to €215 billion in July 2008, a deficit which has been steadily increasing since the last quarter of 2002.

In the three months to August 2008, the value of exports rose by 1.5% (see Table 8). However, against the backdrop of weakening global demand and the past appreciation of the effective exchange rate of the euro, export volumes had contracted by 2.7% in the three-month period to July. A closer look at extra-euro area export volumes of goods shows that the fall in exports was broadly based across the various categories of goods, although it was particularly strong for consumer and intermediate goods.

The sharp rise in the price of oil was an important factor behind the growth in the value of imports in the period under review. The breakdown of trade in goods by volumes and prices, available up to July 2008, signals a steady increase in import prices since the fourth quarter of 2007, while import volumes have steadily declined, owing particularly to the contraction in euro area industrial production.

Turning to other items of the current account, in 12-month cumulated terms the surplus in services increased to €56.7 billion in August 2008, up from €47.7 billion a year earlier. Finally, mainly on account of higher income payments to non-euro area residents, the income balance deteriorated by €22.1 billion in 12-month cumulated terms, from a surplus of €15.5 billion in the 12-month period to August 2007 to a deficit of €6.6 billion in the 12 months to August 2008.

Table 8 Main items of the euro area balance of payments

(seasonally adjusted, unless otherwise indicated)

			Three-month moving average figures ending				12-month cumulated figures ending	
	2008 July	2008 Aug.	2007 Nov.	2008 Feb.	2008 May	2008 Aug.	2007 Aug.	2008 Aug.
	EUR billions							
Current account	-3.0	-7.3	1.8	-2.3	-2.8	-5.2	46.9	-25.6
Goods balance	-0.4	-3.3	4.6	1.1	1.3	-1.6	64.6	16.1
Exports	135.1	136.9	128.3	129.9	132.2	134.9	1,485.0	1,576.1
Imports	135.5	140.1	123.6	128.9	130.9	136.6	1,420.5	1,559.9
Services balance	4.9	4.1	4.8	5.1	4.7	4.3	47.7	56.7
Exports	41.0	43.0	41.8	41.9	41.9	41.9	470.2	502.6
Imports	36.2	38.9	37.0	36.8	37.2	37.6	422.5	445.9
Income balance	-0.6	-1.3	0.3	-0.6	-1.0	-0.9	15.5	-6.6
Current transfers balance	-6.8	-6.9	-7.9	-7.9	-7.8	-7.0	-80.8	-91.8
Financial account [1]	-5.7	-27.1	-16.7	-15.2	29.6	-6.3	112.1	-25.7
Combined net direct and portfolio investment	-21.1	-25.5	-0.6	-21.2	-14.3	-8.4	166.7	-133.7
Net direct investment	-12.3	-11.6	0.9	-32.2	-17.0	-14.5	-175.8	-188.5
Net portfolio investment	-8.8	-13.9	-1.6	11.0	2.7	6.1	342.5	54.7
Equities	-0.8	-1.6	-10.2	20.4	-7.8	-5.5	128.0	-9.3
Debt instruments	-8.0	-12.3	8.6	-9.4	10.5	11.6	214.6	64.0
Bonds and notes	-0.3	21.4	11.3	9.7	19.4	17.9	262.8	174.6
Money market instruments	-7.8	-33.7	-2.6	-19.0	-8.8	-6.4	-48.2	-110.6
	Percentage changes over previous period							
Goods and services								
Exports	1.0	2.1	0.2	1.1	1.3	1.5	11.2	6.3
Imports	-0.1	4.3	1.6	3.1	1.5	3.6	7.9	8.8
Goods								
Exports	1.7	1.3	-0.1	1.3	1.7	2.1	11.7	6.1
Imports	1.1	3.4	1.8	4.2	1.6	4.3	7.4	9.8
Services								
Exports	-1.4	4.9	1.3	0.4	-0.0	-0.1	9.3	6.9
Imports	-4.2	7.6	1.0	-0.5	1.1	1.0	9.9	5.5

Source: ECB.
Note: Figures may not add up due to rounding.
1) Figures refer to balances (net flows). A positive (negative) sign indicates a net inflow (outflow). Not seasonally adjusted.

FINANCIAL ACCOUNT

In the three-month period to August 2008, the euro area combined direct and portfolio investment account recorded average monthly net outflows of €8.4 billion, owing to net outflows in foreign direct investment, equity portfolio investment and money market instruments, which were only partly compensated by the large net inflows in bonds and notes (see Table 8). The latter development might be attributable to the yield differentials between euro area and US long-term bonds and notes. In July and August, cross-border portfolio equity investment activity was muted, possibly owing to the sharp deterioration in the corporate earnings growth outlook in OECD countries. Moreover, in August, both euro area residents and non-residents repatriated part of their equity portfolio investment abroad, reflecting heightened investor risk aversion.

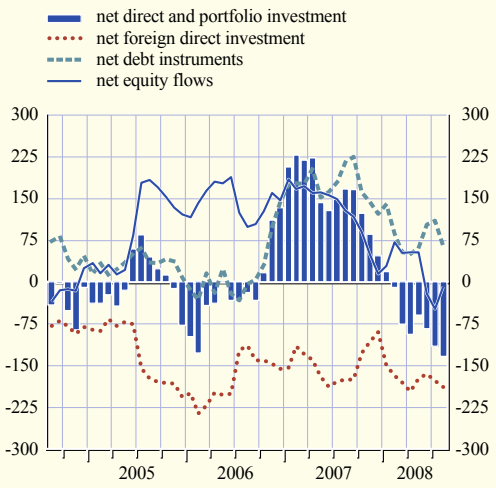
From a longer-term perspective, combined direct and portfolio investment recorded net outflows of €133.7 billion in the 12-month period to August 2008, compared with net inflows of €166.7 billion a year earlier (see Chart 35), owing to smaller net portfolio investment inflows. The financial turmoil which started in early August 2007 as a result of the US sub-prime mortgage crisis has led to uncertainty in financial markets, resulting in global portfolio reallocation decisions which

have had an impact on euro area cross-border portfolio investment flows.

Specifically, both euro area portfolio investment abroad (asset flows) and foreign portfolio investment in the euro area (liability flows) were on an upward trend until July 2007. The outbreak of the financial turmoil interrupted these trends. From July 2007 to August 2008 both assets and liabilities contracted on a 12-month cumulated basis; particularly, non-resident investors reduced their portfolio flow in the euro area. Therefore, net portfolio investment flows were reduced from €342 billion in the 12-month period to July 2007 to €55 billion in the 12-month period to August 2008, owing mainly to the reduction of net equity inflows. In particular, global investors reduced their investment in euro area equities.

Chart 35 Euro area combined direct and portfolio investment

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



Source: ECB.

As for foreign direct investment activity, cumulative net outflows in direct investment increased in the 12-month period to August 2008 compared with a year earlier, from €175.8 billion to €188.5 billion, partly owing to the strong euro exchange rate. This both made it more expensive for foreign investors to invest in euro area equity capital and favoured euro area investment abroad.

ARTICLES

MONITORING LABOUR COST DEVELOPMENTS ACROSS EURO AREA COUNTRIES

Cumulative increases in labour costs across euro area countries can be indicative of growing imbalances and losses in competitiveness and, as such, are an important early sign of the need for adjustment. Relative developments in labour costs across the euro area countries, together with other indicators of competitiveness, have therefore to be closely monitored.

In the context of the euro area, where monetary policy has to be geared towards maintaining price stability for the euro area as a whole, the accumulation of competitiveness losses and imbalances in a country points to the need for the national authorities to react. Such a reaction should focus on implementing measures to improve the functioning of the labour and product markets and to dampen labour cost increases. The sooner corrective measures are taken by the national authorities, the lower the risks of a protracted period of low growth and losses in employment in that country.

This article reviews the main stylised facts in labour cost developments and competitiveness indicators across euro area countries, as well as the adjustment processes they experience, focusing on the period since the start of Stage Three of EMU in 1999. It subsequently discusses the main factors behind these developments and highlights relevant policy considerations for national authorities and social partners alike.

1 INTRODUCTION

The euro area is an expanding currency union that will undergo further enlargement in January 2009, when a sixteenth country joins. The introduction of a common currency has, in particular, eliminated the effects of exchange rate fluctuation among the participating countries, thus reducing transaction costs and enhancing cross-border price transparency, thereby promoting trade and, ultimately, greater economic integration. Nonetheless, there are differences in the macroeconomic performance of the countries and regions within the euro area. Some of these differences show up in labour cost developments.

Labour costs differentials can, in principle, be a desirable feature of a well-functioning economy. Such differentials reflect differences in local labour market conditions and diverse underlying productivity developments. In the context of a monetary union, different nominal wage developments across countries can serve as an important vehicle for adjustment in case of country-specific shocks or common shocks with a different domestic transmission.

However, large and persistent positive differentials in nominal wage growth, which do not reflect productivity developments, could imply losses in competitiveness and export market shares with, inter alia, adverse repercussions in the medium-term prospects for output growth and employment in some euro area countries. In particular, there is the risk that substantial and persistent labour cost growth would ultimately translate into deteriorating domestic labour market conditions in these countries, implying painful adjustment costs in terms of job and output losses that could have been avoided in a number of ways, including a more flexible and efficient functioning of the labour market and labour cost moderation.

Monetary policy is conducted by the Governing Council of the ECB with the primary objective of maintaining price stability in the euro area as a whole. Monetary policy cannot therefore address differences in labour costs or other country-specific economic developments. However, the ECB has to assess the underlying causes of such differentials, as this is key to better understanding euro area developments.

Against this background, this article describes the main features and possible causes of differentials in labour cost developments and adjustment processes across euro area countries and discusses their implications for national

economic policies.[1] The article is structured as follows: Section 2 provides evidence on labour cost developments; Section 3 presents stylised facts on various competitiveness measures and developments in current account balances and export performances; Section 4 discusses determinants of wage differentials and their implications in the adjustment processes; and Section 5 discusses the implications of these differentials for economic policies and draws a number of conclusions.

2 EVIDENCE ON LABOUR COST DEVELOPMENTS: STYLISED FACTS

To facilitate the comparison of developments over time and across countries, labour costs can be measured in terms of unit of labour, i.e. compensation per employee, or in terms of unit of output, i.e. unit labour cost. Although there are various ways of calculating unit labour cost, a standard formulation is to divide compensation per employee by productivity, measured as real output divided by employment. In this way, it is evident that increases in unit labour costs are the result of either higher compensation per employee or lower productivity, or a combination of both factors.

However, some measurement issues and caveats should be borne in mind when calculating unit labour costs, especially when comparing developments across countries. First, labour input can be measured in various ways, namely in terms of persons, full-time equivalents or hours. For homogeneity of the data over time and their comparability across countries, this article uses employment in full-time equivalent terms. Full-time equivalent employment is defined as total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory. For instance, a person working according to a 50% part-time arrangement would be equivalent to 0.5 in full-time equivalent terms. Second, the calculation of unit labour costs reported in this article refers to the whole economy rather than to a specific sector, such as the manufacturing sector. Third, the calculation of unit labour costs implicitly assumes that the self-employed are remunerated

1 Two articles published by the ECB have previously dealt with various aspects of euro area country differentials, namely "Output growth differentials in the euro area: sources and implications" in the April 2007 issue of the Monthly Bulletin and "Monetary policy and inflation differentials in a heterogeneous currency area" in the May 2005 issue of the Monthly Bulletin.

Table 1 Unit labour costs across euro area countries

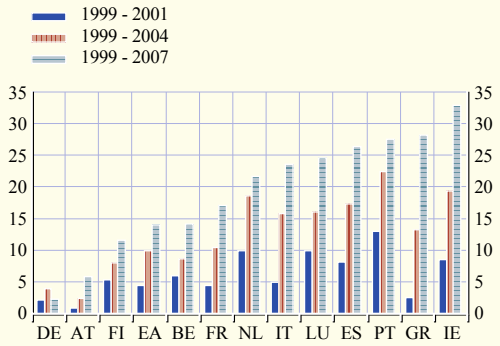
(annual percentage changes)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	Cumulative growth 1999 - 2007
Euro area	0.9	1.1	2.3	2.3	2.1	0.8	1.1	1.0	1.5	14.0
Belgium	1.3	0.3	4.2	2.1	0.7	-0.3	1.5	1.6	2.0	14.2
Germany	0.5	0.7	0.9	0.9	1.0	0.0	-0.8	-1.0	0.2	2.3
Ireland	0.6	3.4	4.4	0.8	3.9	5.1	3.7	3.1	4.2	33.0
Greece 1)			2.5	6.0	2.4	1.8	3.7	4.6	4.4	28.3
Spain	1.9	2.8	3.2	2.9	2.9	2.4	2.5	2.3	2.7	26.4
France	0.9	1.1	2.3	2.9	1.8	1.1	1.7	1.9	2.3	17.2
Italy	1.2	0.6	3.1	3.6	4.4	2.1	2.8	2.3	1.5	23.7
Luxembourg	0.7	2.5	6.5	2.2	1.9	1.3	1.7	2.2	3.4	24.7
The Netherlands	1.7	2.9	5.0	4.8	2.7	0.2	-0.2	1.1	1.6	21.7
Austria	0.1	-0.2	1.0	1.0	0.8	-0.3	1.4	0.7	1.2	5.9
Portugal	2.4	4.9	5.2	3.7	3.2	1.2	2.0	1.8	0.4	27.6
Finland	0.8	1.0	3.5	1.1	1.1	0.2	2.3	-0.2	1.1	11.6

Source: European Commission.
Note: The table shows data for the years since the introduction of the euro in the respective country.
1) In the case of Greece, the cumulative unit labour cost growth refers to the period 2001-07. Calculations by the Bank of Greece may differ from those shown in this table.

Chart 1 Cumulative growth in unit labour costs

(percentage changes)



Source: European Commission.
Notes: Countries are given in ascending order according to cumulative unit labour cost growth during the period 1999-2007. In the case of Greece, 2001 is the reference year (see also the notes in Table 1).

at the same average compensation level as employees.[2]

Overall, although the calculation of growth rates in unit labour costs in the various countries can differ somewhat depending on the choice of the data mentioned above and certain associated limitations, the main thrust of the analysis shown in this article does not appear to be altered by these measurement issues.

It can be seen from Table 1 that a number of euro area countries have witnessed relatively strong increases in unit labour costs since the beginning of 1999. In particular, in cumulative terms, over the nine-year period from 1999 to 2007, a group of countries have accumulated increases in unit labour costs of between 25% and 35%, well above the euro area average cumulative increase of around 14%. This contrasts with the very modest cumulative increases seen in a few other countries.[3]

A special feature of the labour cost developments across the euro area countries is their high degree of persistence. In some countries, cumulated labour cost growth has been consistently either above or below the euro area average. As can be seen in Chart 1, those countries that during the first few years of EMU started to accumulate above-average increases in unit labour costs have remained in the same relative position during more recent years. Moreover, in some cases, there has been a noticeable acceleration in labour cost increases in recent years.

As previously mentioned, from an accounting perspective, increases in unit labour costs are the result of higher compensation per employee or lower productivity, or a combination of both factors. Table 2 shows that the different cumulated developments in unit labour costs across the euro area countries from 1999 to 2007 appear to be largely the result of differences in the growth rates of compensation per employee rather than in productivity growth developments. However, in a few countries, the cumulated productivity growth rate over the nine-year period of reference appears to be outstandingly low, contributing to above-average increases in unit labour costs.

Finally, differences in unit labour cost developments across individual euro area countries have clearly been positively associated with differences in their HICP inflation rates over the same period. As shown in Chart 2, those

2 In this section, data for unit labour costs, compensation per employee and productivity across the euro area countries have been taken from the European Commission's publicly available annual macroeconomic database. In this database, employment is measured in full-time equivalent terms in the cases of Germany, Spain, France, Italy, the Netherlands and Austria, while in the remaining euro area countries it is measured in persons. This database is updated twice a year, in spring and autumn, and is linked to the two main projections exercises conducted by the European Commission. In particular, the data shown in this article correspond to the database for the European Commission spring 2008 forecasts.

3 For the purposes of this article, the time horizon for the review of the country developments starts in 1999 and ends in 2007 and is restricted to the period when the countries joined the euro area. For that reason, calculations for Greece are shown since 2001. This, however, reduces the comparability of the cumulative growth rates with other euro area countries. The use of the same starting point for these countries might not always be fully appropriate as the initial conditions for countries may differ somewhat from an equilibrium perspective. In a country-specific analysis, a different time horizon perspective may therefore be warranted. Data for Cyprus, Malta and Slovenia are not shown since these countries joined the euro area relatively recently and no meaningful cumulative rates can be calculated. Slovakia will become a member of the euro area at the beginning of 2009. However, it is important to stress that all the policy implications and lessons drawn in this article are fully applicable to all euro area countries.

Table 2 Cumulative growth in unit labour costs, compensation per employee and labour productivity (1999-2007)

(percentage changes)

	Unit labour costs	Compensation per employee	Labour productivity
Euro area	14.0	25.9	11.0
Belgium	14.2	27.6	11.7
Germany	2.3	17.6	15.0
Ireland	33.0	68.4	26.6
Greece [1)]	28.3	55.6	21.3
Spain	26.4	31.5	4.1
France	17.2	28.0	9.2
Italy	23.7	28.5	3.9
Luxembourg	24.7	40.1	12.3
The Netherlands	21.7	39.4	14.6
Austria	5.9	20.4	13.7
Portugal	27.6	39.2	9.1
Finland	11.6	32.7	18.9

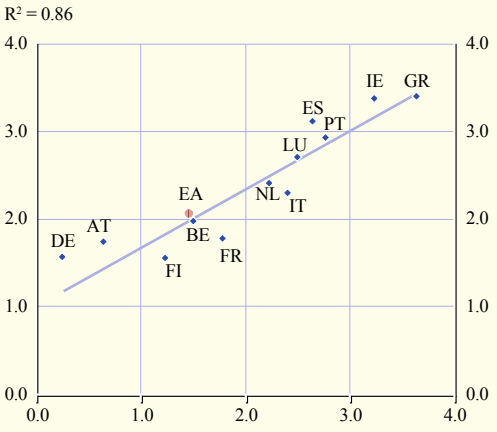
Source: European Commission.
1) In the case of Greece, the cumulative growth rates refer to the period 2001-07.

countries that, over the period, had above-average unit labour cost growth rates also recorded higher-than-average inflation rates. In particular, a group of countries recorded average inflation rates of between 3.0% and 3.5%, with broadly similar above-average unit labour cost growth rates.[4] In other words, persistent increases in unit labour costs in some euro area countries since 1999 have been accompanied by positive inflation differentials.

Chart 2 HICP inflation and unit labour cost growth (1999-2007)

(percentage changes)

x-axis: average growth of unit labour costs from 1999 to 2007
y-axis: average growth of HICP from 1999 to 2007



Sources: European Commission and Eurostat.
Notes: The chart shows average growth since the introduction of the euro in the respective country, i.e. 2001-07 in the case of Greece. The R^2 is an indicator from 0 to 1 that shows how closely the estimated trend line fits with the actual variables.

Such persistent differences in labour cost developments can have important implications for the price and cost competitiveness of individual countries. The following section reviews a number of external competitiveness measures, which take into account the trade structure of individual countries, as well as export performance indicators.

3 COMPETITIVENESS PERFORMANCE OF THE EURO AREA COUNTRIES: SOME STYLISED FACTS

The concept of a country's competitiveness is neither unequivocal nor straightforward to define. In a narrow sense, competitiveness often refers to international price competitiveness as measured by various effective exchange rate indicators. A second, ex post approach links the concept of competitiveness to the "external performance" of a country, thus typically examining developments in export market shares and current account balances, as well as underlying factors that may have an impact on the ability of an economy to compete in international markets. A third approach

4 For convenience, the chart shows average inflation rates. The same pattern is obtained by plotting cumulative increases in HICP inflation and unit labour cost growth rates.

broadens the definition of competitiveness to include a notion of relative productivity – the most competitive economy being the one with the highest prospects of generating firms able to contribute to longer-term economic growth and welfare.[5] Thus, the first and second perspectives are explicitly concerned with the external dimension of the economy and its adjustment processes, whereas the third perspective tends to focus more on the longer-term trends in the economy. A brief examination of recent trends associated with the first two concepts now follows with a view to assessing the degree of heterogeneity among euro area countries.

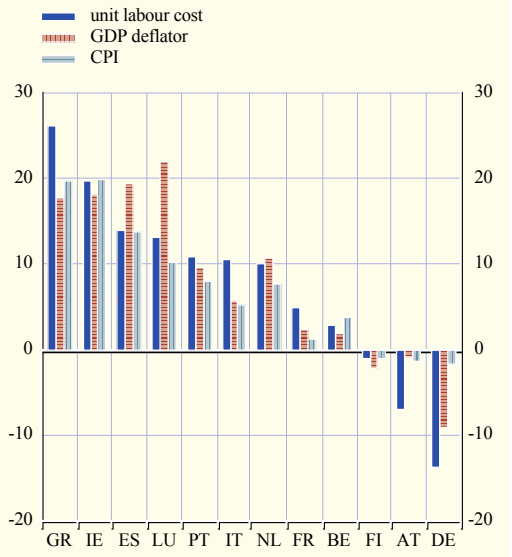
3.1 PRICE AND COST COMPETITIVENESS

The assessment of the international price and cost competitiveness of individual euro area countries is based on the harmonised competitiveness indicators (HCIs) calculated by the ECB.[6] These indicators are defined as relative prices between the euro area countries and their trading partners expressed in a common currency and differ depending on the price deflator employed. They are generally considered to be more suitable as measures of competitiveness than a comparison of cumulated prices, since they take into account movements in nominal exchange rates. The weights used to aggregate the competitor countries depend on the trade structure of each country.

Overall, the harmonised competitiveness indicators suggest that there has been a sizeable degree of heterogeneity in the evolution of price competitiveness in euro area countries. In terms of total trade, the majority of euro area countries have recorded price competitiveness losses against their trading partners, which have been accentuated by the strength of the euro with respect to 1999 (see Chart 3). The magnitude of these price competitiveness losses, however, varies considerably across countries. It appears that this heterogeneity can, to a large extent, be explained by different inflationary developments at the country level rather than different trade structures.

Chart 3 Cumulated changes in Harmonised Competitiveness Indicators (HCIs) based on total trade (1999-2007)

(percentage changes)



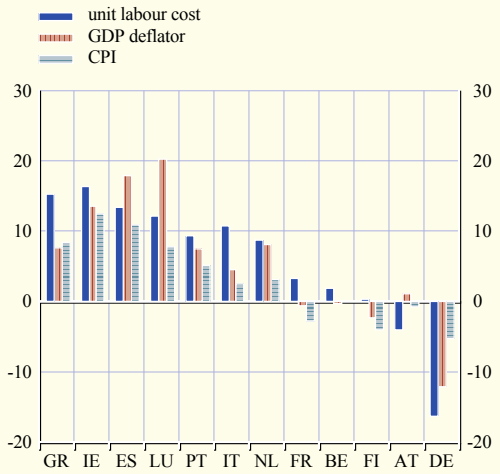
Source: ECB calculations.
Notes: The HCIs based on total trade consider both intra-euro area trade and trade with a group of 22 euro area trading partners. An increase in the HCIs indicates a real effective appreciation or a decline in national competitiveness. This chart shows cumulative growth rates since the introduction of the euro in the respective country, i.e. since the first quarter of 2001 in the case of Greece. Countries are given in descending order according to the HCI based on unit labour cost.

5 The third perspective on the concept of competitiveness addresses the issue of countries' ability to generate highly productive firms that will eventually be able to compete successfully in international markets. According to this view, the international competitiveness of a country stems from the aggregation of individual domestic firms' competitiveness relative to foreign counterparts. This means that national specificities are important determinants. In particular, countries with more intense domestic market competition, better technology and higher accessibility tend to be overall more competitive. See, for example, M. Melitz and G. Ottaviano (2008), "Market size, trade and productivity", Review of Economic Studies, Vol. 75, pp. 295-316. See also G. Ottaviano, D. Taglioni and F. di Mauro (2007), "Deeper, wider and more competitive? Monetary integration, eastern enlargement and competitiveness in the European Union", ECB Working Paper No 847.

6 The Eurosystem has regularly published the HCIs, which are based on the CPI, as a means of providing a comparable measure of individual euro area countries' price competitiveness that is also consistent with the methodology and data sources used to calculate the real effective exchange rates of the euro. See the box entitled "The introduction of harmonised competitiveness indicators for euro area countries" in the February 2007 issue of the Monthly Bulletin. The Eurosystem has recently decided to extend, as of November this year, the publication of the HCIs to two other deflators used in the calculation of the real effective exchange rate of the euro, namely the GDP deflator and unit labour costs in the total economy. For the euro area, measures of real effective exchange rates are calculated also by using measures of unit labour costs in the manufacturing sector and the PPI.

Chart 4 Cumulated changes in Harmonised Competitiveness Indicators (HCIs) based on intra-euro area trade (1999-2007)

(percentage changes)



Source: ECB calculations.
Notes: The HCIs based on intra-euro area trade consider only trade with euro area trading partners. An increase in the HCIs indicates a real effective appreciation or a decline in national competitiveness. The chart shows cumulative growth rates since the introduction of the euro in the respective country, i.e. since the first quarter of 2001 in the case of Greece. Countries are given in the same order as in Chart 3.

In terms of intra-euro area trade, most countries have experienced some losses in price competitiveness, which have been matched by gains in a few other countries, mainly in Germany (see Chart 4). The overall result is generally robust to the choice of the indicator, i.e. whether the HCIs are based on the CPI, the GDP deflator or unit labour cost in the economy as a whole. While the qualitative conclusions remain broadly the same, the magnitude of the price competitiveness changes in some cases appears to be sensitive to the choice of the price deflator.[7]

3.2 EXTERNAL PERFORMANCE

Turning to the external performance of the euro area countries, over recent years the euro area as a whole has lost market shares. This adjustment, which is in keeping with what has taken place in other advanced countries, stems from the increasing importance of some large lower-income countries, notably China, as global traders. In order to assess intra-euro area competitiveness, it is therefore important to compare relative changes in the market shares of euro area countries.

Export market shares are, however, not always a good proxy for the economic performance of a country. In particular, in an environment of increasing international fragmentation of production, the contribution of channels such as offshore production – which may partly substitute for trade – is not accurately reflected by relative export market shares and their evolution. All these qualifications notwithstanding, the degree of heterogeneity in the evolution of export market shares across euro area countries has been substantial. While some countries have witnessed pronounced declines since 1999, others have only been affected marginally or have even showed a tendency to gain market shares within the euro area and at the global level. Such developments appear to be partly associated with changes in price competitiveness conditions. For example, a co-movement between intra-euro area export market share developments and intra-euro area price competitiveness seems to be visible in a number of countries (see Chart 5). However, some structural factors, such as specialisation in certain industries, can also play an important role in determining export performance.

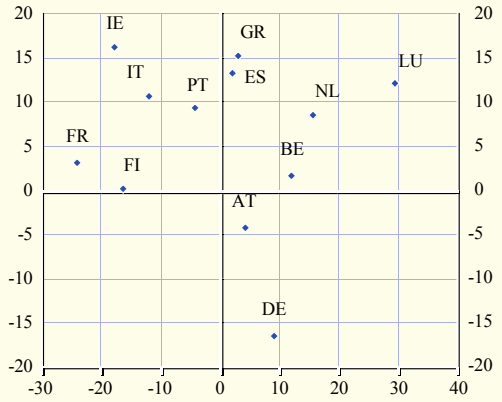
Price competitiveness is also expected to have an impact on a country's current account balance through the export channel. Although there are other factors at play in explaining the evolution of the current account, most of the euro area countries that experienced a sizeable loss in price and cost competitiveness over the

7 A brief review of these indicators for the euro area can be found in the box entitled "Indicators of euro area cost and price competitiveness: similarities and differences" in the June 2005 issue of the Monthly Bulletin. For a more comprehensive discussion of the merits and drawbacks of the various indicators, see the article entitled "Developments in the euro area's international cost and price competitiveness" in the August 2003 issue of the Monthly Bulletin. For the case of the euro area, M. Ca' Zorzi and B. Schnatz (2007), "Explaining and forecasting euro area exports: which competitiveness indicator performs best?", ECB Working Paper No 833, argue that the information content in forecasting euro area export developments has been similar across different indicators.

Chart 5 Cumulated changes in cost competitiveness and intra-euro area export market shares (1999-2007)

(percentage changes)

x-axis: cumulative growth in intra-euro area export market shares
y-axis: cumulative growth in intra-euro area HCI (unit labour cost-based)

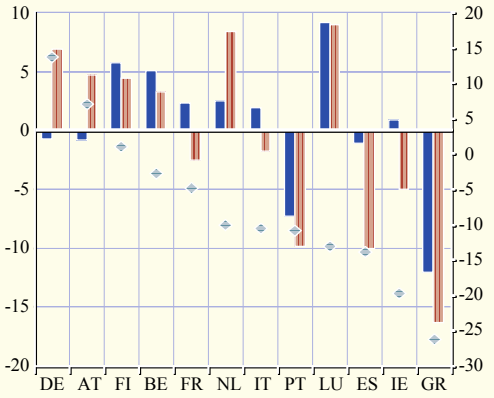


Sources: Eurostat and ECB calculations.
Notes: The intra-euro area HCI considers only trade with euro area trading partners. An increase in the HCI indicates a real effective appreciation or a decline in national competitiveness.

Chart 6 Current account positions across the euro area countries and the Harmonised Competitiveness Indicator (HCI)

(percentage; percentage changes)

current account as a percentage of GDP in 1998 (left-hand scale)
current account as a percentage of GDP in 2007 (left-hand scale)
cumulated change in HCI (unit labour cost-based) between 1999Q1 and 2007Q4 (sign changed), (right-hand scale)



Sources: European Commission and ECB.
Notes: The initial year plotted on the chart corresponds to the year prior to the introduction of the euro in the respective country, i.e. 2000 in the case of Greece. Countries are given in descending order according to the cumulated change in the HCI (unit labour cost-based).

period 1999-2007 appear to have also seen a worsening in their current account positions. By contrast, countries that gained in price competitiveness saw an improvement in their current account positions (see Chart 6).[8]

In summary, the high degree of heterogeneity seen in price and cost competitiveness in the euro area countries explains some of the divergence in the external performance across euro area countries when evaluated in terms of changes in export market shares and current account positions.

4 DETERMINANTS AND ADJUSTMENT PROCESSES

Persistent labour cost growth differentials may have different policy implications depending on their origins. For this reason, it is important to identify their underlying causes carefully. However, this is not a straightforward exercise, as a number of different factors – sometimes intrinsically linked – can contribute to differences in labour cost growth. This section presents a brief overview of the main factors that may explain the existence of long-lasting labour cost differentials across euro area countries and their role in the adjustment processes.

4.1 MAIN DETERMINANTS

Although various factors can be closely related and at work simultaneously, three main general categories of determinants can explain relatively strong cumulated labour costs or price increases in an individual country. First, there are factors that can be related to the real convergence and economic integration process of a country and/or to relative increases in its trend

8 Current account balances are also affected by many other factors that may have a more prominent role; this is the case, for instance, of Luxembourg, which has a notable positive balance in services activities. See also the box entitled "Current account balances across the euro area countries from a saving and investment perspective" in the July 2007 issue of the Monthly Bulletin.

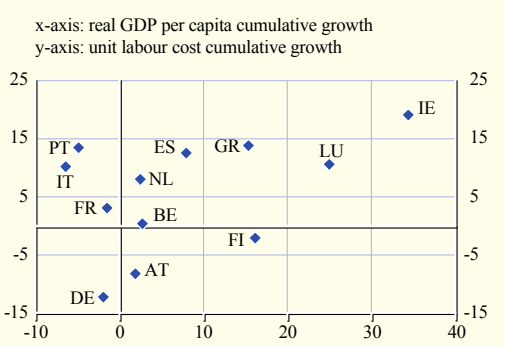
productivity; a second group of determinants related to long-term differences in national economic structures and institutions, which mainly reflect inappropriate features associated with product and labour market policies; and third, strong and persistent demand pressures, in a context of rigid supply conditions and possibly also influenced by an inadequate fiscal stance, can create a protracted period of above-potential growth and positive output gaps, which would ultimately be reflected in an overheating domestic environment and price and labour cost pressures.

In more detail, relatively stronger increases in labour costs in an individual country can be associated with a process of economic convergence towards higher living standards or, more specifically, to relatively higher trend increases in GDP per capita.[9] If such trends are sustainable, higher relative price and cost levels may, to a certain extent, be in line with a change in fundamentals and, as such, no threat to future economic performance in the economy. In such circumstances, wage and price inflation differentials could appear over a limited period of time but are not necessarily inconsistent with equilibrium. In practical terms, however, it is extremely difficult to disentangle the portion of the price and labour cost differentials that reflect an adjustment to a new equilibrium level.

In the context of EMU, with the benefits from positive trade dynamics resulting from the removal of exchange rate uncertainty and, in general, integration of goods and services markets, further support can be expected for the catching-up process. However, in that process, it is essential that the external competitiveness position of the country is not significantly jeopardised by rapid and excessive increases in labour costs, which might result, in the case of adverse unexpected shocks, in a protracted period of under-performance. In other words, it is important that such convergence takes place in a sustainable way, avoiding the build-up of large imbalances that may lead to a "boom-bust" process.[10]

Chart 7 Cumulative growth in real GDP per capita and unit labour costs relative to the euro area (1999-2007)

(percentage changes)



Source: ECB calculations based on European Commission data.
Note: The chart shows cumulative growth differences with respect to the euro area since the introduction of the euro in the respective country, i.e. in the period 2001-07 in the case of Greece.

Chart 7 helps determine whether strong cumulative real GDP per capita increases in the period 1999-2007 in the euro area countries, as a proxy for capturing relative improvements in living standards, might to some extent explain the strong cumulated increases in unit labour costs previously discussed in this article. As can be seen, the relationship appears to be very heterogeneous. Most of the countries appear to be grouped around a vertical line (close to the y-axis), most likely indicating that other factors, rather than differences in GDP per capita developments, may also help to explain the different performances in terms of unit labour costs. In particular, there is a group of countries, on the upper left-hand side panel of the chart, indicative of below-average growth in GDP per capita accompanied by strong cumulative labour cost increases. In theses cases, there appears to be a significant probability that, since 1999, non-sustainable increases in relative labour costs have been accumulated, with negative consequences for GDP per capita prospects.

9 There is some evidence that most of the convergence of wage levels across the euro area countries took place before 1999, especially in the 1980s, broadly coming to a halt after the start of Stage Three of EMU. For a more detailed analysis, see M. Andersson et al. (2008), "Wage growth dispersion across the euro area countries: some stylised facts", ECB Occasional Paper No 90.

10 For further discussion on asset prices, see the article entitled "Asset price bubbles and monetary policy" in the April 2005 issue of the Monthly Bulletin.

A second category of determinant, relating to certain institutional factors in the product and labour markets, may also have contributed to the different cumulative developments seen in labour cost growth across the euro area countries. A lack of flexibility in product and labour markets can create, in the case of adverse shocks, persistent relative price and cost increases in the countries affected. The close link between the persistence of wages and inflation may be related to certain institutional factors, e.g. wage indexation.[11] Such indexation can lead to substantial downward wage rigidities. Since wages are important determinants of prices, backward-looking wage indexation enables temporary price or cost shocks to initiate wage-price spirals, leading to persistent wage and price deviations from the euro area average.[12] As explained in more detail in Box 1, this is particularly the case in situations where external shocks hit the economies of the euro area.

11 See M. Andersson et al. (2008), "Wage growth dispersion across euro area countries: some stylised facts", ECB Occasional Paper No 90.
12 See the box entitled "Wage indexation mechanisms in euro area countries" in the May 2008 issue of the Monthly Bulletin.

Box 1

THE COSTS OF SECOND-ROUND EFFECTS IN THE CASE OF EXTERNAL PRICE SHOCKS

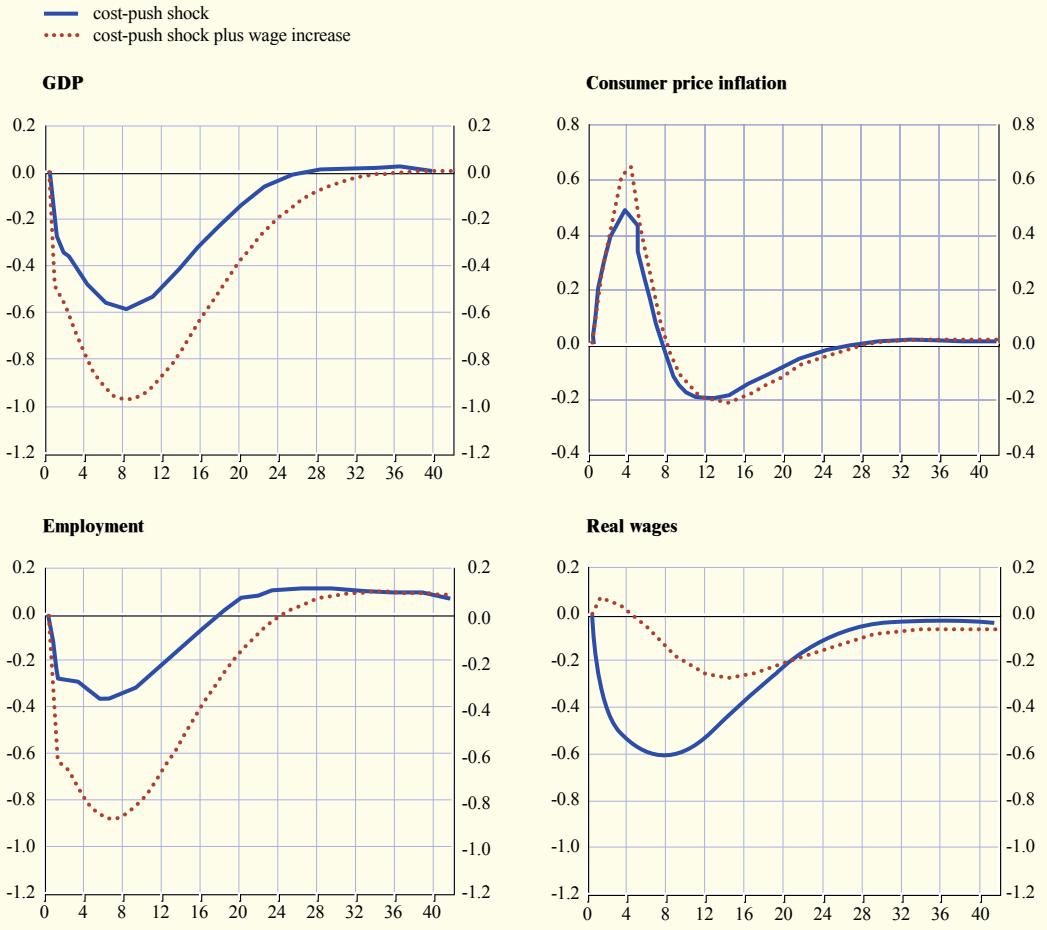
The impact of external economic shocks across individual euro area countries depends, to a large extent, on the reactions of economic agents and, in particular, of social partners interacting in the labour market. This is particularly important in the current situation of heightened external cost pressures that stem from higher commodity, energy and food prices. Under such circumstances, and to the extent that inflationary expectations are not credibly anchored, there is a risk that economic agents in an individual country may try to raise the prices of the goods and services they supply in the market in order to catch up with cost developments and/or losses in purchasing power. However, such second-round effects are likely to result in more protracted and stronger price increases and output losses than could have been explained by the first-round effect of the initial external cost-push shock.

In a situation of external cost increases, higher nominal wages are often called for with a view to compensating employees for the higher cost of living and to protecting households against real income losses. The extent to which wage-setters may strive for, and are capable of achieving, higher nominal wages in a country depends on the structural and institutional features of the economy. However, the macroeconomic impact of higher nominal wages in response to external cost increases depends on the interaction of prices and wages with other economic variables. Against this background, this box analyses the implications of higher nominal wage claims in response to an external cost-push shock in the context of a DSGE model. The model, which is an extended version of the New Area-Wide Model (NAWM), is calibrated to represent four countries or regions in a stylised way, namely an individual large euro area country, the rest of the euro area, the United States and the rest of the world.[1] It builds on recent advances in developing micro-founded DSGE models suitable for quantitative policy analysis. Thus, economic decisions of households and firms are rigorously modelled as

1 See G. Coenen, P. McAdam and R. Straub (2007), "Tax reform and labour market performance in the euro area: a simulation-based analysis using the New Area-Wide Model", ECB Working Paper No 747.

Adjustment dynamics in a stylised euro area country in response to an external cost shock

(percentages; quarters)



Notes: This chart depicts the quarterly adjustment dynamics of selected economic variables in a stylised euro area country in response to an external cost-push shock resulting from a temporary increase in export prices in the rest of the world. The effects of a pure cost-push shock (solid line) are compared with a scenario of an accompanying compensatory increase in wages (dotted line). Consumer price inflation is reported as deviations from year-on-year percentage changes. The other variables are reported as percentage deviations from the levels obtained in the baseline scenario.

utility or profit-maximising choices in a general equilibrium setting. Furthermore, the model incorporates several nominal and real frictions in an effort to improve its empirical fit. Both households and firms are assumed to act as wage and price-setters with some degree of market power.

The external cost-push shock is introduced into the model as a temporary increase in export prices in the rest of the world. This shock has been calibrated so as to give rise to a transitory impact in year-on-year consumer price inflation in the individual euro area country of about 0.5 percentage point, gradually declining thereafter. Consequently, inflation increases in the short run and declines thereafter, reflecting the economic slack caused by the adverse shock. The effects of this pure external cost-push shock are then compared with a scenario of an accompanying compensatory increase in nominal wages of 0.5% in the individual euro area country.

As shown in the chart, the wage increase significantly worsens the negative effects of the external cost shock on output and employment compared with the benchmark case that considers the external cost shock alone. The negative impact on output derives primarily from the adverse impact of higher real wages on employment. Thus, while employees succeed in temporarily increasing their real wages, it will bring about significant and more protracted losses in employment and output. The loss in employment following the adverse external cost shock is more than twice as large when, at the same time, nominal wages are increased. Inflation is also higher in the short term. The analysis shown in this box therefore stresses the need to set wages in line with domestic economic conditions. If social partners increase wages as a response to an external cost shock without taking into account domestic market conditions, they may worsen the competitiveness situation of their country and eventually substantially aggravate the initial unfavourable impact of such a shock on employment and output.

Additionally, in some cases the public sector may provide a signal for wage bargaining in other sectors, irrespective of local labour productivity developments, labour market conditions or the profitability of firms. Moreover, wage bargaining in sectors that are not directly exposed to external competition may fail to take the competitiveness situation of the country sufficiently into account. This may also create some inertia in wage increases and therefore persistence. In these cases, rising relative wage and price levels can be associated with negative prospects for job creation and growth.

Finally, an economy can suffer a long period of strong demand pressures. These pressures may initially be related to either country-specific demand shocks or an excessive reaction to common shocks, accompanied by the overly optimistic expectations of consumers or firms regarding future income prospects. This situation may be accompanied or intensified by an insufficiently tight fiscal stance. Typically, if there are strong demand pressures, the authorities may mistakenly take a cyclical expansion to be an upward shift in potential output. Such a situation is likely to lead to an inflationary process and cumulated losses in competitiveness. Moreover, it can result not only in pressures on goods and services prices but also in asset price inflation, notably in housing markets.

The negative domestic consequences of excessive price and labour cost inflation for employment and output may be temporarily counterbalanced by such persistent strong domestic demand or housing booms. In these cases, the relatively stronger increases in prices and labour costs may initially appear to be accompanied by an increase in living standards. However, the accumulation of relative losses in competitiveness and the build-up of domestic imbalances will, at some point, have to be corrected. The potentially large costs related to a correction of imbalances – a major negative impact on output and employment – may only materialise with some lag, once the economy is in a process of slowdown, possibly coupled with an adjustment in the housing sector. Should the economy also suffer from structural rigidities in product and labour markets, particularly downward wage rigidities, a protracted and painful adjustment process in output and employment could then finally take place.

4.2 CROSS-COUNTRY ADJUSTMENT PROCESSES

In a monetary union such as the euro area, with a single currency and a single monetary policy, the main adjustment mechanism – in the absence of a high degree of labour mobility across countries, sufficient "risk-sharing" across borders and a cross-country fiscal transfer system – is the competitiveness channel. The competitiveness channel is generally seen as the most important equilibrating mechanism. If, for example, a country in a monetary union experiences unsustainable domestic inflationary pressures,

e.g. owing to increases in wages and other domestic costs, these pressures will lead to the gradual accumulation of external competitiveness losses and, over time, a reduction in foreign demand for the country's exports. The resulting decline in demand for the country's output will tend to restore output to its potential level and to dampen previous inflationary pressures. The working of this adjustment mechanism through the competitiveness channel would be enhanced in an environment of highly integrated labour and product markets in the euro area. However, available evidence suggests that, in the euro area, as a result of structural rigidities and a lack of full implementation of the Single Market, this key equilibrating mechanism requires a relatively long period to work through.[13]

A high degree of downward price and wage flexibility is therefore particularly important for the competitiveness channel to work because it could help national labour markets to adjust to economic shocks and would facilitate the efficient allocation of labour and other resources.[14] Greater detail is provided by Box 2, which investigates how different degrees of wage rigidity in a country can be crucial in explaining the adjustment process of that country within a monetary union and, in general, emphasises the key role played by the structure of the labour market in reducing the burden for employment and in speeding up the adjustment in the case of adverse shocks hitting the economy.

13 See the article entitled "Output growth differentials in the euro area: sources and implications" in the April 2007 issue of the Monthly Bulletin and also European Commission (2006), "The EU economy 2006 review – Adjustment dynamics in the euro area: experiences and challenges", European Economy 6.

14 Price and wage dynamics have been studied in depth in the context of the Eurosystem Inflation Persistence Network and the Eurosystem Wage Dynamic Network, two research networks comprising euro area NCBs and the ECB. See, in particular, the material available on the ECB's website at http://www.ecb.europa.eu/events/conferences/html/inflationpersistence.en.html and http://www.ecb.europa.eu/events/conferences/html/wage_dynamics_network.en.html.

Box 2

ADJUSTMENT PROCESSES AND LABOUR MARKET INSTITUTIONS – A MODEL PERSPECTIVE

The euro area is characterised by large cross-country differences in employment protection legislation and wage-setting institutions, such as the degree of centralisation and coordination of wage bargaining, the extension of agreements to other workers, contract duration, etc. These distinct features can generate cross-country differences in the way employment and wages adjust to changing economic conditions. This box analyses how different degrees of wage rigidity affect adjustment processes within a monetary union, with special attention to downward nominal and real wage rigidities. In many countries, wages exhibit resistance against cuts in nominal and/or real terms, while wage increases are less rigid as empirical evidence from the Eurosystem Wage Dynamics Network indicates.[1] Such structural rigidities, including asymmetries between countries and between wage cuts and increases, create differing adjustment dynamics across countries for other economic variables, especially employment and inflation. The phenomenon of inflation differentials and their persistence has been documented by a number of authors, e.g. Angeloni and Ehrmann (2007), whereby the heterogeneity in the national labour markets and/or wage adjustment rigidities is one of the main reasons for inflation persistence. Indeed, as formalised in Abbritti and Mueller (2007), rigidities in wage-setting imply higher persistence

1 Within the Eurosystem Wage Dynamics Network, Du Caju, Gautier, Momferatou and Ward-Warmedinger (2008) have compiled an overview describing labour market institutions in the European Union (see http://www.ecb.europa.eu/events/conferences/html/wage_dynamics_network.en.html).

in inflation differentials between countries following asymmetric productivity shocks within a monetary union. In addition, they generate larger unemployment following union-wide adverse technology shocks and make macroeconomic stabilisation by monetary policy more difficult.

In a recent contribution to the Eurosystem Wage Dynamics Network, Fahr and Smets (2008) analysed the transmission of productivity shocks within a monetary union in the presence of different degrees of either downward nominal wage rigidity or downward real wage rigidity between countries.[2] If the monetary union is hit by a common negative productivity shock, real wages should fall to reduce production costs. However, if real wages cannot adjust downwards following a negative productivity shock, the demand for labour falls and generates a slump in employment for the more rigid country. Furthermore, the country in which wages are indexed to prices, i.e. characterised by downward real wage rigidity, shows higher inflation and wage rates following a positive, as well as a negative, aggregate shock. The country with downward real wage rigidities is thereby characterised by higher inflation and lower employment, creating a strong and persistent effect for inflation differentials. In all these cases, inflation differentials result from structural rigidities in labour markets.

An asymmetric shock that only affects one region inevitably also has nominal and real effects for the other regions in the monetary union. These effects come through the relative price levels of the two regions and the impact on union-wide interest rates. The adjustment between the two regions (or countries) in this case is strongly affected by the degree of financial and economic integration and price flexibility.

Comparing the implications of the different models, it can be concluded that any policy measure leading to a reduction in real wage rigidities (e.g. a reduced degree of price indexation of wages) substantially reduces the impact of economic shocks on employment. At the same time, lower wage rigidities shift the burden of the adjustment from the real economy to nominal variables and improve the stabilisation possibilities for monetary policy. Reducing the degree of downward wage rigidity within the euro area, especially real wage rigidity, further reduces the persistence in inflation and wage differentials and reduces the detrimental effects of adverse shocks on employment.

2 Downward nominal wage rigidities may induce a positive bias for inflation, so-called "grease inflation", a term originally used by Tobin in his presidential address 1971.

References: Abbritti, M. and A. I. Mueller (2007), "Asymmetric labour market institutions in the EMU: positive and normative implications", Economics Working Paper, Central Bank of Iceland, 37.
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Tobin, J. (1972), "Inflation and unemployment", American Economic Review, 62(1), 1-18.

5 POLICY IMPLICATIONS AND CONCLUSIONS

Cross-country differentials in price and labour cost developments can be, to some extent, a normal and unavoidable feature of monetary unions. However, in some cases they reflect unsustainable losses in competitiveness that have negative consequences for employment and output prospects. In a monetary union the central bank does not possess the necessary instruments to address such differentials. More importantly, any such attempt would be at odds with the principles of well-functioning currency areas (see Box 3). To support necessary adjustments following economic shocks and to facilitate a smooth reallocation of activities over time, across sectors and, importantly, also within and between countries, it is vital that the ECB remains firmly committed to delivering price stability over the medium term for the euro area as a whole. Country-specific price and labour cost dynamics that result from relatively inefficient institutional arrangements or domestic policies need to be addressed by national policy-makers. Such action would also support other countries in the euro area, as moderate overall price and labour cost developments are of utmost importance to support monetary policy in its task of achieving price stability for the euro area as whole.

Box 3

THE ECB'S MONETARY POLICY STRATEGY AND CROSS-COUNTRY DIFFERENTIALS

Cross-country differentials in price and labour cost developments may pose a number of questions for the appropriate conduct of monetary policy. This box lays out strategic principles that the literature on monetary unions has developed.

First, while the existence of heterogeneous regions within a monetary union increases the number of relative prices that may be relevant for national policymaking, in order to facilitate an efficient allocation of activities in the union it is crucial that monetary policy be unambiguously committed to stabilising area-wide inflation rates. This reasoning naturally follows from the important distinction between movements in relative prices and the average price level. Monetary policy cannot affect any particular pattern of relative prices within an economy. Given the large number of prices in a monetary union, it is therefore of overriding importance that monetary policy focuses on maintaining area-wide price stability, thereby offering the crucial nominal anchor for all economic decisions within and between regions. By offering this anchor, monetary policy provides the single most important signalling device available in market-based economies.

Second, in principle, equilibrium inflation rates may differ across countries for some periods of time because of different productivity developments, without endangering the competitiveness of economies. Nevertheless, the scope for such divergences in national inflation rates should be limited in monetary unions that make the adoption of the common currency by new members conditional on a high degree of macroeconomic convergence.

Third, differences in institutional features may imply that member countries exhibit different degrees of inflation persistence in response to certain shocks. In this context, it is sometimes argued that countries characterised by more persistent inflation dynamics should receive a greater weight in the considerations of the central bank. To some extent, this reasoning can

be linked to the view that movements in those components of the price index that exhibit a high degree of inflation inertia are of particular concern for monetary policy-makers. However, it is also clear that this reasoning – apart from substantial identification and communication challenges – entails a second-best element: to the extent that persistent inflation dynamics reflect country-specific inefficiencies, these features should be addressed by national structural policies and they should not be accommodated by monetary policy. Similarly, from a political economy perspective, the incentives for countries with rigidities to undertake needed reforms should not be diluted.

Fourth, notwithstanding its clear focus on maintaining area-wide price stability, it is useful for monetary policy to take regional and country-specific information into account, rather than to look only at aggregate information. This principle is related to the argument that different shocks may imply different future inflation patterns and require different policy reactions. Similarly, the comprehensive use of disaggregated information naturally helps to improve the understanding of the underlying sources of inflationary developments.

The monetary policy strategy of the ECB is in line with these broad recommendations.[1] This is most visibly manifested in the ECB's primary objective of maintaining price stability for the euro area as a whole. Furthermore, the ECB also uses regional and country-specific information in its internal analysis, as most prominently seen in the preparation of the Eurosystem/ECB staff macroeconomic projections.

1 For detailed references, see the article "Monetary policy and inflation differentials in a heterogeneous currency area" in the May 2005 issue of the Monthly Bulletin, "Background studies for the ECB's evaluation of its monetary policy strategy", ECB (2003), and the June 2008 Special Edition of the Monthly Bulletin on the occasion of the tenth anniversary of the ECB.

Despite some progress, most euro area countries still exhibit structural impediments triggered by a rigid legal and regulatory environment, high taxes on labour and rigidities associated with wage regulations. Therefore, in order to enhance employment, productivity and the resilience to economic shocks, it is particularly important for economic policy in the euro area countries to be developed further in the following dimensions.[15]

First, with respect to labour market policies, governments and social partners must share responsibility for ensuring that wage determination pays sufficient attention to local labour market and productivity conditions and does not jeopardise competitiveness and employment. This requires the social partners to take into account the different conditions at firm and sectoral level when setting wages. In this respect, accumulated large competitiveness losses and levels of unemployment should be taken into account in wage setting and limit the scope for exhausting labour productivity gains.

Under such circumstances, inadequate policies or labour market institutions that could result in wage increases as a response to a cost-push shock would further contribute to the inflationary impact of such shocks and may finally give rise to more protracted and stronger price increases than could have been explained by the first-round effect of the initial cost-push (see also Box 1 in the previous section).

Therefore, broad-based second-round effects stemming from the impact of higher energy and food prices on price and wage-setting behaviour must be avoided. In particular, schemes in which nominal wages are indexed to consumer prices should be abolished.

15 See also the chapter entitled "Economic challenges and enlargement" in the June 2008 Special Edition of the Monthly Bulletin on the occasion of the tenth anniversary of the ECB.

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.

Second, the proper functioning of adjustments through product and labour markets across the euro area countries calls for the completion of the Single Market, particularly in services and network industries. A deeper integration of markets is crucial to stimulate price flexibility by fostering competition and opening product and labour markets. Greater cross-border competition and the integration of markets across the euro area countries would substantially contribute to speeding up the adjustment in case of adverse shocks.

Third, national authorities can make a substantial contribution to more modest labour cost developments. In particular, public wage-setting should not contribute to strong overall labour cost growth and competitiveness losses. Moreover, as high labour cost growth may partly reflect an overheating of the economy, a prudent fiscal stance is particularly important.[16] Structural budget balance estimates typically tend to overstate the strength of the underlying budgetary position during periods of high growth and associated asset price increases. This is especially so if government revenues are boosted by strong growth in the "tax rich" components of GDP (e.g. domestic demand) and/or by the value and number of property transactions and capital gains. In such cases, allowing a sufficiently large fiscal surplus to build up may be wise not only because it may help to mitigate overheating pressures but also because it will create an adequate safety margin in case of a sudden reversal of revenue trends. Such a policy should be seen as allowing the automatic fiscal stabilisers to operate rather than as discretionary fiscal policy, which in the past has been shown as an inappropriate instrument for responding to cyclical fluctuations.

And fourth, in the context of the Lisbon Strategy, the necessary reforms that enhance competition and improve long-term growth prospects in the euro area must be implemented. Moreover, price and wage flexibility, as well as an efficient working of the internal market, is a prerequisite in order to avoid a situation where, after suffering a specific shock, a country or a region in the euro area enters either a period of protracted low growth and high unemployment or a long period of overheating. This would improve the adjustment mechanisms in individual countries and therefore be an important factor in improving the overall resilience to economic shocks of the euro area economy. Overall, such reforms would tend to reduce inflationary pressures and enhance long-term employment prospects.

To conclude, developments in price and unit labour cost competitiveness indicators across the euro area economies must be closely monitored. Persistent losses in relative cost competitiveness can relate to different factors. Of these, the combination of strong demand pressures and a number of structural rigidities in the product and labour markets are of particular concern, since they can lead to inertia in price and wage formation and result in persistent price and wage inflation in a country. From the perspective of euro area-wide cost developments, there is a need for more disciplined nominal wage developments in countries that need to gain in competitiveness inside the euro area. It is the responsibility of the national authorities and all social partners to continuously ensure a proper and smooth functioning of the euro area.

The ECB has repeatedly pointed to the need to monitor closely competitiveness in the euro area countries as part of the policy processes related to the economic governance of the euro area.

16 For a largely conceptual point of view on the appropriate design between monetary and fiscal policies in currency areas, see the article entitled "One monetary policy and many fiscal policies: ensuring a smooth functioning of EMU" in the July 2008 issue of the Monthly Bulletin.

The European Commission recently reached the same conclusion when proposing a broadening of macroeconomic surveillance.[17] Enlarging the scope of surveillance to include monitoring competitiveness developments in the individual euro area countries should help highlight the prominence of this issue in policy discussions at the European and national levels. A regular competitiveness review is therefore highly welcome from an ECB perspective. The results of such a review should be appropriately communicated to the public at large to raise awareness about competitiveness problems.

17 See European Commission (2008), "EMU@10: successes and challenges after 10 years of Economic and Monetary Union", European Economy February 2008.

VALUING STOCK MARKETS AND THE EQUITY RISK PREMIUM

The purpose of this article is to present a framework for valuing stock markets. Since any yardstick aimed at valuing stock markets is surrounded by a large degree of uncertainty, it is advisable to use a broad range of measures. The article starts out by discussing how stock prices are determined and why they may deviate from a rational valuation. Subsequently, several standard valuation metrics are derived, presented and discussed on the basis of euro area data.

1 INTRODUCTION

Stock prices may contain relevant, timely and original information for the assessment of market expectations, market sentiment, financing conditions and, ultimately, the outlook for economic activity and inflation. More specifically, stock prices play an active and passive role in the monetary transmission process. The active role is most evident via wealth and cost of capital effects. For example, as equity prices rise, share-owning households become wealthier and may choose to increase their consumption. Alternatively, higher stock prices tend to lower the cost to firms of raising additional equity capital. This, in turn, can have an impact on the prospects for economic activity and inflation in the economy as a whole through its potential impact on aggregate investment and potential output.

The passive role played by stock prices is related to the information they provide about future economic developments according to equity investors. This channel is characterised by the fact that stock prices, like other financial asset prices, are inherently forward-looking. To this end, stock prices should reflect the discounted present value of expected future dividends, where dividends are usually paid out as a fraction of earnings. Earnings among a pool of firms are in turn crucially dependent on aggregated demand. As a result, stock prices may reflect the expectations of market participants about the future course of the economy. Indicators of future economic activity can also be obtained from other sources, such as business and consumer surveys, but most stock price-based indicators have the advantage of being available more quickly. Furthermore, an assessment of the value of stock markets and thus an insight into the expected return on equity is also important for monetary analysis, because of the interplay between the return on money and the return on other financial assets, including equity.

However, the information content of stock prices with regard to future economic activity is likely to vary over time. Stock prices can occasionally drift to levels that are not considered to be consistent with what a fundamental valuation would suggest. For example, this can occur in times of great unrest in financial markets, during which participants may overreact to bad news and thus push stock prices below fundamental valuation levels. Moreover, there are indications that, from time to time, investors become overly optimistic regarding the prospects of future stock returns, giving rise to what is usually termed an "asset price bubble".[1] In either case, such situations tend to blur the information content of stock prices and may lead to a misallocation of resources. Stock price misalignments could thus become a concern, because they can distort economic and financial decisions. Indeed, history has shown that the boom-bust cycles of stock markets associated with such periods can harm the entire economy.

In order to draw inferences about stock price movements that are as accurate as possible, a number of valuation models can be used. The purpose of this article is to present, from a methodological perspective, the most standard measures used within central banks and the financial community. Needless to say, all stock market valuation models presented here are surrounded by a large degree of uncertainty and should be seen more as suggestive tools for medium-term analysis than as measures to predict short-term directions of stock prices.

1 For a detailed description of stock price bubbles and monetary policy see the article entitled "Asset price bubbles and monetary policy" in the April 2005 issue of the Monthly Bulletin.

The article is structured as follows. Section 2 elaborates on the theoretical determination of stock prices and also discusses why stock prices may occasionally depart from a rational valuation approach. Section 3 presents a number of standard stock market valuation indicators on the basis of euro area data. Section 4 concludes.

2 THEORETICAL DETERMINATION OF STOCK PRICES

THE RATIONAL VALUATION APPROACH

In general, the price of a financial asset at any point in time consists of the net present value of the future cash flows investors expect to receive by holding the asset. The discount rates applied are the expected rates of return that investors demand for holding the asset in their portfolios. For stock prices, the cash-flow component consists of current and expected future dividends, whereas the discount rate is made up of the risk free interest rate and a risk premium. This results in the present value relation, which is known as the dividend discount model:[2]

$$P_t = E_t\left[\sum_{k=1}^{\infty} \frac{D_{t+k}}{(1+r)^k}\right] \quad (1)$$

where D is the payout in the form of dividends and r is the discount rate. Again, the expected rate of return must compensate for both the passage of time and the uncertainty related to future cash flows derived from the stock. Hence, the expected rate of return can be written as the sum of the expected real return from a risk-free asset (r_f) and an equity risk premium (erp) related to the cash flow uncertainty. For the time being, it is assumed that investors expect both entities to remain constant over time. The way in which the equity risk premium may be determined under more general conditions is dealt with later on. The present value model thus states that high prices today must relate to either high expected future dividend payments, low expected future rates of return or some combination of the two.

The model, in this simple theoretical representation, is based on very few assumptions. However, when turning to its practical application, it is necessary to rely on further assumptions. As evident from the pricing equation, there are two unknown components: first, the stream of future dividend payments and, second, the expected future rates of return. To implement the model in practice, some simplifying assumptions regarding the expected behaviour of these two components are needed. One way to go about this is by viewing the expected real rate of return on the stock (r) and the real growth rate of dividends (g) as constant. In this case, the present value relation is reduced to the "Gordon growth model":

$$P_t = \frac{D_t(1+g)}{r_f + erp - g} \quad (2)$$

Again, prices are high when dividend growth is expected to be high or the expected rate of return on the stock is low.

For stock market valuation purposes, it is common to scale stock prices by some component related to the cash flow. The two most common indicators are the dividend yield and the price-earnings ratio. Taking these in turn, equation (2) can be rewritten to give a simple expression for the dividend yield:

$$\frac{D_t}{P_t} = \frac{r_f + erp - g}{1+g} \quad (3)$$

According to this relation, the dividend yield will be low when investors expect high future dividend growth g, a low real risk-free rate of return r_f, a low equity premium erp, or some combination thereof. In these cases, the current stock price is high relative to the current level of dividend payments.

The pricing relation (2) may also be rewritten in terms of earnings instead of dividends. Given the assumption that a constant fraction (θ) of earnings

2 For a thorough description of the model see the article entitled "The stock market and monetary policy" in the February 2002 issue of the Monthly Bulletin. For ease of exposition, here we assume a constant expected stock return.

is paid out as dividends, the following holds: $D_t = \theta E_t$. Hence equation (2) may be used to obtain an expression of the price-earnings ratio:

$$\frac{P_t}{E_t} = \frac{\theta(1+g)}{r_f + erp - g} \quad (4)$$

The price-earnings ratio will thus be high when earnings are expected to grow at a high rate, when the expected rate of return on the stock is low or when some combination of the two holds.

Another popular valuation metric is the "Fed model". By assuming a 100% payout ratio, this model relates the expected return on stocks to the return on nominal government bonds r_f^N:

$$\frac{E_t}{P_t} = \frac{D_t}{P_t} = r_f + erp = r_f^N - E(\pi) + erp \quad (5)$$

where $E(\pi)$ is the expected rate of inflation. This expression follows from the fact that a pay-out ratio of 100% also implies zero long-term growth ($g = 0$). According to the Fed model, the difference between the earnings or dividend yield and the yield on a long-term nominal bond should be proxied by the equity risk premium minus the expected rate of inflation. Empirical measures of these valuation yardsticks will be shown in Section 3.

As mentioned above, the equity risk premium is an important determinant of stock prices and the derived valuation ratios. It is the risk compensation required by investors in order to hold a given stock. Thus the equity premium of a stock must contain both a measure of risk and the price of a unit of risk. Stock pricing models often define the risk component as the co-movement of the stock's return with specific financial or macroeconomic variables, while the price of risk is linked to the degree of risk aversion exhibited by investors. A vast amount of theoretical and empirical research has been carried out on the equity risk premium, and it is outside the scope of this article to provide an exhaustive overview. Box 1 gives an outline of some of the most common approaches to determining the equity risk premium.

Box 1

EQUITY RISK PREMIUM

The equity risk premium can be defined as the rate at which stock prices are expected to outperform the risk-free rate. The equity risk premium is therefore an ex ante and unobservable concept. Bearing these difficulties in mind, there are a number of approaches to modelling and estimating this component. Among the most prominent approaches are the Capital Asset Pricing Model (CAPM), the Consumption-Capital Asset Pricing Model (C-CAPM) and the Intertemporal-Capital Asset Pricing Model (I-CAPM). The purpose of this box is to provide a brief introduction to these standard approaches. An attempt to empirically estimate the euro area equity risk premium in an I-CAPM framework will be shown in Section 3. To simplify matters, log-linearised versions of the models are presented.

According to the CAPM, the excess return on risky assets (such as stocks) over the risk-free asset is determined by the covariance between the expected return on the asset (r_{t+1}) and the expected return on the market portfolio of wealth ($r_{m,t+1}$), which is often proxied by a broad stock market index.

$$E_t\left[r_{t+1}\right] - r_f \approx \mathrm{cov}_t\left(r_{t+1}, r_{m,t+1}\right)$$

To take as an example a single stock, the more its returns are expected to covary with the market portfolio, the riskier it is deemed to be. The intuition is that such a security provides a payoff which is not highly valuable, as it does not provide a hedge against times when the overall market is performing badly. This CAPM commonly does not include any measure of risk aversion, hence changes over time in equity risk premia must be driven by changes in the perceived riskiness of assets.

On a similar note, the C-CAPM states that the equity risk premium is determined by the covariance of the growth rate of aggregate consumption (c) with the return on the risky asset and by the coefficient of relative risk aversion γ:

$$E_t\left[r_{t+1}\right] - r_f \approx \gamma_t \operatorname{cov}_t\left(r_{t+1}, \Delta c_{t+1}\right)$$

The covariance term determines the risk of the asset and the risk aversion coefficient determines the price of risk. The larger the covariance between aggregate consumption growth and the asset return, the riskier the asset is deemed to be and the higher the required rate of return for holding the asset. Similarly to the CAPM, a stock which is expected to move broadly in tandem with aggregate consumption growth tends to deliver wealth when this is least desirable, i.e. when consumption is already high. A higher rate of return will be required by investors to hold this type of asset than for assets which help smooth the consumption path. How much higher this required rate of return will be depends on the investors' degree of risk aversion. A high degree of risk aversion, all else being equal, implies a high required rate of return for a risky asset. The degree of risk aversion may vary with the state of the economy so that, in times of recession or high levels of uncertainty about the future state of the economy, investors become more risk-averse than in times of high growth and stability.[1] This would imply cyclical variation in equity risk premia and hence in expected stock returns.

Finally, a discrete-time version of the I-CAPM of Merton (1973) may also be derived as a special case of the consumption-based model:[2]

$$E_t\left[r_{t+1}\right] - r_f \approx \lambda_t \operatorname{cov}\left(r_{t+1}, r_{m,t+1}\right) + \lambda_{t,z} \operatorname{cov}\left(r_{t+1}, \Delta z_{t+1}\right)$$

Like the CAPM, the I-CAPM includes the asset return covariance with the current market return as a risk component. However, additional risk factors relating to news about future returns on invested wealth are also priced. These news components are modelled through changes in "state variables" (z_{t+1}). These may be macroeconomic or financial variables which can be assumed to proxy for the changing investment opportunity set faced by the investor in the future. The λs represent sensitivities of the equity premium to the individual risk factors. The intuition is that investors care about the development of investment opportunities in the long run. Long-term investors will be unhappy about news that future investment returns are expected to be low, as this has a negative impact on the future consumption path. Investors will thus have a preference for stocks which do well on this type of news, allowing them to hedge uncertainty about future investment opportunities. An attempt to estimate the euro area equity risk premium in an I-CAPM framework will be expounded in Section 3.

1 See, for example, Chart 8 in the article "Extracting information from financial asset prices" in the November 2004 issue of the Monthly Bulletin.

2 See J. H. Cochrane (2001), "Asset Pricing", Princeton University Press, and J. Y. Campbell (1993), "Intertemporal Asset Pricing without Consumption Data", American Economic Review, 93, pp. 487-512.

DEVIATIONS FROM FUNDAMENTAL EQUILIBRIUM PRICING

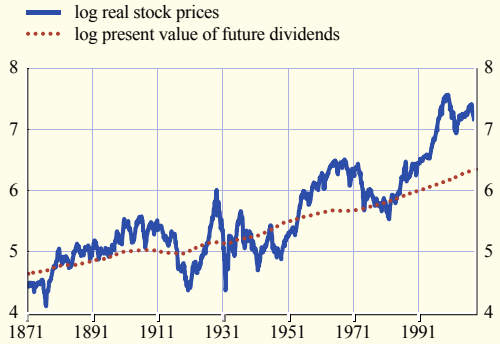
The rational present-value formula explained in the previous section is an equilibrium concept. Generally speaking, if investors are rational and able to anticipate the future dividend stream with a certain degree of accuracy (and also adopt an adequate discount factor), there should be little room for equity prices to experience prolonged periods of over or undervaluation. However, both the theoretical and empirical literature have shown that asset prices can drift to levels which are hard to reconcile with the rational valuation model stated above. This discussion is not new: as far back as the mid-1930s, Keynes likened the stock markets to a beauty contest, where "we devote our intelligences to anticipating what average opinion expects the average opinion to be".[3]

This notwithstanding, the prevailing view throughout most the second half of the 20th century was that financial markets were efficient and that asset prices tended to reflect their fundamental determinants. In the 1970s, Kindleberger was among the first academics to challenge this mainstream assumption by exploring historical episodes of financial crisis and arguing that investors tend to exaggerate good news, which can at times give rise to misalignments of asset prices.[4]

Later, a number of influential empirical studies conducted in the early 1980s indirectly supported the view of inefficiencies in stock markets and, in particular, the finding of "excess volatility". This logic can be seen as follows. If the rational valuation formula holds, stock prices for a single firm can be seen as rational forecasts of the firm's future dividend stream (holding the expected return as constant). For such a forecast to be rational, it should be less volatile than the dividend stream it intends to forecast. However, empirical evidence for the United States took notice of the observation that stock prices tend to be much more volatile than the underlying dividends.[5] Charts 1 and 2 illustrate this notion, which is applied to long samples of US and German data. The charts show fluctuations in stock prices that are much larger than the fluctuations in the present value of future dividends for both economies.

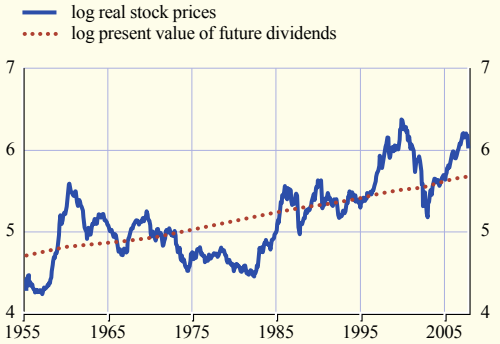
3 See J. M. Keynes (1936), "The general theory of employment, interest and money", Macmillan, London.
4 See C. P. Kindleberger (1978), "Manias, panics, and crashes", John Wiley & Sons, Inc.
5 See R. J. Shiller (1981), "Do stock prices move too much to be justified by subsequent changes in dividends?", American Economic Review, 71, pp. 421-36, and S. F. LeRoy and R. D. Porter (1981), "The present-value relation tests based on implied variance bounds", Econometrica, 49, pp. 555-74.

Chart 1 Real US stock prices and present value of subsequent dividends



Source: http://www.econ.yale.edu/~shiller/data.htm
Note: Corresponds to the S&P 500 index over the sample period 1871-2008.

Chart 2 Real German stock prices and present value of subsequent dividends



Source: Global Financial Data.
Note: Corresponds to the CDAX index over the sample period 1955-2008.

The only way to reconcile the existence of excess volatility with the rational valuation formula is to assume that the historically very smooth pattern of dividends is not representative of its ex ante potential fluctuations.

The empirical observation that stock prices can indeed drift away from levels implied by the rational valuation formula sparked a theoretical discussion as to whether there are any factors that may help to explain this presumed anomaly. To this end, two disciplines have improved the understanding of asset price fluctuations: models of asset price bubbles and insights gained from behavioural finance. These two fields are not in any way exhaustive, but practitioners and policy-makers have frequently used knowledge gained from these fields to better understand, in particular, the developments during the late 1990s, when the increases in stock prices were largely at odds with the efficient markets hypothesis.

One important strand of the literature which has formalised departures from fundamentals is that on asset price bubbles. Bubbles refer to asset prices that exceed an asset's fundamental value because current owners believe that they can resell the asset at an even higher price in the future. Asset price bubbles can be decomposed into the following four broad categories: first, models that assume that asymmetric information among investors can produce asset price bubbles; second, models that focus on the interaction between rational and behavioural traders; third, heterogeneous beliefs on the side of traders, which lead, in some circumstances, to an outcome where they agree to disagree about the fundamental value of equity prices; and fourth, bubbles that occur based on the assumptions that investors are rational and share the same information. In this last category, bubbles may be driven exclusively by the exogenous fundamental determinants of stock prices, namely expected future dividends. This type is referred to as intrinsic bubbles. In this setting, bubbles can cause prices to overreact to changes in fundamentals. Stock price increases in the late 1990s were particularly strong in the technology sector. At that time, many investors held the view that new internet-based companies, commonly referred to as dot-coms, would deliver earnings (and dividends) which would far exceed current earnings. Such a perceived structural change in fundamentals can probably explain much of the strong run-up in stock prices for many firms in the technology sector during that particular episode. This explanation is also in line with the intrinsic bubbles hypothesis.

Insights from the behavioural finance literature can also help to explain why asset prices sometimes drift to levels that seem stretched from fundamentals, for example, the elevated stock prices in the 1990s. This discipline uses research on human and social cognitive and emotional biases to better understand economic decisions and how they affect market prices.[6] One of the most important insights from this field is that individuals are not able to filter and process all of the information that could potentially affect asset prices. As they cannot cope with the complexity of processing all of the information, some investors will instead use simple anchoring rules to make decisions. The most likely anchor consists of the most recent asset price history.[7] For instance, a few years of steadily rising stock prices may serve as the anchor that investors use as an important input to their investment decisions. In this setting, market participants may therefore extrapolate the recent price history when projecting the future expected path of stock prices. This can turn into a feedback loop, whereby a second round of price increases eventually feeds back into even higher prices and so on.

The above-mentioned feedback loop can be further amplified by investors' tendency towards herding behaviour. Although people independently make use of all publicly available

6 The behavioural finance field was recognised with the award of the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel to Daniel Kahneman and Vernon L. Smith in 2002. For further information, see the webpage: http://nobelprize.org/nobel_prizes/economics/laureates/2002/

7 See D. Kahneman and A. Tversky (1974), "Judgement under uncertainty: heuristics and biases", Science, 185, pp. 1124-31.

information before taking a major decision, they are also heavily influenced by the decisions of others. Shiller provides a telling example.[8] If two restaurants are opening next to each other, the first customer has to judge the quality of the food based on his or her view from the outside. This information is surely not very accurate and, thus, the actual restaurant chosen is more or less random. Upon seeing the first customer eating in one of the restaurants, the second customer has additional information on which to base his or her decision. The result may be that all customers end up eating in the same restaurant. Investors can sometimes behave like a herd when it comes to investment decisions. Instead of thoroughly evaluating the probabilities and likelihoods of certain events, they may justify their own investment decisions based on other investors' actions. Apart from the above-mentioned overreaction to fundamentals in line with the intrinsic bubble hypothesis, herd behaviour and a widespread belief that the world economy reached a "new era" in the late 1990s can probably explain part of the strong upsurge in technology stocks in particular at that time.

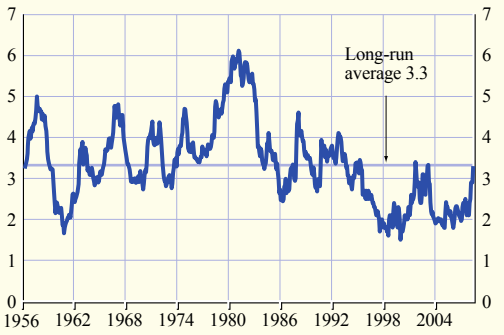
3 EMPIRICAL STOCK MARKET VALUATION METRICS FOR THE EURO AREA

ESTABLISHING A BENCHMARK FOR VALUATION INDICATORS

The main aim of this section is to present euro area empirical counterparts to the valuation indicators derived in the previous section. For this purpose, it is important to understand how these indicators should be interpreted. In particular, some sort of benchmark is needed in order to assess stock price valuations. A simple benchmark derives from the following stylised fact. Over sufficiently long periods of time, most valuation indicators tend to revert to some average level (mean reversion) after having reached cyclical peaks and troughs. Hence, historical averages appear as simple, but still reasonable, yardsticks for the long-term fundamental equilibrium levels of the various valuation indicators and are thus

Chart 3 Dividend yield for Germany

(percentages per annum)



Source: Global Financial Data.
Note: Corresponds to the CDAX index over the sample period 1956-2008.

widely employed among practitioners and policy-makers. However, it must be borne in mind that particularly high or low valuations in such a framework cannot be equated with mispricing per se, as they are also, in principle, consistent with equilibrium pricing when taking into account cyclical fluctuations in stock market fundamentals. In addition, persistent deviations from historical averages over previous periods may be observationally equivalent to the hypothesis of structural changes in the process generating the fundamentals.

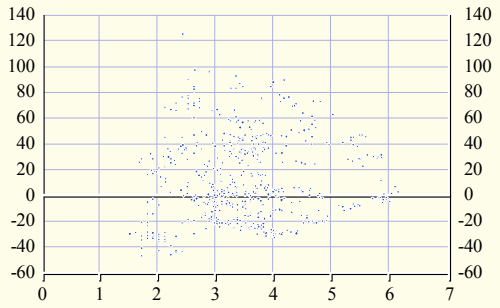
Chart 3 is an example of the use of mean reversion as a standard yardstick and shows the dividend yield for a German stock market index dating back to the mid-1950s. It shows that periods when the dividend yield drifted to levels significantly below or above the long-term average were followed by either an abrupt or a gradual reversion to some long-run mean.

Such a reversion to the mean could be brought about by changes in the dividend growth path and/or by a correction in stock prices. Charts 4 and 5 decompose the dividend yield series to evaluate whether future dividend growth and/or future stock price developments are responsible for the observed mean reversion.

8 See R. J. Shiller (2000), "Irrational Exuberance", Princeton University Press.

Chart 4 Dividend yield (x-axis) and five-year dividend growth for Germany (y-axis)

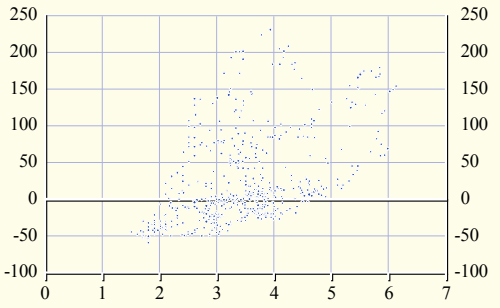
(percentage changes; monthly data)



Source: Global Financial Data.
Notes: Dividends for the CDAX index over the sample period 1956-2003. The five-year dividend growth is measured in real terms and total percentage changes over the next five years.

Chart 5 Dividend yield (x-axis) and five-year stock prices change for Germany (y-axis)

(percentage changes; monthly data)



Source: Global Financial Data.
Notes: Dividends and stock prices for the CDAX index over the sample period 1956-2003. The five-year equity growth is measured in real terms and total percentage changes over the next five years.

The horizontal axes of Charts 4 and 5 show the current annual dividend yield. Chart 4 scatter plots the current dividend yield against real dividend growth evolution for the following five years. The chart shows little co-movement between current and future dividend growth. The picture changes when five-year real stock price changes are instead plotted on the vertical axis, as in Chart 5, which shows a slight positive relationship between the two variables. Thus, on average, periods of above-average dividend yield tend to be followed by a positive stock price performance, whereas low dividend yield often signals subsequent declines in stock prices over the following five years. As a consequence, the observed mean reversion in the dividend yield tends to emanate mainly from adjustments in equity prices.[9] Evidence of weak long-run predictive content in dividend yields for future dividends also holds for other scaling indicators, such as price-earnings ratios, and is found across several major markets.[10]

EMPIRICAL VALUATION INDICATORS

As elaborated upon in the theoretical section, the "Gordon growth model" can be used to derive a number of valuation indicators which are then grouped into two categories. The first category uses earnings to scale stock prices, while the second category employs the equity risk premium as a yardstick for stock price valuations.

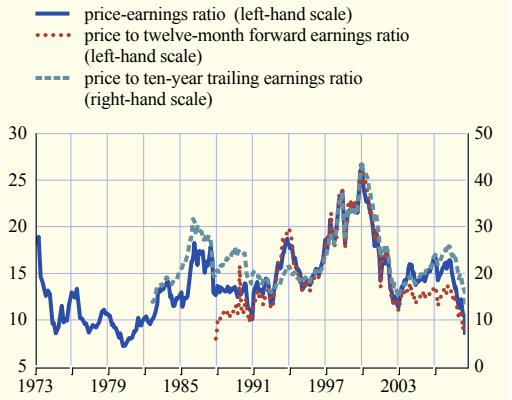
EARNINGS INDICATORS

Firms' earnings are the source of cash flows for stocks (as a proportion of the earnings are paid out as dividends). A natural starting point to gauge the "correct" level of firms' stock prices would therefore be to examine the way in which these are related to their actual and expected profitability. Applying this to the euro area, Chart 6 plots three price-earnings ratios based on earnings for different horizons. The first is a "classical" price-earnings ratio that employs the last reported earnings in the denominator. The second is a forward-looking price-earnings ratio, where the earnings component refers to the analysts' forecast of the expected earnings for the next twelve months. The third measure uses

9 It is, however, important to note that there are periods when this relationship does not hold. For instance, there is little co-movement between German dividend yields and future real stock price returns in the early 1990s.

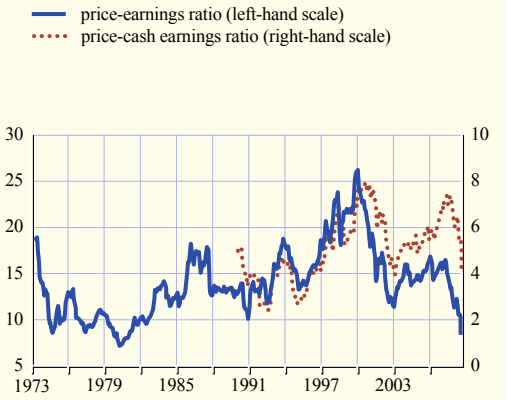
10 See J. Y. Campbell and R. J. Shiller (1998), "Valuation ratios and the long-run stock market outlook", Journal of Portfolio Management, pp. 11-26, and D. E. Rapach and M. E. Wohar (2005), "Valuation ratios and long-horizon stock price predictability", Journal of Applied Econometrics, 20(3), pp. 327-44. See also the article "Equity valuation measures: what can they tell us?" by A. V. Wetherilt and O. Weeken published in the Winter 2002 issue of the Bank of England's Quarterly Bulletin.

Chart 6 Euro area price/earnings with earnings calculated over different horizons



Sources: Thomson Financial Datastream and ECB calculations.
Note: Prices refer to the EMU total stock market index, except for forward earnings, where prices refer to the MSCI EMU index.

Chart 7 Euro area price/earnings and price-cash earnings ratios



Source: Thomson Financial Datastream.
Note: Prices refer to the EMU total stock market index.

a ten-year average of past earnings, which smoothes out the strong cyclicality observed in earnings.[11] The movements in all three price-earnings ratios are broadly similar over time. Moreover, all measures have, in the past, tended to fluctuate within some stable range, providing evidence of mean reversion. One notable exception was around the year 2000, when all price-earnings ratios rose to elevated levels, supporting the general opinion that there was a dot-com bubble during this period. The various price-earnings ratios suggest that, since the outbreak of the financial turmoil in the summer of 2007, the euro area stock market valuation has moved from slightly overvalued towards undervalued, at least when applying historical averages as a benchmark.

The above-mentioned earnings valuation measures reflect reported earnings, which refer to resources earned and resources used over an accounting period. This (accounting) definition, however, ignores the timing of cash receipts when recognising revenues and the timing of cash expenditures when recognising losses. In order to provide a broader overview, firms usually present a cash-flow statement in addition to the income statement. Thus, a firm can, at a certain point in time, show robust income growth, but have little cash at its disposal. As a result, a valuation assessment that is only based on reported earnings may occasionally be misleading.

Chart 7 plots a ratio based on cash earnings, as well as the price-earnings ratio based on current reported earnings. Although both measures of the price-earnings ratio tend to co-move, there are indeed periods of conflicting signals. Around 2000, both ratios were at all-time highs, supporting the view that there was a dot-com bubble. By contrast, the price-cash earnings ratio suggests that, before the outbreak of the financial turmoil in the summer of 2007, euro area stock prices were on the high side compared with cash flows, but this is not borne out by reported earnings. This different behaviour reflects not only developments in certain non-cash expenses, but also the introduction in 2005 of new accounting standards in the euro area, namely the International Financial Reporting Standards. These changes in accounting standards tend to make reported earnings pro-cyclical, i.e. they result in higher reported earnings during economically "good" times and lower reported earnings during "bad" times.

11 As suggested by R. J. Shiller (2000), "Irrational Exuberance", Princeton University Press.

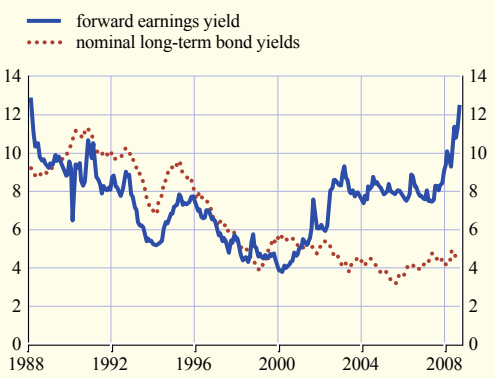
Other adjustments to earnings are possible, such as accounting and debt adjustments to earnings.[12] A popular adjustment among practitioners is to adjust the price-earnings ratio for growth, which is known as the price-earnings growth ratio. The latter, in turn, can be adjusted further for risk.[13] Another possible adjustment to the price-earnings ratio is to correct it for the level of the long-term interest rate and a proxy for the structural level of the equity risk premium, given that the dividend discount model suggests that it is not just earnings that determine stock prices, but also the risk-free interest rate and the equity risk premium.[14]

As shown in Section 2, the "Gordon growth model" can be used to derive a relative valuation tool between the stock markets (in the form of forward earnings yields) and the government bond markets (using long-term bond yields). This relationship was first examined in the mid-1990s by a few Federal Reserve economists. Given their employer, the model became known as the "Fed model".[15] This model stipulates that there is an alleged long-term relationship between the two assets by taking the viewpoint that stocks and bonds are two competing asset classes for investors. If the expected return on one of them is substantially higher, investors will shift their funds to that asset class. These portfolio shifts will reduce any differences in expected returns. In the same vein, the Fed model can be linked to the demand for money in the euro area.[16]

Chart 8 shows the forward earnings yield and long-term bond yields for the euro area since the late 1980s. The chart shows that the two indicators were both on a downward trend throughout the 1990s, signalling a relative "fair valuation" between the two asset classes. Since 2002, earnings yields have increased, whereas euro area long-term bond yields have hovered at relatively low levels. The low level of long-term bond yields over the past few years can be related to a number of factors, such as accommodative monetary policy rates, low term premia demanded on government bonds and strong demand from emerging markets. At the same time, euro area firms have delivered strong earnings growth over the same period, which has probably supported the forward earnings yield measure.

Chart 8 Fed model for the euro area

(percentages; annualised)



Sources: Reuters, Thomson Financial Datastream and ECB calculations.
Note: Forward earning yield is the ratio between the twelve-month forward earnings and the MSCI EMU index.

The main criticism of the Fed model is that it explores the relationship between a nominal variable, i.e. the yield on long-term government bonds, and a variable which is in theory a real quantity. As a result, periods of surging inflation expectations should induce investors to require higher yields offered on nominal long-term bonds. At the same time, stock prices should be unaffected by higher inflation expectations

12 See S. E. Wilcox (2007), "The adjusted earnings yield", Financial Analysts Journal, 63(5), pp. 54-68.

13 See J. Estrada (2005), "Adjusting P/E ratios by growth and risk: the PERG ratio", International Journal of Managerial Finance, 1(3), pp.187-203, and M. A. Trombley (2008), "Understanding the PEG ratio", Journal of Investing, 17(1), pp. 22-25.

14 See G. J. de Bondt (2008), "Determinants of stock prices: new international evidence", Journal of Portfolio Management, 34(3), pp. 81-92, and G. J. de Bondt (2008), "Determinants and future returns of sector stock prices", Colloquium Paper, 27th SUERF Colloquium on "New Trends in Asset Management: Exploring the Implications", Munich 12-14 June.

15 See J. Lander, A. Orphanides and M. Douvogiannis (1997), "Earnings forecasts and the predictability of stock returns: Evidence from trading the S&P", Journal of Portfolio Management, 23(4), pp. 24-35.

16 See R. A. De Santis, C. A. Favero and B. Roffia (2008), "Euro area money demand and international portfolio allocation: A contribution to assessing risks to price stability", ECB Working Paper No 926; also presented at the ECB workshop entitled "The external dimension of monetary analysis", Frankfurt am Main, 12-13 December 2007.

if the cash-flow component is revised upward by a similar magnitude as the discount factor. Consequently, the information content from the Fed model may be blurred. In addition, it should be noted that the Fed model uses earnings forecasts provided by market analysts to derive the forward earnings yield. These forecasts might, however, be biased.[17]

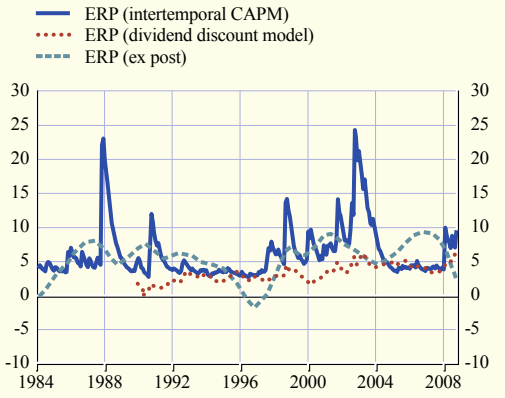
EQUITY RISK PREMIUM INDICATORS

As discussed in the theoretical section of this article, the equity risk premium is the rate at which risky stocks are expected to outperform the return on risk-free interest rates. A myriad of techniques are available to estimate the equity risk premium, but all estimates are surrounded by a large degree of uncertainty, as the premium is an unobservable component.

Chart 9 shows three measures of the equity risk premium for the euro area, of which two are model-based and one is an ex-post measure. The first measure uses a conditional I-CAPM methodology, whereby returns of the euro area portfolio depend on the market risk, as well as on the risk that the investment opportunity set changes over time, proxied by the yield curve spread as the intertemporal factor.[18] The second model-based measure employs the dividend discount methodology to back out the implied equity risk premium for the euro area.[19] The third measure is a simple moving ten-year average of the ex-post equity risk premium.

Three features can be noted from the chart. First, the three measures provide a relatively similar level of average equity risk premium over longer periods of time. Over the sample period from January 1990 to October 2008, the unconditional mean of the I-CAPM, the mean of the premium from the three-stage dividend discount model and the simple moving average of realised returns were 6%, 3% and 5% respectively. Second, estimates of the equity risk premia can, in certain periods, decouple from one another. It is reasonable to assume that the simplifying assumptions made in order to make the models tractable can result in temporarily noisy estimates. It is therefore important to cross-check equity risk premium developments using a broad set of models. Third, during the stock market correction between 2000 and 2002, the model-based measures suggested that investors required a higher premium for investing in the stock markets. Such a sudden shift in the equity premium may have amplified the stock market correction taking place at that time. Moreover, while the dividend discount model clearly suggests that a gradual decline in the equity premium contributed to the increasingly higher valuation of stocks during the dot-com boom period around 2000, the evidence from the I-CAPM is less conclusive in this regard.

Chart 9 Equity risk premium (ERP) measures for the euro area



Sources: Thomson Financial Datastream and ECB calculations.

17 For euro area evidence, see the box entitled "What is the information content of stock market earnings expectations held by analysts?" in the March 2004 issue of the Monthly Bulletin.

18 For more details, see L. Cappiello, M. Lo Duca and A. Maddaloni, "Country and industry equity risk premia in the euro area: an intertemporal approach", ECB Working Paper No 913, 2008.

19 This estimate is based on a "three-stage dividend discount model". The 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 equals professional stock market analysts' three-to-five year ahead 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) where 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 at a constant level of 2.25%, which is in the range of longer-term potential growth estimates for the euro area economy.

4 CONCLUSIONS

A simple fundamental valuation model of stock prices suggests that they should reflect current and future expected dividends, discounted by an appropriate discount factor. However, theoretical research on stock price bubbles and insights from behavioural finance have shown that, on certain occasions, stock prices can drift to levels beyond those considered consistent with an appropriate valuation. The strong stock price corrections that tend to take place after episodes when stocks have been overvalued can harm the entire economy.

Notwithstanding the difficulties involved in identifying stock price misalignments from fundamentals in real time, this article has shown that a number of metrics can help in this context. In particular, valuation yardsticks that scale stock prices by their earnings component are able to signal strong misvaluations with a certain degree of accuracy. The article also argues in favour of applying a multi-model approach when valuing stocks. Around the year 2000, the vast majority of the valuation indicators clearly supported the view that there was a dot-com bubble. Recently, at the outbreak of the financial turmoil in the summer of 2007, all stock market valuation metrics indicated a lower valuation.

TEN YEARS OF TARGET AND THE LAUNCH OF TARGET2

TARGET (Trans-European Automated Real-time Gross settlement Express Transfer system), an interbank payment system for the real-time processing of cross-border transfers in euro throughout the European Union, was made up of 17 national real-time gross settlement (RTGS) systems[1] and the ECB payment mechanism (EPM). Between November 2007 and May 2008, TARGET was replaced by an enhanced and streamlined version of the system, called TARGET2. TARGET, and now TARGET2, is run by the Eurosystem, the central banking system of the euro area. This article recalls the most important events which marked the ten years of TARGET, describes the TARGET2 project, and provides the first statistical data collected after the first weeks of TARGET2 operations.

1 TEN YEARS OF TARGET

In the mid-1990s, Europe was pursuing a single currency and EU countries were preparing for the change from their national currencies to the euro. In the EU central banks' community, the question arose as to how the euro could circulate between the Member States in a fast and reliable way. Indeed, there was an urgent need to develop a payment service to serve the needs of what would be the single monetary policy and, at the same time, to facilitate the settlement of euro payments across national borders in the EU. At the time, the majority of Member States already had their own RTGS systems, but only for the settlement of transactions in their national currencies.

The need to be ready in time for the introduction of the euro did not grant sufficient time to build a fully-fledged single RTGS system. The most practical and immediate solution was to link the existing RTGS systems and to define a minimum set of harmonised features, basically for sending and receiving payments across national borders (i.e. inter-Member State payments). At the national level, central banks continued to work as they did for the settlement of payments within their banking community (i.e. intra-Member State payments). This approach kept the changes that the banks and the central banks had to undergo to a minimum, which was important at a time when they were already fully engaged with the changeover to the euro and to the single monetary policy. As a result, the TARGET system was built by linking together the different RTGS structures that existed at the national level. TARGET (hereafter referred to as "TARGET1" for clarity), the RTGS system for the euro, commenced operation on 4 January 1999 following the launch of the euro.

FEATURES AND BENEFITS OF TARGET1

TARGET1 had a decentralised technical structure, which consisted of 17 national RTGS systems and the ECB payment mechanism (EPM). All these components were interlinked so as to provide a technical framework for the processing of payments across national borders in the EU. TARGET1 was available for all credit transfers in the countries that had adopted the euro as their currency, as well as in Denmark, Estonia, Poland and the United Kingdom.[2] As a result of its wide participation criteria, it was possible to reach almost all credit institutions established in the EU via TARGET1 and, hence, all their account holders.

Liquidity availability in TARGET1 was facilitated by permitting the use of minimum reserve holdings for settlement purposes during the day and, in addition, the Eurosystem provided unlimited (collateralised) intraday credit free of interest to its counterparties. Incoming funds were available for immediate re-use, and the high speed at which payments in TARGET1 were processed facilitated and improved cash management for its participants.

1 A real-time gross settlement system is a payment system in which processing and settlement take place in real time (continuously) rather than in batch processing mode. It enables transactions to be settled with immediate finality. Gross settlement means that each transfer is settled individually rather than on a net basis. TARGET and TARGET2 are examples of real-time gross settlement systems.

2 Sweden was also connected to TARGET1 between January 1999 and December 2006.

There was no upper or lower value limit for TARGET1 payments.

TARGET1 was originally intended for the processing of time-critical large-value payments in euro with the objective to reduce systemic risk throughout the EU. In particular, payments related to monetary policy operations with the Eurosystem, or to final settlement of systemically important payment and settlement systems, had to be made via TARGET1. Besides these operations, TARGET1 users began using the system more and more for other types of transactions, including low-value payments, hence benefiting from all the TARGET1 advantages in terms of speed, liquidity management and security. Due to its attractive pricing scheme, even smaller credit institutions in the EU were able to offer their customers an efficient cross-border payment service.

The use of TARGET1 was supported by a transparent pricing structure, where inter-Member State payments were subject to degressive transaction fees (from €1.75 down to €0.80). Still, intra-Member State transaction fees were not harmonised and were fixed by individual central banks.

All the national RTGS systems composing TARGET1 were operational every day, with the exception of Saturdays and Sundays, New Year's Day, Good Friday, Easter Monday, 1 May (Labour Day), Christmas Day and 26 December. TARGET1 operated for 11 hours on each of its working days from 7 a.m. to 6 p.m. CET, with a cut-off time for customer payments at 5 p.m.

Most of the TARGET1 features explained here are still valid today or have been enhanced in TARGET2.

FIGURES FOR TARGET1

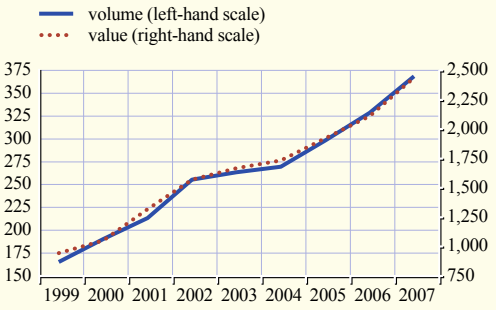
In November 2007, at the beginning of the migration to TARGET2, there were 1,072 direct participants connected to TARGET1 and the overall number of banks (including their branches and subsidiaries) accessible via TARGET1 was around 52,800, meaning that almost all EU credit institutions were reachable.

Since its launch in January 1999, TARGET1 payment traffic has grown by around 10% every year, both in terms of value and the number of payments. In 2007, TARGET1 processed, on average, more than 360,000 payments per day with a total value of €2.4 trillion (see Chart 1).

TARGET1 accounted for 89% in terms of the value and 61% in terms of the volume of traffic that flows through all the

Chart 1 TARGET1 traffic

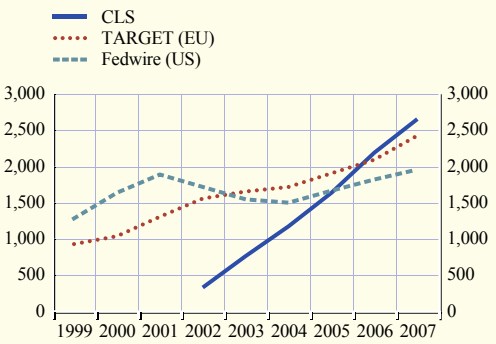
(daily averages in thousands; EUR billions)



Source: ECB.

Chart 2 Traffic comparison in the three biggest systems in the world

(daily average values in EUR billions) [1]



Source: ECB.
1) Continuous Linked Settlement (CLS) is an international system for settling foreign exchange transactions. Fedwire is the RTGS system for the US dollar operated by the Federal Reserve.

Table 1 Payment value bands in TARGET1 in 2007

(percentages)

Equal to or less than €50,000	> €50,000 = €1 million	> €1 million = €1 billion	> €1 billion
64	25	11	< 0.1

Source: ECB.

large-value payment systems operating in euro. In value terms, TARGET1 was one of the biggest payment systems in the world and the biggest RTGS system (see Chart 2).

The average value of a TARGET1 payment was €6.4 million in 2007. Around 64% of TARGET1 transactions were less than or equal to €50,000 (see Table 1).

2 THE TARGET2 PROJECT

For years, TARGET1 operated successfully in a market environment that was rapidly evolving and highly competitive. TARGET1 was able to meet all its main objectives: it supported the implementation of the single monetary policy, it contributed to reducing systemic risk and it helped the banks to manage their euro liquidity. Despite these considerable successes, the TARGET1 approach adopted in the mid-1990s revealed some of its weaknesses, which called for a re-design of the system. TARGET1 participants increasingly requested an enhanced and more harmonised service offered at the same price across the EU. Furthermore, cost efficiency was also considered problematic by the Eurosystem, as the revenues covered too small a proportion of the costs. This was largely attributable to the decentralised structure of TARGET1 with multiple local technical components, which increased the maintenance and running costs. Lastly, in the context of EU enlargement, new Member States were expected to connect to TARGET1, hence increasing the number of TARGET1 components.

In order to overcome these weaknesses, the Eurosystem started to examine the options for the evolution of TARGET1. The Governing Council of the ECB took a strategic step on 24 October 2002 and decided on the principles and structure of the new payment system, TARGET2. The Governing Council decided that TARGET2 would offer harmonised core services. These TARGET2 core services would be provided by a single technical platform and would be priced according to a single price structure. This new approach based on a technical consolidation allowed the Eurosystem to achieve lower costs and, at the same time, to recover a very large part of the total TARGET2 costs. A public good factor corresponding to the positive externalities generated by TARGET2 (e.g. in terms of the reduction of systemic risk) would be defined, for which costs would not have to be recovered. Lastly, the Governing Council acknowledged that, despite the technical consolidation of TARGET2, the decentralisation of the relationships that the national central banks had with the counterparties in their respective countries would be preserved.

2.1 PROJECT ORGANISATION AND MAJOR MILESTONES

After the strategic decision of the Governing Council, the Eurosystem developed the concept, design and business rules of TARGET2. The development of TARGET2 was divided into three phases: the pre-project phase, the project phase, and the testing and migration phase.

PRE-PROJECT PHASE

The Eurosystem collected the views of the TARGET1 users on the expected features and level of service via a public consultation. The users' input contributed greatly to the definition of core and additional services for TARGET2, which included modern liquidity management tools, liquidity saving features, a standardised interface for ancillary systems and state-of-the-art business continuity concepts.

Although, in 2002, it was planned that TARGET2 would be a multiple-platform system, it soon became clear that a Single Shared Platform (SSP) would better respond to the needs of the industry. Three central banks (the Deutsche Bundesbank, the Banque de France and the Banca d'Italia) made a joint offer to build and operate technically the SSP, which the Governing Council approved on 14 December 2004.

The Eurosystem initiated the discussion on the governance of TARGET2, as well as on the cost of and financing rules for TARGET2. This last issue required the development of a common cost methodology and an investigation of the possible introduction of a public good factor in TARGET2 in order to take due account of the externalities, such as the reduction of systemic risk.

The pre-project phase ended in July 2004 with the consultation of the users on a General Functional Specifications (GFS) document.

PROJECT PHASE

The Eurosystem elaborated the User Detailed Functional Specifications (UDFS) of the SSP. In this context, some of the features were enhanced, particularly the intraday liquidity pooling. The liquidity pooling feature allows TARGET2 participants to group together some of their RTGS accounts and to pool the available intraday liquidity for the benefit of all members of the group. This concept was largely supported by future TARGET2 users as it avoided the fragmentation of their liquidity within the system and allowed them to centralise their liquidity management even with the decentralised holding of accounts.

The Governing Council of the ECB decided to legally construct TARGET2 as a multiple system, whilst aiming at the highest degree of harmonisation of the legal documentation used by the central banks. The general legal structure and the participation criteria were adopted in 2006.

Due attention was given to the elaboration of the pricing scheme. The pricing had to ensure broad access to the system, including for small banks, and, at the same time, had to be attractive to the major market players. The result was a dual pricing scheme which allows participants to choose between a low periodical fee with a flat transaction fee and a higher periodical fee with a lower degressive transaction fee. Some services, such as the liquidity pooling and the settlement of ancillary systems, were priced separately. The pricing scheme for TARGET2 core services took into account the growth rates in TARGET1 traffic over the last three years.

Operational aspects were worked out in close cooperation with the European banking industry, particularly those related to contingency procedures. Furthermore, to facilitate the night-time settlement of the various ancillary systems in central bank money with immediate finality and to support cross-system delivery versus payment (DvP) settlement, the Governing Council decided that TARGET2 would be operational at night.

TESTING AND MIGRATION PHASE

As regards the migration from TARGET1 to TARGET2, the Eurosystem opted for a "country window" approach, where TARGET1 users migrated to the SSP in different waves and on predefined dates. Each wave consisted of a group of central banks and their respective national banking communities. Banking communities were split into three waves and a fourth wave was scheduled in case any one community would not be in a position to migrate on schedule (see Table 2). This migration by country wave was preferred to a "big bang" approach, which was seen as too risky for a system of such importance. Within this general framework, individual central banks were responsible for monitoring the preparation of their respective national user community, for assisting these communities during the testing phase and for ensuring a smooth changeover to the new system.

Table 2 Composition of the country waves for the migration to TARGET2

Group 1 19/11/2007	Group 2 18/02/2008	Group 3 19/05/2008	Group 4 15/09/2008
Austria	Belgium	Denmark	
Cyprus	Finland	Estonia	
Germany	France	ECB	
Latvia	Ireland	Greece	Reserved for contingency
Lithuania	Netherlands	Italy	(not used)
Luxembourg	Portugal	Poland	
Malta	Spain		
Slovenia			

Source: ECB.

TARGET2 user testing activities were organised in several phases with a gradual increase in the level of complexity, from basic connectivity tests at participant level up to more complex business scenarios involving the whole user community. Time slots applicable for each testing phase were defined for each country group. In this context, due consideration was given to the multi-country banks, which had branches or subsidiaries in more than one country group. Because of the organisation into waves, the time schedule was particularly tight for the first migration group, which only had six months to complete its user testing activities. As a result of the careful monitoring of the national central banks, all testing activities were completed successfully on time for all the banking communities and the fourth group did not need to be activated. The TARGET2 system went live according to the original migration schedule, with the first operations being settled on the SSP on 19 November 2007.

2.2 PROJECT STAKEHOLDERS AND FUTURE DEVELOPMENTS

CENTRAL BANK PARTICIPATION

As for TARGET1, the connection of a central bank and its banking community was only mandatory when the country in question adopted the euro. For central banks which have not yet adopted the euro, the participation in TARGET2 is optional. In the course of the project, 21 of the 28 central banks comprising the European System of Central Banks confirmed their connection to TARGET2. In addition to the 15 central banks[3] having adopted the euro and the ECB, five other central banks[4] opted for a connection.

Although it was connected to TARGET1 via its local component CHAPS-Euro, the Bank of England decided to discontinue its connection as from 16 May 2008, which was the last operational day of TARGET1.

PHASING-OUT OF SETTLEMENT ACTIVITIES ON LOCAL SYSTEMS

In TARGET1, some central banks maintained "home accounts" outside their RTGS systems. These accounts were primarily used to manage minimum reserves, standing facilities or cash withdrawal, but could also be used to settle interbank or ancillary system transactions. In the TARGET2 context, the Eurosystem agreed that transactions between market participants and transactions stemming from the settlement of ancillary systems, as well as payments related to open market operations, should ultimately be settled on the RTGS accounts of the SSP. However, the domestic set-up in some countries

3 The central banks of Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, Slovenia, Spain and the Netherlands, as well as Malta and Cyprus which joined EMU in January 2008. On 1 January 2009 Národná banka Slovenska will become the twenty-second central bank connected to TARGET2, at which time Slovakia will adopt the euro.

4 Denmark, Estonia, Latvia, Lithuania and Poland.

did not allow for an immediate shift of these operations to the SSP at the start of TARGET2. As a result, the Eurosystem agreed on a maximum transition period of four years (from the moment the relevant NCB joins the SSP) for settling these payments on the SSP. The proprietary home accounting systems maintained by some individual central banks are also known as PHAs.

INTERACTION WITH THE USER COMMUNITY

TARGET2 benefited from fruitful cooperation with TARGET1 users, both at the national level (between the individual central banks and their domestic users) and at the European level (between the Eurosystem and the TARGET Working Group). Relevant information was published regularly on the dedicated TARGET2 websites and joint meetings took place on issues of common interest, e.g. operational procedures, risk management or testing and migration. This cooperation proved to be an important factor in understanding the market requirements. It was also very beneficial for a successful changeover to TARGET2 operations, as evidenced in the smooth migration process and the high levels of acceptance by the users immediately after the go-live.

FUTURE TARGET2 DEVELOPMENTS

It is foreseen that a new version of the SSP will be made available each year, offering a range of enhancements and new features to TARGET2 users. The content of these yearly releases will be defined after a broad consultation of the user community.

The first yearly release of the SSP will go live on 17 November 2008. Its content is mainly driven by the new SWIFT standard release, which will go live on the same day. Two releases are scheduled exceptionally for 2009. The first one, in May, will enhance the interface with ancillary systems, in particular allowing the settlement across central securities depositories during the night-time phase. The content of the second release in November 2009 is still being discussed with the TARGET2 users.

3 THE GO-LIVE OF TARGET2

TARGET2 only completed its migration phase in May 2008. On the basis of the first statistical data for TARGET2, collected after the first weeks of operations, some important facts can already be reported and a number of lessons can be drawn. Further information will be provided in the TARGET2 Annual Report 2008.

TRAFFIC

In June 2008, which was the first full month of operation of TARGET2, a daily average of 378,000 transactions were settled in TARGET2. The migration from TARGET1 to TARGET2 did not affect significantly the general trend in system traffic observed over the last three years. The first weeks of operation confirm the Eurosystem's volume estimates for TARGET2. The traffic estimate of 93.1 million transactions for the first operating year is therefore likely to be achieved, hence facilitating the recovery of TARGET2 costs.

At the time TARGET2 was launched, two other large-value payment systems closed, namely CHAPS-Euro (following the decision of the Bank of England not to connect to TARGET2) and the French Paris Net Settlement (PNS). The initial assumption was that around 60% of their respective traffic would stay in TARGET2. In the case of CHAPS-Euro, it appears that most of the transactions issued by its participants stayed in TARGET2 and are now settling via their branches/subsidiaries or directly via remote participation in TARGET2. In the case of PNS, only one third of the transaction stayed in TARGET2, whereas approximately two thirds of its transactions were re-routed to other payment systems, in particular EURO1. Nevertheless, these two outcomes somehow offset each other and the overall net effect on TARGET2 traffic has been negligible.

PARTICIPATION

Two types of participation are worth considering, namely that of credit institutions and that of ancillary systems:

- By June 2008, 784 direct participants had opened an RTGS account on the SSP. This figure is slightly lower than the 1,072 direct participants in TARGET1 at the start of the migration. Two main factors explain this difference. First, a number of credit institutions reconsidered their participation as direct participant at the time of their migration and opted, for instance, to connect indirectly via a direct participant. Second, TARGET2 created strong incentives for the banks to rationalise their euro liquidity management and to centralise it in fewer RTGS accounts. This is particularly true for multi-country banks, whose liquidity used to be fragmented across several accounts in TARGET1. In November 2007 there were still 16 multi-country banks holding five accounts or more in the different TARGET1 components. At the end of the migration, only three of them had kept more than five accounts on the SSP. It is expected that the number of direct participants will increase in the coming years as a result of the progressive phasing-out of PHAs by 2011 (e.g. Portugal in March 2009) and also of the connection of new banking communities (e.g. Slovakia in January 2009).

- Out of the 66 ancillary systems settling in TARGET2, 51 are registered on the SSP; the remaining 15 systems are still connected to one of the PHAs. For ancillary systems as well, the number of connections to the SSP will continue to increase. The phasing-out of PHAs has already been initiated and, in the coming months, systems like Euroclear Belgium (via the Nationale Bank van België/Banque Nationale de Belgique), EUREX Clearing AG (via the Deutsche Bundesbank), and SICOI and SITEME (via the Banco do Portugal) will be settling on the SSP. Moreover, new ancillary systems will join TARGET2, such as STEP2 and MasterCard Europe (via the ECB) or EURO SIPS, CDCP and First Data Slovakia (via the Národná banka Slovenska).

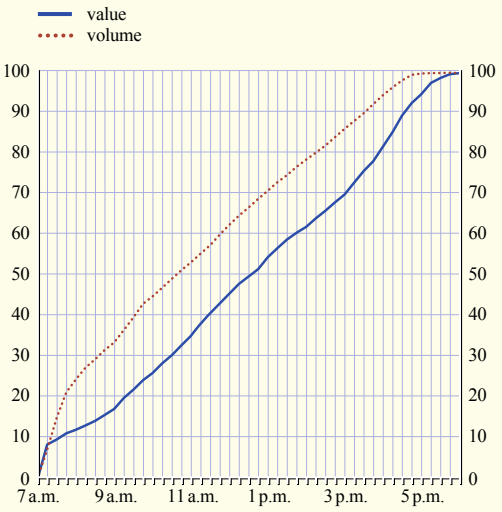
The analysis of the different participation types confirms the Eurosystem's expectations and shows a significant potential for TARGET2 to attract new participants in the coming years.

PARTICIPANTS' BEHAVIOUR

The analysis of intraday flows in TARGET2 shows that participants continue to make payments early in the day, hence providing the interbank market with sufficient liquidity and ensuring the coverage of subsequent payments. By 1 p.m. around half of the daily turnover is already settled and by 5 p.m. this proportion reaches 90%. These observations are very similar to those made for TARGET1. They show that the liquidity flow in TARGET2 has neither been affected by the recent financial turmoil, nor by the new liquidity saving features available on the SSP, such as the bilateral/multilateral limits or liquidity reservations (see Chart 3).

Chart 3 Intraday pattern of TARGET2 payments, cumulative

(June 2008; percentages)



Source: ECB.

In volume terms, the same observations can be made. More than 50% of the volume is normally processed in the first four hours of operation (between 7 a.m. and 11 a.m.) and by 3 p.m. almost five out of six payments have been processed. The daily peak hour is traditionally between 7 a.m. and 8 a.m., when a daily average of nearly 100,000 transactions are remitted and settled. Most of these are low-value payments which banks submit on the previous day and are released by the system the following morning.

SYSTEM PERFORMANCE

Since the start of operations, the availability of the SSP reached 99.9%. For 99.8% of the payments processed on the RTGS accounts, the transit time was less than five minutes. Only one incident with a limited business impact was encountered on 30 June 2008. The feedback of TARGET2 users on the system's performance is in general very positive.

On 30 June 2008, TARGET2 reached a historical peak of 566,549 transactions. The SSP alone settled more than 500,000 payments, which is the all-time high for the system since its launch in November 2007. This very high level of traffic, due to end-of-quarter/semester activities, represents an increase of 50% over the average daily volume. Overall, the system's performance has been satisfactory since the start of the migration phase.

USAGE OF NEW FEATURES

Among the various new features offered by the SSP, it is worth starting with the most elaborate ones, namely the ancillary system interface (ASI) and the liquidity pooling.

- The ASI is the harmonised technical interface offered to ancillary systems for their settlement activities in TARGET2. This optional feature has already been chosen by around half of the systems settling in TARGET2 and has received very positive feedback from both these systems and their settlement banks. The usage of the ASI is expected to develop further in the years to come when all ancillary system transactions today settling on the local PHAs are shifted to the SSP. This will contribute to the harmonisation of the settlement procedures across the user community.

- By June 2008, 17 groups of accounts combining 66 accounts altogether had been created on the SSP in order to benefit from the liquidity pooling feature. This is less than anticipated by the Eurosystem, which expected up to twice as many. This assumption was made during the project phase on the basis of users' feedback, which clearly indicated that the liquidity pooling feature was indispensable and would be widely subscribed to by participants. As an alternative to this feature, it seems that a majority of banks (especially multi-country banks) opted for the internal consolidation of their payments flow and liquidity management rather than for the sharing of the liquidity across several accounts in TARGET2.

As regards the other features (e.g. payment prioritisation, liquidity reservation, direct debit), the first observations confirm that they have been adopted quickly by a wide range of participants and that their usage contributes to a smoother settlement of TARGET2 transactions. In general, the usage of the new features confirms the adequacy of the TARGET2 specifications with regard to the participants' expectations.

TRANSITION PHASE

Out of the 21 central banks connected to TARGET2, in practice, only 12 of them chose to keep a local PHA. Only in six countries is an account on the local PHA needed for settling specific payment transactions (e.g. domestic payments or ancillary system settlement). In June 2008 the volume of TARGET2 transactions settled on the local PHAs was very limited and only accounted for around 3% of the total TARGET2 traffic. This percentage is expected to decrease further in the coming months as two

countries have already taken action to shift all their payment activities to the SSP well before the end of the transition period (Portugal in March 2009 and Belgium in June 2009). The Eurosystem policy on local PHAs had little effect on overall TARGET2 activity and this effect is expected to decrease in the months to come.

TARGET2 REVENUES

The new pricing policy for TARGET2 entered into force after the migration of the last country wave on 19 May 2008. While it is premature to draw conclusions about the system's cost recovery, the collection of the first TARGET2 revenues is roughly in line with the Eurosystem's expectations.

The SSP alone is generating more than 96% of the revenues, while the local PHAs bring in the remaining part. This is roughly in line with the distribution of transactions as the SSP contributes to the overall TARGET2 traffic in the same proportion.

85% of the direct participants in the SSP opted for the flat fee option (option A), while 15% opted for the degressive fee option (option B). Still, this last category of participants generates around 90% of the traffic on the SSP, hence confirming the high concentration of activity around the key users. As a result of the contribution of the biggest participants, around one-quarter of the SSP transactions benefited from the lowest pricing band at €0.125.

The transactions exchanged between credit institutions generate around 90% of the TARGET2 volume, the remaining 10% being attributable to ancillary system transactions. When considering the TARGET2 revenues, credit institutions and ancillary systems roughly contribute in the same proportion. This tends to confirm that the Eurosystem has found the right balance in its pricing policy between interbank and ancillary system transactions based on system usage.

If the currently observed trend in TARGET2 traffic is confirmed, the traffic for 2008 should be around 96 million transactions, while a minimum of 93.1 million was required to recover the costs for the core TARGET2 services. Although this forecast should be treated with caution, it is a positive sign for TARGET2 and for its participants.

Overall, the first analysis of TARGET2 revenues tends to confirm that the pricing policy met its objectives to ensure broad access to the system and to be attractive to the major players.

4 CONCLUSION

After the four-year project phase, TARGET2 went live as scheduled on 19 November 2007 and the migration phase was completed on 19 May 2008. The data collected after the first few weeks of TARGET2 operations confirm most of the Eurosystem's forecasts during the project phase in terms of volume, cost and revenues. The Single Shared Platform is operating smoothly with a satisfactory level of performance. Participants are quickly becoming acquainted with TARGET2 and with its liquidity-saving features. The transition phase, at the end of which all eligible TARGET2 payment activities should have been shifted from local systems to the SSP, has already started.

EURO AREA STATISTICS

CONTENTS [1]

1 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.

ENLARGEMENT OF THE EURO AREA ON 1 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

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

EURO AREA OVERVIEW

Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates

	M1 [1]	M2 [1]	M3 [1, 2]	M3 [1, 2] 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government [1]	Securities other than shares issued in euro by non-MFI corporations [1]	3-month interest rate (EURIBOR, % per annum, period averages)	10-year spot rate (% per annum, end-of-period) [3]
	1	2	3	4	5	6	7	8
2006	8.6	8.7	8.4	-	10.9	15.3	3.08	3.91
2007	6.4	9.9	11.1	-	10.8	18.6	4.28	4.38
2007 Q4	5.9	10.7	12.0	-	11.1	19.5	4.72	4.38
2008 Q1	3.8	10.3	11.2	-	11.1	20.4	4.48	4.13
Q2	2.3	10.0	10.1	-	10.5	17.9	4.86	4.73
Q3	0.6	9.1	9.0	-	9.1	.	4.98	4.34
2008 May	2.2	10.1	10.0	10.0	10.5	17.6	4.86	4.52
June	1.5	9.5	9.6	9.6	9.9	18.1	4.94	4.73
July	0.3	9.1	9.2	9.2	9.3	17.3	4.96	4.53
Aug.	0.2	8.9	8.8	8.9	8.8	18.7	4.97	4.34
Sep.	1.2	8.9	8.6	.	8.5	.	5.02	4.34
Oct.	.	.	.	.	.	.	5.11	4.25

2. Prices, output, demand and labour markets

	HICP	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (percentages)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2006	2.2	5.1	2.5	2.9	4.0	83.2	1.6	8.3
2007	2.1	2.8	2.6	2.6	3.4	84.2	1.8	7.4
2008 Q1	3.4	5.4	3.5	2.1	2.5	83.9	1.5	7.2
Q2	3.6	7.1	2.7	1.4	1.2	83.3	1.2	7.4
Q3	3.8	8.5	.	.	.	82.2	.	7.5
2008 May	3.7	7.1	-	-	-0.3	-	-	7.4
June	4.0	8.0	-	-	-0.4	-	-	7.4
July	4.0	9.2	-	-	-1.2	82.8	-	7.4
Aug.	3.8	8.5	-	-	-0.6	-	-	7.5
Sep.	3.6	7.9	-	-	.	-	-	7.5
Oct.	3.2	.	-	-	.	81.6	-	.

3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: EER-22 [4] (index, 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
	1	2	3	4	5	6	7	8
2006	17.9	19.8	-156.7	290.4	325.8	103.6	104.5	1.2556
2007	51.8	57.5	-90.4	137.7	347.4	107.7	108.3	1.3705
2007 Q4	15.8	10.3	25.0	-73.2	347.4	110.5	111.2	1.4486
2008 Q1	-2.4	-1.5	-107.1	73.8	356.3	112.7	113.1	1.4976
Q2	-21.4	6.2	-49.2	34.3	353.9	115.7	115.7	1.5622
Q3	.	.	.	.	370.7	113.7	113.3	1.5050
2008 May	-20.0	-1.8	-7.0	10.2	349.2	115.5	115.5	1.5557
June	2.8	2.6	-19.6	41.0	353.9	115.4	115.4	1.5553
July	2.0	2.3	-12.3	-8.8	355.6	115.8	115.5	1.5770
Aug.	-7.4	-6.5	-11.6	-13.9	350.7	113.5	113.2	1.4975
Sep.	.	.	.	.	370.7	111.6	111.2	1.4370
Oct.	.	.	.	.	.	107.6	107.2	1.3322

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

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

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

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

3) Based on AAA-rated euro area central government bond yield curves. For further information, see table 4.7.

4) For the definition of the trading partner groups and other information, please refer to the General notes.

MONETARY POLICY STATISTICS

1.1 Consolidated financial statement of the Eurosystem

(EUR millions)

1. Assets

	2008 10 October	2008 17 October	2008 24 October	2008 31 October
Gold and gold receivables	220,237	220,196	220,195	220,193
Claims on non-euro area residents in foreign currency	146,985	146,591	153,941	155,164
Claims on euro area residents in foreign currency	165,050	223,203	198,860	205,828
Claims on non-euro area residents in euro	14,191	13,696	12,955	11,232
Lending to euro area credit institutions in euro	739,388	773,191	767,232	839,593
Main refinancing operations	250,882	311,986	305,951	326,565
Longer-term refinancing operations	447,179	447,182	447,187	501,789
Fine-tuning reverse operations	24,681	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	16,634	14,003	14,085	11,230
Credits related to margin calls	12	21	8	10
Other claims on euro area credit institutions in euro	66,110	61,163	64,045	63,626
Securities of euro area residents in euro	113,560	114,816	116,343	116,915
General government debt in euro	37,448	37,448	37,441	37,441
Other assets	378,886	382,779	387,152	381,454
Total assets	1,881,854	1,973,084	1,958,164	2,031,447

2. Liabilities

	2008 10 October	2008 17 October	2008 24 October	2008 31 October
Banknotes in circulation	712,119	721,833	723,083	727,706
Liabilities to euro area credit institutions in euro	450,561	470,259	383,787	458,872
Current accounts (covering the minimum reserve system)	295,820	230,516	181,178	179,442
Deposit facility	154,655	239,575	202,558	279,365
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	86	168	51	64
Other liabilities to euro area credit institutions in euro	143	125	221	208
Debt certificates issued	0	0	0	0
Liabilities to other euro area residents in euro	85,684	91,921	137,722	109,414
Liabilities to non-euro area residents in euro	195,015	255,004	283,579	303,381
Liabilities to euro area residents in foreign currency	968	1,297	72	680
Liabilities to non-euro area residents in foreign currency	26,668	19,775	16,428	16,706
Counterpart of special drawing rights allocated by the IMF	5,384	5,384	5,384	5,384
Other liabilities	164,948	167,120	167,522	168,731
Revaluation accounts	168,685	168,685	168,685	168,685
Capital and reserves	71,680	71,680	71,680	71,681
Total liabilities	1,881,854	1,973,084	1,958,164	2,031,447

Source: ECB.

1.2 Key ECB interest rates

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

With effect from [1]	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
	Level	Change	Level	Level	Change	Level	Change
	1	2	3	4	5	6	7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 [2]	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 [3]	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
2005 6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006 8 Mar.	1.50	0.25	-	2.50	0.25	3.50	0.25
15 June	1.75	0.25	-	2.75	0.25	3.75	0.25
9 Aug.	2.00	0.25	-	3.00	0.25	4.00	0.25
11 Oct.	2.25	0.25	-	3.25	0.25	4.25	0.25
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
8 Oct.	2.75	-0.50	-	-	-	4.75	-0.50
9 [4]	3.25	0.50	-	-	-	4.25	-0.50
15 [5]	3.25	...	3.75	-	-0.50	4.25	...
12 Nov.	2.75	-0.50	3.25	-	-0.50	3.75	-0.50

Source: ECB.

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

2) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new monetary regime by market participants.

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

4) As of 9 October 2008 the ECB reduced the standing facilities corridor from 200 basis points to 100 basis points around the interest rate on the main refinancing operations.

5) On 8 October 2008 the ECB announced that, starting from the operation to be settled on 15 October, the weekly main refinancing operations would be carried out through a fixed-rate tender procedure with full allotment at the interest rate on the main refinancing operations. This change overrode the previous decision (made on the same day) to cut by 50 basis points the minimum bid rate on the main refinancing operations conducted as variable rate tenders.

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

(EUR millions; interest rates in percentages per annum)

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

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate [4)]	Weighted average rate	
	1	2	3	4	5	6	7	8
	Main refinancing operations							
2008 9 July	263,642	400	175,000	-	4.25	4.32	4.37	7
16	265,931	440	155,000	-	4.25	4.34	4.36	7
23	268,193	461	175,500	-	4.25	4.35	4.38	7
30	247,409	430	166,000	-	4.25	4.38	4.42	7
6 Aug.	241,886	424	160,000	-	4.25	4.38	4.41	7
13	233,394	430	176,000	-	4.25	4.37	4.40	7
20	228,735	454	151,000	-	4.25	4.38	4.40	7
27	226,453	424	167,000	-	4.25	4.39	4.42	7
3 Sep.	226,254	411	160,000	-	4.25	4.39	4.41	7
10	223,273	422	176,500	-	4.25	4.39	4.41	7
17	328,662	533	150,000	-	4.25	4.53	4.58	7
24	334,044	506	180,000	-	4.25	4.73	4.78	7
1 Oct.	228,012	419	190,000	-	4.25	4.65	4.96	7
8	271,271	436	250,000	-	4.25	4.70	4.99	7
15 [5)]	310,412	604	310,412	3.75	-	-	-	7
22	305,421	703	305,421	3.75	-	-	-	7
29	325,112	736	325,112	3.75	-	-	-	7
5 Nov.	311,991	756	311,991	3.75	-	-	-	7
	Longer-term refinancing operations							
2008 22 May	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
10 July	74,579	141	25,000	-	-	4.93	5.03	182
31	107,684	189	50,000	-	-	4.70	4.76	91
14 Aug.	78,920	124	50,000	-	-	4.61	4.74	91
28	77,216	191	50,000	-	-	4.60	4.74	91
11 Sep.	69,500	114	50,000	-	-	4.45	4.66	91
25	154,577	246	50,000	-	-	4.98	5.11	84
30	141,683	210	120,000	-	-	4.36	4.88	38
9 Oct.	113,793	181	50,000	-	-	5.36	5.57	182
30 [5)]	103,108	223	103,108	3.75	-	-	-	91

2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
					Fixed rate	Minimum bid rate	Marginal rate [4)]	Weighted average rate	
	1	2	3	4	5	6	7	8	9
2008 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
8 July	Collection of fixed-term deposits	14,585	12	14,585	4.00	-	-	-	1
12 Aug.	Collection of fixed-term deposits	22,630	10	21,000	4.25	-	-	-	1
9 Sep.	Collection of fixed-term deposits	20,145	17	20,145	4.25	-	-	-	1
15	Reverse transaction	90,270	51	30,000	-	4.25	4.30	4.39	1
16	Reverse transaction	102,480	56	70,000	-	4.25	4.32	4.40	1
18	Reverse transaction	49,330	43	25,000	-	4.25	4.30	4.39	1
24	Reverse transaction	50,335	36	40,000	-	4.25	4.25	4.35	1
1 Oct.	Collection of fixed-term deposits	173,047	52	173,047	4.25	-	-	-	1
2	Collection of fixed-term deposits	216,051	65	200,000	4.25	-	-	-	1
3	Collection of fixed-term deposits	193,844	54	193,844	4.25	-	-	-	3
6	Collection of fixed-term deposits	171,947	111	171,947	4.25	-	-	-	1
7	Collection of fixed-term deposits	147,491	97	147,491	4.25	-	-	-	1
9	Reverse transaction	24,682	99	24,682	3.75	-	-	-	6

Source: ECB.

1) The amounts shown may differ slightly from those in Section 1.1 due to operations allotted but not settled.
2) With effect from April 2002, split tender operations, i.e. operations with one-week maturity conducted as standard tenders in parallel with a main refinancing operation, are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.
3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.
4) In liquidity-providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.
5) On 8 October 2008 the ECB announced that, starting from the operation to be settled on 15 October, the weekly main refinancing operations would be carried out through a fixed-rate tender procedure with full allotment at the interest rate on the main refinancing operations.

1.4 Minimum reserve and liquidity statistics

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

1. Reserve base of credit institutions subject to reserve requirements

Reserve base as at [1]	Total	Liabilities to which a 2% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
2006	15,648.3	8,411.7	601.9	1,968.4	1,180.3	3,486.1
2007	17,394.7	9,438.8	815.0	2,143.1	1,364.0	3,633.9
2008 Q1	17,703.3	9,551.7	840.2	2,126.0	1,558.4	3,627.1
2008 Apr.	17,956.0	9,762.0	856.2	2,135.6	1,562.3	3,640.0
May	18,092.7	9,817.8	910.6	2,156.1	1,548.9	3,659.3
June	17,971.8	9,775.4	916.3	2,172.4	1,439.4	3,668.1
July	18,035.4	9,825.2	938.2	2,175.7	1,407.4	3,689.0
Aug.	18,165.8	9,888.5	948.6	2,184.4	1,438.7	3,705.6

2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2006	172.5	173.2	0.7	0.0	3.30
2007	195.9	196.8	1.0	0.0	4.17
2008 15 Jan. [2]	199.8	200.9	1.1	0.0	4.20
12 Feb.	201.6	202.4	0.8	0.0	4.17
11 Mar.	204.6	205.3	0.7	0.0	4.10
15 Apr.	206.9	207.5	0.6	0.0	4.19
13 May	207.8	208.6	0.8	0.0	4.24
10 June	207.3	208.1	0.8	0.0	4.17
8 July	211.9	212.7	0.8	0.0	4.06
12 Aug.	214.1	214.8	0.7	0.0	4.35
9 Sep.	213.3	214.0	0.7	0.0	4.38
7 Oct.	214.8	216.8	2.0	0.0	4.58
11 Nov.	216.2	.	.	.	.

3. Liquidity

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts	Base money
		Monetary policy operations of the Eurosystem										
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations	Deposit facility	Other liquidity-absorbing operations [3]	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	327.0	313.1	120.0	0.1	0.1	0.1	0.0	598.6	54.9	-66.4	173.2	771.8
2007	327.5	173.0	278.6	0.3	0.0	0.4	2.2	644.6	61.9	-126.6	196.8	841.9
2008 15 Jan.	343.8	255.7	268.8	0.3	0.0	1.1	68.4	668.2	46.4	-116.4	200.9	870.2
12 Feb.	353.6	173.8	268.5	0.2	0.0	0.4	0.6	651.7	51.7	-110.7	202.4	854.5
11 Mar.	343.3	181.3	268.5	0.1	0.3	0.3	0.0	653.2	59.7	-125.0	205.3	858.7
15 Apr.	349.4	181.5	278.6	0.1	2.6	0.6	0.4	662.1	66.4	-124.8	207.5	870.3
13 May	364.5	174.4	295.0	0.1	0.0	0.3	0.8	667.6	68.8	-112.2	208.6	876.6
10 June	375.0	172.8	287.9	0.3	0.0	0.2	0.5	671.4	67.3	-111.5	208.1	879.7
8 July	376.4	185.4	275.4	0.1	0.0	0.4	0.5	677.2	64.9	-118.3	212.7	890.3
12 Aug.	374.5	166.3	299.3	0.1	0.0	0.3	0.6	686.1	61.3	-123.0	214.8	901.2
9 Sep.	376.6	163.5	300.0	0.1	0.0	0.6	0.7	685.0	61.1	-121.2	214.0	899.5
7 Oct.	417.3	174.1	334.3	7.5	5.9	19.9	45.5	684.3	55.2	-82.6	216.8	921.0

Source: ECB.

1) End of period.

2) Owing to the adoption of the euro by Cyprus and Malta on 1 January 2008, the reserve requirement is an average - weighted by the number of calendar days - of the reserve requirements for the then 13 countries of the euro area for the period 12-31 December 2007 and the reserve requirements for the 15 countries now in the euro area for the period 1-15 January 2008.

3) 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	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Money market fund shares/ units [2]	Holdings of shares/ other equity issued by euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Eurosystem													
2006	1,558.2	695.7	19.7	0.6	675.3	217.0	187.5	2.5	27.0	-	17.2	351.4	14.7	262.4
2007	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 Q1	2,017.8	965.9	19.4	0.7	945.9	278.5	235.9	2.3	40.3	-	16.2	383.3	15.2	358.6
2008 Apr.	2,012.4	951.4	18.8	0.7	931.9	278.9	235.1	2.5	41.3	-	16.6	375.3	16.0	374.3
May	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
June	2,098.5	1,010.6	18.5	0.7	991.5	277.5	234.7	2.4	40.4	-	15.7	381.5	15.9	397.3
July	2,098.8	1,004.4	18.4	0.7	985.4	277.1	234.9	2.5	39.8	-	15.4	385.6	16.1	400.1
Aug.	2,147.1	1,048.3	18.4	0.7	1,029.2	279.0	236.8	2.4	39.8	-	15.5	456.5	16.1	331.8
Sep. (p)	2,473.4	1,342.5	18.5	0.7	1,323.3	278.9	237.4	2.4	39.1	-	14.7	482.4	16.0	338.8
	MFIs excluding the Eurosystem													
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	29,446.8	16,904.9	956.1	10,159.8	5,789.0	3,880.9	1,194.1	949.8	1,737.0	93.5	1,296.2	4,872.9	206.0	2,192.4
2008 Q1	30,229.2	17,251.6	958.0	10,456.3	5,837.3	4,035.2	1,215.7	1,004.0	1,815.4	100.5	1,312.3	4,974.2	198.4	2,357.0
2008 Apr.	30,533.1	17,439.2	971.0	10,533.1	5,935.2	4,096.1	1,224.2	1,032.0	1,839.9	99.8	1,371.9	5,075.6	199.1	2,251.2
May	30,897.6	17,618.7	963.3	10,598.0	6,057.4	4,172.7	1,227.4	1,056.3	1,889.1	98.7	1,384.2	5,059.9	199.7	2,363.6
June	30,760.6	17,638.4	975.7	10,660.6	6,002.0	4,193.1	1,219.4	1,082.4	1,891.2	98.4	1,309.5	4,895.7	201.4	2,424.2
July	30,773.1	17,695.2	977.3	10,714.5	6,003.4	4,243.7	1,226.8	1,099.5	1,917.4	97.9	1,329.7	4,932.3	201.7	2,272.5
Aug.	31,030.8	17,740.6	970.1	10,722.8	6,047.8	4,288.3	1,228.6	1,127.4	1,932.3	98.5	1,325.6	5,039.0	202.1	2,336.6
Sep. (p)	31,538.1	18,140.3	979.6	10,819.1	6,341.6	4,189.1	1,191.0	1,098.4	1,899.7	100.4	1,326.4	5,117.6	203.6	2,460.8

2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents				Money market fund shares/ units [3]	Debt securities issued [4]	Capital and reserves	External liabilities	Remaining liabilities
			Total	Central government	Other general government/ other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11
	Eurosystem										
2006	1,558.2	647.0	431.6	33.7	15.9	382.0	-	0.1	208.6	35.3	235.6
2007	2,046.1	697.0	714.7	23.9	19.1	671.8	-	0.1	238.0	66.0	330.3
2008 Q1	2,017.8	681.9	703.2	60.4	20.8	622.0	-	0.1	246.5	70.3	315.9
2008 Apr.	2,012.4	690.5	682.9	66.9	23.1	592.9	-	0.1	237.9	81.4	319.7
May	2,009.4	692.8	656.3	44.4	25.0	586.9	-	0.1	239.1	95.6	325.5
June	2,098.5	699.6	733.2	55.2	24.6	653.3	-	0.1	240.7	98.7	326.2
July	2,098.8	707.8	720.9	61.3	17.5	642.1	-	0.1	242.5	102.1	325.5
Aug.	2,147.1	704.8	766.9	67.5	14.8	684.7	-	0.1	243.8	178.8	252.7
Sep. (p)	2,473.4	705.4	932.3	51.3	17.7	863.3	-	0.1	264.4	285.0	286.2
	MFIs excluding the Eurosystem										
2006	25,950.2	-	13,257.2	124.2	7,890.6	5,242.4	698.3	4,247.6	1,449.7	3,991.1	2,306.2
2007	29,446.8	-	15,082.4	127.1	8,865.9	6,089.4	754.1	4,645.2	1,678.9	4,533.2	2,753.0
2008 Q1	30,229.2	-	15,299.2	139.6	9,010.7	6,148.8	843.0	4,683.7	1,713.7	4,763.6	2,926.1
2008 Apr.	30,533.1	-	15,479.2	130.7	9,100.4	6,248.1	852.1	4,712.2	1,721.5	4,929.1	2,839.0
May	30,897.6	-	15,653.5	129.6	9,171.7	6,352.2	854.8	4,793.8	1,727.8	4,967.0	2,900.6
June	30,760.6	-	15,659.8	155.9	9,216.2	6,287.7	831.7	4,808.4	1,714.8	4,790.1	2,955.9
July	30,773.1	-	15,649.0	119.6	9,232.2	6,297.1	840.8	4,854.5	1,736.0	4,829.9	2,862.9
Aug.	31,030.8	-	15,726.8	119.3	9,255.6	6,351.9	855.5	4,878.7	1,740.7	4,939.8	2,889.2
Sep. (p)	31,538.1	-	16,208.8	140.3	9,325.4	6,743.1	827.8	4,864.8	1,760.3	4,884.1	2,992.3

Source: ECB.

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

2.2 Consolidated balance sheet of euro area MFIs [1]

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

1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
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	22,330.8	11,134.3	973.9	10,160.4	2,371.0	1,419.2	951.8	884.3	5,246.5	221.1	2,473.5
2008 Q1	23,000.9	11,434.3	977.4	10,457.0	2,457.9	1,451.7	1,006.3	870.8	5,357.5	213.6	2,666.7
2008 Apr.	23,185.5	11,523.5	989.8	10,533.7	2,493.8	1,459.3	1,034.5	925.7	5,450.9	215.1	2,576.4
May	23,375.8	11,580.7	982.1	10,598.6	2,522.3	1,463.6	1,058.7	918.7	5,436.5	215.7	2,701.9
June	23,323.2	11,655.5	994.2	10,661.3	2,539.1	1,454.2	1,084.9	860.3	5,277.2	217.3	2,773.8
July	23,312.4	11,710.9	995.7	10,715.2	2,563.6	1,461.7	1,102.0	878.6	5,317.9	217.8	2,623.6
Aug.	23,520.3	11,712.0	988.5	10,723.4	2,595.2	1,465.4	1,129.8	879.8	5,495.5	218.2	2,619.7
Sep. (p)	23,794.9	11,817.8	998.0	10,819.7	2,529.2	1,428.4	1,100.8	877.1	5,599.9	219.6	2,751.4
	Transactions										
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	2,593.8	1,016.7	-9.7	1,026.4	229.5	-46.8	276.3	60.1	792.5	-0.5	495.4
2008 Q2	359.9	232.9	16.7	216.1	98.0	16.0	82.0	-3.9	-71.1	3.7	100.3
Q3 (p)	271.8	145.6	3.5	142.1	-23.6	-36.0	12.4	24.2	74.6	2.1	48.8
2008 Apr.	179.6	93.1	12.2	80.9	40.0	11.3	28.7	53.9	82.7	1.5	-91.5
May	188.6	59.2	-7.7	66.9	32.4	8.6	23.8	-6.3	-21.0	0.6	123.8
June	-8.4	80.5	12.2	68.3	25.6	-3.9	29.5	-51.4	-132.7	1.6	68.0
July	-22.0	58.1	1.5	56.6	20.0	3.7	16.3	19.7	31.1	0.4	-151.2
Aug.	107.2	-10.0	-7.5	-2.5	23.8	-0.6	24.3	0.7	18.8	0.4	73.5
Sep. (p)	186.5	97.5	9.5	88.0	-67.4	-39.2	-28.2	3.9	24.7	1.3	126.6

2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units [2]	Debt securities issued [3]	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2006	19,723.8	592.2	158.0	7,906.5	614.6	2,587.8	1,280.8	4,026.5	2,541.8	15.6
2007	22,330.8	638.5	151.0	8,885.0	660.4	2,866.8	1,487.6	4,599.2	3,083.3	-41.2
2008 Q1	23,000.9	632.9	200.0	9,031.5	742.2	2,828.1	1,502.5	4,833.9	3,242.0	-12.3
2008 Apr.	23,185.5	641.3	197.6	9,123.5	752.0	2,831.1	1,496.6	5,010.4	3,158.7	-26.1
May	23,375.8	645.7	174.0	9,196.8	755.8	2,863.4	1,484.9	5,062.6	3,226.2	-33.8
June	23,323.2	652.0	211.1	9,240.8	733.0	2,876.9	1,490.6	4,888.8	3,282.1	-52.4
July	23,312.4	658.7	180.9	9,249.7	742.5	2,897.4	1,511.9	4,932.0	3,188.4	-49.6
Aug.	23,520.3	656.0	186.8	9,270.4	756.7	2,906.7	1,523.2	5,118.6	3,141.8	-40.4
Sep. (p)	23,794.9	657.1	191.5	9,343.1	727.0	2,926.1	1,560.6	5,169.1	3,278.5	-58.5
	Transactions									
2006	1,997.5	59.4	-15.2	683.7	27.6	285.5	57.4	601.6	252.2	45.3
2007	2,593.8	45.8	-13.3	835.1	54.5	270.2	163.1	778.8	467.6	-8.1
2008 Q2	359.9	19.2	10.8	208.0	-8.9	53.1	8.0	55.9	48.7	-35.1
Q3 (p)	271.8	5.1	-19.6	74.4	-8.0	11.3	68.6	49.0	132.9	-42.0
2008 Apr.	179.6	8.5	-2.4	88.7	10.4	1.9	6.1	155.7	-73.7	-15.7
May	188.6	4.4	-24.0	71.3	3.9	31.6	-7.6	48.9	66.0	-5.9
June	-8.4	6.3	37.1	48.0	-23.2	19.6	9.5	-148.7	56.4	-13.5
July	-22.0	6.7	-30.2	3.6	8.1	20.9	21.5	35.6	-91.8	3.7
Aug.	107.2	-2.7	5.8	8.1	14.2	-9.9	10.9	27.1	64.6	-11.0
Sep. (p)	186.5	1.1	4.8	62.7	-30.3	0.2	36.2	-13.6	160.1	-34.6

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.

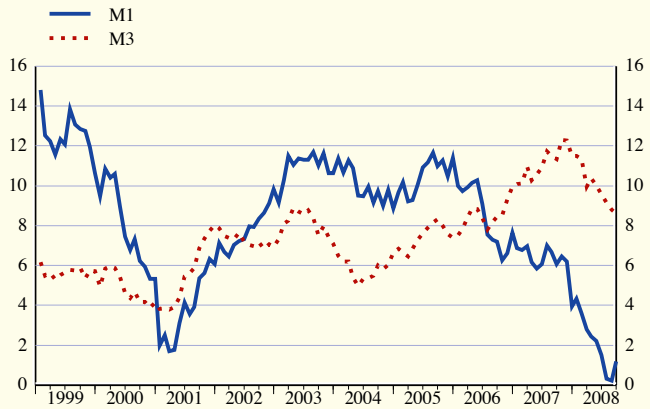
2.3 Monetary statistics [1]

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

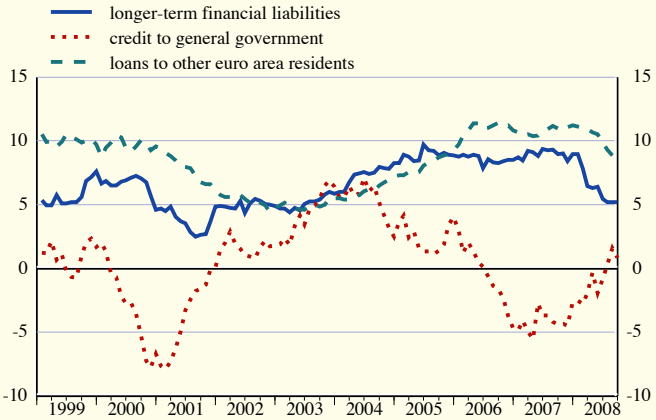
1. Monetary aggregates [2] and counterparts

	M1	M2-M1	M2	M3-M2	M3	M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents	Loans	Net external assets [3]
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
2006	3,685.4	2,954.2	6,639.6	1,101.5	7,741.1	-	5,434.1	2,321.3	10,644.4	9,171.5	634.3
2007	3,832.7	3,507.2	7,339.9	1,310.2	8,650.1	-	5,977.8	2,417.2	12,027.2	10,176.4	627.1
2008 Q1	3,843.6	3,674.0	7,517.6	1,337.8	8,855.4	-	5,972.2	2,420.6	12,335.5	10,460.4	541.6
2008 Apr.	3,839.2	3,762.1	7,601.3	1,341.2	8,942.5	-	5,997.3	2,434.6	12,424.5	10,524.0	473.6
May	3,850.6	3,792.0	7,642.6	1,346.7	8,989.3	-	6,011.4	2,434.5	12,521.3	10,596.6	413.4
June	3,843.4	3,825.6	7,668.9	1,357.0	9,025.9	-	6,009.7	2,432.3	12,566.5	10,632.1	379.7
July	3,832.1	3,904.1	7,736.3	1,362.4	9,098.7	-	6,049.9	2,450.8	12,662.8	10,680.8	371.6
Aug.	3,844.7	3,948.1	7,792.8	1,361.9	9,154.7	-	6,099.8	2,466.8	12,795.0	10,754.3	383.3
Sep. (p)	3,879.4	3,977.1	7,856.5	1,367.5	9,224.0	-	6,137.2	2,440.3	12,824.1	10,817.8	427.3
	Transactions										
2006	261.2	310.5	571.7	130.9	702.6	-	427.7	-114.7	1,105.8	898.6	200.6
2007	145.4	525.4	670.7	220.0	890.7	-	489.5	-60.1	1,369.9	1,031.7	13.1
2008 Q2	-1.5	153.0	151.5	22.2	173.7	-	57.7	25.0	252.8	183.5	-153.6
Q3 (p)	27.0	137.1	164.1	11.7	175.8	-	80.3	-2.6	245.2	169.2	30.7
2008 Apr.	-5.1	87.3	82.2	4.0	86.2	-	34.2	17.4	92.6	67.7	-57.9
May	9.6	29.8	39.4	4.8	44.2	-	18.3	4.3	99.0	74.6	-63.5
June	-6.0	35.9	29.8	13.5	43.3	-	5.3	3.3	61.2	41.2	-32.1
July	-13.0	75.4	62.4	5.5	67.9	-	38.7	14.8	99.5	51.4	-10.2
Aug.	8.5	37.9	46.4	0.3	46.7	-	27.2	11.4	117.4	62.7	12.6
Sep. (p)	31.5	23.8	55.4	5.8	61.2	-	14.4	-28.8	28.3	55.1	28.4
	Growth rates										
2006 Dec.	7.6	11.7	9.4	13.3	10.0	9.8	8.5	-4.7	11.6	10.8	200.6
2007 Dec.	3.9	17.7	10.1	20.0	11.5	11.8	9.0	-2.6	12.8	11.2	13.1
2008 Mar.	2.8	18.3	9.8	11.1	10.0	10.6	6.4	-1.9	12.3	10.9	-157.4
2008 Apr.	2.4	19.7	10.3	10.9	10.4	10.1	6.3	-0.3	12.1	10.7	-185.8
May	2.2	19.4	10.1	9.8	10.0	10.0	6.4	-1.9	12.0	10.5	-244.4
June	1.5	19.0	9.5	9.9	9.6	9.6	5.4	-0.8	11.2	9.9	-286.2
July	0.3	19.4	9.1	9.5	9.2	9.2	5.2	0.3	11.0	9.3	-300.3
Aug.	0.2	18.9	8.9	8.4	8.8	8.9	5.2	1.6	10.8	8.8	-253.3
Sep. (p)	1.2	17.7	8.9	7.1	8.6	.	5.2	0.8	10.1	8.5	-189.7

C1 Monetary aggregates [1]
(annual growth rates; seasonally adjusted)



C2 Counterparts [1]
(annual growth rates; seasonally adjusted)



Source: ECB.
1) Data refer to the changing composition of the euro area. For further information, see the General notes.
2) 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).
3) Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated.

2.3 Monetary statistics [1)]

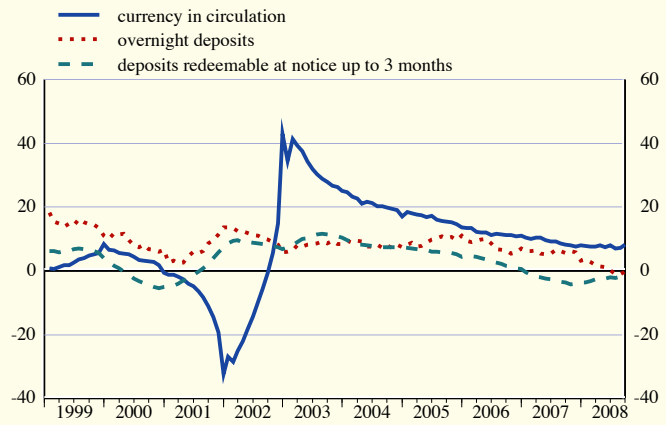
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	Currency in circulation	Overnight deposits	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Repos	Money market fund shares/units	Debt securities up to 2 years	Debt securities over 2 years	Deposits redeemable at notice over 3 months	Deposits with agreed maturity over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
2006	578.4	3,107.0	1,402.2	1,552.0	266.1	636.9	198.5	2,399.6	102.2	1,655.0	1,277.3
2007	625.8	3,206.9	1,971.8	1,535.3	307.4	686.6	316.3	2,561.0	119.6	1,813.5	1,483.7
2008 Q1	638.0	3,205.6	2,132.4	1,541.5	308.7	746.6	282.5	2,545.9	119.4	1,813.7	1,493.1
2008 Apr.	644.8	3,194.5	2,219.0	1,543.1	323.7	743.8	273.7	2,557.6	118.7	1,817.9	1,503.1
May	643.7	3,206.8	2,255.4	1,536.6	316.8	739.5	290.4	2,566.7	117.6	1,829.7	1,497.4
June	649.6	3,193.8	2,288.9	1,536.7	340.6	728.0	288.4	2,572.1	116.9	1,832.8	1,488.0
July	649.7	3,182.4	2,374.1	1,530.1	346.4	726.7	289.4	2,595.1	116.4	1,833.3	1,505.1
Aug.	653.7	3,191.0	2,420.3	1,527.8	336.6	744.5	280.8	2,619.8	115.4	1,841.1	1,523.6
Sep. [p]	662.9	3,216.5	2,455.3	1,521.8	344.4	732.2	290.9	2,631.1	114.2	1,836.9	1,554.9
	Transactions										
2006	57.3	203.9	301.2	9.3	30.9	30.0	70.0	217.2	15.4	138.1	57.0
2007	46.9	98.4	581.3	-55.9	43.3	58.6	118.0	152.3	9.9	164.5	162.8
2008 Q2	11.6	-13.1	157.8	-4.8	31.9	-18.2	8.5	27.8	-2.5	17.6	14.8
Q3 [p]	13.3	13.7	152.9	-15.8	3.6	2.2	5.9	17.7	-2.7	-0.2	65.5
2008 Apr.	6.8	-11.9	85.9	1.5	14.9	-2.2	-8.7	10.4	-0.7	2.5	22.0
May	-1.0	10.7	36.2	-6.5	-6.9	-4.2	15.8	9.3	-1.2	11.6	-1.6
June	5.9	-11.9	35.7	0.1	23.9	-11.8	1.4	8.1	-0.7	3.5	-5.6
July	0.1	-13.1	82.6	-7.2	5.7	-2.7	2.5	21.8	-0.5	0.1	17.3
Aug.	4.0	4.5	40.3	-2.4	-9.9	17.8	-7.6	4.6	-1.0	5.5	18.1
Sep. [p]	9.2	22.4	30.0	-6.2	7.7	-12.9	11.0	-8.7	-1.2	-5.8	30.1
	Growth rates										
2006 Dec.	11.0	7.0	27.2	0.6	13.2	4.9	54.4	9.9	17.8	9.1	4.7
2007 Dec.	8.1	3.2	41.4	-3.6	16.3	9.2	59.4	6.3	9.6	9.9	12.5
2008 Mar.	7.7	1.9	39.4	-2.5	11.4	8.1	18.1	3.9	3.5	7.1	10.5
2008 Apr.	8.0	1.4	41.4	-2.2	17.8	6.8	14.1	3.6	1.9	6.5	11.5
May	7.5	1.2	40.5	-2.4	17.1	4.8	15.2	3.3	0.5	6.2	12.9
June	8.0	0.3	38.8	-2.0	18.4	2.0	22.0	2.7	-0.8	5.5	10.9
July	7.1	-1.0	38.9	-2.1	17.2	1.0	24.5	3.2	-2.2	4.5	10.5
Aug.	7.2	-1.1	37.2	-1.8	16.7	4.1	10.1	2.7	-3.4	4.6	11.3
Sep. [p]	8.2	-0.2	34.4	-2.0	16.5	3.6	5.5	2.3	-5.7	4.0	13.0

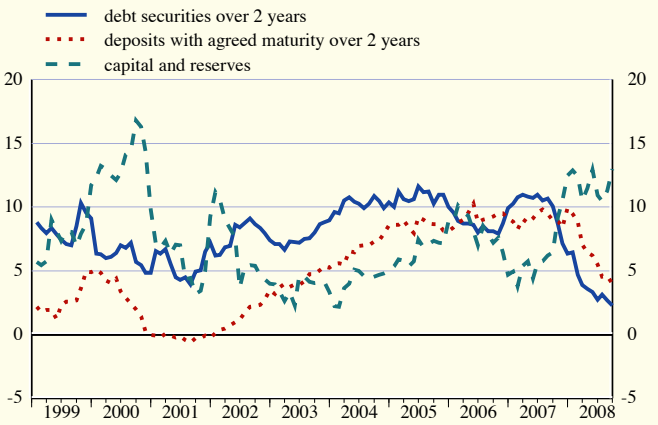
C3 Components of monetary aggregates [1)]

(annual growth rates; seasonally adjusted)



C4 Components of longer-term financial liabilities [1)]

(annual growth rates; seasonally adjusted)



Source: ECB.

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

2.4 MFI loans, breakdown [1), 2)]

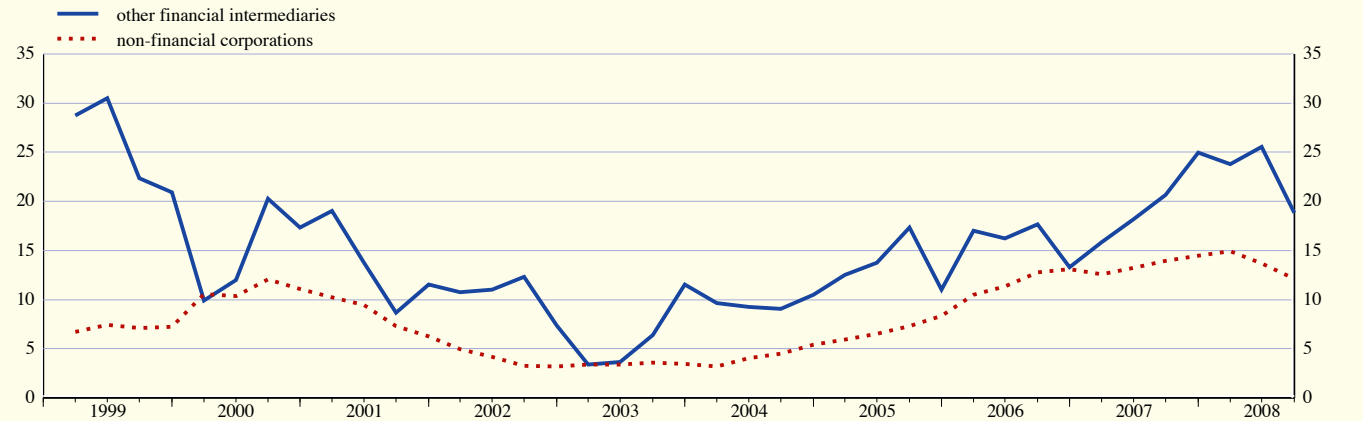
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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

	Insurance corporations and pension funds		Other financial intermediaries [4)]		Non-financial corporations			
	Total		Total		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
		Up to 1 year		Up to 1 year				
	1	2	3	4	5	6	7	8
	Outstanding amounts							
2006	82.8	55.2	696.0	420.6	3,844.5	1,137.9	707.1	1,999.5
2007	95.1	70.6	867.9	526.3	4,388.7	1,276.5	858.9	2,253.3
2008 Q1	102.8	79.0	943.3	595.0	4,547.6	1,328.9	898.3	2,320.4
2008 Apr.	101.0	76.4	968.7	618.2	4,590.8	1,337.7	904.3	2,348.7
May	104.4	80.2	988.9	632.7	4,618.6	1,338.3	910.9	2,369.5
June	103.3	79.3	997.3	625.2	4,671.0	1,365.4	925.7	2,379.8
July	101.1	78.0	1,000.3	612.1	4,708.9	1,375.6	931.9	2,401.4
Aug.	99.9	76.1	987.1	596.4	4,722.1	1,361.7	943.2	2,417.3
Sep. (p)	100.6	77.0	1,018.2	621.2	4,762.2	1,375.3	952.4	2,434.4
	Transactions							
2006	18.1	13.9	81.9	57.7	446.2	100.5	123.1	222.6
2007	14.0	15.8	175.4	113.5	556.3	144.9	155.7	255.7
2008 Q2	0.5	0.3	52.9	28.8	131.3	38.7	31.6	61.1
Q3 (p)	-3.3	-2.6	13.3	-9.5	83.7	7.1	26.6	50.0
2008 Apr.	-1.9	-2.7	23.0	21.0	47.6	10.5	8.6	28.5
May	3.4	3.8	20.1	14.4	28.6	0.8	7.0	20.9
June	-1.1	-0.9	9.8	-6.6	55.1	27.4	16.1	11.6
July	-2.3	-1.2	1.4	-13.8	41.1	10.5	6.9	23.7
Aug.	-1.5	-2.2	-16.4	-18.4	7.0	-16.3	11.3	12.0
Sep. (p)	0.5	0.8	28.3	22.7	35.6	12.8	8.4	14.3
	Growth rates							
2006 Dec.	28.0	33.3	13.3	15.6	13.1	9.7	20.8	12.4
2007 Dec.	16.8	28.5	25.0	27.0	14.5	12.7	22.0	12.8
2008 Mar.	6.3	10.8	23.8	24.0	15.0	14.0	22.3	12.9
2008 Apr.	-2.7	-3.4	23.1	24.5	14.9	13.1	21.8	13.4
May	-2.5	-2.2	26.6	30.0	14.2	12.5	19.9	13.1
June	-4.8	-4.6	25.5	25.9	13.7	11.9	20.0	12.4
July	-7.8	-7.4	24.0	22.2	12.9	11.1	18.6	11.9
Aug.	-8.5	-10.8	20.7	18.2	12.6	10.8	18.4	11.6
Sep. (p)	-9.2	-12.3	18.9	15.6	12.1	10.1	17.5	11.3

C5 Loans to financial intermediaries and non-financial corporations [2)]

(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.
3) 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.
4) This category includes investment funds.

2.4 MFI loans, breakdown [1), 2)]

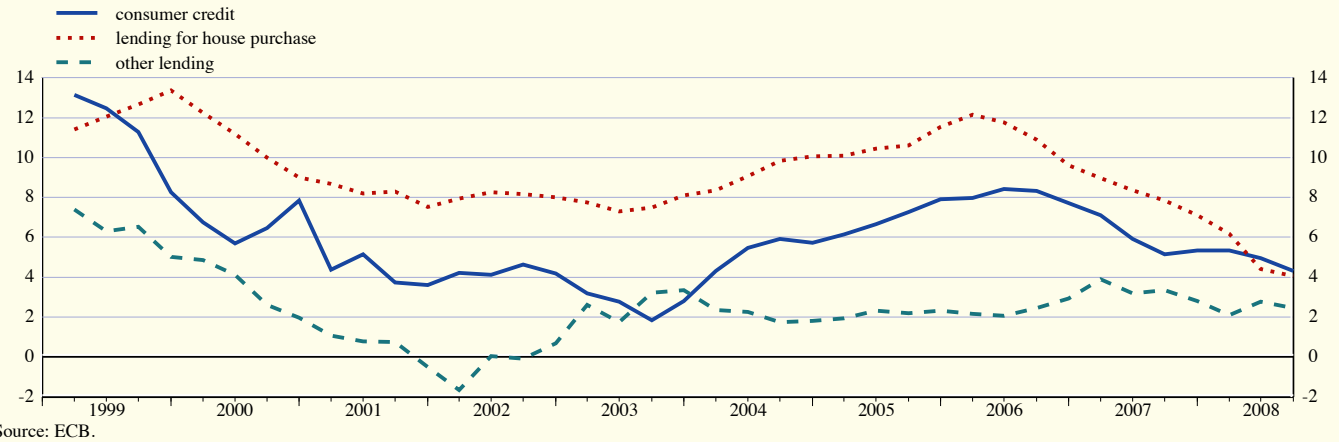
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

2. Loans to households [3)]

	Total	Consumer credit				Lending for house purchase				Other lending			
		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Outstanding amounts												
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	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 Q1	4,862.7	623.9	136.5	203.0	284.4	3,478.0	16.1	73.3	3,388.7	760.7	147.0	105.3	508.5
2008 Apr.	4,872.6	627.9	136.1	204.6	287.2	3,486.3	16.1	73.1	3,397.1	758.4	145.6	102.6	510.3
May	4,886.0	628.5	136.3	204.0	288.2	3,498.8	15.8	73.1	3,409.9	758.6	144.3	102.1	512.2
June	4,889.0	635.7	139.8	203.7	292.2	3,484.8	15.8	73.2	3,395.7	768.6	152.7	102.5	513.4
July	4,904.2	636.1	139.1	202.9	294.1	3,503.7	15.8	73.4	3,414.5	764.4	146.8	102.2	515.4
Aug.	4,913.7	633.5	137.3	202.1	294.2	3,515.9	15.9	73.1	3,426.8	764.3	146.8	100.7	516.8
Sep. [p]	4,938.2	636.6	140.4	201.4	294.9	3,533.9	16.5	72.7	3,444.8	767.6	150.0	100.2	517.4
	Transactions												
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	20.8	1.7	4.4	14.7
2008 Q2	31.3	11.9	3.3	1.0	7.5	8.6	-0.3	0.0	8.9	10.9	6.2	-1.8	6.5
Q3 [p]	48.4	1.3	0.7	-2.2	2.8	47.4	0.6	0.0	46.7	-0.3	-2.9	-2.0	4.6
2008 Apr.	12.1	4.4	-0.3	1.7	3.0	8.9	0.0	-0.2	9.1	-1.1	-1.3	-2.1	2.3
May	14.7	0.4	0.3	-0.6	0.7	13.1	-0.2	0.0	13.3	1.1	-1.2	-0.2	2.5
June	4.5	7.1	3.4	-0.2	3.8	-13.4	0.0	0.2	-13.6	10.9	8.7	0.5	1.7
July	16.4	0.8	-0.6	-0.6	2.0	19.5	0.0	0.1	19.4	-3.9	-5.8	-0.3	2.2
Aug.	8.4	-2.6	-1.9	-0.8	0.1	11.0	0.1	-0.2	11.1	0.0	-0.2	-1.2	1.4
Sep. [p]	23.5	3.1	3.2	-0.8	0.7	16.9	0.6	0.1	16.2	3.6	3.1	-0.5	1.0
	Growth rates												
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 Dec.	6.2	5.3	2.7	0.5	10.7	7.1	6.1	3.2	7.2	2.8	1.2	4.4	3.0
2008 Mar.	5.4	5.4	3.9	-0.1	10.4	6.2	2.5	2.1	6.3	2.1	-0.2	4.3	2.3
2008 Apr.	5.2	5.4	2.6	0.8	10.3	6.0	4.9	1.7	6.1	2.1	-0.2	1.9	2.8
May	4.9	5.0	2.9	-0.1	10.1	5.6	2.3	1.4	5.7	2.0	-0.4	1.3	2.9
June	4.2	4.9	4.0	-0.8	9.9	4.4	-1.0	1.0	4.5	2.8	2.0	0.7	3.4
July	4.0	4.4	2.7	-1.3	9.6	4.3	0.0	0.6	4.4	2.5	0.6	-0.1	3.5
Aug.	3.9	4.0	2.0	-1.4	9.1	4.1	0.2	0.2	4.2	2.5	2.1	-1.5	3.4
Sep. [p]	3.8	4.3	4.9	-1.2	8.2	4.0	2.3	-0.1	4.1	2.5	2.4	-2.1	3.4

C6 Loans to households [2)]

(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.
3) 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)]

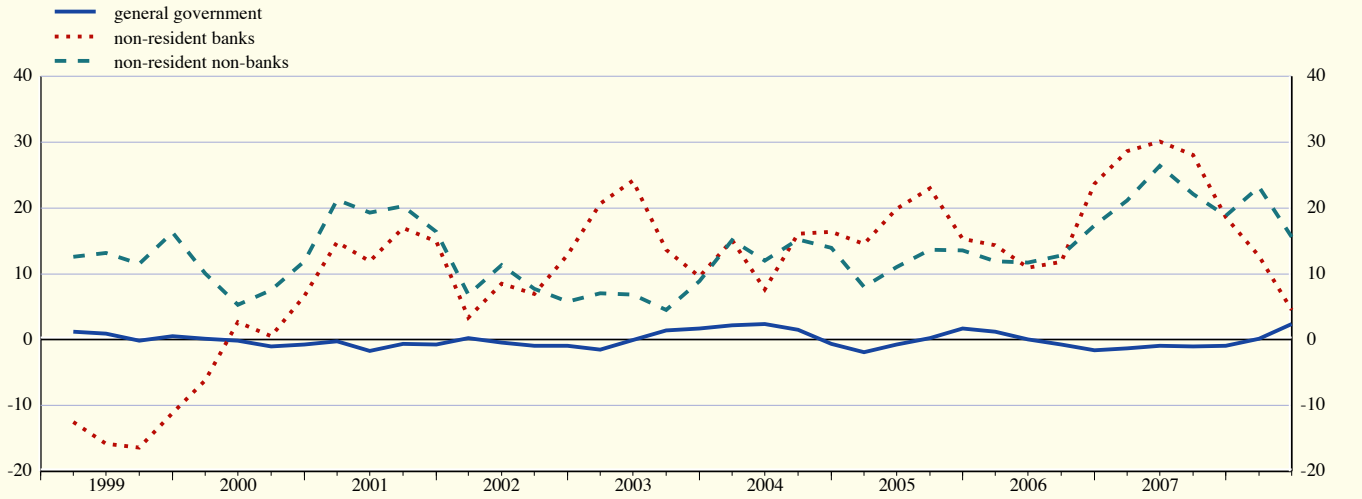
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

3. Loans to government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [3)]	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2005	826.9	125.1	246.8	425.8	29.2	2,485.2	1,722.1	763.1	66.0	697.1
2006	810.5	104.1	232.5	448.1	25.8	2,924.3	2,061.0	863.4	63.2	800.2
2007 Q3	794.0	92.7	213.9	446.0	41.4	3,302.8	2,354.1	948.7	61.3	887.4
Q4	956.1	213.4	217.6	495.7	29.4	3,295.2	2,337.8	957.4	59.8	897.5
2008 Q1	958.0	210.6	212.8	497.3	37.2	3,413.5	2,394.8	1,018.7	61.6	957.1
Q2 [(p)]	975.7	218.9	215.2	501.9	39.7	3,310.8	2,296.8	1,013.5	60.3	953.2
	Transactions									
2006	-13.4	-17.6	-14.3	21.9	-3.4	532.5	402.9	129.5	-0.1	129.6
2007	-7.7	-4.5	-13.0	6.2	3.5	542.0	382.0	160.1	0.3	159.8
2007 Q3	-4.2	-2.8	-5.0	-0.2	3.8	77.5	57.5	20.0	1.2	18.7
Q4	8.0	7.1	3.8	9.2	-12.0	56.8	23.2	33.7	-0.1	33.8
2008 Q1	0.7	-3.3	-4.8	1.0	7.8	215.4	121.6	93.6	3.0	90.6
Q2 [(p)]	17.7	8.2	2.1	4.8	2.5	-99.8	-96.6	-3.6	-1.3	-2.3
	Growth rates									
2005 Dec.	1.7	-4.3	-3.2	5.4	22.9	14.8	15.3	13.6	2.0	14.9
2006 Dec.	-1.6	-14.0	-5.8	5.1	-11.6	21.8	23.7	17.4	-0.1	19.1
2007 Sep.	-1.0	-7.8	-6.3	1.9	16.0	26.3	28.0	22.1	-2.0	24.2
Dec.	-1.0	-4.3	-5.6	1.4	13.7	18.7	18.6	18.8	0.5	20.3
2008 Mar.	0.1	0.9	-5.1	1.6	19.5	15.7	12.7	23.2	10.2	24.1
June [(p)]	2.4	6.8	-1.8	3.2	5.6	7.7	4.5	15.7	4.7	16.4

C7 Loans to government and non-euro area residents [2)]

(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.
3) 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)]

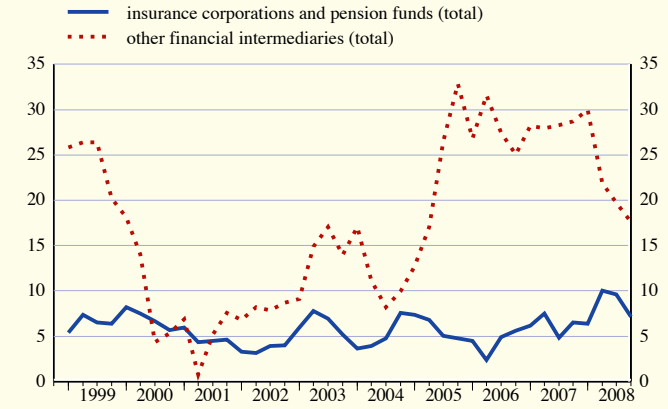
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

1. Deposits by financial intermediaries

	Insurance corporations and pension funds							Other financial intermediaries [3)]						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Outstanding amounts													
2006	650.0	70.2	57.1	495.4	1.0	1.4	24.9	1,140.3	283.1	251.8	469.4	10.6	0.2	125.1
2007	687.8	71.1	68.9	525.1	0.8	1.1	20.9	1,472.7	312.3	348.0	652.8	12.2	0.3	147.1
2008 Q1	723.3	81.8	83.9	532.6	1.6	1.6	21.9	1,526.2	333.2	361.1	648.8	13.2	0.2	169.6
2008 Apr.	722.4	74.9	87.7	534.2	1.4	1.6	22.6	1,560.4	312.4	395.6	656.3	14.1	0.2	181.8
May	718.7	69.6	88.8	535.6	1.3	1.6	21.7	1,580.1	321.4	391.2	671.9	12.7	0.2	182.6
June	717.4	73.5	83.6	537.5	1.4	1.6	19.8	1,600.0	335.6	386.5	682.4	12.0	0.2	183.2
July	716.8	69.6	86.0	538.3	1.3	1.6	20.1	1,604.4	299.8	428.9	683.1	14.1	0.2	178.4
Aug.	713.2	66.6	85.5	538.7	1.2	1.6	19.5	1,614.5	287.1	448.2	681.8	12.9	0.1	184.3
Sep. (p)	726.7	75.6	90.2	537.7	1.2	1.6	20.3	1,643.8	323.0	446.8	674.5	11.7	0.1	187.6
	Transactions													
2006	37.9	2.7	5.5	25.6	-0.2	0.0	4.4	249.2	45.5	67.8	130.5	0.3	0.1	4.9
2007	41.4	0.8	11.7	33.4	-0.2	-0.3	-4.1	341.1	32.7	98.9	183.7	1.7	0.1	24.1
2008 Q2	-5.9	-8.3	-0.2	4.9	-0.2	0.0	-2.1	70.8	0.7	25.3	32.5	-1.2	0.0	13.6
Q3 (p)	8.6	1.9	6.1	0.3	-0.2	0.0	0.5	31.5	-16.2	55.9	-11.8	-0.6	-0.1	4.2
2008 Apr.	-1.0	-6.9	3.8	1.6	-0.2	0.0	0.7	31.8	-21.1	34.1	5.7	0.8	0.0	12.2
May	-3.7	-5.3	1.1	1.5	-0.1	0.0	-0.9	17.5	7.1	-4.4	15.5	-1.4	0.0	0.8
June	-1.2	3.9	-5.1	1.9	0.1	0.0	-1.9	21.5	14.7	-4.5	11.3	-0.6	0.0	0.7
July	-0.7	-3.9	2.3	0.8	-0.1	0.0	0.3	2.4	-36.5	41.3	0.3	2.1	0.0	-4.8
Aug.	-4.1	-3.1	-0.7	0.4	-0.1	0.0	-0.6	4.3	-14.4	17.6	-3.3	-1.3	0.0	5.8
Sep. (p)	13.3	8.9	4.5	-0.9	0.0	0.0	0.8	24.8	34.7	-3.0	-8.7	-1.3	0.0	3.2
	Growth rates													
2006 Dec.	6.2	4.0	10.7	5.4	-16.3	-	21.2	28.2	19.5	36.8	38.9	2.9	-	4.0
2007 Dec.	6.4	1.1	20.5	6.8	-22.5	-	-16.3	30.0	11.5	39.5	39.1	16.0	-	19.0
2008 Mar.	10.0	12.6	41.8	6.6	-17.7	-	-4.3	21.9	6.3	36.5	26.5	17.6	-	13.4
2008 Apr.	8.7	6.6	37.5	6.3	-20.6	-	-7.3	22.9	2.6	44.4	23.9	24.2	-	20.8
May	9.3	6.5	45.5	6.0	-17.9	-	-5.3	21.9	2.6	44.0	22.2	11.5	-	21.5
June	9.6	13.2	42.2	5.7	-10.5	-	3.4	19.7	5.5	35.4	19.7	5.6	-	20.8
July	7.1	-4.1	38.3	5.5	-20.6	-	-3.2	17.9	-6.3	48.4	16.1	5.8	-	18.4
Aug.	7.4	8.4	23.4	5.6	-15.4	-	-5.9	18.6	-4.9	48.2	15.7	8.7	-	18.4
Sep. (p)	7.2	11.0	40.1	3.1	-20.1	-	-3.3	17.6	-3.1	45.1	16.1	-11.7	-	16.2

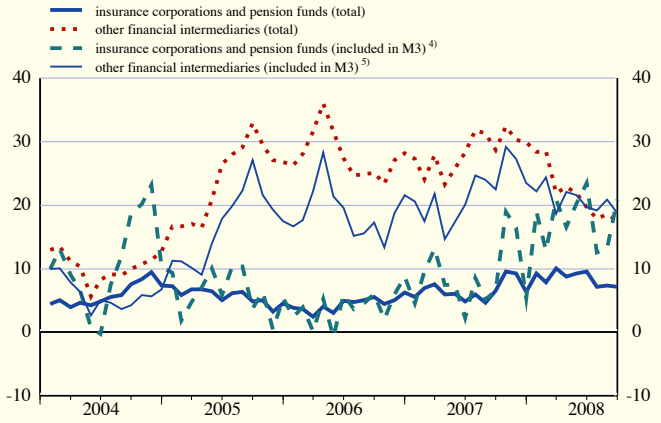
C8 Total deposits by sector [2)]

(annual growth rates)



C9 Total deposits and deposits included in M3 by sector [2)]

(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.
3) This category includes investment funds.
4) Covers deposits in columns 2, 3, 5 and 7.
5) Covers deposits in columns 9, 10, 12 and 14.

2.5 Deposits held with MFIs, breakdown [1), 2)]

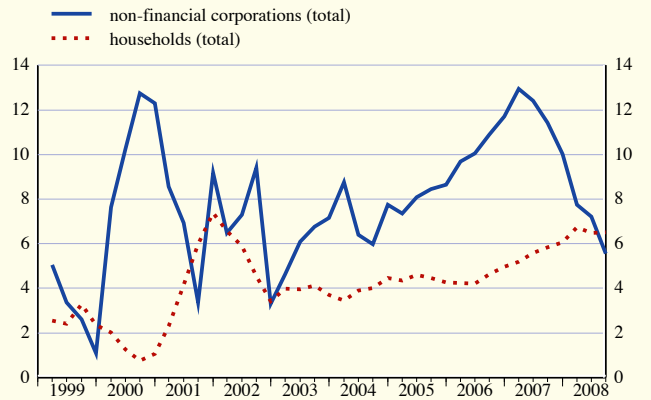
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

2. Deposits by non-financial corporations and households

	Non-financial corporations							Households [3)]						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Outstanding amounts													
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	1,470.6	882.1	474.6	59.6	29.2	1.4	23.7	4,989.0	1,777.7	994.5	561.1	1,457.6	111.1	87.1
2008 Q1	1,448.4	847.0	488.4	59.8	28.9	1.5	22.9	5,076.5	1,757.2	1,100.4	548.4	1,465.9	109.1	95.6
2008 Apr.	1,458.7	837.9	510.2	60.4	27.8	1.4	21.0	5,119.4	1,771.5	1,133.9	543.9	1,464.9	107.8	97.5
May	1,477.1	853.3	512.5	61.2	27.5	1.4	21.3	5,148.2	1,777.9	1,159.3	539.8	1,463.0	106.4	101.8
June	1,481.5	866.3	501.7	61.8	27.3	1.4	23.0	5,162.9	1,783.9	1,179.5	534.8	1,460.4	105.7	98.5
July	1,469.1	842.8	512.0	63.2	26.2	1.4	23.4	5,186.8	1,769.0	1,224.6	531.1	1,449.7	105.2	107.1
Aug.	1,472.6	839.5	518.6	63.5	25.9	1.4	23.7	5,195.5	1,744.9	1,256.4	530.0	1,449.4	104.1	110.8
Sep. (p)	1,493.3	872.8	505.6	63.0	25.6	1.4	25.0	5,201.9	1,750.5	1,272.9	526.2	1,441.2	103.1	108.0
	Transactions													
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
2008 Q2	33.8	19.6	14.0	1.7	-1.5	-0.1	0.1	87.1	26.6	79.9	-13.5	-5.5	-3.3	2.9
Q3 (p)	1.8	2.4	-1.0	0.6	-2.2	-0.1	2.0	34.2	-34.4	89.6	-8.6	-19.3	-2.6	9.5
2008 Apr.	9.9	-9.2	21.5	0.6	-1.0	-0.1	-1.9	42.6	13.9	33.5	-4.5	-1.0	-1.3	1.9
May	18.3	15.4	2.2	0.8	-0.3	0.0	0.3	28.7	6.4	25.4	-4.1	-1.8	-1.4	4.2
June	5.6	13.5	-9.7	0.3	-0.2	0.0	1.7	15.7	6.2	21.0	-5.0	-2.7	-0.6	-3.2
July	-15.6	-24.5	8.7	1.3	-1.5	0.0	0.5	23.8	-15.0	45.1	-3.7	-10.7	-0.5	8.6
Aug.	-0.1	-4.9	4.8	0.2	-0.3	0.0	0.2	6.1	-24.7	29.8	-1.2	-0.4	-1.1	3.6
Sep. (p)	17.5	31.9	-14.5	-0.9	-0.3	0.0	1.3	4.2	5.2	14.7	-3.7	-8.2	-1.0	-2.7
	Growth rates													
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 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 Mar.	7.7	2.0	29.3	-10.8	-29.0	-1.3	-15.3	6.7	1.4	45.5	-7.6	-2.1	2.7	25.2
2008 Apr.	8.6	0.6	34.7	-10.0	-28.5	-5.9	-14.2	7.0	1.1	45.9	-7.4	-1.8	1.2	28.4
May	8.0	1.3	31.0	-8.4	-29.2	-6.9	-21.0	7.2	1.3	45.8	-7.1	-1.7	0.1	29.3
June	7.2	0.8	28.3	-7.4	-26.5	-7.2	-13.0	6.5	-0.4	44.8	-7.3	-1.6	-1.1	26.8
July	6.1	0.4	23.2	-5.0	-28.0	-16.5	-8.3	6.9	-0.2	44.8	-7.2	-1.5	-2.2	29.8
Aug.	5.8	1.6	18.8	-5.0	-22.5	-16.9	-11.0	7.1	0.0	43.6	-6.8	-1.3	-3.6	27.4
Sep. (p)	5.6	2.9	14.1	-2.7	-22.8	-17.3	2.3	6.5	-0.6	40.9	-7.0	-1.3	-5.1	28.6

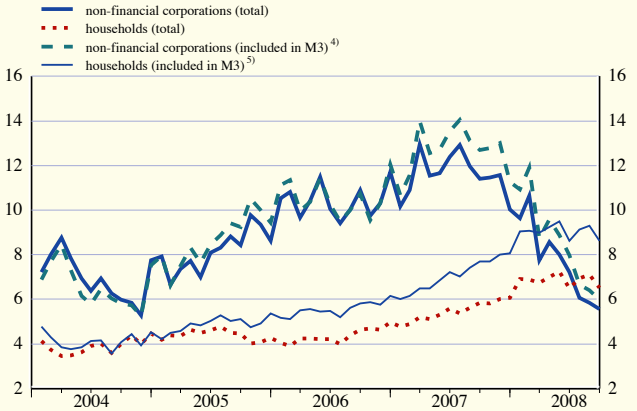
C10 Total deposits by sector [2)]

(annual growth rates)



C11 Total deposits and deposits included in M3 by sector [2)]

(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.
3) Including non-profit institutions serving households.
4) Covers deposits in columns 2, 3, 5 and 7.
5) Covers deposits in columns 9, 10, 12 and 14.

2.5 Deposits held with MFIs, breakdown [1), 2)]

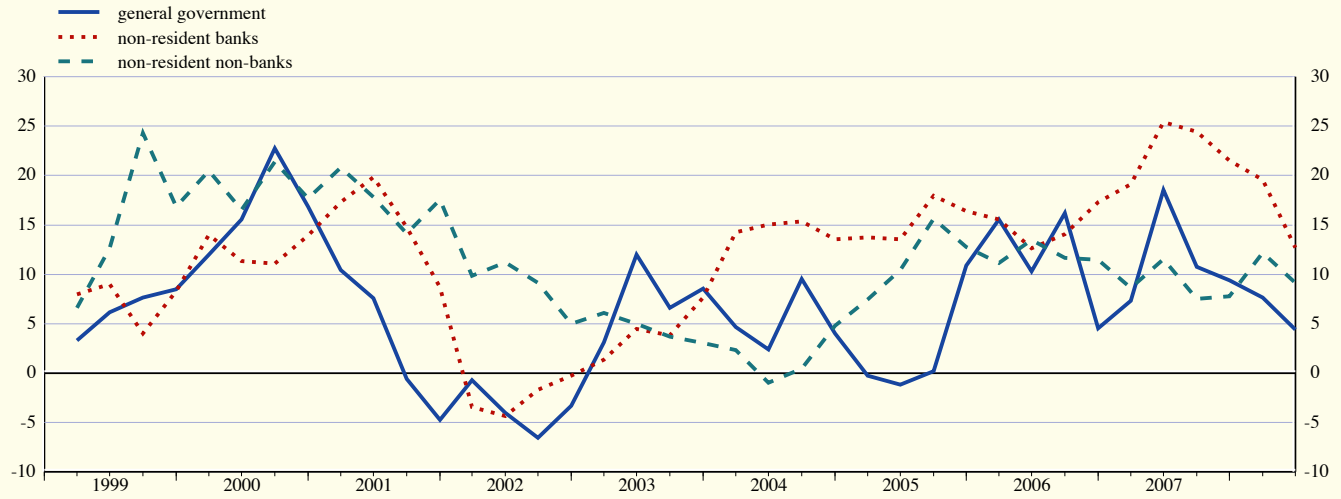
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

3. Deposits by government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [3)]	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2005	313.1	149.2	38.3	80.9	44.7	3,050.5	2,250.5	800.0	125.8	674.2
2006	329.0	124.2	45.4	90.8	68.6	3,429.0	2,557.1	871.9	128.6	743.3
2007 Q3	373.5	144.3	60.0	97.2	72.0	3,877.0	2,963.4	913.6	145.9	767.7
Q4	372.9	127.1	59.0	106.8	80.1	3,856.2	2,944.2	912.0	143.4	768.6
2008 Q1	375.9	139.6	49.6	107.6	79.1	4,039.8	3,075.7	964.2	131.1	833.0
Q2 [p)]	410.3	155.9	56.5	112.4	85.9	4,019.9	3,038.6	981.2	132.0	849.2
	Transactions									
2006	14.2	-24.5	7.0	7.8	23.9	476.6	385.8	90.8	6.6	84.2
2007	30.9	-3.1	13.6	8.9	11.5	614.6	547.2	67.4	20.2	47.2
2007 Q3	-7.3	-26.1	16.1	2.0	0.6	130.2	120.7	9.4	10.8	-1.4
Q4	-12.0	-21.9	-1.0	2.8	8.1	50.2	53.2	-3.0	-0.5	-2.5
2008 Q1	2.8	12.4	-9.3	0.6	-1.0	279.2	220.4	58.7	-8.4	67.1
Q2 [p)]	34.4	16.0	6.8	4.8	7.1	-17.7	-35.1	17.4	0.9	16.5
	Growth rates									
2005 Dec.	10.9	8.1	25.4	16.6	0.6	15.4	16.4	12.7	16.8	12.0
2006 Dec.	4.5	-16.5	18.4	9.6	53.5	15.8	17.3	11.5	5.3	12.6
2007 Sep.	10.7	-3.5	44.0	13.3	19.4	20.0	24.5	7.5	13.2	6.5
Dec.	9.4	-2.3	29.9	9.8	16.7	18.0	21.5	7.8	15.8	6.4
2008 Mar.	7.7	-3.7	18.1	13.3	16.5	17.8	19.6	12.2	5.5	13.3
June [p)]	4.4	-12.2	29.0	10.5	20.8	11.8	12.7	9.1	1.8	10.3

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

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

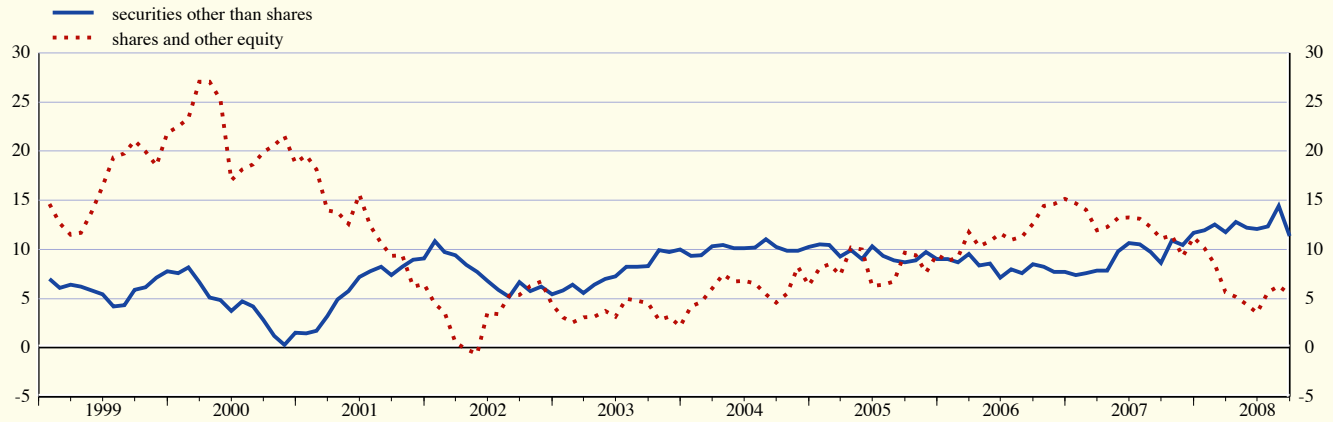
2.6 MFI holdings of securities, breakdown [1), 2)]

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

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts											
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	5,113.7	1,652.9	84.0	1,177.5	16.6	916.5	33.4	1,232.8	1,639.9	424.8	871.4	343.7
2008 Q1	5,300.0	1,728.0	87.5	1,200.4	15.4	958.2	45.8	1,264.8	1,606.3	453.2	859.1	294.0
2008 Apr.	5,382.4	1,748.0	91.9	1,208.1	16.0	983.0	49.0	1,286.3	1,670.7	458.3	913.7	298.7
May	5,477.7	1,790.0	99.1	1,212.7	14.7	1,007.1	49.1	1,304.9	1,683.2	477.5	906.7	298.9
June	5,484.6	1,792.7	98.5	1,204.3	15.1	1,034.3	48.1	1,291.5	1,600.8	460.4	849.1	291.3
July	5,551.5	1,814.2	103.2	1,211.7	15.0	1,050.8	48.7	1,307.8	1,621.7	462.0	867.7	291.9
Aug.	5,638.0	1,826.7	105.6	1,213.9	14.7	1,076.4	51.0	1,349.7	1,619.1	456.8	868.8	293.5
Sep. (p)	5,497.1	1,797.7	102.0	1,175.4	15.5	1,047.8	50.6	1,308.0	1,616.5	459.6	866.9	290.0
	Transactions											
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	164.5	52.0	60.0	52.5
2008 Q2	204.1	66.3	11.4	12.9	0.0	78.8	2.9	31.8	7.7	15.7	-3.9	-4.2
Q3 (p)	-46.2	6.7	-2.7	-35.0	-0.9	13.9	-1.4	-26.8	28.1	2.2	24.4	1.5
2008 Apr.	80.2	19.5	3.8	10.5	0.6	25.3	3.2	17.3	62.8	6.0	53.8	3.0
May	97.0	42.3	7.1	7.3	-1.3	23.8	0.0	17.8	14.4	21.0	-6.2	-0.4
June	26.8	4.5	0.5	-5.0	0.7	29.7	-0.3	-3.3	-69.4	-11.2	-51.4	-6.8
July	60.2	21.7	4.2	5.1	-0.2	15.8	0.4	13.1	23.1	2.8	19.7	0.6
Aug.	50.9	12.2	-0.6	-0.6	-1.0	24.3	0.1	16.7	-2.3	-4.9	0.7	1.9
Sep. (p)	-157.4	-27.1	-6.3	-39.4	0.3	-26.3	-1.9	-56.6	7.3	4.3	4.0	-1.0
	Growth rates											
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 Dec.	11.7	8.8	25.6	-6.9	10.5	42.9	33.4	17.7	11.2	13.9	7.5	17.8
2008 Mar.	11.8	8.7	24.7	-5.5	12.2	40.7	52.7	16.3	5.6	15.0	4.2	-2.8
2008 Apr.	12.8	9.0	28.5	-2.8	16.1	40.1	59.5	16.0	5.2	13.8	3.9	-2.8
May	12.2	10.6	36.8	-4.8	4.3	38.7	59.7	14.0	4.4	12.7	4.1	-6.2
June	12.0	11.0	36.5	-4.5	9.7	36.6	61.8	12.6	3.5	17.5	2.4	-10.4
July	12.3	11.5	26.2	-2.3	9.6	36.0	53.8	11.3	5.6	18.6	5.9	-10.6
Aug.	14.4	12.5	33.3	0.2	4.2	38.0	62.9	13.7	6.3	16.3	7.1	-8.2
Sep. (p)	11.4	11.1	24.1	-1.9	5.8	30.8	44.6	10.2	5.4	13.8	7.8	-10.8

C13 MFI holdings of securities [2)]

(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 [1), 2)]

(EUR billions)

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

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
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	-6.9	-0.8	-2.3	-3.7
2008 Q1	-1.1	-0.4	-0.3	-0.4	-1.2	0.0	-0.1	-1.2	-1.3	-0.4	-0.2	-0.8
Q2	-0.9	-0.2	-0.4	-0.4	-0.4	0.0	0.0	-0.4	-1.9	-0.2	-0.9	-0.8
2008 Apr.	-0.3	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.9	-0.1	-0.6	-0.3
May	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.5	0.0	-0.3	-0.2
June	-0.3	0.0	-0.1	-0.1	-0.3	0.0	0.0	-0.3	-0.5	-0.1	-0.1	-0.3
July	-0.3	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-0.2
Aug.	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.6	0.0	-0.4	-0.2
Sep. (p)	-0.4	-0.1	-0.1	-0.2	-0.3	0.0	0.0	-0.3	-0.5	-0.1	-0.1	-0.3

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

	Non-financial corporations				Non-euro area residents		
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2006	-13.2	-3.5	-4.6	-5.1	-0.8	-0.1	-0.7
2007	-12.5	-2.1	-5.4	-4.9	-5.2	-3.4	-1.8
2008 Q1	-3.0	-1.2	-0.8	-1.0	-2.4	-1.8	-0.6
Q2	-5.4	-0.9	-3.4	-1.1	0.0	-0.1	0.0
2008 Apr.	-3.3	-0.5	-2.7	-0.2	0.0	0.0	0.1
May	-0.8	-0.2	-0.4	-0.3	-0.1	-0.1	0.0
June	-1.2	-0.3	-0.4	-0.6	0.0	0.0	0.0
July	-0.5	-0.2	-0.2	-0.2	-0.5	-0.4	-0.1
Aug.	-1.9	-0.1	-1.6	-0.2	-0.1	0.0	-0.1
Sep. (p)	-1.6	-0.5	-0.5	-0.6	-0.6	-0.3	-0.3

3. Revaluation of securities held by MFIs

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
2006	-8.6	1.2	-0.4	-7.9	-0.2	-0.4	-0.3	-0.7	31.5	7.1	16.3	8.0
2007	-11.8	-2.7	0.0	0.6	-0.2	-2.5	-0.5	-6.5	12.6	3.0	8.8	0.8
2008 Q1	-22.1	-4.7	-0.2	0.4	-0.2	-4.8	-0.6	-11.9	-20.6	-1.1	-11.6	-7.9
Q2	-18.5	-1.5	-0.1	-8.7	-0.1	-2.5	-0.5	-5.0	-7.9	-2.9	-6.5	1.5
2008 Apr.	-4.7	0.9	0.0	-2.6	0.0	-0.4	-0.4	-2.0	2.5	0.4	0.4	1.7
May	-3.5	-0.2	0.0	-2.8	0.0	0.4	0.0	-0.8	-1.9	-1.7	-0.7	0.6
June	-10.3	-2.2	-0.1	-3.3	0.0	-2.4	-0.1	-2.2	-8.5	-1.6	-6.2	-0.8
July	2.3	0.1	0.1	2.4	0.0	0.6	0.0	-0.9	-1.6	-0.5	-1.1	0.0
Aug.	5.7	0.8	0.2	2.8	0.1	0.9	0.1	0.9	-0.2	-0.2	0.4	-0.4
Sep. (p)	-8.2	-2.3	0.0	1.0	0.1	-2.3	-0.1	-4.5	-9.2	-0.8	-6.0	-2.4

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) Including non-profit institutions serving households.

2.8 Currency breakdown of selected MFI balance sheet items [1),2)]

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

1. Deposits

	MFIs [3)]							Non-MFIs						
	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies					All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	By euro area residents													
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 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	6,089.4	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	6,148.8	91.8	8.2	4.7	0.5	1.3	1.0	9,150.3	96.4	3.6	2.1	0.4	0.1	0.6
Q2 [(p)]	6,287.7	91.6	8.4	5.0	0.4	1.3	1.0	9,372.1	96.4	3.6	2.1	0.5	0.1	0.5
	By non-euro area residents													
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 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	2,944.2	46.8	53.2	33.6	2.9	2.4	11.1	912.0	50.0	50.0	32.9	1.6	1.8	9.9
2008 Q1	3,075.7	48.1	51.9	33.1	3.0	2.6	10.3	964.2	52.3	47.7	32.0	1.4	1.7	8.7
Q2 [(p)]	3,038.6	46.6	53.4	33.7	3.1	2.7	10.6	981.2	51.4	48.6	32.2	1.2	1.8	9.3

2. Debt securities issued by euro area MFIs

	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2005	4,051.7	81.2	18.8	9.6	1.8	1.9	3.2
2006	4,485.5	80.5	19.5	10.0	1.6	1.9	3.5
2007 Q3	4,862.4	80.8	19.2	9.7	1.7	1.8	3.6
Q4	4,948.0	81.4	18.6	9.3	1.7	1.9	3.4
2008 Q1	4,993.3	82.1	17.9	8.8	1.8	1.9	3.2
Q2 [(p)]	5,146.8	82.0	18.0	8.9	1.7	1.8	3.4

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.

2.8 Currency breakdown of selected MFI balance sheet items [1),2)]

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

3. Loans

	MFIs [3)]							Non-MFIs						
	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies					All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	To euro area residents													
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 Q3	5,433.3	-	-	-	-	-	-	10,742.0	96.1	3.9	1.9	0.2	1.0	0.5
Q4	5,789.0	-	-	-	-	-	-	11,115.9	96.2	3.8	1.8	0.2	0.9	0.6
2008 Q1	5,837.3	-	-	-	-	-	-	11,414.3	96.1	3.9	1.8	0.2	1.0	0.5
Q2 [p]	6,002.0	-	-	-	-	-	-	11,636.4	96.0	4.0	1.9	0.2	1.0	0.6
	To non-euro area residents													
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 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	2,337.8	48.0	52.0	28.9	2.3	2.4	12.7	957.4	40.9	59.1	41.3	1.2	3.7	8.2
2008 Q1	2,394.8	48.2	51.8	28.1	2.9	2.8	12.2	1,018.7	43.0	57.0	39.3	1.3	4.2	7.5
Q2 [p]	2,296.8	46.3	53.7	28.9	2.7	3.0	12.8	1,013.5	43.2	56.8	38.6	1.2	3.9	8.4

4. Holdings of securities other than shares

	Issued by MFIs [3)]							Issued by non-MFIs						
	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies					All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Issued by euro area residents													
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 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	2,144.0	97.7	2.3	1.4	0.2	0.1	0.5
2008 Q1	1,815.4	95.2	4.8	2.5	0.3	0.3	1.4	2,219.7	97.2	2.8	1.9	0.3	0.1	0.4
Q2 [p]	1,891.2	94.8	5.2	2.6	0.3	0.3	1.7	2,301.9	97.3	2.7	1.9	0.3	0.1	0.4
	Issued by non-euro area residents													
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 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	635.8	50.8	49.2	30.3	0.8	0.5	14.4	629.0	38.1	61.9	36.8	5.8	0.8	11.4
Q2 [p]	659.8	50.2	49.8	30.7	0.7	0.5	14.7	630.0	38.4	61.6	36.9	5.9	0.9	10.5

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 [1]

(EUR billions; outstanding amounts at end of period)

1. Assets

	Total	Deposits	Holdings of securities other than shares			Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
			Total	Up to 1 year	Over 1 year				
	1	2	3	4	5	6	7	8	9
2007 Q1	5,714.8	332.6	2,032.6	178.1	1,854.5	2,071.7	720.9	186.6	370.5
Q2	5,993.1	344.2	2,046.7	191.9	1,854.8	2,219.3	786.1	179.7	417.2
Q3	5,892.8	358.3	2,015.0	187.0	1,828.0	2,168.5	773.6	180.6	396.6
Q4	5,781.3	353.4	1,993.4	184.1	1,809.3	2,077.4	784.0	189.1	384.0
2008 Q1	5,160.6	365.5	1,857.8	164.8	1,693.0	1,670.3	719.8	197.1	350.1
Q2 (p)	5,014.9	359.3	1,807.2	157.4	1,649.8	1,624.2	690.7	204.8	328.7

2. Liabilities

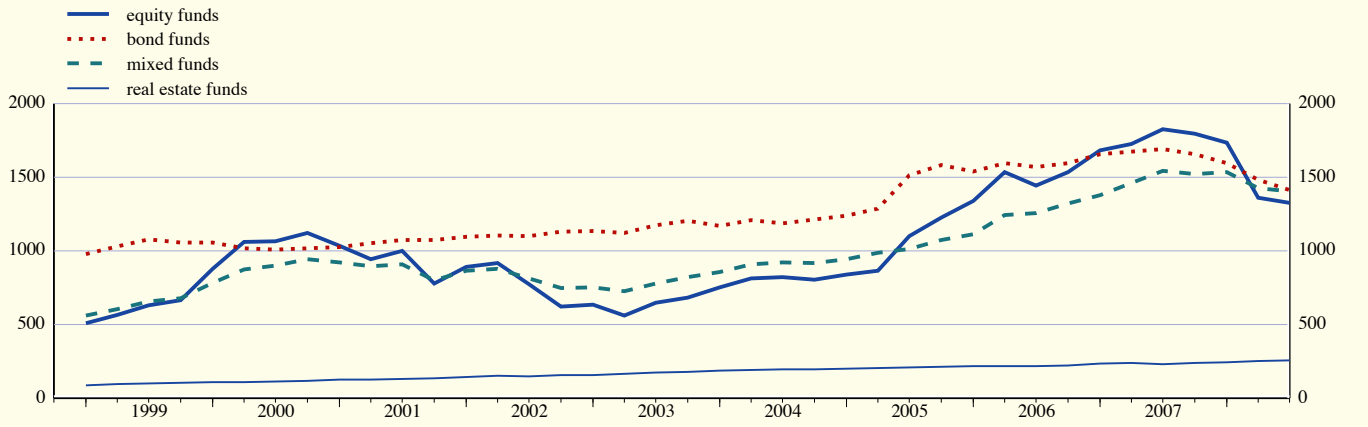
	Total	Deposits and loans taken	Investment fund shares	Other liabilities
	1	2	3	4
2007 Q1	5,714.8	80.9	5,351.4	282.6
Q2	5,993.1	82.9	5,589.0	321.3
Q3	5,892.8	78.5	5,496.8	317.5
Q4	5,781.3	76.8	5,411.5	293.0
2008 Q1	5,160.6	76.4	4,846.6	237.6
Q2 (p)	5,014.9	74.8	4,720.6	219.5

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

	Total	Funds by investment policy					Funds by type of investor	
		Equity funds	Bond funds	Mixed funds	Real estate funds	Other funds	General public funds	Special investors' funds
	1	2	3	4	5	6	7	8
2007 Q1	5,714.8	1,724.3	1,674.1	1,459.9	238.5	618.1	4,374.0	1,340.9
Q2	5,993.1	1,826.0	1,692.8	1,541.6	230.8	701.8	4,579.4	1,413.8
Q3	5,892.8	1,797.1	1,654.6	1,523.2	236.1	681.7	4,468.3	1,424.5
Q4	5,781.3	1,735.5	1,596.8	1,535.4	244.2	669.4	4,344.6	1,436.7
2008 Q1	5,160.6	1,362.6	1,483.3	1,427.8	249.6	637.4	3,778.1	1,382.5
Q2 (p)	5,014.9	1,324.6	1,413.6	1,405.5	256.1	615.3	3,646.8	1,368.1

C14 Total assets of investment funds

(EUR billions)



Source: ECB.

1) Other than money market funds. For further details, see the General notes.

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

(EUR billions; outstanding amounts at end of period)

1. Funds by investment policy

	Total	Deposits	Holdings of securities other than shares			Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
			Total	Up to 1 year	Over 1 year				
	1	2	3	4	5	6	7	8	9
	Equity funds								
2007 Q1	1,724.3	59.4	65.6	25.4	40.2	1,461.9	78.9	-	58.5
Q2	1,826.0	61.1	67.7	27.0	40.7	1,546.9	84.5	-	65.8
Q3	1,797.1	72.0	68.7	26.7	41.9	1,505.5	82.4	-	68.5
Q4	1,735.5	58.1	71.8	26.5	45.2	1,464.2	79.5	-	61.9
2008 Q1	1,362.6	51.2	63.0	21.3	41.7	1,130.9	65.7	-	51.7
Q2 (p)	1,324.6	54.1	65.0	22.0	43.0	1,088.5	65.3	-	51.6
	Bond funds								
2007 Q1	1,674.1	112.3	1,357.7	94.0	1,263.7	43.9	52.6	-	107.5
Q2	1,692.8	115.1	1,347.9	98.3	1,249.6	62.3	55.6	-	112.0
Q3	1,654.6	109.9	1,318.4	97.0	1,221.5	62.6	53.3	-	110.4
Q4	1,596.8	116.1	1,273.1	92.7	1,180.4	58.0	49.8	-	99.8
2008 Q1	1,483.3	124.7	1,167.7	80.3	1,087.5	56.8	45.5	-	88.6
Q2 (p)	1,413.6	116.0	1,118.4	74.6	1,043.8	57.8	42.7	-	78.5
	Mixed funds								
2007 Q1	1,459.9	73.8	530.1	44.1	486.0	381.0	323.6	0.3	150.9
Q2	1,541.6	81.5	530.2	50.8	479.4	399.2	347.9	0.9	181.9
Q3	1,523.2	86.2	522.6	46.3	476.3	405.4	345.1	0.5	163.3
Q4	1,535.4	89.7	547.0	47.3	499.7	393.1	343.6	0.7	161.4
2008 Q1	1,427.8	97.9	528.0	46.4	481.6	339.4	313.9	1.2	147.3
Q2 (p)	1,405.5	99.1	519.8	42.5	477.3	341.6	308.3	0.8	135.9
	Real estate funds								
2007 Q1	238.5	18.9	6.7	1.9	4.8	4.6	9.6	186.1	12.6
Q2	230.8	18.8	6.6	1.9	4.7	4.3	10.0	178.1	12.9
Q3	236.1	20.7	6.4	1.6	4.8	3.9	13.1	179.2	12.8
Q4	244.2	19.7	6.0	1.5	4.5	3.4	12.5	187.9	14.7
2008 Q1	249.6	19.9	5.3	1.1	4.2	3.1	11.3	195.4	14.6
Q2 (p)	256.1	17.9	5.9	1.1	4.8	3.0	10.1	203.4	15.7

2. Funds by type of investor

	Total	Deposits	Holdings of securities other than shares	Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
	1	2	3	4	5	6	7
	General public funds						
2007 Q1	4,374.0	274.4	1,422.4	1,695.8	530.1	153.3	297.9
Q2	4,579.4	278.8	1,434.5	1,819.1	577.5	145.0	324.5
Q3	4,468.3	287.9	1,375.7	1,791.2	564.1	142.9	306.4
Q4	4,344.6	279.9	1,336.9	1,717.4	569.6	149.1	291.8
2008 Q1	3,778.1	277.6	1,218.3	1,362.1	514.2	154.1	251.9
Q2 (p)	3,646.8	264.5	1,177.3	1,326.6	485.5	154.9	238.0
	Special investors' funds						
2007 Q1	1,340.9	58.2	610.2	375.9	190.7	33.3	72.6
Q2	1,413.8	65.4	612.2	400.2	208.6	34.7	92.6
Q3	1,424.5	70.4	639.3	377.3	209.5	37.7	90.2
Q4	1,436.7	73.4	656.6	360.0	214.5	40.0	92.2
2008 Q1	1,382.5	88.0	639.6	308.1	205.6	43.0	98.2
Q2 (p)	1,368.1	94.8	629.9	297.6	205.2	49.9	90.7

Source: ECB.

EURO AREA ACCOUNTS

3.1 Integrated economic and financial accounts by institutional sector

(EUR billions)

Uses 2008 Q2	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Exports of goods and services						525.8
Trade balance [1]						-17.9
Generation of income account						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,112.2	110.7	712.1	55.3	234.1	
Other taxes less subsidies on production	40.6	4.4	28.2	4.2	3.7	
Consumption of fixed capital	337.0	91.4	191.3	11.0	43.4	
Net operating surplus and mixed income [1]	586.3	304.0	253.6	30.1	-1.4	
Allocation of primary income account						
Net operating surplus and mixed income						
Compensation of employees						4.5
Taxes less subsidies on production						
Property income	1,201.5	59.6	514.5	553.8	73.6	166.1
Interest	561.9	57.2	89.7	341.5	73.5	87.5
Other property income	639.5	2.3	424.8	212.3	0.1	78.6
Net national income [1]	1,947.4	1,690.8	-8.9	32.2	233.3	
Secondary distribution of income account						
Net national income						
Current taxes on income, wealth, etc.	295.1	225.8	53.5	15.5	0.3	5.3
Social contributions	413.6	413.6				0.8
Social benefits other than social transfers in kind	407.5	1.4	16.0	28.5	361.5	0.6
Other current transfers	184.4	69.4	25.2	49.2	40.6	8.4
Net non-life insurance premiums	47.1	34.5	11.0	0.9	0.7	1.2
Non-life insurance claims	47.0			47.0		0.8
Other	90.2	34.9	14.2	1.2	39.9	6.5
Net disposable income [1]	1,929.3	1,474.7	-75.1	33.2	496.6	
Use of income account						
Net disposable income						
Final consumption expenditure	1,768.8	1,304.8			464.0	
Individual consumption expenditure	1,587.0	1,304.8			282.2	
Collective consumption expenditure	181.7				181.7	
Adjustment for the change in net equity of households in pension fund reserves	18.1	0.0	0.2	17.9	0.0	0.1
Net saving/current external account [1]	160.6	188.0	-75.3	15.4	32.6	25.1
Capital account						
Net saving / current external account						
Gross capital formation	522.7	164.9	288.8	14.7	54.3	
Gross fixed capital formation	521.1	165.3	286.9	14.7	54.2	
Changes in inventories and acquisitions less disposals of valuables	1.6	-0.3	1.9	0.0	0.0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.3	-1.8	1.9	0.2	0.0	-0.3
Capital transfers	34.6	9.1	2.1	1.5	21.8	5.1
Capital taxes	5.9	5.7	0.2	0.0		0.0
Other capital transfers	28.7	3.4	1.9	1.5	21.8	5.1
Net lending (+)/net borrowing (-) (from capital account) [1]	-22.4	116.6	-159.0	10.6	9.3	22.4
Statistical discrepancy	0.0	-22.2	22.2	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 2008 Q2	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Imports of goods and services						507.9
Trade balance						
Generation of income account						
Gross value added (basic prices)	2,076.0	510.4	1,185.2	100.7	279.7	
Taxes less subsidies on products	233.4					
Gross domestic product (market prices)[2]	2,309.4					
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	586.3	304.0	253.6	30.1	-1.4	
Compensation of employees	1,113.9	1,113.9				2.7
Taxes less subsidies on production	274.8				274.8	-0.8
Property income	1,173.9	332.5	252.0	555.8	33.5	193.7
Interest	545.7	82.7	49.9	405.1	8.0	103.7
Other property income	628.2	249.8	202.1	150.8	25.5	89.9
Net national income						
Secondary distribution of income account						
Net national income	1,947.4	1,690.8	-8.9	32.2	233.3	
Current taxes on income, wealth, etc.	299.9				299.9	0.5
Social contributions	413.3	1.1	16.8	46.0	349.5	1.1
Social benefits other than social transfers in kind	405.2	405.2				3.0
Other current transfers	164.1	87.8	11.6	48.3	16.4	28.6
Net non-life insurance premiums	47.0			47.0		1.2
Non-life insurance claims	46.4	36.8	8.6	0.7	0.3	1.4
Other	70.7	51.0	3.0	0.5	16.1	26.0
Net disposable income						
Use of income account						
Net disposable income	1,929.3	1,474.7	-75.1	33.2	496.6	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in net equity of households in pension fund reserves	18.1	18.1				0.0
Net saving/current external account						
Capital account						
Net saving / current external account	160.6	188.0	-75.3	15.4	32.6	25.1
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	337.0	91.4	191.3	11.0	43.4	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	37.5	9.6	17.8	0.6	9.5	2.2
Capital taxes	5.9				5.9	0.0
Other capital transfers	31.6	9.6	17.8	0.6	3.6	2.2
Net lending (+)/net borrowing (-) (from capital account)						
Statistical discrepancy						

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 2008 Q2	Euro area	Households	Non-financial corporations	MFIs	Other financial inter-mediaries	Insurance corporations and pension funds	General govern-ment	Rest of the world
Opening balance sheet, financial assets								
Total financial assets		17,379.8	14,812.5	22,782.7	10,163.0	6,210.5	2,861.4	15,119.2
Monetary gold and special drawing rights (SDRs)				212.8				
Currency and deposits		5,763.1	1,747.0	2,486.8	1,580.2	837.3	559.6	4,174.2
Short-term debt securities		59.3	137.8	136.8	382.8	260.9	27.6	725.3
Long-term debt securities		1,392.3	215.9	3,752.4	1,799.7	1,996.1	221.7	2,628.9
Loans		39.9	2,275.0	12,458.3	1,753.7	354.3	366.3	1,756.2
of which long-term		23.2	1,223.7	9,349.6	1,394.1	287.3	330.2	.
Shares and other equity		4,674.1	7,371.2	1,867.1	4,431.9	2,271.6	1,114.6	5,023.9
Quoted shares		914.8	1,697.1	610.6	2,213.4	663.7	362.2	.
Unquoted shares and other equity		2,229.4	5,310.1	1,006.6	1,532.6	479.0	608.0	.
Mutual fund shares		1,529.9	364.1	249.9	686.0	1,128.8	144.4	.
Insurance technical reserves		5,183.2	137.3	2.0	0.0	147.7	3.3	235.8
Other accounts receivable and financial derivatives		267.9	2,928.2	1,866.6	214.7	342.6	568.3	575.0
Net financial worth								
Financial account, transactions in financial assets								
Total transactions in financial assets		134.7	104.3	384.4	204.8	45.7	60.4	138.6
Monetary gold and special drawing rights (SDRs)				-0.4				0.4
Currency and deposits		110.7	23.5	-99.8	87.7	-9.1	46.1	11.1
Short-term debt securities		-1.3	-26.9	11.9	2.2	19.2	1.9	33.5
Long-term debt securities		26.1	-26.7	141.3	15.7	28.5	7.6	159.5
Loans		0.4	58.8	228.8	58.0	-1.1	2.5	-24.4
of which long-term		0.0	11.1	150.5	35.5	3.5	0.7	.
Shares and other equity		-32.1	117.2	23.2	39.4	4.0	0.8	-44.8
Quoted shares		-18.1	91.4	-7.4	29.8	3.8	0.9	.
Unquoted shares and other equity		17.2	30.6	30.6	40.3	1.4	-0.5	.
Mutual fund shares		-31.2	-4.8	-0.1	-30.8	-1.2	0.5	.
Insurance technical reserves		61.5	0.4	0.0	0.0	2.7	0.0	2.9
Other accounts receivable and financial derivatives		-30.4	-41.9	79.4	1.8	1.6	1.4	0.4
Changes in net financial worth due to transactions								
Other changes account, financial assets								
Total other changes in financial assets		-245.9	-306.2	-51.6	-263.1	-100.0	-4.7	-142.1
Monetary gold and special drawing rights (SDRs)				-0.2				
Currency and deposits		0.8	0.8	-1.9	2.4	2.1	0.1	-3.8
Short-term debt securities		-0.3	6.7	-2.9	-1.3	1.1	0.1	-1.8
Long-term debt securities		-18.3	-0.9	-21.1	-46.2	-26.8	-4.3	-75.2
Loans		-0.3	-5.0	-13.2	-11.5	0.1	0.0	13.2
of which long-term		-0.1	-4.5	-11.0	-4.0	0.4	0.0	.
Shares and other equity		-189.4	-340.8	-34.9	-205.8	-74.2	0.1	-57.0
Quoted shares		-71.0	-180.4	-5.6	-176.7	-54.9	2.8	.
Unquoted shares and other equity		-99.3	-152.9	-24.8	-7.4	-14.5	-2.2	.
Mutual fund shares		-19.1	-7.5	-4.5	-21.6	-4.8	-0.4	.
Insurance technical reserves		-37.4	4.1	0.0	0.0	0.5	0.0	-26.6
Other accounts receivable and financial derivatives		-1.0	29.0	22.5	-0.8	-2.9	-0.8	9.2
Other changes in net financial worth								
Closing balance sheet, financial assets								
Total financial assets		17,268.7	14,610.6	23,115.5	10,104.7	6,156.1	2,917.1	15,115.4
Monetary gold and special drawing rights (SDRs)				212.2				
Currency and deposits		5,874.6	1,771.3	2,385.0	1,670.3	830.3	605.9	4,181.5
Short-term debt securities		57.8	117.6	145.8	383.7	281.2	29.6	757.0
Long-term debt securities		1,400.0	188.3	3,872.7	1,769.3	1,997.8	225.0	2,713.2
Loans		40.1	2,328.7	12,673.8	1,800.2	353.2	368.8	1,745.0
of which long-term		23.2	1,230.4	9,489.0	1,425.7	291.2	330.9	.
Shares and other equity		4,452.6	7,147.6	1,855.4	4,265.5	2,201.4	1,115.6	4,922.1
Quoted shares		825.7	1,608.1	597.5	2,066.5	612.6	365.9	.
Unquoted shares and other equity		2,147.2	5,187.8	1,012.5	1,565.5	466.0	605.2	.
Mutual fund shares		1,479.6	351.8	245.4	633.6	1,122.8	144.5	.
Insurance technical reserves		5,207.3	141.8	2.0	0.0	150.9	3.4	212.1
Other accounts receivable and financial derivatives		236.5	2,915.3	1,968.5	215.7	341.3	568.8	584.7
Net financial worth								

Source: ECB.

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

(EUR billions)

Liabilities 2008 Q2	Euro area	Households	Non-financial corporations	MFIs	Other financial inter-mediaries	Insurance corporations and pension funds	General govern-ment	Rest of the world
Opening balance sheet, liabilities								
Total liabilities		6,151.0	23,451.4	22,711.1	9,926.6	6,389.6	6,896.8	13,589.9
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			25.0	14,049.0	32.6	2.5	238.2	2,800.8
Short-term debt securities			285.1	410.7	104.9	0.3	656.5	273.0
Long-term debt securities			435.4	2,726.9	1,786.6	25.8	4,435.8	2,596.4
Loans		5,450.3	7,605.8		1,662.4	209.6	1,188.6	2,886.9
of which long-term		5,128.9	5,127.5		777.7	66.8	1,024.6	.
Shares and other equity			12,267.3	3,114.0	6,188.1	613.9	5.4	4,565.7
Quoted shares			4,197.8	856.7	252.3	244.3	0.0	.
Unquoted shares and other equity			8,069.5	1,101.0	1,108.2	368.8	5.4	.
Mutual fund shares				1,156.4	4,827.6			.
Insurance technical reserves		33.1	328.7	56.6	0.6	5,289.8	0.5	
Other accounts payable and financial derivatives		667.7	2,504.0	2,353.7	151.5	247.6	371.7	467.2
Net financial worth [1]	-1,316.6	11,228.8	-8,638.9	71.6	236.4	-179.1	-4,035.4	
Financial account, transactions in liabilities								
Total transactions in liabilities		40.3	241.0	359.3	196.8	68.1	51.0	116.2
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			-0.2	267.1	1.0	-0.1	0.8	-98.4
Short-term debt securities			8.3	2.6	5.8	0.0	23.0	0.8
Long-term debt securities			3.1	77.6	124.4	0.6	34.8	111.6
Loans		67.2	164.5		40.8	-2.0	7.5	45.0
of which long-term		57.6	84.9		38.4	2.6	-3.3	.
Shares and other equity			25.6	20.4	23.7	5.0	0.0	32.8
Quoted shares			-4.3	6.2	0.0	1.3	0.0	.
Unquoted shares and other equity			29.9	5.4	22.6	3.7	0.0	.
Mutual fund shares				8.8	1.2			.
Insurance technical reserves		0.0	0.3	1.6	0.0	65.6	0.0	
Other accounts payable and financial derivatives		-26.9	39.4	-9.9	1.2	-1.1	-15.0	24.4
Changes in net financial worth due to transactions [1]	-22.4	94.4	-136.8	25.1	8.0	-22.4	9.3	22.4
Other changes account, liabilities								
Total other changes in liabilities		0.1	-422.1	-174.5	-285.9	-76.2	-119.0	-36.0
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	-0.6	0.0	0.0	0.0	1.1
Short-term debt securities			0.1	-1.0	0.0	0.0	-0.2	2.8
Long-term debt securities			-8.6	-1.6	-15.1	-0.1	-133.9	-33.4
Loans		-5.4	5.8		-9.4	-0.2	0.1	-7.7
of which long-term		-5.2	7.4		-5.2	0.0	0.1	.
Shares and other equity			-438.0	-215.1	-220.2	-36.6	0.0	7.9
Quoted shares			-223.6	-199.2	-49.8	-29.6	0.0	.
Unquoted shares and other equity			-214.4	-15.5	-46.5	-7.0	0.0	.
Mutual fund shares				-0.4	-123.8			.
Insurance technical reserves		0.0	0.0	0.0	0.0	-59.4	0.0	
Other accounts payable and financial derivatives		5.5	18.7	43.8	-41.2	20.1	15.1	-6.7
Other changes in net financial worth [1]	105.9	-245.9	115.9	122.8	22.7	-23.9	114.2	-106.1
Closing balance sheet, liabilities								
Total liabilities		6,191.5	23,270.4	22,895.9	9,837.6	6,381.5	6,828.9	13,670.1
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			24.8	14,315.5	33.6	2.4	239.0	2,703.5
Short-term debt securities			293.5	412.3	110.7	0.3	679.3	276.6
Long-term debt securities			429.9	2,803.0	1,895.8	26.3	4,336.6	2,674.5
Loans		5,512.1	7,776.1		1,693.8	207.4	1,196.3	2,924.2
of which long-term		5,181.3	5,219.8		810.9	69.4	1,021.3	.
Shares and other equity			11,855.0	2,919.4	5,991.7	582.3	5.4	4,606.4
Quoted shares			3,969.9	663.7	202.5	216.1	0.0	.
Unquoted shares and other equity			7,885.0	1,090.9	1,084.2	365.5	5.4	.
Mutual fund shares				1,164.8	4,704.9			.
Insurance technical reserves		33.1	329.0	58.1	0.6	5,296.1	0.5	
Other accounts payable and financial derivatives		646.3	2,562.0	2,387.6	111.5	266.7	371.7	484.9
Net financial worth [1]	-1,233.1	11,077.2	-8,659.8	219.6	267.1	-225.4	-3,911.8	

Source: ECB.

3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2004	2005	2006	2006 Q3-2007 Q2	2006 Q4-2007 Q3	2007 Q1-2007 Q4	2007 Q2-2008 Q1	2007 Q3-2008 Q2
Generation of income account								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	3,777.3	3,891.5	4,050.2	4,138.1	4,178.9	4,231.2	4,280.4	4,331.3
Other taxes less subsidies on production	122.9	130.0	128.9	133.5	134.6	136.3	136.4	135.7
Consumption of fixed capital	1,124.0	1,177.7	1,234.9	1,269.7	1,284.7	1,299.6	1,310.8	1,322.5
Net operating surplus and mixed income [1]	1,989.8	2,060.4	2,165.8	2,232.0	2,271.3	2,298.2	2,318.9	2,341.3
Allocation of primary income account								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,338.2	2,577.1	2,978.9	3,238.2	3,353.4	3,472.9	3,562.7	3,664.5
Interest	1,250.3	1,342.7	1,634.5	1,808.7	1,898.8	1,993.9	2,072.0	2,142.2
Other property income	1,087.9	1,234.3	1,344.4	1,429.5	1,454.7	1,479.0	1,490.7	1,522.3
Net national income [1]	6,692.6	6,937.5	7,280.5	7,468.5	7,559.8	7,646.3	7,708.5	7,759.5
Secondary distribution of income account								
Net national income								
Current taxes on income, wealth, etc.	883.7	933.3	1,024.6	1,060.6	1,085.2	1,109.0	1,125.0	1,135.3
Social contributions	1,430.0	1,472.4	1,534.7	1,564.0	1,576.4	1,593.6	1,610.3	1,626.7
Social benefits other than social transfers in kind	1,455.4	1,499.2	1,549.5	1,567.8	1,578.6	1,594.4	1,606.0	1,619.6
Other current transfers	684.7	707.2	715.0	727.5	731.8	741.5	750.3	756.4
Net non-life insurance premiums	178.0	178.3	177.4	180.4	181.4	182.7	183.0	184.4
Non-life insurance claims	178.7	179.3	177.5	180.5	181.1	182.1	182.5	184.2
Other	328.0	349.5	360.0	366.7	369.3	376.6	384.7	387.9
Net disposable income [1]	6,616.5	6,850.3	7,189.0	7,378.0	7,468.9	7,553.3	7,610.3	7,660.2
Use of income account								
Net disposable income								
Final consumption expenditure	6,083.3	6,325.9	6,589.3	6,704.5	6,766.5	6,836.7	6,902.3	6,973.6
Individual consumption expenditure	5,437.7	5,665.5	5,911.2	6,015.1	6,070.4	6,133.6	6,193.7	6,256.0
Collective consumption expenditure	645.6	660.3	678.1	689.3	696.2	703.1	708.6	717.7
Adjustment for the change in net equity of households in pension funds reserves	58.0	60.4	59.0	57.5	58.0	59.5	60.5	63.2
Net saving [1]	533.4	524.8	599.9	673.7	702.6	716.8	708.2	686.8
Capital account								
Net saving								
Gross capital formation	1,613.4	1,704.5	1,848.8	1,921.9	1,951.4	1,987.1	2,010.8	2,034.3
Gross fixed capital formation	1,602.0	1,698.1	1,835.9	1,912.0	1,939.0	1,967.0	1,987.4	2,006.3
Changes in inventories and acquisitions less disposals of valuables	11.4	6.3	12.8	10.0	12.4	20.1	23.4	28.1
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	-1.1	0.6	0.4	-0.4	-0.6	-0.2	0.1	0.5
Capital transfers	174.5	180.8	173.8	170.2	169.1	163.9	164.6	167.7
Capital taxes	29.9	24.4	22.5	23.3	23.8	23.8	23.4	23.5
Other capital transfers	144.7	156.4	151.2	146.9	145.3	140.1	141.2	144.2
Net lending (+)/net borrowing (-) (from capital account) [1]	61.0	8.2	-4.5	32.4	46.8	39.6	20.1	-12.1

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)

(EUR billions; four-quarter cumulated flows)

Resources	2004	2005	2006	2006 Q3-2007 Q2	2006 Q4-2007 Q3	2007 Q1-2007 Q4	2007 Q2-2008 Q1	2007 Q3-2008 Q2
Generation of income account								
Gross value added (basic prices)	7,013.9	7,259.6	7,579.8	7,773.3	7,869.5	7,965.3	8,046.5	8,130.9
Taxes less subsidies on products	797.5	841.2	910.5	937.1	947.2	953.9	955.6	953.3
Gross domestic product (market prices)[2]	7,811.4	8,100.8	8,490.3	8,710.4	8,816.7	8,919.1	9,002.1	9,084.1
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	1,989.8	2,060.4	2,165.8	2,232.0	2,271.3	2,298.2	2,318.9	2,341.3
Compensation of employees	3,784.8	3,897.9	4,057.0	4,144.9	4,185.8	4,238.1	4,287.7	4,338.7
Taxes less subsidies on production	935.0	983.8	1,050.4	1,079.1	1,088.7	1,096.8	1,097.0	1,093.7
Property income	2,321.3	2,572.4	2,986.2	3,250.6	3,367.4	3,486.0	3,567.6	3,650.2
Interest	1,216.9	1,315.6	1,608.8	1,781.9	1,868.0	1,958.5	2,028.4	2,090.5
Other property income	1,104.5	1,256.8	1,377.4	1,468.7	1,499.4	1,527.5	1,539.2	1,559.7
Net national income								
Secondary distribution of income account								
Net national income	6,692.6	6,937.5	7,280.5	7,468.5	7,559.8	7,646.3	7,708.5	7,759.5
Current taxes on income, wealth, etc.	886.8	937.1	1,029.6	1,067.7	1,092.9	1,116.6	1,132.3	1,143.0
Social contributions	1,429.1	1,471.7	1,533.9	1,563.2	1,575.5	1,592.9	1,609.4	1,625.8
Social benefits other than social transfers in kind	1,447.7	1,491.4	1,541.3	1,558.9	1,569.3	1,585.1	1,596.5	1,610.0
Other current transfers	614.1	624.9	627.5	639.6	643.4	650.9	655.0	659.9
Net non-life insurance premiums	178.7	179.3	177.5	180.5	181.1	182.1	182.5	184.2
Non-life insurance claims	175.8	176.8	174.6	177.7	178.6	179.7	180.0	181.4
Other	259.6	268.8	275.4	281.5	283.7	289.1	292.5	294.4
Net disposable income								
Use of income account								
Net disposable income	6,616.5	6,850.3	7,189.0	7,378.0	7,468.9	7,553.3	7,610.3	7,660.2
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in net equity of households in pension funds reserves	58.2	60.7	59.3	57.8	58.2	59.7	60.7	63.4
Net saving								
Capital account								
Net saving	533.4	524.8	599.9	673.7	702.6	716.8	708.2	686.8
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,124.0	1,177.7	1,234.9	1,269.7	1,284.7	1,299.6	1,310.8	1,322.5
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	190.5	191.6	183.7	180.7	179.5	174.0	176.5	181.2
Capital taxes	29.9	24.4	22.5	23.3	23.8	23.8	23.4	23.5
Other capital transfers	160.6	167.2	161.1	157.4	155.7	150.2	153.1	157.7
Net lending (+)/net borrowing (-) (from capital account)								

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.

3.3 Households

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

	2004	2005	2006	2006 Q3-2007 Q2	2006 Q4-2007 Q3	2007 Q1-2007 Q4	2007 Q2-2008 Q1	2007 Q3-2008 Q2
Income, saving and changes in net worth								
Compensation of employees (+)	3,784.8	3,897.9	4,057.0	4,144.9	4,185.8	4,238.1	4,287.7	4,338.7
Gross operating surplus and mixed income (+)	1,286.7	1,338.3	1,415.7	1,459.7	1,481.1	1,499.4	1,518.9	1,538.8
Interest receivable (+)	233.2	229.8	266.3	282.7	291.5	301.6	310.4	319.7
Interest payable (-)	126.2	130.5	164.4	187.3	198.1	208.6	215.2	221.7
Other property income receivable (+)	643.7	691.6	727.0	751.1	758.3	764.8	766.2	768.7
Other property income payable (-)	9.2	9.5	9.7	9.7	9.6	9.9	9.8	9.9
Current taxes on income and wealth (-)	707.3	739.8	792.3	814.7	831.5	851.9	866.3	880.4
Net social contributions (-)	1,426.3	1,468.5	1,530.6	1,559.8	1,572.2	1,589.4	1,606.1	1,622.5
Net social benefits (+)	1,442.8	1,486.2	1,535.8	1,553.4	1,563.8	1,579.5	1,590.9	1,604.4
Net current transfers receivable (+)	63.9	66.7	66.8	68.9	68.8	69.4	69.3	72.2
= Gross disposable income	5,186.0	5,362.4	5,571.7	5,689.3	5,737.8	5,793.1	5,846.0	5,907.9
Final consumption expenditure (-)	4,489.3	4,668.9	4,866.5	4,951.0	4,996.2	5,047.0	5,097.2	5,146.8
Changes in net worth in pension funds (+)	57.8	60.3	58.9	57.6	58.2	59.7	60.8	63.4
= Gross saving	754.5	753.8	764.0	795.9	799.8	805.8	809.5	824.5
Consumption of fixed capital (-)	301.5	317.2	334.5	344.3	348.5	352.7	355.8	359.3
Net capital transfers receivable (+)	18.4	22.8	19.9	16.8	15.7	13.3	13.6	14.0
Other changes in net worth [1] (+)	327.0	529.5	532.8	635.8	230.7	-37.7	-801.6	-1,133.1
= Changes in net worth [1]	798.4	989.0	982.3	1,104.2	697.7	428.7	-334.3	-653.9
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	519.9	552.1	605.0	630.5	637.5	640.5	643.0	641.3
Consumption of fixed capital (-)	301.5	317.2	334.5	344.3	348.5	352.7	355.8	359.3
Main items of financial investment (+)								
Short-term assets	214.9	207.5	306.3	382.1	396.8	420.1	441.7	419.7
Currency and deposits	213.0	247.9	283.8	316.9	328.3	348.0	382.1	382.5
Money market fund shares	-6.4	-20.2	0.7	44.6	44.3	43.4	38.4	16.5
Debt securities [2]	8.4	-20.3	21.9	20.6	24.2	28.7	21.3	20.7
Long-term assets	347.3	426.5	345.7	258.3	212.5	202.7	138.9	145.8
Deposits	32.2	-5.0	0.7	-17.0	-24.7	-30.3	-39.6	-36.3
Debt securities	63.9	5.1	78.9	43.5	11.9	36.0	56.6	84.5
Shares and other equity	-1.4	133.5	-19.8	-44.9	-41.3	-55.1	-118.2	-134.4
Quoted, unquoted shares and other equity	-9.9	63.0	-0.1	14.8	28.3	22.5	-15.0	-18.0
Mutual fund shares	8.5	70.5	-19.7	-59.7	-69.6	-77.6	-103.2	-116.5
Life insurance and pension fund reserves	252.7	292.9	285.8	276.7	266.7	252.0	240.2	231.9
Main items of financing (-)								
Loans	307.7	390.4	392.4	369.0	365.8	350.1	309.1	278.4
of which from euro area MFIs	277.8	358.5	348.3	317.4	303.2	283.2	251.5	198.9
Other changes in financial assets (+)								
Shares and other equity	282.8	451.5	484.3	594.5	226.0	-74.6	-727.2	-1,012.3
Life insurance and pension fund reserves	48.6	105.6	54.5	58.1	21.6	2.2	-67.5	-121.5
Remaining net flows (+)	-5.9	-46.5	-86.7	-105.9	-82.3	-59.5	-98.3	-89.3
= Changes in net worth [1]	798.4	989.0	982.3	1,104.2	697.7	428.7	-334.3	-653.9
Financial balance sheet								
Financial assets (+)								
Short-term assets	4,276.1	4,493.4	4,754.4	4,972.5	5,020.1	5,208.4	5,362.1	5,479.8
Currency and deposits	3,926.0	4,176.7	4,456.5	4,613.3	4,653.9	4,844.7	4,935.1	5,051.8
Money market fund shares	313.9	300.5	261.7	304.9	304.1	303.5	356.2	357.2
Debt securities [2]	36.1	16.2	36.2	54.3	62.2	60.2	70.7	70.8
Long-term assets	9,938.2	10,947.0	11,898.0	12,246.1	12,071.6	11,995.3	11,362.6	11,163.8
Deposits	894.2	946.2	946.1	920.4	920.1	880.9	828.0	822.8
Debt securities	1,226.1	1,206.3	1,312.9	1,299.6	1,300.9	1,349.3	1,380.9	1,387.0
Shares and other equity	3,967.8	4,546.0	5,050.0	5,277.9	5,057.4	4,921.9	4,317.8	4,095.4
Quoted, unquoted shares and other equity	2,802.2	3,208.3	3,632.0	3,854.0	3,674.0	3,572.2	3,144.2	2,973.0
Mutual fund shares	1,165.6	1,337.7	1,418.0	1,423.9	1,383.4	1,349.7	1,173.7	1,122.4
Life insurance and pension fund reserves	3,850.1	4,248.6	4,588.9	4,748.2	4,793.1	4,843.2	4,835.8	4,858.6
Remaining net assets (+)	112.1	67.0	18.9	9.8	5.6	-14.1	-45.5	-54.2
Liabilities (-)								
Loans	4,287.4	4,693.7	5,095.1	5,262.1	5,333.7	5,415.8	5,450.3	5,512.1
of which from euro area MFIs	3,812.5	4,210.4	4,559.5	4,708.9	4,769.8	4,827.8	4,863.3	4,889.7
= Net financial wealth	10,038.9	10,813.7	11,576.2	11,966.3	11,763.6	11,773.8	11,228.8	11,077.2

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 flows; outstanding amounts at end-of-period)

	2004	2005	2006	2006 Q3-2007 Q2	2006 Q4-2007 Q3	2007 Q1-2007 Q4	2007 Q2-2008 Q1	2007 Q3-2008 Q2
Income and saving								
Gross value added (basic prices) (+)	3,990.1	4,128.9	4,318.5	4,440.4	4,499.5	4,554.8	4,598.8	4,641.2
Compensation of employees (-)	2,388.1	2,459.7	2,569.3	2,630.5	2,659.3	2,693.3	2,727.9	2,759.7
Other taxes less subsidies on production (-)	65.6	72.8	75.1	79.2	79.9	80.7	80.8	80.0
= Gross operating surplus (+)	1,536.4	1,596.4	1,674.1	1,730.7	1,760.3	1,780.8	1,790.1	1,801.6
Consumption of fixed capital (-)	636.9	667.3	698.0	718.3	726.9	735.6	742.1	748.6
= Net operating surplus (+)	899.5	929.1	976.2	1,012.5	1,033.4	1,045.2	1,048.0	1,053.0
Property income receivable (+)	373.1	436.4	499.1	541.1	557.3	572.2	581.0	587.6
Interest receivable	125.1	136.1	158.3	170.1	177.5	184.6	189.9	195.0
Other property income receivable	248.0	300.4	340.9	371.0	379.8	387.6	391.0	392.5
Interest and rents payable (-)	226.3	236.4	278.5	303.7	317.3	331.4	344.9	357.0
= Net entrepreneurial income (+)	1,046.3	1,129.2	1,196.8	1,249.8	1,273.4	1,286.0	1,284.1	1,283.5
Distributed income (-)	744.0	843.4	904.1	937.2	952.1	963.2	972.5	988.5
Taxes on income and wealth payable (-)	135.4	148.6	187.5	198.1	205.0	208.7	209.6	206.9
Social contributions receivable (+)	73.5	72.7	77.1	72.0	68.9	66.8	65.8	66.2
Social benefits payable (-)	60.4	60.6	62.5	63.4	64.0	64.5	64.5	64.4
Other net transfers (-)	59.9	61.5	64.3	58.8	55.9	54.9	54.8	56.7
= Net saving	120.1	87.8	55.5	64.4	65.2	61.5	48.5	33.1
Investment, financing and saving								
Net acquisition of non-financial assets (+)	218.1	245.0	289.6	310.7	321.0	341.9	352.8	364.5
Gross fixed capital formation (+)	847.9	903.6	971.6	1,016.7	1,034.3	1,055.4	1,069.0	1,081.4
Consumption of fixed capital (-)	636.9	667.3	698.0	718.3	726.9	735.6	742.1	748.6
Net acquisition of other non-financial assets (+)	7.1	8.6	15.9	12.3	13.6	22.1	25.9	31.8
Main items of financial investment (+)								
Short-term assets	103.3	127.6	154.5	200.7	171.8	168.6	157.7	120.1
Currency and deposits	88.9	112.9	144.5	163.4	157.6	148.3	116.3	110.8
Money market fund shares	16.5	8.6	3.7	23.5	-9.2	-18.8	-7.5	-9.0
Debt securities [1]	-2.1	6.1	6.3	13.8	23.4	39.2	48.9	18.3
Long-term assets	197.7	380.1	410.2	434.8	476.1	468.7	475.6	443.9
Deposits	0.8	25.2	26.6	40.3	30.3	26.0	3.2	-19.1
Debt securities	-52.3	-32.6	-22.5	-45.7	-58.8	-74.1	-88.7	-115.9
Shares and other equity	190.1	244.6	231.0	244.8	289.1	323.4	367.7	383.9
Other, mainly intercompany loans	59.1	142.8	175.1	195.4	215.5	193.5	193.3	195.0
Remaining net assets (+)	70.8	88.1	201.8	180.2	199.3	160.1	105.4	30.8
Main items of financing (-)								
Debt	202.2	433.2	701.8	731.4	757.1	766.6	766.6	685.6
of which loans from euro area MFIs	164.8	264.5	449.8	484.2	522.4	559.5	593.3	563.3
of which debt securities	7.7	10.7	37.5	48.5	28.7	34.7	36.1	11.1
Shares and other equity	201.8	260.6	230.2	256.7	271.6	247.8	210.0	173.1
Quoted shares	11.6	101.3	38.6	68.5	82.5	42.3	21.8	-12.6
Unquoted shares and other equity	190.2	159.2	191.6	188.2	189.0	205.5	188.2	185.7
Net capital transfers receivable (-)	65.7	59.3	68.6	71.7	72.0	64.3	67.1	71.0
= Net saving	120.1	87.8	55.5	64.4	65.2	61.5	48.5	33.1
Financial balance sheet								
Financial assets								
Short-term assets	1,376.8	1,506.4	1,654.2	1,740.2	1,754.5	1,823.9	1,838.2	1,851.6
Currency and deposits	1,102.6	1,220.7	1,356.8	1,405.0	1,429.0	1,499.7	1,478.9	1,513.1
Money market fund shares	163.7	176.3	185.9	205.2	185.8	162.3	186.9	185.7
Debt securities [1]	110.5	109.5	111.5	130.0	139.8	161.9	172.3	152.7
Long-term assets	7,563.9	8,586.4	9,842.1	10,570.6	10,464.0	10,564.9	9,908.9	9,701.9
Deposits	154.0	196.6	227.7	284.5	276.2	274.1	268.1	258.1
Debt securities	322.8	279.1	270.6	240.5	197.8	196.0	181.4	153.1
Shares and other equity	5,389.6	6,266.3	7,319.0	7,900.9	7,798.5	7,855.0	7,184.3	6,961.9
Other, mainly intercompany loans	1,697.5	1,844.3	2,024.8	2,144.7	2,191.4	2,239.8	2,275.0	2,328.7
Remaining net assets	298.8	374.3	473.1	543.5	538.1	571.3	586.6	519.9
Liabilities								
Debt	6,547.0	7,030.7	7,732.9	8,170.8	8,298.4	8,488.8	8,655.1	8,828.6
of which loans from euro area MFIs	3,160.8	3,433.0	3,872.5	4,122.6	4,247.9	4,407.4	4,547.6	4,671.0
of which debt securities	651.5	671.3	688.9	725.7	709.8	714.9	720.5	723.4
Shares and other equity	9,580.4	10,924.1	12,720.3	13,810.3	13,626.5	13,640.3	12,267.3	11,855.0
Quoted shares	2,992.7	3,689.3	4,464.6	5,040.7	4,960.8	4,981.0	4,197.8	3,969.9
Unquoted shares and other equity	6,587.7	7,234.8	8,255.7	8,769.5	8,665.8	8,659.3	8,069.5	7,885.0

Sources: ECB and Eurostat.

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 amounts at end-of-period)

	2004	2005	2006	2006 Q3-2007 Q2	2006 Q4-2007 Q3	2007 Q1-2007 Q4	2007 Q2-2008 Q1	2007 Q3-2008 Q2
Financial account, financial transactions								
Main items of financial investment (+)								
Short-term assets	40.1	26.1	50.9	54.0	47.1	41.4	61.5	73.4
Currency and deposits	13.2	7.2	12.4	2.4	8.9	7.8	32.5	34.1
Money market fund shares	2.7	0.4	3.7	3.6	0.3	0.0	10.6	8.9
Debt securities [1]	24.2	18.5	34.8	48.0	37.9	33.6	18.4	30.3
Long-term assets	222.1	293.9	326.2	286.0	267.9	241.1	232.4	189.2
Deposits	36.7	16.5	76.6	66.6	66.6	52.8	29.7	16.8
Debt securities	131.9	132.4	132.5	154.1	153.6	131.3	110.2	94.0
Loans	7.4	-4.0	1.5	-16.2	-21.7	-17.5	16.6	16.7
Quoted shares	12.7	32.5	2.4	5.3	3.4	-1.4	2.9	1.1
Unquoted shares and other equity	2.6	30.2	29.3	20.2	23.8	23.6	42.7	38.9
Mutual fund shares	30.8	86.3	83.8	55.9	42.2	52.2	30.3	21.7
Remaining net assets (+)	10.4	11.8	21.2	28.4	31.3	1.7	-3.1	-0.4
Main items of financing (-)								
Debt securities	-1.7	-0.4	5.2	3.9	3.0	1.1	1.0	2.0
Loans	4.6	17.4	40.3	27.8	22.2	7.2	31.7	17.8
Shares and other equity	12.3	13.9	10.7	12.8	9.2	1.5	1.7	4.2
Insurance technical reserves	262.6	334.3	332.4	337.0	324.5	304.7	286.8	272.8
Net equity of households in life insurance and pension fund reserves	231.0	292.1	282.7	280.3	277.2	267.0	255.5	241.1
Prepayments of insurance premiums and reserves for outstanding claims	31.6	42.2	49.7	56.7	47.3	37.6	31.2	31.7
= Changes in net financial worth due to transactions	-5.1	-33.4	9.6	-13.0	-12.7	-30.3	-30.3	-34.6
Other changes account								
Other changes in financial assets (+)								
Shares and other equity	111.0	182.1	177.3	237.9	124.9	-2.8	-186.4	-321.1
Other net assets	142.0	70.8	-34.6	-78.8	-101.2	-50.2	0.2	-5.6
Other changes in liabilities (-)								
Shares and other equity	21.2	118.3	47.2	98.5	14.8	-20.9	-91.9	-153.1
Insurance technical reserves	83.7	137.9	52.7	62.6	24.7	15.2	-58.3	-135.3
Net equity of households in life insurance and pension fund reserves	63.9	147.0	56.0	61.7	25.0	1.3	-70.9	-147.1
Prepayments of insurance premiums and reserves for outstanding claims	19.8	-9.1	-3.3	0.8	-0.3	13.9	12.6	11.9
= Other changes in net financial worth	148.0	-3.2	42.7	-2.0	-15.8	-47.3	-36.0	-38.2
Financial balance sheet								
Financial assets (+)								
Short-term assets	401.7	432.5	484.4	511.5	515.7	521.1	562.8	580.2
Currency and deposits	133.6	142.7	154.6	144.4	154.0	163.2	190.9	179.9
Money market fund shares	72.2	74.3	80.4	84.2	81.0	78.2	88.0	87.4
Debt securities [1]	195.8	215.5	249.4	282.9	280.7	279.8	283.9	312.8
Long-term assets	4,097.8	4,611.7	5,051.3	5,232.0	5,256.8	5,240.5	5,157.5	5,083.8
Deposits	500.6	520.8	598.0	637.2	647.0	647.8	646.4	650.4
Debt securities	1,617.1	1,776.4	1,851.2	1,892.4	1,931.8	1,939.5	1,973.2	1,966.2
Loans	348.2	353.2	350.3	335.0	332.7	327.7	354.3	353.2
Quoted shares	590.3	649.6	729.4	775.5	766.3	735.0	663.7	612.6
Unquoted shares and other equity	350.3	403.3	474.6	493.7	484.3	497.4	479.0	466.0
Mutual fund shares	691.3	908.5	1,047.7	1,098.3	1,094.8	1,093.1	1,040.8	1,035.4
Remaining net assets (+)	138.2	178.5	223.5	211.1	220.8	224.7	240.1	223.1
Liabilities (-)								
Debt securities	22.3	21.3	26.7	26.5	26.1	27.1	26.1	26.6
Loans	118.0	136.2	171.8	190.9	195.1	175.9	209.6	207.4
Shares and other equity	497.7	629.9	687.8	731.3	697.6	668.3	613.9	582.3
Insurance technical reserves	4,106.9	4,579.2	4,964.3	5,158.5	5,216.3	5,284.2	5,289.8	5,296.1
Net equity of households in life insurance and pension fund reserves	3,474.5	3,913.5	4,252.3	4,419.8	4,471.8	4,520.7	4,515.2	4,513.8
Prepayments of insurance premiums and reserves for outstanding claims	632.5	665.6	712.0	738.7	744.5	763.5	774.6	782.2
= Net financial wealth	-107.1	-143.8	-91.5	-152.5	-141.8	-169.2	-179.1	-225.4

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.

4 FINANCIAL MARKETS

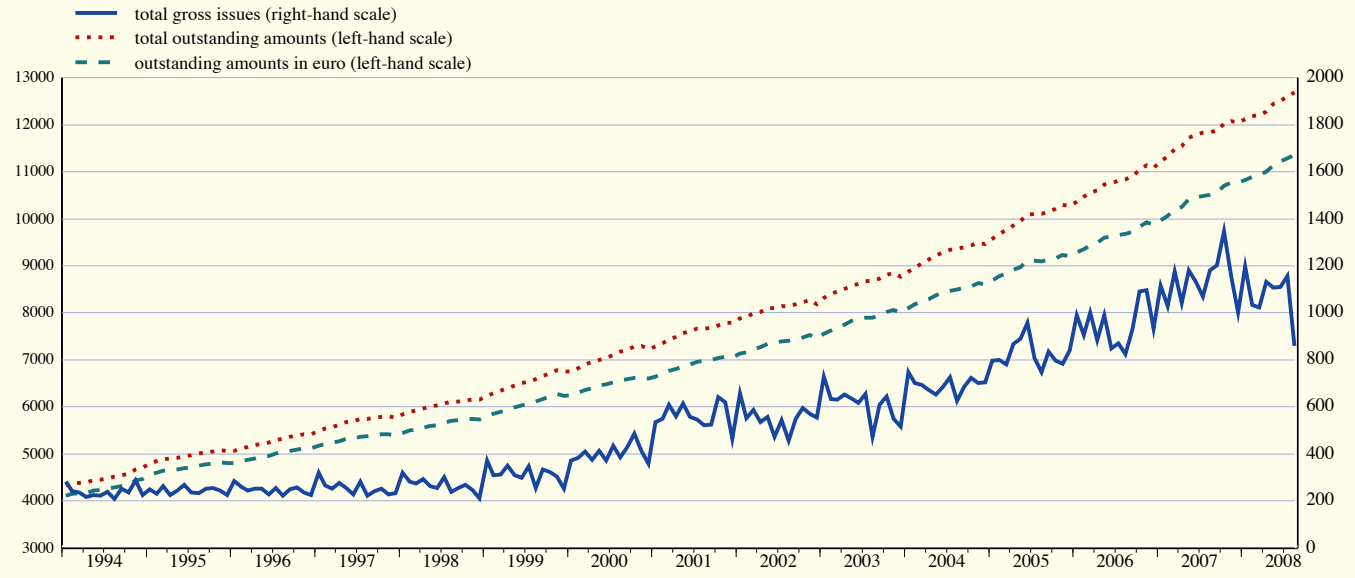
4.1 Securities, other than shares, by original maturity, residency of the issuer and currency

(EUR billions and period growth rates; seasonally adjusted; transactions during the month and end-of-period outstanding amounts; nominal values)

	Total in euro [1]			By euro area residents								
				In euro			In all currencies					
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted [2]	
											Net issues	6-month growth rates
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2007 Aug.	12,563.8	1,184.1	28.1	10,511.1	1,131.9	26.0	11,851.1	1,181.8	25.9	9.2	76.4	9.0
Sep.	12,653.8	1,243.6	88.5	10,566.1	1,154.1	53.5	11,878.1	1,201.8	43.7	9.0	63.9	8.0
Oct.	12,763.5	1,350.5	108.5	10,696.6	1,279.0	129.6	12,024.6	1,348.2	147.1	9.1	115.2	9.0
Nov.	12,852.4	1,176.4	87.0	10,767.8	1,108.1	69.2	12,069.5	1,160.3	64.1	8.6	52.1	7.6
Dec.	12,877.8	1,039.7	28.5	10,764.3	958.2	-0.5	12,050.2	1,001.3	-17.8	9.0	97.7	8.2
2008 Jan.	12,911.9	1,199.7	38.1	10,819.0	1,130.1	58.8	12,118.8	1,195.8	68.4	8.5	28.0	7.5
Feb.	12,994.3	1,024.8	82.5	10,891.5	966.2	72.6	12,179.7	1,034.3	75.8	8.0	45.1	6.9
Mar.	13,100.1	1,071.1	105.9	10,938.7	966.9	47.1	12,197.2	1,022.4	44.9	7.1	20.4	6.1
Apr.	13,151.4	1,159.0	51.4	11,005.2	1,067.4	66.7	12,276.7	1,132.3	78.7	7.1	59.6	5.1
May	13,328.4	1,123.6	177.1	11,142.9	1,033.8	137.7	12,438.1	1,107.7	152.6	6.7	96.9	5.9
June	13,465.6	1,151.8	135.4	11,218.6	1,036.6	74.1	12,510.1	1,108.8	80.3	6.9	87.7	5.7
July	.	.	.	11,279.7	1,069.0	55.0	12,588.0	1,155.8	74.3	7.1	96.5	6.8
Aug.	.	.	.	11,355.9	785.4	77.8	12,687.2	859.1	84.1	7.6	135.4	8.3
	Long-term											
2007 Aug.	11,386.5	103.2	-6.7	9,473.4	87.3	-7.7	10,637.0	104.5	-2.9	8.5	48.6	7.6
Sep.	11,409.2	157.6	21.6	9,488.3	132.2	13.7	10,625.0	146.6	12.4	8.0	20.6	6.1
Oct.	11,486.2	237.0	78.1	9,552.3	200.8	65.3	10,687.6	225.2	72.5	7.7	69.7	6.6
Nov.	11,566.8	175.4	78.9	9,612.7	141.8	58.6	10,729.9	156.7	55.6	7.1	38.3	5.4
Dec.	11,623.0	198.0	56.8	9,660.0	164.1	47.9	10,764.2	175.3	36.7	7.4	72.6	5.7
2008 Jan.	11,622.3	194.5	2.6	9,653.2	166.2	-3.4	10,761.7	190.1	1.8	6.7	16.2	5.1
Feb.	11,669.3	181.7	46.9	9,702.3	162.4	49.1	10,804.1	186.8	51.4	6.1	29.0	4.7
Mar.	11,705.0	179.1	36.0	9,727.9	144.5	25.7	10,802.7	159.7	22.5	5.3	12.9	4.5
Apr.	11,792.5	258.2	87.6	9,791.6	207.0	63.9	10,876.4	224.8	69.2	5.5	64.9	4.4
May	11,944.7	289.2	152.4	9,904.2	233.6	112.7	10,999.3	256.1	121.9	5.2	68.3	5.0
June	12,060.0	281.6	115.5	9,992.4	228.2	88.5	11,086.4	251.3	95.9	5.3	68.9	4.9
July	.	.	.	10,027.1	175.1	29.5	11,128.8	193.4	35.1	5.4	60.0	5.7
Aug.	.	.	.	10,074.5	103.9	48.9	11,197.2	119.6	50.7	5.9	106.3	7.2

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 [1]					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			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	11,088	4,573	1,166	625	4,419	304	947	700	36	93	112	7
2007	12,050	5,054	1,475	675	4,531	315	1,136	841	46	122	121	7
2007 Q3	11,878	4,960	1,345	666	4,597	310	1,151	868	30	131	115	6
Q4	12,050	5,054	1,475	675	4,531	315	1,170	888	65	109	101	7
2008 Q1	12,197	5,095	1,493	680	4,616	313	1,084	786	24	106	159	9
Q2	12,510	5,236	1,600	692	4,666	317	1,116	786	52	119	153	7
2008 May	12,438	5,228	1,549	695	4,650	317	1,108	801	44	118	135	9
June	12,510	5,236	1,600	692	4,666	317	1,109	775	68	117	143	7
July	12,588	5,287	1,617	694	4,672	319	1,156	812	31	113	190	9
Aug.	12,687	5,319	1,641	695	4,711	321	859	586	32	108	128	6
	Short-term											
2006	1,014	575	16	89	330	4	766	616	5	85	57	3
2007	1,286	787	19	117	357	6	946	754	5	113	69	3
2007 Q3	1,253	715	10	112	410	6	1,004	802	4	126	69	4
Q4	1,286	787	19	117	357	6	984	809	7	101	64	3
2008 Q1	1,394	817	32	128	411	6	905	700	7	102	93	4
Q2	1,424	833	36	129	418	8	872	665	4	109	89	5
2008 May	1,439	854	32	130	414	8	852	666	4	103	74	6
June	1,424	833	36	129	418	8	858	650	7	109	88	4
July	1,459	845	43	131	432	7	962	719	11	109	120	3
Aug.	1,490	859	49	129	445	8	739	521	9	105	102	3
	Long-term [2]											
2006	10,075	3,998	1,150	536	4,089	301	181	84	30	8	54	5
2007	10,764	4,267	1,456	558	4,174	309	190	86	41	8	52	3
2007 Q3	10,625	4,245	1,335	554	4,188	304	147	66	27	5	46	3
Q4	10,764	4,267	1,456	558	4,174	309	186	79	58	9	37	4
2008 Q1	10,803	4,278	1,461	552	4,205	306	179	86	17	4	67	5
Q2	11,086	4,403	1,564	563	4,247	309	244	121	47	10	64	3
2008 May	10,999	4,374	1,517	565	4,236	308	256	135	41	15	62	4
June	11,086	4,403	1,564	563	4,247	309	251	125	61	7	55	3
July	11,129	4,442	1,574	563	4,239	311	193	93	20	4	71	6
Aug.	11,197	4,460	1,592	566	4,266	313	120	66	23	3	26	2
	Of which long-term fixed rate											
2006	7,059	2,136	545	410	3,731	237	108	40	12	5	48	3
2007	7,324	2,274	589	423	3,788	250	107	44	10	5	45	3
2007 Q3	7,315	2,254	591	417	3,806	246	88	33	8	3	41	2
Q4	7,324	2,274	589	423	3,788	250	93	43	8	6	33	3
2008 Q1	7,303	2,271	583	415	3,789	246	110	43	4	3	56	3
Q2	7,470	2,359	601	427	3,836	248	145	67	11	9	56	2
2008 May	7,422	2,323	593	427	3,832	247	144	64	9	14	54	3
June	7,470	2,359	601	427	3,836	248	147	78	13	6	48	2
July	7,481	2,384	599	427	3,822	250	124	52	2	3	64	3
Aug.	7,517	2,387	607	429	3,844	251	66	32	9	2	21	1
	Of which long-term variable rate											
2006	2,595	1,512	595	113	312	64	60	34	18	3	4	1
2007	2,985	1,615	848	124	338	58	69	31	30	3	4	0
2007 Q3	2,855	1,611	727	125	336	57	46	24	17	2	3	0
Q4	2,985	1,615	848	124	338	58	80	25	49	2	3	1
2008 Q1	3,028	1,628	857	126	357	60	53	32	11	1	7	2
Q2	3,160	1,675	939	126	359	60	87	46	35	1	4	1
2008 May	3,113	1,671	899	127	355	60	99	63	29	1	5	1
June	3,160	1,675	939	126	359	60	92	39	47	2	5	0
July	3,180	1,680	949	127	363	61	51	26	17	2	4	2
Aug.	3,211	1,696	960	128	366	62	44	27	13	1	3	1

Source: ECB.

1) Monthly averages of/monthly data for the transactions during this period.

2) 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

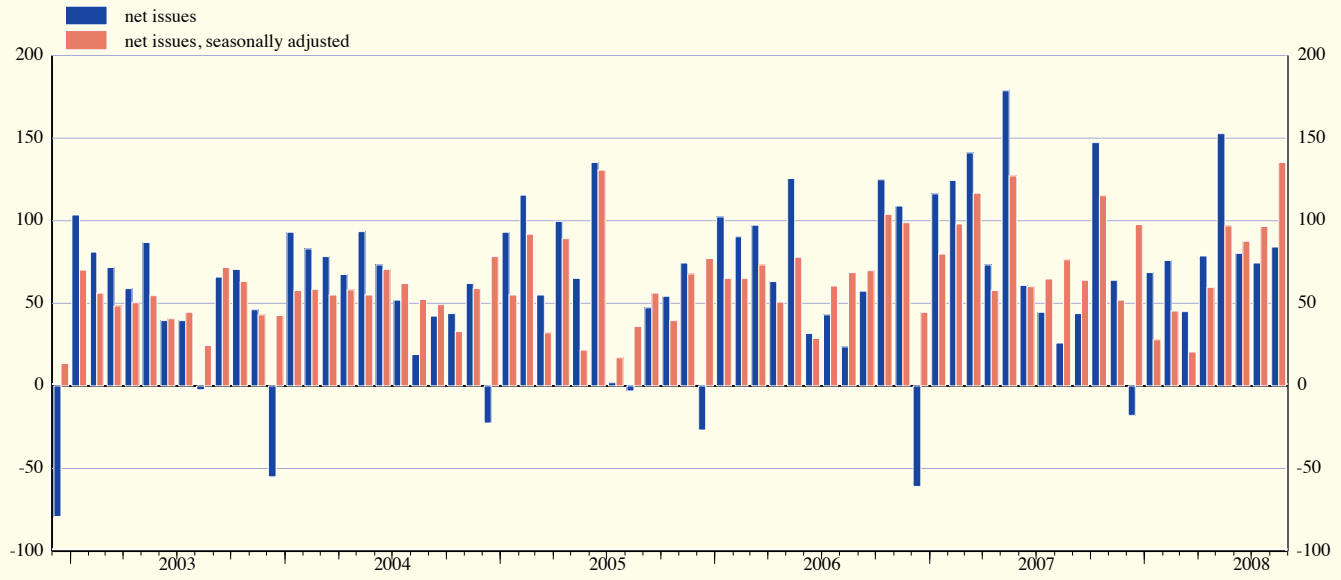
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

2. Net issues

	Non-seasonally adjusted [1]						Seasonally adjusted [1]					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			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	67.3	35.2	20.3	2.4	7.5	1.9	67.3	35.5	19.9	2.4	7.5	1.9
2007	83.5	40.4	27.5	4.6	10.0	0.9	84.1	41.0	27.0	4.8	10.4	0.9
2007 Q3	38.0	31.8	12.1	-2.8	-3.8	0.7	68.4	39.7	22.4	0.2	4.1	1.9
Q4	64.5	31.9	48.0	4.0	-21.0	1.6	88.3	42.5	31.8	6.0	7.1	0.9
2008 Q1	63.0	23.1	8.1	2.8	29.6	-0.6	31.2	3.9	17.6	1.7	8.7	-0.8
Q2	103.9	46.2	35.6	4.3	16.4	1.3	81.4	48.1	31.6	0.0	0.7	1.0
2008 May	152.6	93.2	29.1	12.2	14.3	3.8	96.9	77.2	24.4	4.3	-12.8	3.9
June	80.3	13.2	52.8	-2.0	16.1	0.2	87.7	48.8	43.1	-2.8	-0.3	-0.9
July	74.3	49.0	16.3	1.4	5.7	1.9	96.5	47.4	17.8	1.2	27.1	2.9
Aug.	84.1	26.2	20.7	0.1	35.0	2.1	135.4	40.2	39.3	5.3	46.8	3.7
	Long-term											
2006	63.0	29.0	19.7	2.2	10.1	1.9	62.9	29.1	19.4	2.2	10.2	1.9
2007	61.7	23.8	27.3	2.3	7.7	0.7	61.4	23.9	26.8	2.3	7.7	0.7
2007 Q3	11.0	4.7	12.6	-1.7	-4.7	0.1	38.7	11.7	22.8	-0.2	3.3	1.2
Q4	54.9	9.5	45.0	2.4	-3.7	1.6	60.2	17.6	29.1	2.0	10.7	0.8
2008 Q1	25.2	11.5	4.0	-1.0	11.4	-0.7	19.4	2.4	13.3	1.5	2.9	-0.8
Q2	95.7	42.6	34.3	3.9	14.0	0.8	67.4	36.2	30.3	0.4	-0.2	0.7
2008 May	121.9	63.8	28.7	9.7	17.4	2.4	68.3	45.5	23.1	4.5	-7.6	2.6
June	95.9	35.3	49.1	-0.8	11.7	0.6	68.9	39.1	39.9	-5.9	-3.4	-0.7
July	35.1	32.4	8.8	-0.2	-8.2	2.3	60.0	32.9	9.9	-0.2	13.7	3.7
Aug.	50.7	9.3	14.7	1.5	23.1	2.0	106.3	27.3	34.3	4.3	36.9	3.5

C16 Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted

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



Source: ECB.

1) Monthly averages of/monthly data for the transactions during this period.

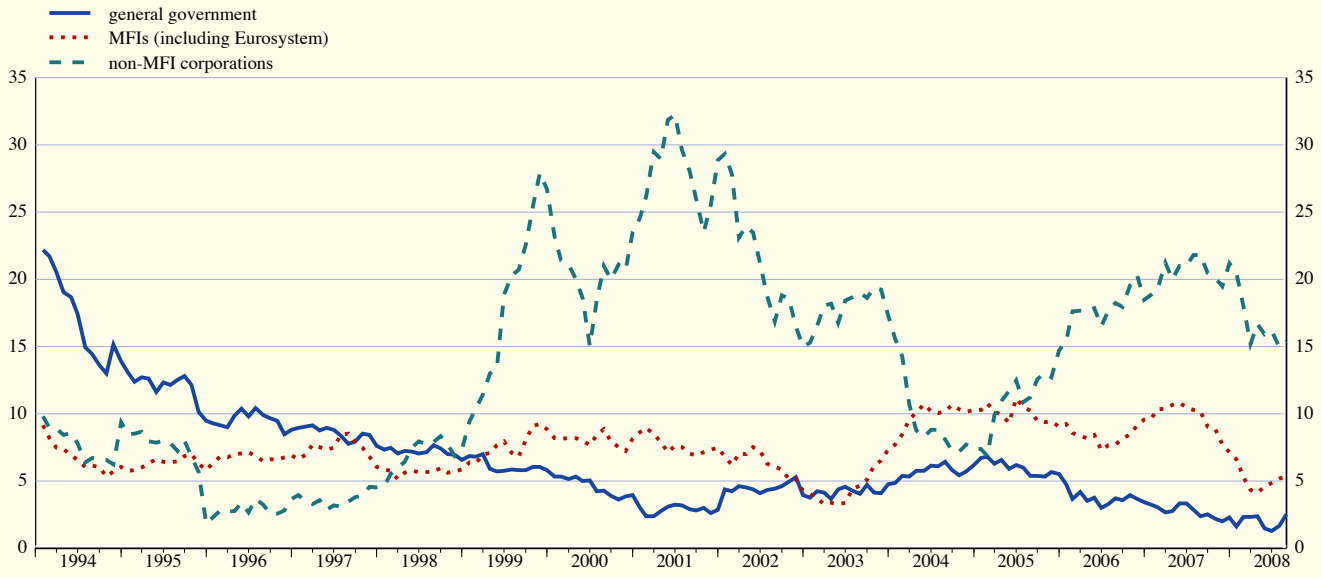
4.3 Growth rates of securities, other than shares, issued by euro area residents [1)]

(percentage changes)

	Annual growth rates (non-seasonally adjusted)						6-month seasonally adjusted growth rates					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			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											
2007 Aug.	9.2	11.1	28.6	9.7	3.1	2.5	9.0	9.7	26.5	12.1	3.8	3.1
Sep.	9.0	10.9	27.0	8.2	3.2	4.2	8.0	9.7	18.7	9.0	3.5	3.2
Oct.	9.1	11.0	26.9	8.9	3.0	5.4	9.0	10.4	26.0	9.1	3.4	4.5
Nov.	8.6	10.4	25.6	9.0	2.7	4.2	7.6	9.3	22.8	8.8	1.6	5.2
Dec.	9.0	10.6	28.5	8.9	2.7	3.6	8.2	10.4	26.6	5.7	1.5	5.5
2008 Jan.	8.5	10.0	27.1	10.7	2.2	3.1	7.5	9.8	24.1	5.9	0.9	4.8
Feb.	8.0	8.7	24.4	10.0	2.9	2.8	6.9	7.5	22.3	8.1	2.1	2.4
Mar.	7.1	7.7	20.9	8.0	2.8	1.7	6.1	5.7	23.1	7.1	2.1	0.2
Apr.	7.1	7.2	23.1	6.7	2.9	1.1	5.1	4.1	20.2	4.3	2.4	-2.2
May	6.7	7.9	22.0	6.3	1.6	3.0	5.9	6.3	21.1	3.7	1.6	0.8
June	6.9	8.2	24.0	3.7	1.4	2.9	5.7	6.2	21.5	1.6	1.2	0.5
July	7.1	8.5	22.7	2.6	2.0	3.9	6.8	7.4	21.5	-0.5	3.1	2.9
Aug.	7.6	8.3	23.3	4.5	2.9	4.4	8.3	9.2	24.3	1.0	3.7	6.2
	Long-term											
2007 Aug.	8.5	10.1	29.4	6.9	2.4	2.7	7.6	7.6	27.6	7.4	2.3	2.9
Sep.	8.0	9.1	27.9	5.8	2.4	3.5	6.1	5.8	19.7	5.4	2.9	1.7
Oct.	7.7	8.9	27.1	5.7	2.0	4.6	6.6	5.6	25.6	4.9	2.7	2.8
Nov.	7.1	7.7	25.8	6.1	1.9	3.1	5.4	4.6	22.0	5.5	1.4	3.2
Dec.	7.4	7.1	28.6	5.3	2.3	2.7	5.7	4.2	25.7	1.9	2.0	4.1
2008 Jan.	6.7	6.6	27.2	6.0	1.6	2.2	5.1	4.1	23.1	3.7	1.0	3.1
Feb.	6.1	5.3	23.4	5.9	2.3	1.9	4.7	2.9	19.2	4.4	2.3	0.9
Mar.	5.3	4.3	19.8	4.6	2.4	0.9	4.5	2.9	19.8	3.8	2.0	0.1
Apr.	5.5	4.2	21.9	4.5	2.5	0.5	4.4	2.7	18.4	4.1	2.3	-1.9
May	5.2	4.5	20.6	4.9	1.4	1.8	5.0	4.5	19.0	4.3	1.4	0.6
June	5.3	4.9	22.3	2.0	1.2	1.9	4.9	5.5	19.2	2.0	0.4	-0.1
July	5.4	5.2	20.5	1.8	1.5	3.1	5.7	6.2	18.0	0.0	2.1	3.0
Aug.	5.9	5.3	20.7	2.7	2.4	3.5	7.2	7.8	22.2	1.0	2.5	6.2

C17 Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined

(annual percentage changes)



Source: ECB.

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

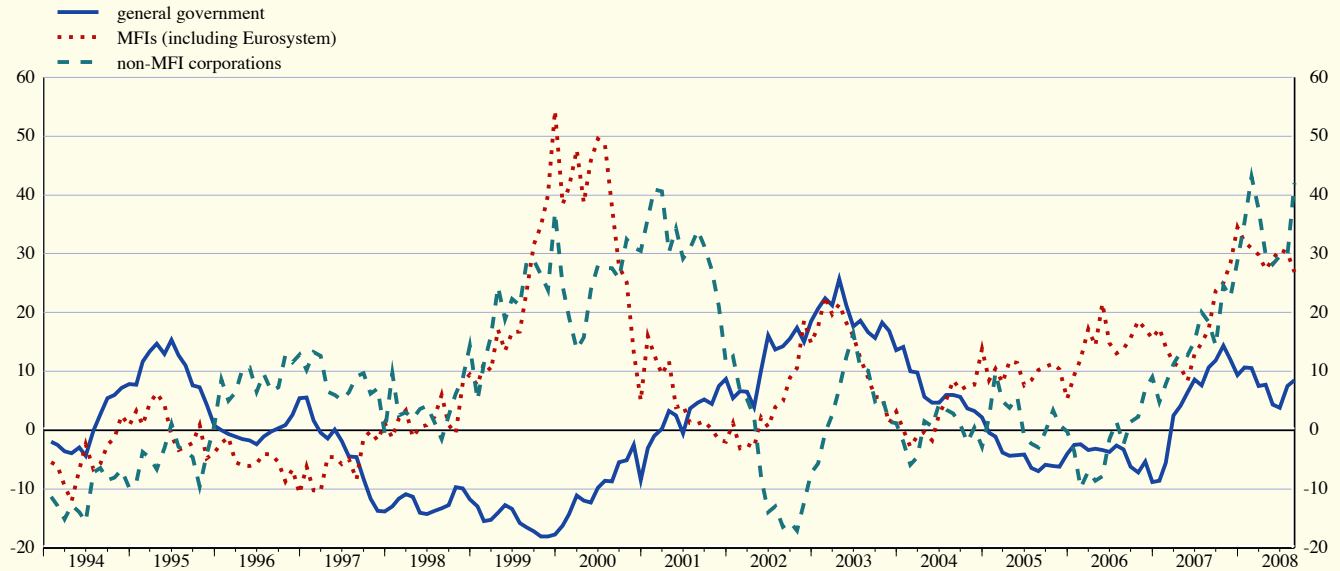
4.3 Growth rates of securities, other than shares, issued by euro area residents [1] (cont'd)

(percentage changes)

	Long-term fixed rate						Long-term variable rate					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			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	14.1	0.3	3.2	13.5	16.1	11.9	40.2	25.6	5.0	4.3
2007	5.1	7.1	17.4	3.7	2.4	6.6	15.7	11.1	37.9	18.0	3.8	-1.8
2007 Q3	5.3	8.0	17.1	4.7	2.3	5.0	16.3	11.1	39.9	19.3	4.4	-4.8
Q4	4.5	6.7	13.1	4.7	1.8	6.3	15.1	9.1	39.5	14.1	4.8	-6.5
2008 Q1	3.3	5.3	8.4	4.4	1.3	3.3	14.3	6.0	38.8	12.6	11.4	-3.2
Q2	2.7	4.3	5.2	3.7	1.3	1.4	12.3	4.9	33.8	8.5	7.6	0.4
2008 Mar.	2.5	3.5	5.6	3.1	1.5	1.4	12.2	4.8	30.9	12.5	12.3	-1.1
Apr.	2.7	3.7	5.0	3.8	1.7	0.8	12.4	4.6	35.9	9.7	7.2	-1.0
May	2.6	4.7	4.6	4.7	1.0	1.7	12.3	5.4	32.9	8.4	6.9	2.0
June	2.8	5.3	6.2	2.3	0.9	1.9	12.1	4.9	34.4	2.6	5.4	1.6
July	3.0	5.7	4.8	2.6	1.2	2.1	11.8	5.1	31.8	1.7	5.7	6.6
Aug.	3.4	5.6	4.4	3.4	1.9	2.4	12.9	5.6	32.7	2.8	9.3	7.0
	In euro											
2006	3.8	3.1	11.5	-0.4	3.2	13.7	14.9	10.1	36.7	27.8	5.2	3.5
2007	4.5	6.4	14.1	2.0	2.7	6.7	15.0	10.3	35.5	17.7	3.9	-2.4
2007 Q3	4.7	7.1	14.0	3.2	2.5	5.1	15.7	10.3	38.0	18.4	4.5	-5.7
Q4	4.0	6.2	10.9	3.1	2.1	6.6	14.9	8.7	37.9	12.8	4.9	-7.1
2008 Q1	2.9	4.9	7.1	2.9	1.5	3.5	14.9	5.8	39.1	11.8	11.7	-4.0
Q2	2.4	3.9	4.6	1.6	1.5	1.4	13.5	5.6	35.1	8.2	8.0	-1.2
2008 Mar.	2.3	3.1	4.5	1.1	1.7	1.4	12.8	4.5	31.9	12.0	12.9	-2.7
Apr.	2.4	3.4	4.0	1.7	1.9	0.8	13.5	5.0	37.5	9.1	7.6	-2.6
May	2.3	4.3	4.1	2.8	1.1	1.8	13.7	6.4	34.2	8.2	7.3	0.5
June	2.5	5.1	6.6	-0.2	1.1	1.9	13.7	6.3	35.6	3.0	5.8	0.1
July	2.8	5.6	5.3	0.2	1.5	2.0	13.6	6.5	33.8	2.3	6.1	5.2
Aug.	3.3	5.5	6.0	0.9	2.2	2.1	14.7	7.1	34.7	3.5	9.8	5.6

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

(annual percentage changes)



Source: ECB.

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

4.4 Quoted shares issued by euro area residents [1)]

(EUR billions, unless otherwise indicated; market values)

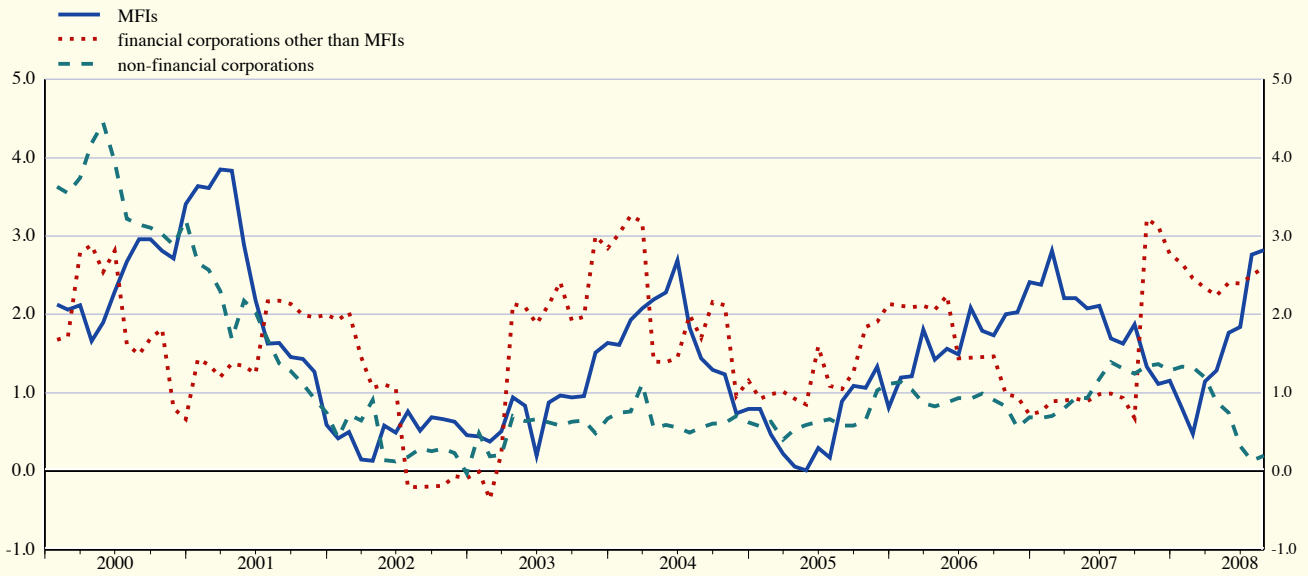
1. Outstanding amounts and annual growth rates

(outstanding amounts as end-of-period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index Dec. 01 = 100	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2006 Aug.	5,586.9	103.5	1.2	963.8	1.8	604.6	1.5	4,018.5	1.0
Sep.	5,728.5	103.6	1.1	991.8	1.7	616.7	1.5	4,120.0	0.9
Oct.	5,917.6	103.6	1.1	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	105.3	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	105.5	1.3	858.2	0.5	492.4	2.5	4,460.5	1.3
Mar.	5,557.5	105.5	1.3	858.5	1.1	501.3	2.3	4,197.7	1.2
Apr.	5,738.4	105.5	1.1	835.2	1.3	519.4	2.2	4,383.7	0.9
May	5,712.3	105.5	1.0	768.9	1.8	497.1	2.4	4,446.3	0.7
June	5,069.5	105.5	0.7	663.2	1.8	435.8	2.4	3,970.6	0.3
July	4,962.2	105.7	0.7	689.5	2.8	428.2	2.5	3,844.5	0.1
Aug.	5,037.9	105.7	0.8	663.5	2.8	438.4	2.6	3,936.0	0.2

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

(annual percentage changes)



Source: ECB.

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

4.4 Quoted shares issued by euro area residents [1)]

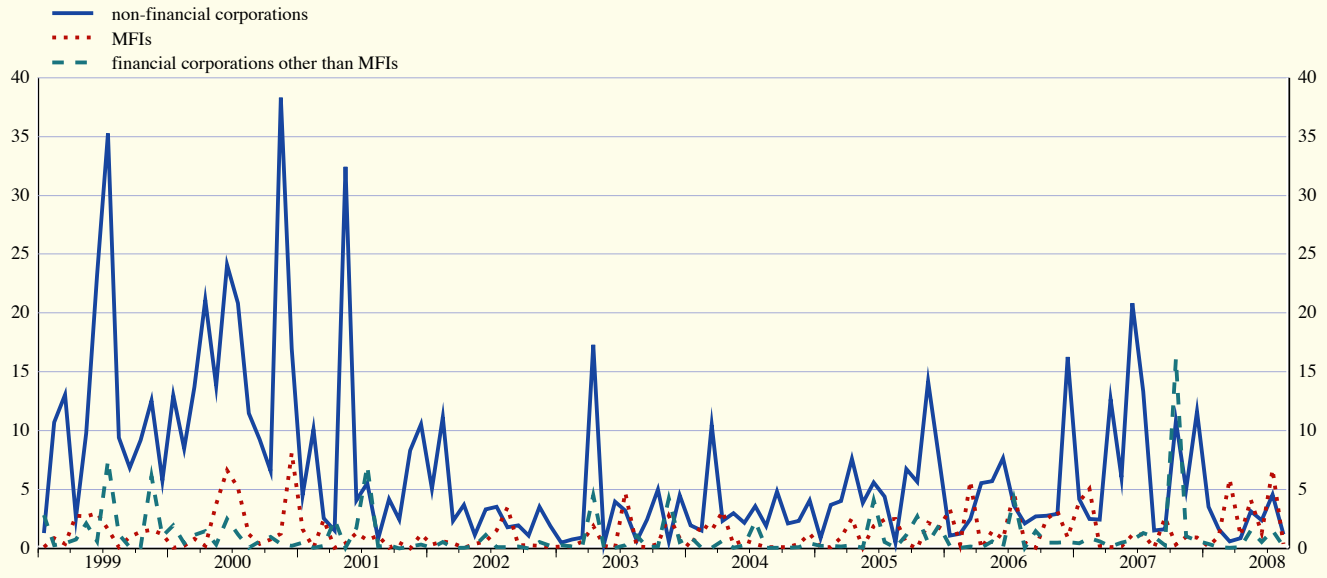
(EUR billions; market values)

2. Transactions during the month

	Total			MFIs			Financial corporations other than MFIs			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2006 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.	4.0	1.4	2.7	0.1	0.0	0.1	0.4	0.7	-0.3	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.	2.1	3.0	-0.9	1.1	0.0	1.1	0.1	0.5	-0.3	0.9	2.5	-1.7
May	8.7	5.9	2.8	4.1	0.1	4.1	1.5	0.3	1.2	3.1	5.6	-2.5
June	4.2	4.8	-0.6	1.3	0.0	1.3	0.5	0.1	0.4	2.4	4.7	-2.3
July	12.8	3.4	9.4	6.7	0.0	6.7	1.5	0.5	1.0	4.5	2.9	1.7
Aug.	1.7	1.5	0.1	0.3	0.0	0.3	0.1	0.0	0.1	1.2	1.5	-0.4

C20 Gross issues of quoted shares by sector of the issuer

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



Source: ECB.

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

4.5 MFI interest rates on euro-denominated deposits and loans by euro area residents [1]

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

1. Interest rates on deposits (new business)

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight [2]	With agreed maturity			Redeemable at notice [2,3]		Overnight [2]	With agreed maturity			
		Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 1 year	Over 1 and up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9	10	11
2007 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	2.01	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.	1.22	4.28	4.16	3.14	2.72	3.81	2.05	4.27	4.56	4.64	4.00
May	1.23	4.32	4.27	3.17	2.73	3.84	2.07	4.26	4.68	4.48	4.03
June	1.24	4.43	4.62	3.28	2.74	3.88	2.06	4.28	4.72	4.01	4.11
July	1.26	4.61	4.83	3.37	2.81	3.94	2.14	4.46	5.06	4.57	4.26
Aug.	1.29	4.59	4.84	3.45	2.87	3.98	2.17	4.46	5.34	4.55	4.30
Sep.	1.32	4.65	4.85	3.35	2.97	4.01	2.20	4.51	5.19	4.67	4.27

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

	Bank overdrafts [2]	Consumer credit				Lending for house purchase					Other lending by initial rate fixation		
		By initial rate fixation			Annual percentage rate of charge [4]	By initial rate fixation				Annual percentage rate of charge [4]			
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years		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 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	8.39	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.	10.46	8.12	7.00	8.47	8.48	5.32	5.02	5.07	5.14	5.37	5.59	5.93	5.49
Feb.	10.45	8.55	7.24	8.44	8.70	5.26	4.97	5.02	5.11	5.35	5.55	5.87	5.55
Mar.	10.52	8.43	7.05	8.42	8.56	5.20	4.89	4.96	5.11	5.28	5.65	5.79	5.46
Apr.	10.53	8.33	7.02	8.46	8.55	5.23	4.91	4.95	5.12	5.29	5.83	5.80	5.45
May	10.57	8.70	7.02	8.44	8.64	5.34	4.96	4.98	5.13	5.36	5.99	5.87	5.59
June	10.63	8.61	6.94	8.44	8.57	5.48	5.11	5.08	5.20	5.46	6.03	6.12	5.67
July	10.66	8.82	7.15	8.58	8.80	5.67	5.27	5.22	5.34	5.62	6.08	6.21	5.82
Aug.	10.77	8.86	7.22	8.69	8.95	5.77	5.37	5.29	5.26	5.69	6.05	6.28	5.70
Sep.	10.82	8.79	7.20	8.68	8.85	5.80	5.43	5.28	5.37	5.71	6.26	6.35	5.74

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

	Bank overdrafts [2]	Other loans up to EUR 1 million by initial rate fixation			Other loans over EUR 1 million by initial rate fixation		
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7
2007 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	5.23
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	5.20	5.30	5.42	5.39
May	6.57	6.10	5.93	5.25	5.27	5.70	5.38
June	6.67	6.16	6.09	5.43	5.35	5.68	5.52
July	6.74	6.26	6.29	5.53	5.45	5.82	5.55
Aug.	6.77	6.27	6.34	5.49	5.45	5.60	5.56
Sep.	6.91	6.34	6.36	5.67	5.62	5.86	5.58

Source: ECB.

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

2) For this instrument category, new business and outstanding amounts coincide. End-of-period.

3) 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.

4) 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 (cont'd)

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

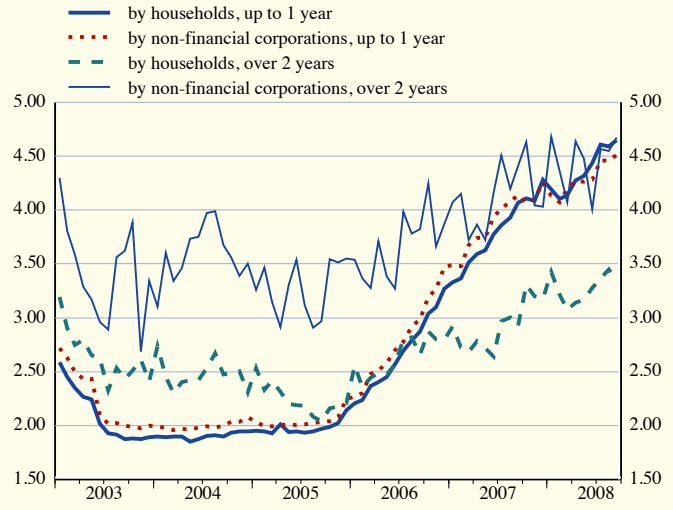
4. Interest rates on deposits (outstanding amounts)

	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight [1]	With agreed maturity		Redeemable at notice [1),2)]		Overnight [1]	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2007 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	2.01	4.23	4.24	3.97
Mar.	1.22	4.01	3.07	2.69	3.78	2.03	4.29	4.24	3.96
Apr.	1.22	4.07	3.07	2.72	3.81	2.05	4.37	4.29	3.91
May	1.23	4.13	3.06	2.73	3.84	2.07	4.43	4.27	4.04
June	1.24	4.20	3.08	2.74	3.88	2.06	4.47	4.31	4.12
July	1.26	4.31	3.07	2.81	3.94	2.14	4.59	4.39	4.24
Aug.	1.29	4.38	3.09	2.87	3.98	2.17	4.65	4.38	4.23
Sep.	1.32	4.45	3.10	2.97	4.01	2.20	4.75	4.44	4.32

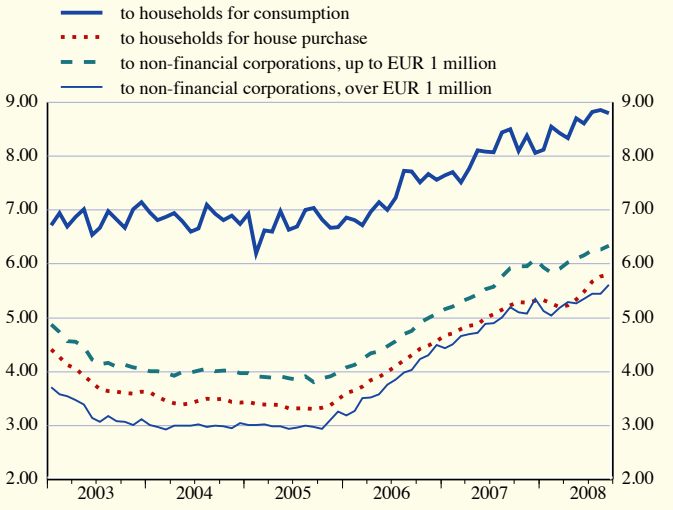
5. Interest rates on loans (outstanding amounts)

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase, with maturity			Consumer credit and other loans, with maturity			With maturity		
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2007 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.	5.54	4.75	5.00	8.97	7.13	6.22	6.08	5.57	5.28
2008 Jan.	5.62	4.75	5.01	8.99	7.15	6.24	6.06	5.55	5.27
Feb.	5.60	4.82	5.03	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	9.07	7.22	6.28	6.04	5.54	5.29
May	5.61	4.85	5.05	9.08	7.22	6.27	6.09	5.59	5.32
June	5.68	4.89	5.07	9.11	7.29	6.35	6.18	5.68	5.39
July	5.72	4.93	5.11	9.19	7.34	6.37	6.25	5.76	5.44
Aug.	5.78	4.97	5.11	9.26	7.38	6.41	6.28	5.79	5.46
Sep.	5.81	5.03	5.15	9.40	7.45	6.50	6.39	5.90	5.54

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



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



Source: ECB.

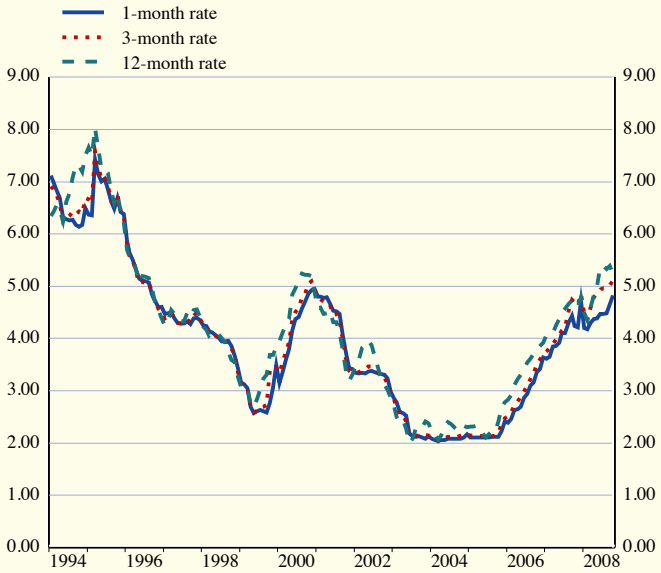
4.6 Money market interest rates

(percentages per annum; period averages)

	Euro area [1),2)]					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
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 Q3	4.05	4.28	4.49	4.56	4.65	5.45	0.89
Q4	3.95	4.37	4.72	4.70	4.68	5.02	0.96
2008 Q1	4.05	4.23	4.48	4.48	4.48	3.26	0.92
Q2	4.00	4.41	4.86	4.93	5.05	2.75	0.92
Q3	4.25	4.54	4.98	5.18	5.37	2.91	0.90
2007 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
July	4.19	4.47	4.96	5.15	5.39	2.79	0.92
Aug.	4.30	4.49	4.97	5.16	5.32	2.81	0.89
Sep.	4.27	4.66	5.02	5.22	5.38	3.12	0.91
Oct.	3.82	4.83	5.11	5.18	5.24	4.06	1.04

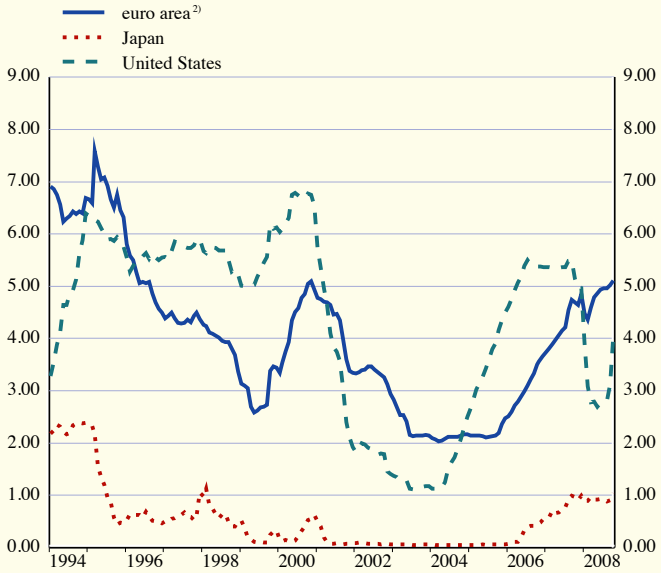
C23 Euro area money market rates [2)]

(monthly; percentages per annum)



C24 3-month money market rates

(monthly; percentages per annum)



Source: ECB.

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

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

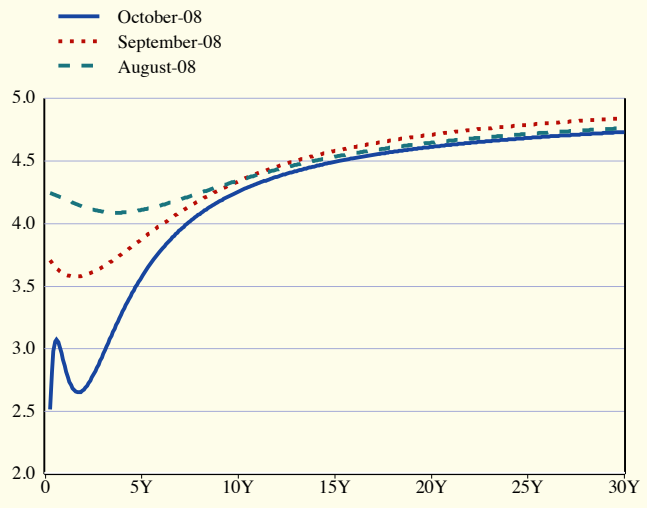
4.7 Euro area yield curves [1)]

(AAA-rated euro area central government bonds; end-of-period; rates in percentages per annum; spreads in percentage points)

	Spot rates								Instantaneous forward rates			
	3 months	1 year	2 years	5 years	7 years	10 years	10 years - 3 months (spread)	10 years - 2 years (spread)	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
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
July	4.20	4.31	4.31	4.31	4.39	4.53	0.33	0.21	4.36	4.27	4.46	4.93
Aug.	4.24	4.20	4.13	4.11	4.19	4.34	0.10	0.21	4.13	4.02	4.26	4.82
Sep.	3.71	3.60	3.59	3.88	4.09	4.34	0.63	0.75	3.52	3.67	4.45	5.00
Oct.	2.52	2.86	2.68	3.58	3.95	4.25	1.74	1.58	2.27	2.99	4.80	4.97

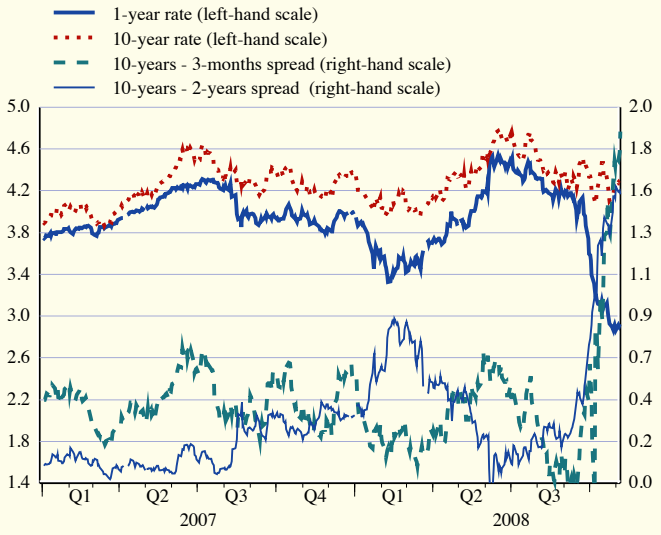
C25 Euro area spot yield curves

(percentages per annum; end-of-period)



C26 Euro area spot rates and spreads

(daily data; rates in percentages per annum; spreads in percentage points)



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.

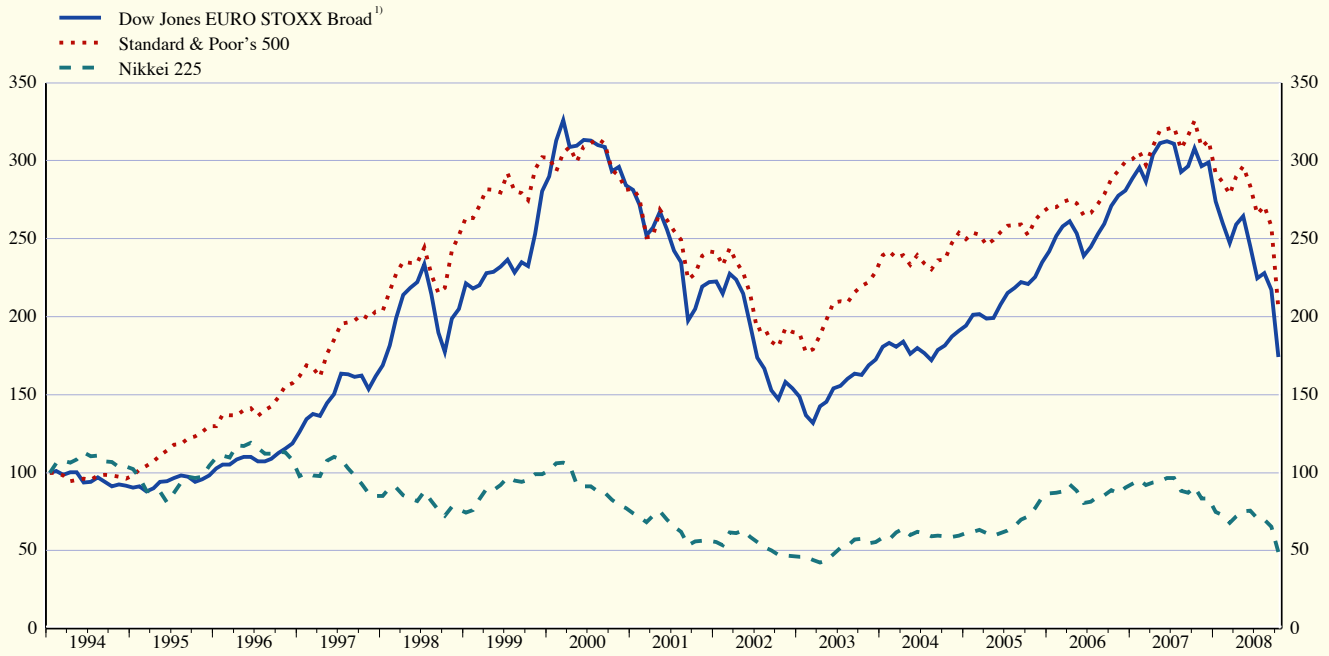
4.8 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices [1]												United States	Japan
	Benchmark		Main industry indices											
	Broad	50	Basic materials	Consumer services	Consumer goods	Oil & gas	Financials	Industrials	Technology	Utilities	Telecom.	Health care	Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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 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
Q3	309.7	3,278.8	506.0	162.2	282.2	382.8	260.5	345.7	285.6	494.8	412.4	407.4	1,252.7	12,758.7
2007 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
July	311.9	3,298.7	529.0	158.2	272.7	401.5	260.0	348.6	281.7	513.7	412.7	418.1	1,257.6	13,153.0
Aug.	316.1	3,346.0	513.7	167.1	287.0	388.1	266.0	356.6	304.4	504.4	411.2	403.0	1,281.5	12,989.4
Sep.	301.3	3,193.7	474.6	161.8	287.4	358.2	255.8	332.2	271.8	465.8	413.2	400.6	1,220.0	12,126.2
Oct.	241.5	2,627.3	342.1	135.6	249.1	287.9	195.0	245.1	212.8	392.4	378.2	363.7	968.8	9,080.5

C27 Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225

(January 1994 = 100; monthly averages)



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					Total (s.a., percentage change on previous period)						Memo item: Administered prices [2]	
	Index 2005 = 100	Total		Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
			Total excl. unprocessed food and energy										
% 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	88.8	11.2
	1	2	3	4	5	6	7	8	9	10	11	12	13
2004	97.9	2.1	2.1	1.8	2.6	-	-	-	-	-	-	1.9	3.6
2005	100.0	2.2	1.5	2.1	2.3	-	-	-	-	-	-	2.1	2.5
2006	102.2	2.2	1.5	2.3	2.0	-	-	-	-	-	-	2.1	2.7
2007	104.4	2.1	2.0	1.9	2.5	-	-	-	-	-	-	2.1	2.1
2007 Q3	104.4	1.9	2.0	1.5	2.5	0.5	1.1	0.9	0.2	0.7	0.5	1.9	1.8
Q4	105.7	2.9	2.3	3.2	2.5	1.0	2.6	1.2	0.3	2.9	0.6	3.0	1.9
2008 Q1	106.4	3.4	2.5	3.9	2.6	1.0	2.0	0.5	0.2	3.4	0.7	3.5	2.5
Q2	108.1	3.6	2.5	4.5	2.4	1.1	1.1	1.1	0.2	6.0	0.6	3.7	2.7
Q3	108.4	3.8	2.5	4.7	2.6	0.7	0.9	1.0	0.1	2.1	0.7	3.9	3.3
2008 May	108.2	3.7	2.5	4.5	2.5	0.6	0.2	0.6	0.0	3.6	0.3	3.8	2.8
June	108.6	4.0	2.5	5.0	2.5	0.5	0.3	0.4	0.1	2.6	0.2	4.1	2.9
July	108.5	4.0	2.5	5.1	2.6	0.3	0.3	0.7	-0.2	1.3	0.2	4.2	3.2
Aug.	108.3	3.8	2.6	4.6	2.7	-0.1	0.3	-0.4	0.3	-3.0	0.3	3.9	3.3
Sep.	108.5	3.6	2.5	4.4	2.6	0.1	0.1	0.2	0.2	-0.4	0.0	3.7	3.4
Oct. [4]	.	3.2	.	.	.	.	.	.	.	.	.	.	.

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing		Transport	Communication	Recreation and personal	Miscellaneous
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy		Rents				
% of total [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	1.6	2.0	0.8	2.4	0.3	10.1	2.6	2.0	2.7	-2.2	2.3	3.1
2006	2.4	2.1	2.8	2.3	0.6	7.7	2.5	2.1	2.5	-3.3	2.3	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 Q3	2.5	2.5	2.4	0.9	1.0	0.7	2.7	2.0	2.4	-1.5	3.0	3.4
Q4	3.9	4.5	3.1	2.8	1.0	8.1	2.7	2.0	2.6	-2.1	3.0	3.2
2008 Q1	5.2	6.4	3.5	3.2	0.8	10.7	2.5	1.9	3.1	-2.5	3.2	3.2
Q2	5.7	6.9	3.7	3.9	0.8	13.6	2.3	1.9	3.6	-1.8	3.0	2.2
Q3	5.6	6.7	3.9	4.2	0.7	15.1	2.3	1.9	4.4	-2.4	3.4	2.3
2008 Apr.	5.4	7.0	3.1	3.2	0.8	10.8	2.4	1.8	3.2	-1.6	2.7	2.1
May	5.8	6.9	3.9	3.9	0.7	13.7	2.3	1.9	3.8	-1.7	3.1	2.2
June	5.8	7.0	4.0	4.5	0.8	16.1	2.3	1.9	4.0	-1.9	3.2	2.2
July	6.1	7.2	4.4	4.6	0.5	17.1	2.3	1.9	4.1	-2.2	3.4	2.2
Aug.	5.6	6.8	3.7	4.2	0.7	14.6	2.2	1.9	4.8	-2.5	3.5	2.3
Sep.	5.2	6.2	3.6	4.0	0.9	13.5	2.3	1.9	4.5	-2.6	3.3	2.3

Sources: Eurostat and ECB calculations.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.
2) ECB estimates based on Eurostat data; these experimental statistics can only provide an approximate measure of price administration since changes in administered prices cannot be fully isolated from other influences. Please refer to http://www.ecb.europa.eu/stats/prices/hicp/html/index.en.html for a note explaining the methodology used in the compilation of this indicator.
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

(annual percentage changes, unless otherwise indicated)

2. Industry, construction, residential property and commodity prices

	Industrial producer prices excluding construction										Construction [1]	Residential property prices [2]	World market prices of raw materials [3]		Oil prices [4] (EUR per barrel)
	Total (index 2000 = 100)	Total		Industry excluding construction and energy						Energy			Total		
			Manufacturing	Total	Intermediate goods	Capital goods	Consumer goods							Total excluding energy	
							Total	Durable	Non-durable						
% 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	7.1	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	7.6	28.5	9.4	44.6
2006	115.8	5.1	3.4	2.8	4.8	1.4	1.6	1.6	1.7	13.3	4.1	6.4	19.7	24.8	52.9
2007	119.1	2.8	3.1	3.2	4.8	1.8	2.3	1.9	2.4	1.7	4.0	4.3	3.9	9.2	52.8
2007 Q3	119.3	2.1	2.7	3.0	4.3	1.6	2.4	1.8	2.5	-0.7	3.7	-	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	3.3	3.9 [6]	23.5	1.6	61.0
2008 Q1	123.6	5.4	5.4	3.6	4.2	1.5	4.4	2.3	4.8	11.7	3.1	-	36.5	11.9	64.2
Q2	127.0	7.1	6.3	3.8	4.5	1.8	4.4	2.3	4.8	18.0	4.0	.	44.0	7.1	78.5
Q3	129.5	8.5	6.5	4.3	5.9	2.2	3.8	2.5	4.0	22.6	.	-	37.0	8.6	77.6
2008 May	127.1	7.1	6.4	3.8	4.3	1.8	4.4	2.3	4.8	18.2	-	-	47.7	6.0	80.1
June	128.3	8.0	6.9	4.0	4.9	2.0	4.5	2.3	4.8	21.5	-	-	51.2	9.6	85.9
July	130.0	9.2	7.3	4.4	5.8	2.1	4.2	2.5	4.5	25.0	-	-	46.8	9.8	85.3
Aug.	129.3	8.5	6.5	4.3	6.0	2.2	3.8	2.4	4.1	22.6	-	-	40.5	10.5	77.0
Sep.	129.1	7.9	5.6	4.1	5.8	2.2	3.3	2.5	3.4	20.3	-	-	23.9	5.5	70.0
Oct.	.	.	.	.	.	.	.	.	.	.	-	-	-4.4	-7.4	55.2

3. Hourly labour costs [7]

	Total (s.a. index 2000 = 100)	Total	By component		By selected economic activity			Memo: indicator of negotiated wages [8]
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total [5]	100.0	100.0	73.1	26.9	34.6	9.1	56.3	
	1	2	3	4	5	6	7	8
2004	113.7	2.6	2.4	3.2	2.9	2.7	2.3	2.1
2005	116.4	2.4	2.5	2.2	2.4	2.0	2.5	2.1
2006	119.2	2.5	2.6	2.1	3.4	1.6	2.0	2.3
2007	122.3	2.6	2.8	2.2	2.6	3.1	2.6	2.2
2007 Q2	121.9	2.6	2.7	2.3	2.9	2.9	2.4	2.3
Q3	122.7	2.5	2.6	2.3	2.1	3.5	2.6	2.2
Q4	123.7	2.9	3.2	2.0	2.9	3.8	2.7	2.1
2008 Q1	124.7	3.5	3.7	2.7	4.3	4.1	2.9	2.9
Q2	125.4	2.7	2.8	2.2	3.0	3.8	2.3	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.
2) Experimental data based on non-harmonised national sources (see the ECB website for further details).
3) Refers to the prices expressed in euro.
4) Brent Blend (for one-month forward delivery).
5) In 2000.
6) The quarterly data for the second (fourth) quarter refer to semi-annual averages of the first (second) half of the year, respectively. Since some national data are only available at annual frequency, the semi-annual estimate is partially derived from annual results; therefore, the accuracy of semi-annual data is lower than the accuracy of annual data.
7) Hourly labour costs for the whole economy, excluding agriculture, public administration, education, health and services not elsewhere classified. Owing to differences in coverage, the estimates for the components may not be consistent with the total.
8) Experimental data (see the ECB website for further details).

5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

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

(seasonally adjusted)

	Total (index 2000 = 100)	Total	By economic activity					
			Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
	1	2	3	4	5	6	7	8
	Unit labour costs [1]							
2004	107.6	0.8	-11.3	-1.2	3.1	-0.1	2.4	2.0
2005	108.8	1.2	8.3	-1.0	3.0	1.3	2.0	2.0
2006	109.9	1.0	3.2	-0.4	3.3	0.0	2.6	2.0
2007	111.7	1.7	0.4	-0.4	3.6	1.5	2.5	2.1
2007 Q2	111.5	1.5	0.7	0.1	4.3	1.0	2.7	1.2
Q3	111.8	1.6	0.5	-1.0	4.5	2.1	2.2	2.1
Q4	112.9	2.5	0.7	0.2	3.9	2.8	3.0	2.9
2008 Q1	113.5	2.6	1.6	1.3	1.7	2.4	3.8	3.0
Q2	115.1	3.2	0.5	2.4	2.2	3.6	2.5	4.5
	Compensation per employee							
2004	110.0	2.1	1.6	2.9	2.9	1.4	1.7	2.3
2005	112.1	1.9	2.2	1.8	2.0	2.1	2.4	1.8
2006	114.6	2.2	3.1	3.6	3.4	1.5	2.3	1.5
2007	117.5	2.5	2.4	2.8	3.0	2.2	2.1	2.6
2007 Q2	117.2	2.3	3.0	3.2	2.5	2.3	1.9	1.9
Q3	117.6	2.3	2.2	2.4	2.9	2.4	1.8	2.4
Q4	118.9	2.9	2.5	3.2	3.3	2.3	2.4	3.4
2008 Q1	120.0	3.1	3.7	3.5	4.1	2.4	2.8	3.1
Q2	121.2	3.5	3.9	3.2	4.9	2.8	2.3	4.4
	Labour productivity [2]							
2004	102.3	1.3	14.6	4.2	-0.2	1.5	-0.7	0.3
2005	103.0	0.7	-5.6	2.8	-0.9	0.7	0.4	-0.1
2006	104.3	1.2	-0.1	3.9	0.1	1.5	-0.2	-0.6
2007	105.2	0.8	2.0	3.2	-0.6	0.8	-0.4	0.4
2007 Q2	105.1	0.9	2.3	3.0	-1.7	1.3	-0.7	0.7
Q3	105.2	0.7	1.8	3.4	-1.6	0.3	-0.4	0.3
Q4	105.3	0.4	1.8	2.9	-0.5	-0.5	-0.6	0.5
2008 Q1	105.7	0.6	2.1	2.2	2.4	0.0	-0.9	0.1
Q2	105.3	0.2	3.4	0.8	2.6	-0.8	-0.2	-0.1

5. Gross domestic product deflators

	Total (s.a. index 2000 = 100)	Total	Domestic demand				Exports [3]	Imports [3]
			Total	Private consumption	Government consumption	Gross fixed capital formation		
	1	2	3	4	5	6	7	8
2004	109.4	1.9	2.1	2.1	2.0	2.4	1.0	1.5
2005	111.6	2.0	2.4	2.1	2.4	2.6	2.3	3.4
2006	113.7	1.9	2.4	2.2	2.0	2.9	2.7	3.9
2007	116.3	2.3	2.2	2.2	1.5	2.6	1.5	1.3
2007 Q2	116.1	2.3	1.9	2.0	0.8	2.8	1.6	0.8
Q3	116.7	2.3	2.2	2.1	1.5	2.4	1.2	1.0
Q4	117.1	2.3	2.8	2.8	2.3	2.5	1.4	2.7
2008 Q1	117.9	2.2	2.8	3.1	2.0	2.3	2.2	3.9
Q2	118.8	2.3	3.2	3.4	3.0	2.3	2.3	4.6

Sources: ECB calculations based on Eurostat data.

1) Compensation (at current prices) per employee divided by value added (volumes) per person employed.

2) Value added (volumes) per person employed.

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

5.2 Output and demand

1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External 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
	Current prices (EUR billions, seasonally adjusted)								
2004	7,808.0	7,651.9	4,470.2	1,594.8	1,577.5	9.3	156.1	2,863.5	2,707.4
2005	8,104.3	7,984.8	4,643.9	1,658.1	1,672.0	10.7	119.4	3,081.4	2,961.9
2006	8,508.3	8,408.2	4,840.8	1,724.4	1,820.3	22.6	100.1	3,430.1	3,330.0
2007	8,931.7	8,799.1	5,028.3	1,790.4	1,946.2	34.2	132.6	3,688.5	3,555.8
2007 Q2	2,223.1	2,186.0	1,250.8	444.9	482.7	7.6	37.2	915.3	878.2
Q3	2,246.1	2,214.1	1,264.6	449.3	488.2	12.0	32.0	934.2	902.2
Q4	2,263.0	2,232.9	1,278.3	453.9	496.8	4.0	30.1	940.5	910.4
2008 Q1	2,293.3	2,265.6	1,288.0	457.0	507.5	13.1	27.7	966.9	939.2
Q2	2,306.1	2,282.2	1,297.2	466.0	506.2	12.8	23.9	971.3	947.4
	percentage of GDP								
2007	100.0	98.5	56.3	20.0	21.8	0.4	1.5	-	-
	Chain-linked volumes (prices of the previous year, seasonally adjusted [3])								
	quarter-on-quarter percentage changes								
2007 Q2	0.5	0.3	0.7	0.2	0.2	-	-	1.3	0.8
Q3	0.6	0.7	0.4	0.5	0.9	-	-	1.8	2.2
Q4	0.4	0.1	0.2	0.3	1.1	-	-	0.3	-0.4
2008 Q1	0.7	0.7	-0.1	0.3	1.4	-	-	1.8	1.8
Q2	-0.2	-0.3	-0.2	0.5	-1.0	-	-	-0.2	-0.5
	annual percentage changes								
2004	2.1	1.9	1.6	1.6	2.2	-	-	7.3	7.0
2005	1.7	1.9	1.7	1.5	3.1	-	-	4.9	5.6
2006	2.9	2.7	1.9	1.9	5.5	-	-	8.2	8.1
2007	2.6	2.4	1.6	2.3	4.2	-	-	6.0	5.4
2007 Q2	2.6	2.3	1.8	2.2	3.5	-	-	6.0	5.3
Q3	2.6	2.2	1.8	2.4	3.6	-	-	7.3	6.4
Q4	2.1	2.1	1.3	2.1	3.2	-	-	4.0	3.9
2008 Q1	2.1	1.7	1.2	1.4	3.7	-	-	5.3	4.5
Q2	1.4	1.2	0.3	1.7	2.5	-	-	3.7	3.2
	contributions to quarter-on-quarter percentage changes of GDP in percentage points								
2007 Q2	0.5	0.3	0.4	0.0	0.0	-0.2	0.2	-	-
Q3	0.6	0.7	0.2	0.1	0.2	0.2	-0.2	-	-
Q4	0.4	0.1	0.1	0.1	0.2	-0.3	0.3	-	-
2008 Q1	0.7	0.6	0.0	0.1	0.3	0.3	0.0	-	-
Q2	-0.2	-0.3	-0.1	0.1	-0.2	0.0	0.1	-	-
	contributions to annual percentage changes of GDP in percentage points								
2004	2.1	1.9	0.9	0.3	0.4	0.2	0.3	-	-
2005	1.7	1.8	1.0	0.3	0.6	-0.1	-0.1	-	-
2006	2.9	2.7	1.1	0.4	1.1	0.1	0.2	-	-
2007	2.6	2.4	0.9	0.5	0.9	0.1	0.3	-	-
2007 Q2	2.6	2.2	1.0	0.5	0.7	0.0	0.3	-	-
Q3	2.6	2.2	1.0	0.5	0.8	-0.1	0.4	-	-
Q4	2.1	2.0	0.7	0.4	0.7	0.2	0.1	-	-
2008 Q1	2.1	1.7	0.7	0.3	0.8	-0.1	0.4	-	-
Q2	1.4	1.1	0.2	0.3	0.5	0.1	0.3	-	-

Sources: Eurostat and ECB calculations.
1) Exports and imports cover goods and services and include cross-border intra-euro area trade. They are not fully consistent with 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.

5.2 Output and demand

2. Value added by economic activity

	Gross value added (basic prices)							Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services	
	1	2	3	4	5	6	7	8
	Current prices (EUR billions, seasonally adjusted)							
2004	7,011.1	154.4	1,434.7	412.3	1,491.9	1,916.7	1,601.0	796.9
2005	7,263.6	142.7	1,472.2	439.2	1,530.6	2,015.4	1,663.4	840.7
2006	7,598.2	139.6	1,540.1	475.9	1,593.1	2,130.9	1,718.5	910.1
2007	7,978.8	149.5	1,616.8	515.8	1,655.7	2,252.5	1,788.5	953.0
2007 Q2	1,985.2	36.7	402.8	127.7	412.6	560.1	445.3	237.9
Q3	2,007.6	38.0	407.4	129.4	416.9	567.1	448.8	238.5
Q4	2,026.4	38.7	409.3	132.3	418.9	573.3	454.0	236.6
2008 Q1	2,052.3	39.8	416.3	136.6	423.4	580.1	456.2	240.9
Q2	2,068.9	39.7	416.4	136.1	424.3	587.8	464.6	237.2
	percentage of value added							
2007	100.0	1.9	20.3	6.5	20.8	28.2	22.4	-
	Chain-linked volumes (prices of the previous year, seasonally adjusted [1])							
	quarter-on-quarter percentage changes							
2007 Q2	0.7	-0.7	0.9	-0.6	1.0	0.9	0.4	-1.2
Q3	0.5	-1.1	0.9	-0.1	0.5	0.7	0.3	0.7
Q4	0.5	1.1	0.5	0.9	0.2	0.6	0.4	-0.6
2008 Q1	0.5	1.2	0.3	2.6	0.6	0.6	0.0	1.7
Q2	0.0	0.1	-0.7	-1.8	-0.4	0.7	0.5	-1.4
	annual percentage changes							
2004	2.3	12.0	2.8	1.1	2.8	1.6	1.5	0.8
2005	1.7	-6.5	1.7	1.8	1.4	2.8	1.4	1.7
2006	2.8	-2.0	3.5	2.7	3.1	3.7	1.3	3.3
2007	2.9	0.8	3.5	3.3	2.6	3.6	1.7	0.6
2007 Q2	2.9	0.7	3.3	2.9	2.9	3.6	1.7	0.2
Q3	2.8	0.4	3.6	2.2	2.6	3.6	1.7	1.1
Q4	2.5	0.3	3.2	1.7	1.7	3.4	1.8	-0.8
2008 Q1	2.2	0.5	2.6	2.9	2.3	2.8	1.1	0.6
Q2	1.5	1.2	1.0	1.6	0.9	2.6	1.2	0.4
	contributions to quarter-on-quarter percentage changes of value added in percentage points							
2007 Q2	0.7	0.0	0.2	0.0	0.2	0.3	0.1	-
Q3	0.5	0.0	0.2	0.0	0.1	0.2	0.1	-
Q4	0.5	0.0	0.1	0.1	0.0	0.2	0.1	-
2008 Q1	0.5	0.0	0.1	0.2	0.1	0.2	0.0	-
Q2	0.0	0.0	-0.1	-0.1	-0.1	0.2	0.1	-
	contributions to annual percentage changes of value added in percentage points							
2004	2.3	0.3	0.6	0.1	0.6	0.4	0.4	-
2005	1.7	-0.1	0.4	0.1	0.3	0.8	0.3	-
2006	2.8	0.0	0.7	0.2	0.7	1.0	0.3	-
2007	2.9	0.0	0.7	0.2	0.6	1.0	0.4	-
2007 Q2	2.9	0.0	0.7	0.2	0.6	1.0	0.4	-
Q3	2.8	0.0	0.7	0.1	0.5	1.0	0.4	-
Q4	2.5	0.0	0.7	0.1	0.4	0.9	0.4	-
2008 Q1	2.2	0.0	0.5	0.2	0.5	0.8	0.2	-
Q2	1.5	0.0	0.2	0.1	0.2	0.7	0.3	-

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

5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

3. Industrial production

	Total	Industry excluding construction										Construction
		Total (s.a. index 2000 = 100)	Total		Industry excluding construction and energy						Energy	
				Manu-facturing	Total	Intermediate goods	Capital goods	Consumer goods				
								Total	Durable	Non-durable		
% of total [1]	100.0	82.8	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	1.4	104.0	1.4	1.5	1.2	0.9	3.0	0.5	-0.7	0.7	1.4	0.7
2006	4.0	108.2	4.0	4.4	4.4	4.9	5.9	2.5	4.4	2.2	0.7	3.9
2007	3.4	111.8	3.4	4.0	3.7	3.8	6.0	2.3	1.2	2.5	-0.6	3.2
2007 Q3	3.7	112.9	3.9	4.2	4.0	3.5	6.6	3.0	2.1	3.2	1.0	1.7
Q4	2.5	112.7	3.0	2.6	2.0	1.8	5.3	0.7	-2.7	1.3	5.5	-0.5
2008 Q1	2.4	113.1	2.5	1.9	1.8	1.5	5.1	0.3	-1.5	0.6	4.4	1.3
Q2	0.7	112.6	1.2	1.3	0.9	0.5	4.1	-1.4	-2.6	-1.1	1.6	-2.2
2008 Mar.	0.9	112.8	1.4	-0.1	-0.7	0.5	2.8	-1.5	-3.8	-1.1	6.1	-2.6
Apr.	3.4	114.1	4.3	4.7	4.7	3.0	7.9	0.7	1.4	0.6	6.4	-1.8
May	-0.5	111.9	-0.3	-0.3	-0.9	-0.4	2.8	-3.4	-5.0	-3.1	-0.6	-1.9
June	-0.8	111.9	-0.4	-0.4	-0.7	-0.9	1.7	-1.3	-4.1	-0.8	-0.9	-2.9
July	-1.5	111.7	-1.2	-1.3	-1.3	-1.8	-0.3	-1.7	-5.4	-1.0	0.5	-3.1
Aug.	-1.0	112.9	-0.6	-1.0	-1.5	-0.2	0.9	-3.5	-5.9	-3.2	1.1	-2.5
	month-on-month percentage changes (s.a.)											
2008 Mar.	-1.0	-	-0.5	-0.6	-1.7	-0.6	-1.7	-0.8	-2.0	-0.6	2.8	-2.8
Apr.	0.9	-	1.1	0.5	2.2	0.7	2.3	0.5	2.2	0.3	-1.0	-0.5
May	-1.7	-	-1.9	-1.5	-2.4	-1.5	-2.1	-1.7	-3.4	-1.5	-2.2	-0.2
June	-0.2	-	0.0	-0.1	0.1	-0.2	-0.4	0.7	0.6	0.8	0.4	-0.8
July	-0.1	-	-0.2	-0.2	-0.3	-0.2	-0.4	-0.3	-0.9	-0.2	1.0	0.2
Aug.	0.8	-	1.1	1.0	1.0	1.6	1.7	0.0	1.4	-0.2	1.5	0.1

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

	Industrial new orders		Industrial turnover		Retail sales						New passenger car registrations	
	Manufacturing [2] (current prices)		Manufacturing (current prices)		Current prices	Constant prices						
	Total (s.a. index 2000 = 100)	Total	Total (s.a. index 2000 = 100)	Total	Total	Total (s.a. index 2000 = 100)	Total	Food, beverages, tobacco	Non-food		Total (s.a., thousands) [3]	Total
									Textiles, clothing, footwear	Household equipment		
% of total [1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	43.7	56.3	10.6	14.8	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2005	109.1	3.9	110.8	3.6	2.3	106.8	1.4	0.8	1.8	2.5	1.4	939	0.9
2006	119.3	9.3	118.9	7.3	2.9	108.5	1.5	0.3	2.5	2.7	4.4	968	3.0
2007	128.9	8.3	126.2	6.3	2.4	109.6	0.9	-0.3	1.8	3.3	2.1	964	-0.4
2007 Q4	131.4	8.3	127.0	5.3	2.1	109.1	-0.3	-0.8	0.2	0.4	-1.2	977	0.3
2008 Q1	130.7	3.7	131.2	4.3	3.1	108.9	-0.2	-1.5	0.6	0.1	-1.3	945	-0.6
Q2	129.2	0.0	132.1	6.2	1.9	108.1	-1.6	-2.4	-0.9	-2.4	-2.2	905	-5.0
Q3	.	.	.	.	2.1	108.2	-1.5	-2.0	-1.1	.	.	894	-9.0
2008 Apr.	134.2	13.1	132.6	14.3	1.1	107.9	-1.7	-2.1	-1.1	-8.7	-1.1	937	2.2
May	126.4	-4.7	131.0	0.8	3.9	108.6	0.3	-0.8	0.8	5.5	-0.7	891	-9.9
June	127.0	-6.9	132.7	3.9	0.9	107.7	-3.2	-4.2	-2.5	-3.3	-4.7	886	-6.6
July	129.6	2.9	131.8	6.2	2.0	108.0	-1.6	-2.3	-1.0	0.1	-3.0	888	-8.7
Aug.	127.9	-6.7	132.7	-2.1	2.3	108.3	-1.5	-1.7	-1.3	-2.9	-3.7	904	-8.6
Sep.	.	.	.	.	2.1	108.1	-1.6	-2.0	-1.1	.	.	891	-9.7
	month-on-month percentage changes (s.a.)												
2008 Apr.	-	4.0	-	2.2	0.4	-	-0.2	-0.4	0.1	-0.5	0.9	-	2.6
May	-	-5.8	-	-1.2	0.8	-	0.6	0.1	1.0	6.1	0.2	-	-4.9
June	-	0.5	-	1.3	-0.5	-	-0.8	-0.7	-0.8	-2.9	-1.7	-	-0.6
July	-	2.0	-	-0.6	0.5	-	0.3	-0.3	0.5	2.5	1.2	-	0.2
Aug.	-	-1.3	-	0.7	0.4	-	0.3	0.6	0.1	-1.8	0.1	-	1.9
Sep.	-	.	-	.	0.1	-	-0.2	0.0	-0.3	.	.	-	-1.5

Sources: Eurostat, except columns 12 and 13 in Table 4 in Section 5.2 (ECB calculations based on data from the ACEA, European Automobile Manufacturers' Association).

1) In 2000.

2) Includes manufacturing industries working mainly on the basis of orders, representing 62.6% of total manufacturing in 2000.

3) Annual and quarterly figures are averages of monthly figures in the period concerned.

5.2 Output and demand

(percentage balances,[1] unless otherwise indicated; seasonally adjusted)

5. Business and Consumer Surveys

	Economic sentiment indicator[2] (long-term average = 100)	Manufacturing industry					Consumer confidence indicator				
		Industrial confidence indicator				Capacity utilisation[3] (percentages)					
		Total[4]	Order books	Stocks of finished products	Production expectations		Total[4]	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
	1	2	3	4	5	6	7	8	9	10	11
2004	98.7	-5	-15	8	10	81.4	-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 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	83.9	-12	-7	-17	11	-12
Q2	96.5	-3	-6	9	7	83.3	-15	-10	-22	13	-14
Q3	88.5	-10	-15	12	-2	82.2	-19	-12	-28	23	-15
2008 May	97.6	-2	-5	8	7	-	-15	-10	-21	13	-15
June	94.8	-5	-9	10	5	-	-17	-12	-25	14	-16
July	89.5	-8	-13	11	1	82.8	-20	-13	-30	20	-16
Aug.	88.5	-9	-13	12	-3	-	-19	-12	-28	23	-14
Sep.	87.5	-12	-20	13	-4	-	-19	-11	-26	24	-15
Oct.	80.4	-18	-26	15	-13	81.6	-24	-12	-33	34	-15

	Construction confidence indicator			Retail trade confidence indicator				Services confidence 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	-12	-19	-4	-8	-12	14	2	11	6	8	18
2005	-7	-11	-2	-7	-12	13	4	11	5	10	18
2006	1	-4	5	1	3	14	13	18	13	18	24
2007	-1	-8	7	1	4	15	12	19	16	19	23
2007 Q3	0	-8	7	1	7	14	11	20	16	20	24
Q4	-3	-11	4	0	4	16	13	15	11	14	20
2008 Q1	-7	-14	-1	-1	2	16	12	10	4	12	15
Q2	-11	-17	-4	-3	-1	16	7	8	3	9	13
Q3	-14	-21	-7	-9	-10	17	-1	1	-7	3	6
2008 May	-9	-16	-2	-1	3	14	8	8	4	9	13
June	-11	-19	-4	-4	-3	17	7	9	4	10	14
July	-14	-23	-6	-9	-10	17	1	1	-8	4	7
Aug.	-13	-20	-6	-10	-8	19	-4	1	-7	4	5
Sep.	-16	-22	-10	-8	-11	14	0	0	-7	2	6
Oct.	-20	-27	-14	-13	-13	16	-9	-6	-13	-4	-2

Source: European Commission (Economic and Financial Affairs DG).

1) Difference between the percentages of respondents giving positive and negative replies.

2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values of the economic sentiment indicator above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period 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 averages.

4) The confidence indicators are calculated as simple averages of the components shown; the assessments of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

5.3 Labour markets [1]

(annual percentage changes, unless otherwise indicated)

1. Employment

	Whole economy		By employment status		By economic activity					
	Millions (s.a.)		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total [2]	100.0	100.0	85.0	15.0	3.9	17.1	7.8	25.4	15.8	30.0
	1	2	3	4	5	6	7	8	9	10
2004	138.410	0.8	0.7	1.2	-2.3	-1.4	1.3	1.3	2.3	1.3
2005	139.733	1.0	1.1	0.3	-1.0	-1.1	2.7	0.7	2.4	1.5
2006	141.992	1.6	1.8	0.7	-1.9	-0.4	2.6	1.6	3.9	1.9
2007	144.502	1.8	1.9	0.8	-1.2	0.3	3.9	1.8	4.1	1.3
2007 Q2	144.298	1.7	1.9	0.7	-1.5	0.4	4.6	1.5	4.4	0.9
Q3	144.879	1.9	1.9	1.5	-1.4	0.2	3.6	2.3	3.9	1.4
Q4	145.269	1.7	2.0	0.5	-1.7	0.2	2.3	2.3	3.9	1.3
2008 Q1	145.715	1.5	1.7	0.7	-1.5	0.5	0.8	2.3	3.7	1.0
Q2	145.985	1.2	1.4	0.1	-2.0	0.3	-1.2	1.7	2.9	1.4
	quarter-on-quarter percentage changes (s.a.)									
2007 Q2	0.737	0.5	0.5	0.5	-0.4	0.1	0.5	0.9	1.3	0.1
Q3	0.580	0.4	0.4	0.3	-1.2	0.0	0.0	0.7	0.8	0.5
Q4	0.391	0.3	0.5	-0.8	-0.5	0.1	0.0	0.1	0.7	0.4
2008 Q1	0.446	0.3	0.3	0.5	0.5	0.2	0.1	0.4	0.9	0.0
Q2	0.270	0.2	0.2	0.0	-1.0	0.0	-1.1	0.4	0.4	0.5

2. Unemployment

(seasonally adjusted)

	Total		By age [3]				By gender [4]			
	Millions	% of labour force	Adult		Youth		Male		Female	
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total [2]	100.0		78.2		21.8		49.6		50.4	
	1	2	3	4	5	6	7	8	9	10
2004	13.100	8.8	10.160	7.7	2.940	17.1	6.554	7.9	6.546	10.0
2005	13.282	8.8	10.338	7.8	2.944	17.2	6.698	8.0	6.585	9.9
2006	12.513	8.3	9.774	7.3	2.738	16.2	6.213	7.4	6.300	9.3
2007	11.363	7.4	8.885	6.5	2.478	14.8	5.589	6.6	5.774	8.4
2007 Q3	11.284	7.4	8.821	6.5	2.463	14.7	5.561	6.6	5.724	8.3
Q4	11.155	7.3	8.706	6.4	2.449	14.6	5.506	6.5	5.648	8.2
2008 Q1	11.162	7.2	8.714	6.3	2.448	14.6	5.519	6.5	5.643	8.1
Q2	11.383	7.4	8.869	6.4	2.514	15.0	5.701	6.7	5.682	8.2
Q3	11.622	7.5	9.079	6.6	2.543	15.1	5.861	6.9	5.761	8.3
2008 Apr.	11.294	7.3	8.796	6.4	2.498	14.9	5.633	6.6	5.661	8.2
May	11.403	7.4	8.882	6.4	2.521	15.0	5.713	6.7	5.690	8.2
June	11.451	7.4	8.929	6.5	2.522	15.0	5.756	6.7	5.695	8.2
July	11.538	7.4	9.017	6.5	2.521	15.0	5.798	6.8	5.740	8.2
Aug.	11.639	7.5	9.111	6.6	2.529	15.0	5.849	6.8	5.790	8.3
Sep.	11.690	7.5	9.110	6.6	2.580	15.3	5.937	6.9	5.753	8.2

Source: Eurostat.

1) Data for employment refer to persons and are based on the ESA 95. Data for unemployment refer to persons and follow ILO recommendations.
2) In 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]

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue										Capital revenue		Memo: fiscal burden [2]
			Direct taxes			Indirect taxes		Social contributions			Sales		Capital taxes	
				Households	Corporations		Received by EU institutions		Employers	Employees				
	1	2	3	4	5	6	7	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	13.6	0.5	15.6	8.1	4.7	2.2	0.2	0.3	41.7
2002	45.2	44.9	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	15.8	8.2	4.6	2.1	0.6	0.5	41.2
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	2.7	13.7	0.3	15.4	8.1	4.5	2.2	0.5	0.3	41.0
2006	45.5	45.1	12.1	8.8	3.0	13.9	0.3	15.3	8.1	4.5	2.1	0.3	0.3	41.6
2007	45.6	45.3	12.5	9.0	3.2	13.8	0.3	15.2	8.0	4.4	2.1	0.3	0.3	41.8

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure				Memo: primary expenditure [3]
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments	Subsidies	Paid by EU institutions		Investment	Capital transfers	Paid by EU institutions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	47.8	44.0	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	4.0	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	1.5	0.1	44.4
2005	47.4	43.5	10.4	5.0	3.0	25.1	22.3	1.7	0.5	3.9	2.5	1.4	0.1	44.4
2006	46.8	42.9	10.2	5.0	2.9	24.8	22.1	1.7	0.5	3.8	2.5	1.4	0.0	43.8
2007	46.2	42.4	10.0	5.0	3.0	24.4	21.7	1.6	0.4	3.8	2.5	1.3	0.0	43.2

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

	Deficit (-)/surplus (+)					Primary deficit (-)/ surplus (+)	Government consumption [4]							
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Collective consumption	Individual consumption
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999	-1.4	-1.7	-0.1	0.1	0.4	2.6	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	-1.9	-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	-3.0	-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	-2.3	-0.3	-0.2	0.2	0.4	20.4	10.4	5.0	5.2	1.9	2.2	8.1	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	-1.2	0.0	0.0	0.5	2.3	20.1	10.0	5.0	5.2	1.9	2.1	7.9	12.2

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

	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	-0.2	-3.8	1.4	-7.5	-0.3	-3.6	-3.5	-4.1	-1.2	-4.7	-1.7	-4.4	-3.4	-2.2	2.4
2005	-2.6	-3.3	1.7	-5.1	1.0	-2.9	-4.3	-2.4	-0.1	-2.8	-0.3	-1.5	-6.1	-1.4	2.9
2006	0.3	-1.5	3.0	-2.8	2.0	-2.4	-3.4	-1.2	1.3	-2.3	0.6	-1.5	-3.9	-1.2	4.1
2007	-0.3	-0.2	0.2	-3.5	2.2	-2.7	-1.6	3.5	3.2	-1.8	0.3	-0.4	-2.6	0.5	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.
2) The fiscal burden comprises taxes and social contributions.
3) Comprises total expenditure minus interest expenditure.
4) Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
5) Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.

6.2 Debt [1]

(as a percentage of GDP)

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

	Total	Financial instruments				Holders				
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [2]				Other creditors [3]
						Total	MFIs	Other financial corporations	Other sectors	
	1	2	3	4	5	6	7	8	9	10
1998	72.9	2.8	15.2	5.3	49.6	52.5	26.5	14.5	11.4	20.4
1999	72.0	2.9	14.4	4.3	50.5	48.8	25.4	13.8	9.7	23.2
2000	69.3	2.7	13.1	3.7	49.7	44.2	22.0	12.4	9.7	25.1
2001	68.2	2.8	12.4	4.0	49.1	42.0	20.6	11.1	10.3	26.2
2002	68.1	2.7	11.8	4.5	49.0	40.1	19.4	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	29.8
2004	69.6	2.2	12.0	5.0	50.5	37.5	18.4	10.8	8.2	32.1
2005	70.2	2.4	11.8	4.7	51.3	35.4	17.2	11.2	7.0	34.8
2006	68.5	2.5	11.4	4.1	50.4	33.8	17.6	9.4	6.8	34.7
2007	66.3	2.2	10.8	4.3	49.0	32.6	17.0	8.7	6.9	33.7

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

	Total	Issued by [4]				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies [5]	Other currencies
	1	2	3	4	5	6	7	8	9	10	11	12	13
1998	72.9	61.2	6.1	5.2	0.4	8.2	64.7	8.0	15.5	26.3	31.0	71.1	1.8
1999	72.0	60.5	6.0	5.1	0.4	7.3	64.7	7.0	13.6	27.8	30.7	70.0	2.0
2000	69.3	58.1	5.9	4.9	0.4	6.5	62.8	6.3	13.4	27.8	28.1	67.5	1.8
2001	68.2	57.1	6.1	4.7	0.4	7.0	61.2	5.3	13.7	26.6	27.9	66.7	1.5
2002	68.1	56.7	6.3	4.7	0.4	7.6	60.4	5.2	15.5	25.3	27.2	66.8	1.3
2003	69.2	57.0	6.5	5.0	0.6	7.8	61.4	5.1	14.9	26.0	28.3	68.3	0.9
2004	69.6	57.4	6.6	5.1	0.4	7.8	61.7	4.8	14.9	26.2	28.5	68.7	0.9
2005	70.2	57.7	6.7	5.2	0.5	7.9	62.3	4.7	14.9	25.6	29.7	69.2	1.0
2006	68.5	56.0	6.5	5.4	0.5	7.5	61.0	4.5	14.5	24.1	29.9	67.8	0.7
2007	66.3	54.2	6.3	5.3	0.6	7.5	58.8	4.2	14.2	22.6	29.5	65.8	0.5

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	94.3	65.6	29.4	98.6	46.2	64.9	103.8	70.2	6.3	72.1	52.4	64.8	58.3	27.2	44.1
2005	92.1	67.8	27.3	98.8	43.0	66.4	105.9	69.1	6.1	69.9	51.8	63.7	63.6	27.0	41.3
2006	87.8	67.6	24.7	95.9	39.6	63.6	106.9	64.6	6.6	63.8	47.4	62.0	64.7	26.7	39.2
2007	83.9	65.1	24.8	94.8	36.2	63.9	104.1	59.5	7.0	62.2	45.7	59.5	63.6	23.4	35.1

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.
2) Holders resident in the country whose government has issued the debt.
3) Includes residents of euro area countries other than the country whose government has issued the debt.
4) Excludes debt held by general government in the country whose government has issued it.
5) Before 1999, this comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.

6.3 Change in debt [1]
(as a percentage of GDP)

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

	Total	Source of change				Financial instruments				Holders			
		Borrowing requirement [2]	Valuation effects [3]	Other changes in volume [4]	Aggregation effect [5]	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [6]	MFIs	Other financial corporations	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	1.8	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	0.8	3.9
2006	1.5	1.4	0.1	0.0	0.0	0.2	0.2	-0.4	1.5	0.1	1.2	-1.3	1.5
2007	1.1	1.1	0.0	0.0	0.0	-0.1	-0.1	0.4	0.9	0.4	0.3	-0.2	0.7

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) [8]	Deficit-debt adjustment [9]											
			Total	Transactions in main financial assets held by general government							Valuation effects		Other changes in volume	Other [10]
				Total	Currency and deposits	Loans	Securities [11]	Shares and other equity	Privatisations	Equity injections		Exchange rate effects		
	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	-0.8	0.0	0.4	0.3	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	1.8	-1.9	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	0.0
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	-3.0	0.1	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.0
2005	3.1	-2.6	0.5	0.7	0.4	0.1	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	-0.2
2006	1.5	-1.3	0.2	0.3	0.3	-0.2	0.3	-0.1	-0.3	0.1	0.1	0.0	0.0	-0.2
2007	1.1	-0.6	0.5	0.6	0.2	0.0	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	-0.1

Source: ECB.

1) 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).
2) The borrowing requirement is by definition equal to transactions in debt.
3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
4) Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
5) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt is due to variations in the exchange rates used for aggregation before 2001.
6) Holders resident in the country whose government has issued the debt.
7) Includes residents of euro area countries other than the country whose government has issued the debt.
8) Including proceeds from sales of UMTS licences.
9) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
10) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
11) Excluding financial derivatives.

6.4 Quarterly revenue, expenditure and deficit/surplus [1]

(as a percentage of GDP)

1. Euro area – quarterly revenue

	Total	Current revenue						Capital revenue		Memo: fiscal burden [2]
			Direct taxes	Indirect taxes	Social contributions	Sales	Property income		Capital taxes	
	1	2	3	4	5	6	7	8	9	10
2002 Q2	45.5	45.0	12.4	12.7	15.4	1.9	1.7	0.5	0.3	40.9
Q3	43.5	43.1	11.2	12.8	15.5	1.9	0.7	0.4	0.3	39.7
Q4	49.0	48.4	13.4	14.1	16.2	2.9	0.9	0.6	0.3	44.0
2003 Q1	41.9	41.4	9.8	12.8	15.5	1.7	0.7	0.5	0.2	38.4
Q2	46.0	44.6	12.0	12.9	15.7	2.0	1.4	1.4	1.2	41.7
Q3	42.6	42.1	10.8	12.5	15.5	1.9	0.6	0.5	0.2	39.1
Q4	49.2	48.2	13.1	14.2	16.2	2.9	0.8	1.0	0.3	43.8
2004 Q1	41.3	40.9	9.6	12.8	15.3	1.7	0.6	0.4	0.3	38.0
Q2	45.0	44.2	12.1	13.0	15.3	2.0	1.0	0.8	0.6	41.0
Q3	42.7	42.2	10.6	12.7	15.4	1.9	0.6	0.5	0.3	39.0
Q4	49.1	48.1	12.9	14.3	16.2	2.9	0.7	1.0	0.4	43.9
2005 Q1	42.0	41.5	9.9	13.0	15.3	1.7	0.6	0.5	0.3	38.4
Q2	44.6	44.0	11.8	13.2	15.1	2.0	1.1	0.6	0.3	40.4
Q3	43.3	42.6	11.0	12.9	15.2	2.0	0.7	0.7	0.3	39.4
Q4	49.2	48.4	13.4	14.3	16.1	2.9	0.8	0.8	0.3	44.0
2006 Q1	42.4	42.0	10.2	13.3	15.1	1.7	0.8	0.5	0.3	38.9
Q2	45.7	45.3	12.5	13.6	15.1	2.0	1.3	0.5	0.3	41.4
Q3	43.6	43.2	11.5	12.9	15.2	1.9	0.8	0.5	0.3	39.9
Q4	49.5	48.9	14.1	14.3	15.9	2.9	0.8	0.6	0.3	44.6
2007 Q1	42.2	41.8	10.3	13.4	14.8	1.7	0.8	0.4	0.3	38.8
Q2	46.2	45.8	13.0	13.6	15.1	2.0	1.4	0.4	0.3	41.9
Q3	43.7	43.3	12.1	12.8	15.0	1.9	0.8	0.4	0.3	40.1
Q4	49.7	49.2	14.5	14.2	15.8	2.9	0.9	0.6	0.3	44.8
2008 Q1	42.3	41.9	10.6	13.0	14.9	1.7	0.9	0.4	0.2	38.8
Q2	45.5	45.1	12.9	12.9	15.1	1.9	1.4	0.4	0.3	41.2

2. Euro area – quarterly expenditure and deficit/surplus

	Total	Current expenditure							Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies		Investment	Capital transfers		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2002 Q2	46.4	43.0	10.3	4.8	3.5	24.3	21.1	1.3	3.4	2.3	1.1	-0.9	2.7
Q3	46.9	43.2	10.1	4.7	3.5	24.9	21.4	1.4	3.7	2.5	1.2	-3.4	0.1
Q4	50.8	46.4	11.1	5.6	3.3	26.4	22.7	1.6	4.4	2.8	1.6	-1.8	1.6
2003 Q1	46.8	43.3	10.3	4.6	3.5	25.0	21.4	1.3	3.5	1.9	1.6	-5.0	-1.5
Q2	47.1	43.6	10.4	4.7	3.4	25.1	21.7	1.3	3.5	2.3	1.2	-1.1	2.3
Q3	47.1	43.4	10.3	4.8	3.3	25.1	21.6	1.3	3.7	2.5	1.2	-4.5	-1.2
Q4	51.2	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	-5.1	-1.9
Q2	46.6	43.2	10.4	4.8	3.3	24.8	21.4	1.3	3.4	2.3	1.1	-1.6	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	-1.8	1.1
2005 Q1	46.9	43.1	10.2	4.6	3.1	25.2	21.4	1.2	3.7	1.9	1.8	-4.9	-1.8
Q2	46.1	42.8	10.2	4.9	3.2	24.5	21.3	1.1	3.4	2.3	1.1	-1.5	1.6
Q3	45.8	42.4	9.9	4.8	3.0	24.7	21.3	1.2	3.4	2.5	1.0	-2.6	0.4
Q4	50.6	45.8	11.1	5.8	2.8	26.1	22.5	1.3	4.8	3.1	1.6	-1.4	1.4
2006 Q1	45.3	42.2	10.0	4.6	2.9	24.7	21.1	1.1	3.1	1.9	1.2	-2.9	0.1
Q2	45.5	42.3	10.2	4.9	3.1	24.1	21.1	1.1	3.2	2.3	0.9	0.2	3.3
Q3	45.4	42.0	9.8	4.7	2.9	24.5	21.1	1.2	3.4	2.5	1.0	-1.7	1.2
Q4	50.4	45.1	10.7	5.8	2.7	25.9	22.3	1.3	5.3	3.2	2.2	-0.9	1.8
2007 Q1	44.4	41.3	9.8	4.6	3.0	24.0	20.5	1.1	3.2	2.0	1.2	-2.2	0.7
Q2	44.7	41.6	9.9	4.8	3.2	23.7	20.7	1.1	3.2	2.3	0.8	1.5	4.6
Q3	44.8	41.4	9.7	4.7	3.0	24.0	20.7	1.2	3.4	2.5	0.9	-1.0	2.0
Q4	50.5	45.1	10.7	5.8	2.8	25.9	22.1	1.4	5.4	3.3	2.1	-0.8	2.0
2008 Q1	44.6	41.4	9.8	4.6	3.0	24.1	20.4	1.2	3.2	2.0	1.2	-2.2	0.7
Q2	45.1	41.8	10.1	4.8	3.2	23.7	20.6	1.1	3.3	2.3	0.9	0.4	3.6

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]
(as a percentage of GDP)

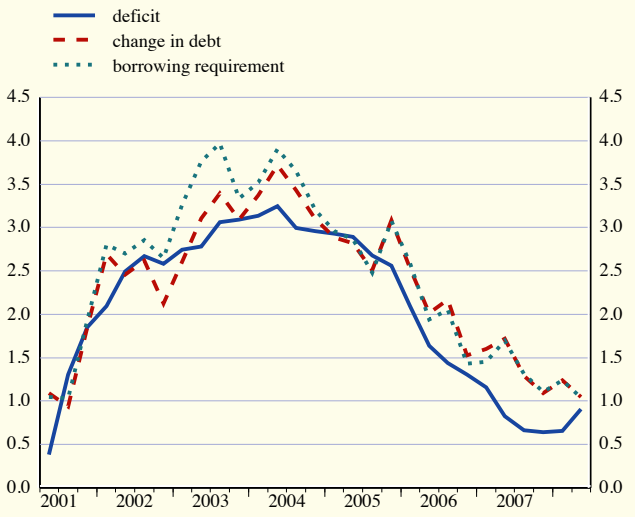
1. Euro area – Maastricht debt by financial instrument [2]

	Total	Financial instruments			
		Currency and deposits	Loans	Short-term securities	Long-term securities
	1	2	3	4	5
2005 Q3	71.0	2.4	11.8	5.2	51.8
Q4	70.2	2.4	11.8	4.7	51.3
2006 Q1	70.5	2.5	11.7	4.9	51.3
Q2	70.6	2.5	11.6	4.9	51.6
Q3	70.1	2.5	11.6	4.7	51.2
Q4	68.5	2.5	11.4	4.1	50.4
2007 Q1	68.8	2.4	11.5	4.8	50.1
Q2	68.9	2.2	11.2	5.1	50.4
Q3	68.0	2.1	11.1	5.2	49.6
Q4	66.3	2.2	10.8	4.3	49.0
2008 Q1	67.1	2.2	10.9	5.0	49.0
Q2	67.1	2.1	10.9	5.0	49.1

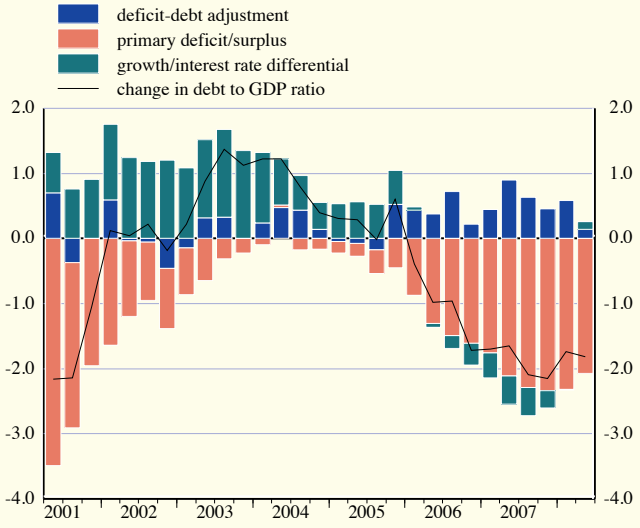
2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)	Deficit-debt adjustment								Memo: Borrowing requirement
			Total	Transactions in main financial assets held by general government					Valuation effects and other changes in volume	Other	
				Total	Currency and deposits	Loans	Securities	Shares and other equity			
	1	2	3	4	5	6	7	8	9	10	11
2005 Q3	0.6	-2.6	-2.0	-2.4	-2.3	0.0	0.3	-0.4	0.0	0.4	0.5
Q4	-0.5	-1.4	-2.0	-0.4	0.0	0.0	-0.3	-0.1	0.0	-1.5	-0.5
2006 Q1	4.8	-2.9	1.9	1.2	1.0	0.1	0.6	-0.5	-0.4	1.0	5.2
Q2	3.3	0.2	3.5	3.2	2.5	0.0	0.4	0.2	0.6	-0.3	2.6
Q3	1.2	-1.7	-0.5	-0.8	-0.7	-0.1	0.2	-0.1	0.2	0.1	1.0
Q4	-2.9	-0.9	-3.8	-2.2	-1.4	-0.6	-0.2	-0.2	-0.1	-1.4	-2.7
2007 Q1	4.9	-2.2	2.7	2.1	1.0	0.1	0.6	0.3	-0.1	0.7	5.0
Q2	3.6	1.5	5.1	4.8	4.1	0.0	0.5	0.2	0.1	0.2	3.5
Q3	-0.4	-1.0	-1.5	-1.6	-2.1	0.2	0.4	0.0	0.0	0.1	-0.5
Q4	-3.4	-0.8	-4.2	-2.9	-2.2	-0.1	-0.6	0.0	-0.1	-1.3	-3.4
2008 Q1	5.4	-2.2	3.1	2.2	1.9	0.0	0.1	0.3	-0.1	1.0	5.4
Q2	2.8	0.4	3.2	2.4	2.0	0.2	0.1	0.0	0.1	0.7	2.7

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



C29 Maastricht debt
(annual change in the debt to GDP ratio and underlying factors)



Source: ECB calculations based on Eurostat and national data.
1) 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.

7 EXTERNAL TRANSACTIONS AND POSITIONS

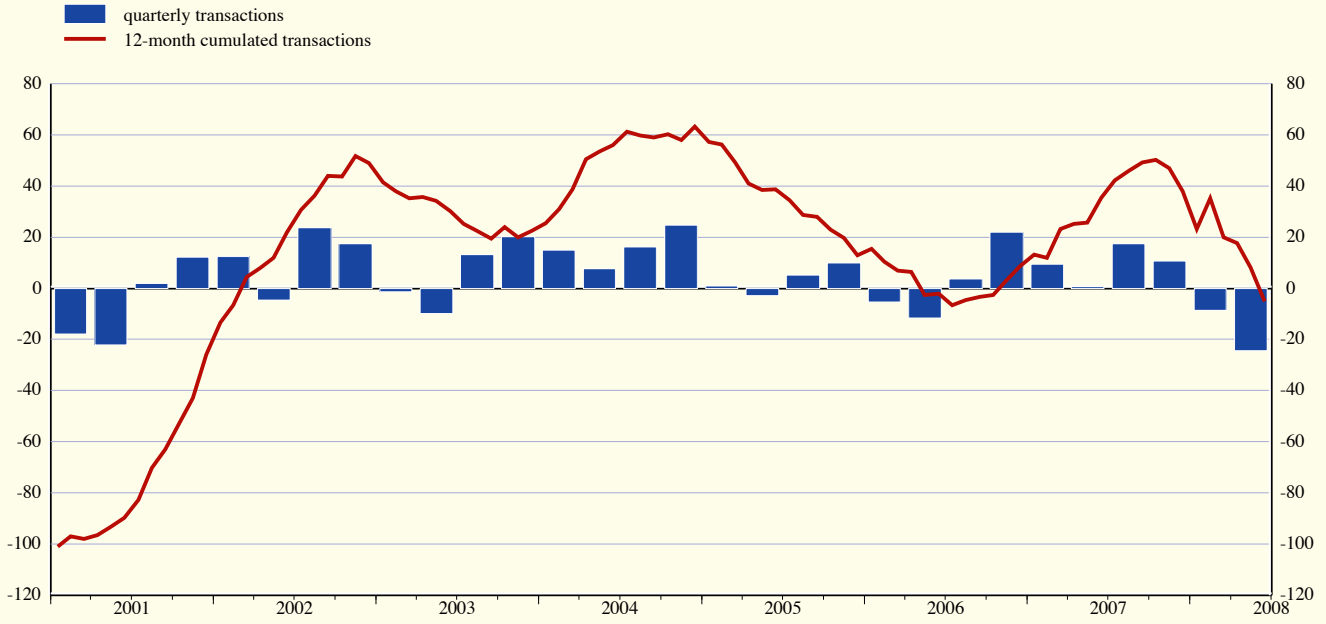
7.1 Summary balance of payments [1]

(EUR billions; net transactions)

	Current account					Capital account	Net lending/ borrowing to/from rest of the world (columns 1+6)	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers			Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2005	13.0	47.0	38.2	1.4	-73.5	11.4	24.4	10.8	-207.4	129.2	-17.3	88.6	17.7	-35.2
2006	8.5	19.8	44.1	23.8	-79.2	9.3	17.9	137.8	-156.7	290.4	3.0	1.9	-0.9	-155.6
2007	37.8	57.5	53.2	11.1	-84.0	14.0	51.8	29.4	-90.4	137.7	-53.9	41.1	-5.1	-81.3
2007 Q2	0.6	20.4	15.4	-18.8	-16.4	2.1	2.7	10.4	-64.8	57.8	-7.4	28.6	-3.8	-13.1
Q3	17.3	17.7	17.8	7.6	-25.9	1.7	19.0	104.8	-34.1	46.7	-15.3	111.9	-4.4	-123.8
Q4	10.6	10.3	11.2	9.4	-20.3	5.2	15.8	-73.2	25.0	-73.2	-19.1	-10.6	4.7	57.4
2008 Q1	-8.6	-1.5	11.9	8.0	-26.9	6.1	-2.4	-4.4	-107.1	73.8	-21.0	55.0	-5.1	6.8
Q2	-24.4	6.2	15.7	-29.2	-17.1	3.0	-21.4	87.2	-49.2	34.3	-9.1	111.1	0.0	-65.7
2007 Aug.	1.9	4.0	4.3	2.1	-8.6	0.2	2.2	62.2	-0.6	-6.7	-3.6	72.1	1.0	-64.4
Sep.	7.4	6.0	7.3	3.6	-9.5	0.5	7.8	-2.4	-33.3	42.5	-3.0	-6.3	-2.3	-5.4
Oct.	4.4	7.3	4.4	2.8	-10.2	1.2	5.6	-46.8	31.6	-48.2	-2.7	-27.6	0.0	41.2
Nov.	2.6	5.1	3.4	0.7	-6.6	0.9	3.5	-0.8	4.5	0.9	-11.2	4.8	0.2	-2.7
Dec.	3.7	-2.1	3.4	5.8	-3.5	3.0	6.7	-25.6	-11.1	-25.9	-5.3	12.2	4.5	18.9
2008 Jan.	-15.0	-8.1	3.5	0.0	-10.4	2.5	-12.4	5.5	-64.2	58.7	-26.9	44.2	-6.4	7.0
Feb.	9.8	4.8	4.5	4.8	-4.4	2.4	12.2	-25.3	-21.4	0.3	2.5	-11.3	4.5	13.1
Mar.	-3.3	1.8	3.8	3.1	-12.1	1.2	-2.2	15.4	-21.6	14.8	3.4	22.1	-3.2	-13.3
Apr.	-4.9	5.4	4.4	-6.9	-7.8	0.7	-4.3	29.8	-22.6	-16.9	-2.8	75.2	-3.3	-25.5
May	-21.8	-1.8	4.9	-19.7	-5.1	1.8	-20.0	43.6	-7.0	10.2	-9.9	47.5	2.7	-23.7
June	2.2	2.6	6.5	-2.6	-4.2	0.5	2.8	13.8	-19.6	41.0	3.5	-11.6	0.5	-16.6
July	1.1	2.3	6.4	-0.1	-7.5	0.9	2.0	-5.7	-12.3	-8.8	2.0	15.1	-1.7	3.7
Aug.	-7.9	-6.5	4.0	1.9	-7.3	0.5	-7.4	-27.1	-11.6	-13.9	-5.8	1.8	2.4	34.5
	12-month cumulated transactions													
2008 Aug.	-21.8	16.7	56.4	-6.4	-88.5	16.2	-5.6	-25.7	-188.5	54.7	-56.0	166.0	-2.0	31.2

C30 B.o.p. current account balance

(EUR billions)



Source: ECB.

1) The sign convention is explained in the general notes.

7.2 Current and capital accounts

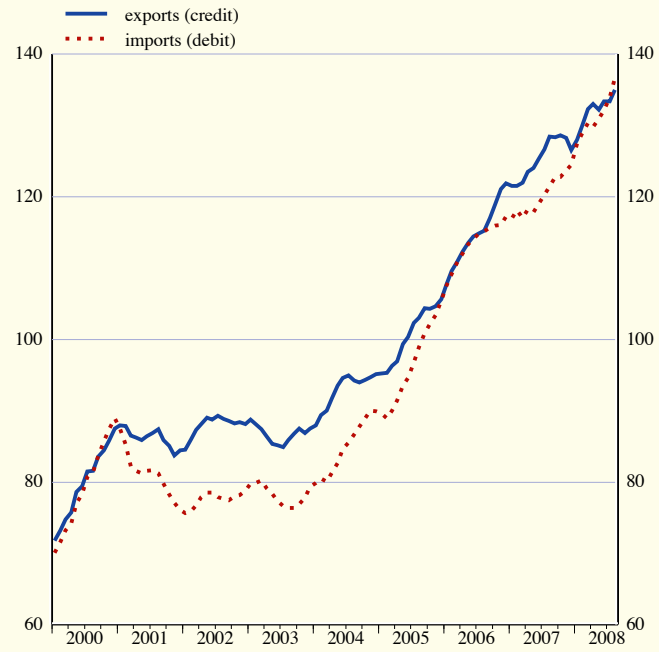
(EUR billions; transactions)

1. Summary current and capital accounts

	Current account													Capital account	
	Total			Goods		Services		Income		Current transfers					
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit		Debit		Credit	Debit
											Workers remittances		Workers remittances		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2005	2,098.1	2,085.0	13.0	1,221.9	1,174.9	403.8	365.6	387.1	385.7	85.2	5.0	158.7	14.5	24.4	13.0
2006	2,422.9	2,414.4	8.5	1,391.5	1,371.7	438.8	394.7	504.0	480.2	88.7	5.3	167.8	17.2	23.9	14.5
2007	2,685.8	2,648.0	37.8	1,506.7	1,449.2	488.3	435.1	601.8	590.7	89.0	6.3	173.0	20.2	25.9	11.9
2007 Q2	671.0	670.3	0.6	373.9	353.6	120.1	104.6	157.3	176.2	19.7	1.6	36.0	4.9	4.7	2.6
Q3	675.6	658.3	17.3	377.0	359.3	133.7	115.8	148.9	141.3	16.0	1.7	41.9	5.2	4.5	2.9
Q4	702.8	692.2	10.6	394.0	383.7	126.2	115.0	156.0	146.6	26.6	1.6	46.9	5.5	8.7	3.5
2008 Q1	684.7	693.2	-8.6	389.0	390.5	115.7	103.9	153.6	145.6	26.4	1.5	53.3	5.0	9.0	2.9
Q2	710.3	734.8	-24.4	403.6	397.4	125.7	109.9	159.4	188.7	21.7	1.5	38.8	5.2	7.3	4.2
2008 June	239.5	237.2	2.2	135.9	133.3	44.0	37.5	51.9	54.6	7.7	.	11.9	.	2.9	2.4
July	240.6	239.4	1.1	141.0	138.8	46.5	40.1	48.4	48.5	4.6	.	12.1	.	1.8	0.9
Aug.	215.6	223.5	-7.9	119.6	126.1	44.8	40.9	46.8	44.8	4.3	.	11.7	.	1.5	0.9
	Seasonally adjusted														
2007 Q2	669.4	653.2	16.2	376.0	357.0	120.6	107.8	150.8	146.1	22.0	.	42.2	.	.	.
Q3	684.6	674.3	10.2	385.1	368.2	124.3	109.9	155.8	153.4	19.4	.	42.8	.	.	.
Q4	680.5	684.0	-3.5	379.5	373.5	125.4	112.0	154.5	154.4	21.1	.	44.1	.	.	.
2008 Q1	700.7	707.3	-6.6	396.9	390.8	125.9	109.9	155.6	158.4	22.2	.	48.2	.	.	.
Q2	703.4	710.2	-6.8	400.0	396.3	125.6	112.4	153.2	156.1	24.6	.	45.4	.	.	.
2008 Mar.	229.0	235.9	-6.9	129.4	130.4	41.8	37.0	51.4	52.4	6.3	.	16.1	.	.	.
Apr.	237.3	235.0	2.3	135.2	130.0	42.1	37.2	50.7	51.5	9.3	.	16.3	.	.	.
May	234.6	238.3	-3.7	132.0	132.2	41.8	37.5	53.4	54.6	7.3	.	14.0	.	.	.
June	231.5	236.9	-5.4	132.8	134.1	41.6	37.7	49.1	49.9	8.0	.	15.1	.	.	.
July	232.5	235.5	-3.0	135.1	135.5	41.0	36.2	50.5	51.1	5.9	.	12.7	.	.	.
Aug.	235.5	242.8	-7.3	136.9	140.1	43.0	38.9	50.7	51.9	4.9	.	11.8	.	.	.

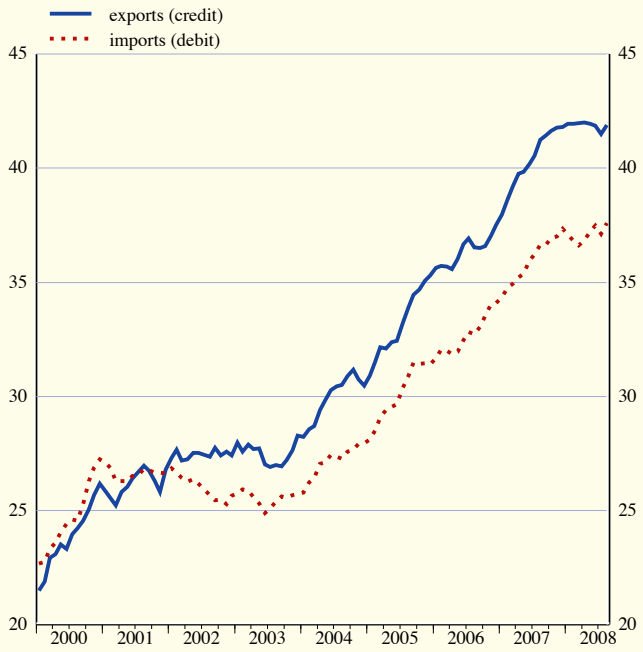
C31 B.o.p. goods

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



C32 B.o.p. services

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



Source: ECB.

7.2 Current and capital accounts
(EUR billions)

2. Income account
(transactions)

	Compensation of employees		Investment income													
	Credit	Debit	Total		Direct investment						Portfolio investment				Other investment	
			Credit	Debit	Equity				Debt		Equity		Debt		Credit	Debit
					Credit		Debit		Credit	Debit	Credit	Debit	Credit	Debit		
						Reinv. earnings		Reinv. earnings								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2005	16.2	9.5	370.9	376.2	147.3	40.2	106.2	-13.3	16.0	16.8	31.5	70.2	82.3	80.9	93.8	102.1
2006	16.8	10.0	487.1	470.2	186.2	44.2	108.2	34.5	20.5	20.0	39.6	99.6	103.5	91.0	137.4	151.4
2007	17.6	10.5	584.3	580.2	210.4	81.2	127.5	34.7	25.9	23.4	45.5	116.5	118.7	114.4	183.8	198.3
2007 Q2	4.3	2.6	153.1	173.6	57.7	13.9	37.4	6.8	6.6	6.2	15.3	53.5	28.7	28.0	44.8	48.5
Q3	4.3	3.2	144.6	138.1	49.5	24.0	28.9	14.5	6.2	5.5	11.0	24.1	30.1	28.5	47.8	51.1
Q4	4.6	2.7	151.4	143.9	52.9	16.5	30.8	5.4	7.3	6.3	9.2	20.7	32.0	32.4	50.0	53.6
2008 Q1	4.6	2.0	149.0	143.6	53.6	25.9	30.2	14.3	6.6	6.0	9.6	20.9	31.4	33.3	47.9	53.2
Q2	4.3	2.7	155.1	186.0	55.1	16.9	35.6	8.4	7.5	6.5	14.3	58.2	31.5	32.7	46.7	53.1

3. Geographical breakdown
(cumulated transactions)

2007 Q3 to 2008 Q2	Total	European Union 27 (outside the euro area)						Brazil	Canada	China	India	Japan	Russia	Switzerland	United States	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Credits															
Current account	2,773.5	1,036.5	59.2	86.6	540.4	289.4	60.9	37.5	37.9	84.7	32.3	56.4	95.0	183.1	409.8	800.2
Goods	1,563.6	561.3	35.7	55.9	240.8	228.9	0.0	19.9	18.5	64.4	24.2	33.5	73.4	88.6	194.2	485.6
Services	501.3	179.3	12.4	13.6	118.4	29.4	5.5	6.2	6.8	15.6	6.2	10.8	12.7	49.0	80.1	134.6
Income	617.9	228.9	10.4	15.6	167.8	28.2	6.8	11.2	12.0	4.4	1.8	11.7	8.7	39.4	128.9	170.9
Investment income	600.0	222.4	10.3	15.5	165.6	28.0	3.0	11.2	11.9	4.4	1.8	11.6	8.6	32.7	127.4	168.0
Current transfers	90.7	67.0	0.7	1.4	13.4	2.9	48.5	0.2	0.7	0.3	0.1	0.4	0.2	6.1	6.7	9.0
Capital account	29.5	26.0	0.0	0.1	0.9	0.1	24.9	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.7	1.3
	Debits															
Current account	2,778.6	934.1	47.2	84.7	470.0	226.7	105.6	-	29.9	-	-	102.1	-	176.3	367.7	-
Goods	1,530.9	441.9	29.0	52.2	179.4	181.4	0.0	26.5	13.2	168.6	19.6	55.9	101.2	76.6	138.5	489.0
Services	444.7	139.2	9.1	10.8	88.6	30.6	0.2	4.8	7.0	11.0	4.3	8.0	9.1	38.0	89.4	133.8
Income	622.1	238.2	8.5	20.3	190.7	10.5	8.2	-	7.8	-	-	37.8	-	55.9	133.6	-
Investment income	611.5	231.9	8.4	20.2	189.2	5.8	8.2	-	7.7	-	-	37.7	-	55.3	132.6	-
Current transfers	180.8	114.8	0.7	1.4	11.3	4.2	97.1	1.5	1.8	2.5	0.6	0.4	0.6	5.8	6.2	46.6
Capital account	13.5	2.6	0.0	0.1	1.4	0.3	0.7	0.2	1.1	0.1	0.2	0.1	0.1	0.6	1.4	7.3
	Net															
Current account	-5.1	102.4	12.0	1.9	70.5	62.7	-44.7	-	8.1	-	-	-45.7	-	6.8	42.1	-
Goods	32.7	119.4	6.8	3.7	61.4	47.5	0.0	-6.5	5.3	-104.2	4.6	-22.4	-27.8	11.9	55.6	-3.4
Services	56.6	40.1	3.3	2.8	29.8	-1.2	5.4	1.4	-0.2	4.6	1.9	2.8	3.6	10.9	-9.3	0.8
Income	-4.2	-9.3	2.0	-4.7	-22.8	17.7	-1.5	-	4.1	-	-	-26.1	-	-16.4	-4.7	-
Investment income	-11.5	-9.4	1.9	-4.7	-23.6	22.2	-5.3	-	4.2	-	-	-26.1	-	-22.7	-5.2	-
Current transfers	-90.1	-47.8	0.0	0.0	2.1	-1.3	-48.6	-1.3	-1.1	-2.2	-0.6	-0.1	-0.3	0.3	0.5	-37.5
Capital account	16.0	23.4	0.0	-0.1	-0.5	-0.2	24.2	-0.1	-1.0	0.0	-0.2	-0.1	0.0	-0.2	0.3	-6.0

Source: ECB.

7.3 Financial account

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

1. Summary financial account

	Total [1]			Total as a % of GDP			Direct investment		Portfolio investment		Net financial derivatives	Other investment		Reserve assets
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Outstanding amounts (international investment position)													
2004	8,609.6	9,507.7	-898.1	110.1	121.6	-11.5	2,276.0	2,229.8	3,043.1	4,078.8	-37.3	3,046.9	3,199.1	281.0
2005	10,795.0	11,593.7	-798.7	133.1	143.0	-9.8	2,800.9	2,438.7	3,883.8	5,107.9	-21.4	3,809.2	4,047.1	322.5
2006	12,272.5	13,292.9	-1,020.4	144.3	156.3	-12.0	3,143.7	2,721.3	4,370.2	5,864.9	-20.9	4,451.8	4,706.8	327.7
2007	13,773.6	14,904.4	-1,130.8	154.3	166.9	-12.7	3,542.2	3,084.5	4,653.3	6,339.4	-10.3	5,241.2	5,480.5	347.2
2008 Q1	13,732.4	14,836.7	-1,104.3	152.4	164.7	-12.3	3,613.0	3,074.5	4,352.1	6,078.9	8.1	5,402.8	5,683.3	356.3
Q2	13,773.0	14,820.6	-1,047.6	151.4	162.9	-11.5	3,644.5	3,048.8	4,484.8	6,072.1	4.5	5,285.4	5,699.6	353.9
	Changes to outstanding amounts													
2004	748.0	878.1	-130.2	9.6	11.2	-1.7	106.5	145.6	387.4	492.7	-17.3	297.1	239.8	-25.7
2005	2,185.4	2,086.0	99.4	26.9	25.7	1.2	524.9	208.9	840.7	1,029.0	15.9	762.3	848.0	41.5
2006	1,477.5	1,699.2	-221.7	17.4	20.0	-2.6	342.8	282.5	486.4	757.0	0.5	642.6	659.7	5.2
2007	1,501.1	1,611.5	-110.4	16.8	18.1	-1.2	398.5	363.2	283.1	474.6	10.7	789.4	773.7	19.5
2008 Q1	-41.2	-67.8	26.5	-1.8	-3.0	1.2	70.8	-10.0	-301.2	-260.6	18.4	161.7	202.8	9.2
Q2	40.7	-16.1	56.7	1.8	-0.7	2.4	31.5	-25.7	132.7	-6.7	-3.6	-117.5	16.3	-2.5
	Transactions													
2004	821.2	794.2	27.0	10.5	10.2	0.3	169.6	88.6	346.2	417.7	8.5	309.4	287.9	-12.5
2005	1,330.7	1,341.4	-10.8	16.4	16.5	-0.1	359.8	152.3	414.4	543.6	17.3	556.8	645.5	-17.7
2006	1,686.4	1,824.1	-137.8	19.8	21.4	-1.6	415.6	258.9	533.9	824.2	-3.0	739.1	741.0	0.9
2007	1,873.1	1,902.5	-29.4	21.0	21.3	-0.3	455.3	364.9	440.6	578.3	53.9	918.3	959.3	5.1
2007 Q4	315.0	241.8	73.2	13.5	10.4	3.1	101.9	126.9	99.1	25.9	19.1	99.6	89.0	-4.7
2008 Q1	537.8	533.4	4.4	23.9	23.7	0.2	151.6	44.4	69.4	143.2	21.0	290.8	345.8	5.1
Q2	59.5	146.7	-87.2	2.6	6.3	-3.8	24.9	-24.2	137.6	172.0	9.1	-112.1	-1.0	0.0
2008 Apr.	82.4	112.2	-29.8	.	.	.	-17.3	-39.9	46.6	29.7	2.8	47.1	122.4	3.3
May	62.5	106.1	-43.6	.	.	.	11.8	4.9	70.3	80.5	9.9	-26.8	20.7	-2.7
June	-85.4	-71.6	-13.8	.	.	.	30.4	10.8	20.7	61.7	-3.5	-132.4	-144.1	-0.5
July	55.3	49.6	5.7	.	.	.	25.6	13.3	19.2	10.4	-2.0	10.9	25.9	1.7
Aug.	29.7	2.6	27.1	.	.	.	15.1	3.5	18.6	4.7	5.8	-7.4	-5.7	-2.4
	Other changes													
2004	-73.3	83.9	-157.2	-0.9	1.1	-2.0	-63.1	57.0	41.3	75.0	-25.8	-12.4	-48.1	-13.3
2005	854.7	744.6	110.1	10.5	9.2	1.4	165.1	56.6	426.3	485.4	-1.4	205.5	202.5	59.2
2006	-208.9	-125.0	-84.0	-2.5	-1.5	-1.0	-72.8	23.6	-47.5	-67.2	3.5	-96.5	-81.4	4.3
2007	-372.0	-291.0	-81.0	-4.2	-3.3	-0.9	-56.8	-1.7	-157.5	-103.7	-43.2	-128.9	-185.6	14.4
	Other changes due to exchange rate changes													
2004	-174.7	-97.2	-77.5	-2.2	-1.2	-1.0	-37.3	8.9	-66.7	-52.8	.	-61.4	-53.3	-9.3
2005	389.8	210.0	179.8	4.8	2.6	2.2	90.2	-22.2	153.4	118.2	.	127.5	114.0	18.7
2006	-346.4	-203.8	-142.6	-4.1	-2.4	-1.7	-73.2	14.2	-152.8	-116.8	.	-105.2	-101.1	-15.2
2007	-534.8	-238.8	-296.0	-6.0	-2.7	-3.3	-114.3	33.6	-222.3	-125.8	.	-183.3	-146.5	-14.9
	Other changes due to price changes													
2004	113.1	222.1	-109.0	1.4	2.8	-1.4	34.4	26.4	107.5	195.7	-25.8	.	.	-3.1
2005	304.8	333.8	-29.0	3.8	4.1	-0.4	67.0	51.4	197.1	282.4	-1.4	.	.	42.1
2006	319.1	296.3	22.8	3.8	3.5	0.3	67.7	41.7	231.7	254.6	3.5	.	.	16.2
2007	179.4	-63.3	242.8	2.0	-0.7	2.7	32.3	13.0	158.7	-76.3	-43.2	.	.	31.7
	Other changes due to other adjustments													
2004	-11.6	-40.9	29.3	-0.1	-0.5	0.4	-60.3	21.7	0.4	-67.8	.	49.1	5.2	-0.8
2005	159.4	200.8	-41.4	2.0	2.5	-0.5	8.0	27.4	75.7	84.8	.	77.9	88.5	-2.2
2006	-181.3	-217.5	36.3	-2.1	-2.6	0.4	-67.3	-32.3	-126.3	-205.0	.	8.6	19.8	3.7
2007	-16.1	11.1	-27.2	-0.2	0.1	-0.3	25.2	-48.3	-93.8	98.5	.	54.4	-39.1	-1.9
	Growth rates of outstanding amounts													
2003	9.2	8.2	-	.	.	.	7.4	7.4	12.5	10.6	.	9.3	6.0	-7.9
2004	10.3	9.1	-	.	.	.	7.8	4.2	12.8	11.5	.	11.2	9.7	-4.1
2005	14.9	13.7	-	.	.	.	15.2	6.8	13.1	12.8	.	17.7	19.6	-5.8
2006	15.8	15.9	-	.	.	.	14.9	10.6	14.0	16.3	.	19.5	18.4	0.2
2007 Q4	15.3	14.2	-	.	.	.	14.5	13.4	10.1	9.8	.	20.7	20.4	1.6
2008 Q1	13.7	12.8	-	.	.	.	15.5	11.3	8.0	7.6	.	17.2	20.4	2.6
Q2	9.8	9.8	-	.	.	.	11.6	7.8	7.8	7.0	.	9.8	14.7	1.4

Source: ECB.

1) Net financial derivatives are included in assets.

7.3 Financial account

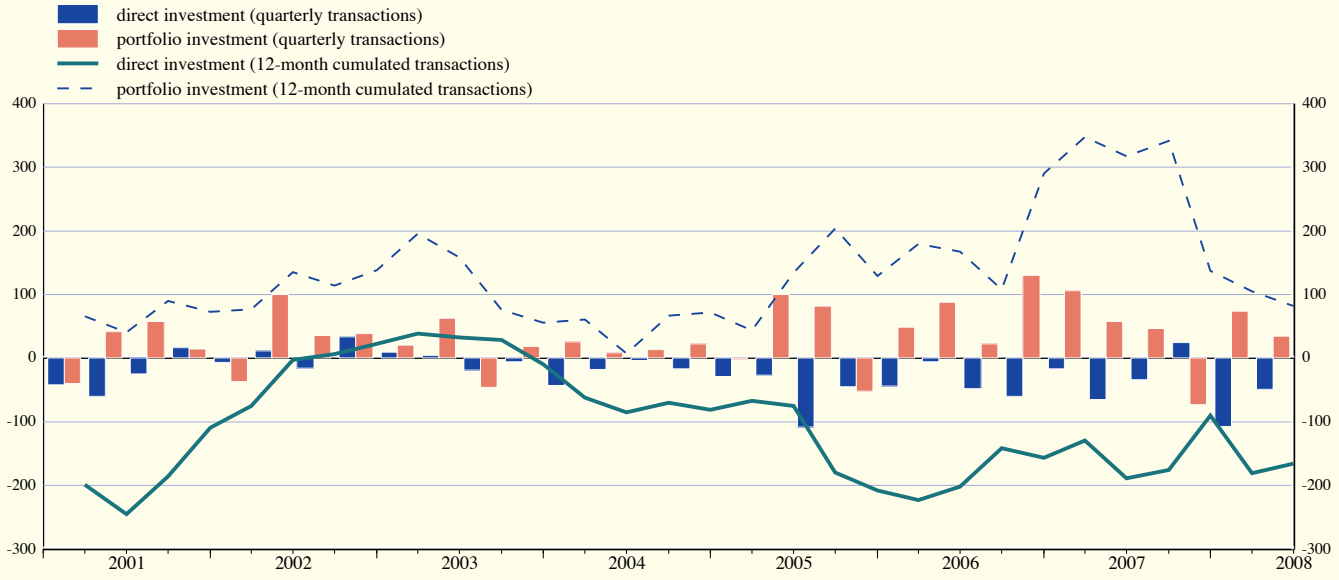
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

2. Direct investment

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs	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 (international investment position)													
2006	3,143.7	2,551.1	219.1	2,332.0	592.6	2.3	590.4	2,721.3	2,085.7	65.1	2,020.6	635.5	9.7	625.9
2007	3,542.2	2,858.8	248.4	2,610.3	683.4	6.4	677.1	3,084.5	2,338.4	68.4	2,270.0	746.1	14.9	731.1
2008 Q1	3,613.0	2,900.5	250.3	2,650.2	712.5	8.4	704.1	3,074.5	2,322.1	65.6	2,256.5	752.4	14.6	737.8
Q2	3,644.5	2,905.3	259.4	2,645.9	739.2	6.6	732.6	3,048.8	2,288.2	64.0	2,224.2	760.7	15.2	745.5
	Transactions													
2006	415.6	325.7	40.2	285.5	89.9	0.0	89.9	258.9	224.0	5.7	218.3	34.9	0.0	34.9
2007	455.3	354.4	28.4	326.1	100.9	-0.6	101.5	364.9	250.7	4.4	246.4	114.2	1.4	112.7
2007 Q4	101.9	80.4	-4.3	84.7	21.5	0.4	21.0	126.9	71.9	1.7	70.2	55.0	0.8	54.1
2008 Q1	151.6	113.8	10.0	103.8	37.8	2.3	35.4	44.4	37.9	0.0	37.9	6.6	0.1	6.4
Q2	24.9	1.8	8.9	-7.1	23.1	-1.8	25.0	-24.2	-27.6	-2.2	-25.4	3.4	1.0	2.3
2008 Apr.	-17.3	-24.2	4.6	-28.8	6.9	-0.1	7.0	-39.9	-32.2	0.8	-33.0	-7.7	0.2	-7.9
May	11.8	11.4	2.4	9.1	0.4	-1.8	2.2	4.9	5.7	-2.2	7.9	-0.9	0.3	-1.2
June	30.4	14.6	2.0	12.7	15.8	0.0	15.8	10.8	-1.2	-0.9	-0.3	12.0	0.5	11.5
July	25.6	22.4	-14.2	36.6	3.2	1.6	1.6	13.3	7.3	0.7	6.7	6.0	0.9	5.1
Aug.	15.1	18.3	2.4	15.9	-3.2	-1.2	-2.0	3.5	4.6	0.3	4.2	-1.1	0.0	-1.1
	Growth rates													
2005	15.2	15.8	13.1	16.0	12.9	2.2	13.0	6.8	7.2	1.6	7.4	5.6	-3.5	5.7
2006	14.9	14.4	22.1	13.7	17.3	-2.9	17.4	10.6	12.2	9.5	12.3	5.8	-1.0	5.9
2007 Q4	14.5	13.9	12.7	14.0	17.0	-88.7	17.3	13.4	12.0	7.0	12.2	18.0	8.7	18.1
2008 Q1	15.5	15.0	13.9	15.1	17.2	106.6	16.8	11.3	10.7	5.6	10.9	13.2	17.2	13.1
Q2	11.6	10.4	13.9	10.1	16.8	6.1	16.9	7.8	6.1	1.4	6.2	13.2	16.9	13.1

C33 B.o.p. net direct and portfolio investment

(EUR billions)



Source: ECB.

7.3 Financial account

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

3. Portfolio investment assets

	Total	Equity					Debt instruments									
							Bonds and notes					Money market instruments				
		Total	MFIs		Non-MFIs		Total	MFIs		Non-MFIs		Total	MFIs		Non-MFIs	
				Euro-system		General government			Euro-system		General government			Euro-system		General government
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Outstanding amounts (international investment position)															
2006	4,370.2	1,936.0	127.7	2.8	1,808.2	37.0	2,056.7	875.1	11.2	1,181.6	14.1	377.5	309.9	9.2	67.7	0.2
2007	4,653.3	1,984.2	145.1	2.4	1,839.1	44.6	2,232.5	937.9	13.9	1,294.6	17.0	436.6	349.5	32.6	87.1	0.5
2008 Q1	4,352.1	1,668.4	123.2	2.7	1,545.2	38.8	2,207.3	960.0	26.2	1,247.4	17.0	476.3	383.9	28.3	92.4	0.8
Q2	4,484.8	1,712.7	121.9	2.7	1,590.7	40.1	2,279.2	996.2	33.8	1,283.0	18.4	492.9	403.8	47.7	89.2	0.8
	Transactions															
2006	533.9	153.2	18.2	0.0	135.0	6.1	313.1	172.8	2.4	140.4	1.1	67.5	56.5	8.0	11.1	-0.1
2007	440.6	81.1	36.2	-0.4	44.8	5.4	283.3	154.0	3.5	129.3	2.2	76.2	67.3	23.7	8.8	0.3
2007 Q4	99.1	20.0	18.8	-0.1	1.3	0.9	61.1	30.3	0.7	30.7	0.4	18.0	30.4	6.7	-12.3	-9.1
2008 Q1	69.4	-44.4	-40.9	0.1	-3.5	-0.6	39.2	29.8	3.4	9.4	0.5	74.6	59.2	7.1	15.3	0.1
Q2	137.6	30.8	-5.1	0.1	36.0	0.8	96.0	37.0	8.3	59.0	1.6	10.8	18.3	20.9	-7.5	0.1
2008 Apr.	46.6	6.7	0.7	-0.1	6.1	.	34.2	13.9	2.8	20.4	.	5.6	11.0	7.1	-5.4	.
May	70.3	16.0	3.5	0.1	12.5	.	46.0	12.0	3.2	34.0	.	8.3	10.3	7.0	-2.1	.
June	20.7	8.1	-9.3	0.0	17.4	.	15.7	11.1	2.3	4.6	.	-3.1	-3.0	6.9	-0.1	.
July	19.2	6.0	3.7	0.1	2.3	.	1.3	-5.6	0.2	6.9	.	11.9	15.2	0.1	-3.4	.
Aug.	18.6	-7.1	-4.0	0.0	-3.1	.	13.3	9.4	0.3	3.9	.	12.4	11.6	-0.1	0.8	.
	Growth rates															
2005	13.1	9.8	17.6	5.9	9.3	19.8	17.1	20.4	9.7	15.2	7.7	5.8	7.6	-6.6	-2.8	-8.2
2006	14.0	9.0	17.5	0.9	8.4	22.1	17.4	24.3	26.1	12.9	9.4	21.6	22.5	1,019.8	20.4	-27.3
2007 Q4	10.1	4.1	29.2	-13.1	2.4	14.0	13.8	17.9	32.5	10.8	15.9	20.5	22.2	251.2	12.8	173.4
2008 Q1	8.0	0.6	-18.0	-4.8	1.8	9.8	11.1	14.6	48.5	8.6	12.5	27.7	32.8	173.5	7.5	-90.0
Q2	7.8	1.4	-27.0	0.6	3.7	8.0	10.7	11.4	83.6	10.1	20.7	21.8	29.8	236.0	-7.8	-93.6

4. Portfolio investment liabilities

	Total	Equity			Debt instruments							
					Bonds and notes				Money market instruments			
		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 (international investment position)											
2006	5,864.9	2,910.7	657.5	2,253.2	2,655.3	955.2	1,702.4	1,015.4	298.9	125.8	173.3	138.0
2007	6,339.4	3,103.1	754.7	2,348.4	2,916.8	1,129.5	1,787.2	1,109.3	319.6	153.3	166.2	142.5
2008 Q1	6,078.9	2,776.1	733.2	2,042.9	2,937.6	1,115.7	1,821.8	1,153.6	365.2	178.2	187.0	164.2
Q2	6,072.1	2,690.7	737.2	1,953.5	3,003.8	1,136.2	1,867.6	1,153.0	377.6	173.6	204.0	172.5
	Transactions											
2006	824.2	299.9	94.5	205.4	521.6	212.7	308.8	137.3	2.7	21.4	-18.7	-19.6
2007	578.3	96.0	76.1	19.6	446.4	232.6	213.8	152.0	35.9	37.6	-1.8	3.2
2007 Q4	25.9	-31.4	-32.5	1.1	78.6	31.9	46.6	28.2	-21.3	21.6	-42.9	-45.4
2008 Q1	143.2	46.1	73.1	-27.0	78.3	23.1	55.2	65.2	18.8	4.4	14.4	27.6
Q2	172.0	-20.7	17.1	-37.8	171.8	66.9	104.9	46.4	20.8	-0.1	21.0	11.1
2008 Apr.	29.7	-28.4	.	.	42.5	.	.	.	15.6	.	.	.
May	80.5	13.7	.	.	80.9	.	.	.	-14.1	.	.	.
June	61.7	-6.0	.	.	48.4	.	.	.	19.3	.	.	.
July	10.4	5.2	.	.	1.1	.	.	.	4.1	.	.	.
Aug.	4.7	-8.7	.	.	34.7	.	.	.	-21.3	.	.	.
	Growth rates											
2005	12.8	13.0	.	.	11.1	.	.	.	23.5	.	.	.
2006	16.3	12.2	17.3	10.8	23.1	25.9	21.4	15.1	0.9	18.7	-9.6	-12.1
2007 Q4	9.8	3.3	11.3	0.9	16.9	24.6	12.6	15.0	11.8	30.5	0.3	3.8
2008 Q1	7.6	2.2	11.9	-1.0	12.9	16.7	10.8	17.4	13.5	31.5	2.8	8.8
Q2	7.0	0.0	11.4	-3.6	14.1	16.0	13.0	16.5	7.8	19.8	1.7	3.2

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			MFIs (excluding Eurosystem)			General government				Other sectors			
		Total	Loans/currency and deposits	Other assets	Total	Loans/currency and deposits	Other assets		Trade credits	Loans/currency and deposits	Currency and deposits		Trade credits	Loans/currency and deposits	Currency and deposits
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Outstanding amounts (international investment position)														
2006	4,451.8	13.4	12.6	0.7	2,941.2	2,878.3	62.8	119.6	14.2	57.8	15.4	1,377.7	187.6	1,062.7	395.8
2007	5,241.2	38.2	37.6	0.7	3,350.5	3,279.1	71.4	106.7	12.7	47.7	13.5	1,745.7	190.8	1,388.4	441.9
2008 Q1	5,402.8	46.4	46.1	0.3	3,463.3	3,393.8	69.6	99.3	12.5	41.5	11.2	1,793.8	192.5	1,417.8	453.7
Q2	5,285.4	36.7	36.4	0.3	3,363.4	3,287.2	76.2	105.6	12.4	47.4	17.0	1,779.7	200.3	1,388.3	407.8
	Transactions														
2006	739.1	-8.7	-8.7	0.0	521.9	516.1	5.8	-7.2	-5.2	-2.7	3.1	233.1	6.3	211.5	30.9
2007	918.3	21.9	22.0	0.0	555.0	547.6	7.4	-7.6	-1.4	-7.1	-2.0	348.9	13.5	293.5	37.5
2007 Q4	99.6	3.5	3.5	0.0	57.0	55.1	1.9	1.3	-0.4	1.7	-0.1	37.8	4.1	32.7	-14.7
2008 Q1	290.8	9.3	9.3	0.0	218.5	214.4	4.1	-4.9	-0.3	-4.9	-1.3	67.9	6.4	34.5	12.8
Q2	-112.1	-9.4	-9.4	0.0	-105.2	-106.1	0.9	6.2	-0.4	5.9	5.6	-3.7	11.0	-22.0	-47.8
2008 Apr.	47.1	-4.7	.	.	51.8	.	.	1.6	.	.	1.3	-1.5	.	.	-18.4
May	-26.8	-2.1	.	.	-32.9	.	.	3.6	.	.	3.5	4.6	.	.	-9.5
June	-132.4	-2.5	.	.	-124.1	.	.	1.0	.	.	0.8	-6.8	.	.	-19.9
July	10.9	-0.6	.	.	7.1	.	.	-8.9	.	.	-9.3	13.3	.	.	4.9
Aug.	-7.4	-1.3	.	.	1.7	.	.	-1.2	.	.	-0.2	-6.7	.	.	-3.3
	Growth rates														
2005	17.7	21.0	23.1	3.3	19.5	19.8	8.8	-5.6	-11.7	-9.1	12.6	17.2	5.1	20.0	2.3
2006	19.5	-39.4	-40.8	3.1	21.1	21.3	10.5	-5.6	-26.1	-4.6	24.4	20.0	3.4	24.5	8.6
2007 Q4	20.7	165.6	174.8	-3.4	19.0	19.1	11.7	-6.4	-9.8	-12.4	-13.1	25.2	7.3	27.4	9.5
2008 Q1	17.2	113.1	116.8	-4.8	15.6	15.5	18.3	-4.5	-10.3	-9.7	17.7	20.8	7.8	21.8	2.0
Q2	9.8	29.0	30.0	-4.1	7.5	7.5	6.2	-12.1	-10.0	-23.1	-34.1	16.2	12.5	16.1	-9.3

6. Other investment liabilities

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other 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	5	6	7	8	9	10	11	12	13	14	15
	Outstanding amounts (international investment position)														
2006	4,706.8	115.9	115.6	0.2	3,483.9	3,429.5	54.4	50.7	0.0	46.6	4.1	1,056.2	146.1	818.3	91.8
2007	5,480.5	201.2	201.0	0.2	3,938.2	3,871.1	67.1	50.9	0.0	45.7	5.2	1,290.2	157.6	1,023.2	109.4
2008 Q1	5,683.3	217.3	216.9	0.4	4,101.6	4,032.5	69.0	49.8	0.0	46.5	3.2	1,314.6	157.4	1,043.9	113.3
Q2	5,699.6	258.9	258.6	0.3	4,082.1	4,010.3	71.9	48.6	0.0	45.6	3.1	1,310.0	166.3	1,035.4	108.3
	Transactions														
2006	741.0	20.4	20.4	0.0	497.0	490.6	6.4	1.9	0.0	2.1	-0.1	221.7	12.7	197.2	11.8
2007	959.3	91.4	91.4	0.0	635.8	631.0	4.8	-1.2	0.0	-2.0	0.8	233.4	9.7	227.5	-3.9
2007 Q4	89.0	36.9	37.0	-0.1	51.3	51.0	0.4	-6.2	0.0	-5.5	-0.6	7.0	3.7	11.7	-8.5
2008 Q1	345.8	21.3	21.2	0.2	283.7	281.1	2.7	-1.0	0.0	0.9	-1.9	41.7	3.3	34.9	3.6
Q2	-1.0	41.3	41.5	-0.1	-25.3	-23.2	-2.1	-0.6	0.0	-1.4	0.7	-16.4	6.3	-15.8	-6.9
2008 Apr.	122.4	16.3	.	.	118.4	.	.	0.3	.	.	.	-12.6	.	.	.
May	20.7	18.9	.	.	1.6	.	.	-1.3	.	.	.	1.5	.	.	.
June	-144.1	6.2	.	.	-145.4	.	.	0.3	.	.	.	-5.2	.	.	.
July	25.9	-1.2	.	.	15.1	.	.	2.6	.	.	.	9.4	.	.	.
Aug.	-5.7	2.0	.	.	1.9	.	.	-1.7	.	.	.	-7.8	.	.	.
	Growth rates														
2005	19.6	8.9	8.9	-3.7	19.2	19.5	2.6	-4.4	-3.4	-4.1	-7.2	24.7	11.3	29.6	13.7
2006	18.4	22.7	22.7	5.7	16.2	16.2	13.3	4.0	-24.1	4.7	-3.2	26.9	9.5	31.6	17.5
2007 Q4	20.4	79.6	79.8	-6.9	18.4	18.5	8.8	-2.3	29.4	-4.2	16.4	21.6	6.7	27.9	-2.3
2008 Q1	20.4	70.9	71.1	15.6	17.8	17.9	10.8	-6.3	21.2	-5.7	-15.3	24.2	10.3	31.0	-4.8
Q2	14.7	72.6	72.7	-6.3	11.8	11.9	3.1	-8.7	26.7	-7.0	-24.5	18.1	10.4	23.1	-8.8

Source: ECB.

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														Memo	
															Assets	Liabilities
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange								Other claims	Claims on euro area residents in foreign currency	Predetermined short-term net drains in foreign currency
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities				Financial derivatives			
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Outstanding amounts (international investment position)															
2004	281.0	125.4	389.998	3.9	18.6	133.0	12.5	25.5	94.7	0.5	56.6	37.6	0.4	0.0	19.1	-12.8
2005	320.1	163.4	375.861	4.3	10.6	141.7	12.6	21.4	107.9	0.6	69.4	38.0	-0.2	0.0	25.6	-17.9
2006	325.8	176.3	365.213	4.6	5.2	139.7	6.3	22.5	110.7	0.5	79.3	30.8	0.3	0.0	24.6	-21.5
2007 Q4	347.2	201.0	353.688	4.6	3.6	138.0	7.2	22.0	108.5	0.4	87.8	20.3	0.3	0.0	44.1	-38.5
2008 Q1	356.3	208.4	353.060	4.3	3.4	140.1	6.6	26.8	105.9	0.5	89.8	15.6	0.9	0.1	36.7	-37.3
Q2	353.9	207.9	352.314	4.3	4.0	137.7	7.4	24.1	105.6	0.5	89.9	15.2	0.6	0.0	59.4	-59.2
2008 July	355.6	206.5	351.082	4.4	3.9	140.8	7.2	25.8	108.0	-	-	-	-0.1	0.0	59.8	-61.9
Aug.	350.7	198.4	350.916	4.5	3.9	143.9	6.7	25.8	112.2	-	-	-	-0.8	0.0	62.1	-61.9
Sep.	370.7	216.8	350.634	4.6	4.0	145.2	11.6	18.1	117.8	-	-	-	-2.3	0.0	188.7	-184.8
	Transactions															
2005	-17.7	-3.9	-	0.2	-8.6	-5.4	-0.2	-6.8	1.6	0.0	4.8	-3.2	0.0	0.0	-	-
2006	0.9	-4.2	-	0.5	-5.2	9.8	-6.1	2.4	13.6	0.0	19.3	-5.7	0.0	0.0	-	-
2007	5.1	-3.2	-	0.3	-0.9	8.8	1.0	1.6	6.2	0.0	14.5	-8.3	0.0	0.0	-	-
2007 Q4	-4.7	-1.4	-	0.1	-0.2	-3.2	-0.4	-4.6	1.7	0.1	4.2	-2.7	0.1	0.0	-	-
2008 Q1	5.1	-0.6	-	-0.3	0.0	5.9	-0.7	5.7	0.9	0.1	6.1	-5.3	0.1	0.1	-	-
Q2	0.0	-0.4	-	0.0	0.7	-0.2	0.7	-2.9	2.0	0.0	1.7	0.3	-0.1	-0.1	-	-
	Growth rates															
2004	-4.1	-0.9	-	-10.4	-17.0	-4.6	30.2	-10.7	-6.1	-46.6	-22.4	45.1	-55.8	-	-	-
2005	-5.8	-2.8	-	4.4	-44.7	-3.8	-2.0	-23.7	1.6	2.2	6.9	-7.9	20.5	-	-	-
2006	0.2	-2.4	-	11.6	-48.8	7.2	-48.4	10.6	13.1	0.0	28.4	-15.3	-73.2	-	-	-
2007 Q4	1.6	-1.7	-	7.3	-18.2	6.3	15.0	6.2	5.7	1.1	18.5	-27.5	-59.1	-	-	-
2008 Q1	2.6	-1.8	-	0.4	-3.3	8.5	33.2	9.3	7.3	406.6	18.3	-33.3	-43.6	-	-	-
Q2	1.4	-1.4	-	-2.4	2.7	5.3	27.2	-3.6	6.4	165.8	17.3	-33.7	-45.0	-	-	-

Source: ECB.

7.3 Financial account

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

8. Geographical breakdown

	Total	European Union 27 (outside the euro area)						Canada	China	Japan	Switzer-land	United States	Offshore financial centres	Internat. organisa-tions	Other countries
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2007	Outstanding amounts (international investment position)														
Direct investment	457.7	-77.0	-3.7	-32.7	-277.5	237.2	-0.3	23.7	27.1	-10.8	113.1	-66.7	-37.3	-0.2	485.7
Abroad	3,542.2	1,302.0	37.1	82.5	916.1	266.2	0.0	91.6	30.7	69.1	350.1	684.4	391.6	0.0	622.6
Equity/reinvested earnings	2,858.8	1,027.4	32.3	55.2	709.9	230.0	0.0	67.8	24.1	57.8	292.5	525.9	366.1	0.0	497.3
Other capital	683.4	274.7	4.9	27.3	206.2	36.3	0.0	23.8	6.6	11.4	57.6	158.6	25.5	0.0	125.3
In the euro area	3,084.5	1,379.0	40.8	115.2	1,193.6	29.0	0.3	67.9	3.7	79.9	236.9	751.1	428.8	0.2	136.9
Equity/reinvested earnings	2,338.4	1,124.2	33.4	93.6	987.8	9.2	0.2	56.6	0.9	65.7	181.3	552.1	267.6	0.0	90.0
Other capital	746.1	254.8	7.4	21.6	205.8	19.9	0.1	11.3	2.7	14.3	55.6	199.0	161.2	0.2	46.9
Portfolio investment assets	4,653.3	1,374.6	68.2	139.3	995.2	101.4	70.5	82.5	42.0	241.9	132.3	1,489.3	630.2	26.8	633.8
Equity	1,984.2	415.2	11.4	45.9	335.3	22.0	0.5	20.2	39.5	141.6	115.7	634.9	285.3	0.9	330.9
Debt instruments	2,669.0	959.4	56.8	93.4	659.9	79.4	70.0	62.3	2.5	100.2	16.6	854.4	344.9	25.9	302.8
Bonds and notes	2,232.5	784.2	52.7	78.2	505.4	78.5	69.4	58.6	2.2	63.5	12.9	710.7	303.1	24.8	272.5
Money market instruments	436.6	175.2	4.0	15.1	154.5	0.8	0.7	3.6	0.3	36.7	3.8	143.8	41.8	1.1	30.4
Other investment	-239.3	-152.6	-155.4	-8.7	121.7	54.4	-164.6	-66.0	-45.2	-31.5	-54.7	-73.1	-91.2	-23.3	298.3
Assets	5,241.2	2,581.4	104.4	72.2	2,241.7	152.3	10.8	23.5	35.0	81.3	266.1	838.0	516.8	57.5	841.7
General government	106.7	21.6	0.8	0.1	10.3	1.2	9.2	0.0	1.8	0.2	0.1	3.1	1.4	38.3	40.4
MFIs	3,388.7	1,924.7	86.7	52.1	1,663.2	121.9	0.8	15.0	15.3	45.0	157.5	409.6	353.5	18.7	449.4
Other sectors	1,745.7	635.2	16.9	20.0	568.2	29.2	0.9	8.5	17.9	36.1	108.5	425.3	161.9	0.5	351.9
Liabilities	5,480.5	2,734.0	259.8	80.9	2,120.0	97.9	175.5	89.5	80.2	112.8	320.7	911.0	608.0	80.8	543.4
General government	50.9	28.4	0.0	0.3	2.4	0.0	25.6	0.0	0.0	0.5	0.8	6.3	0.3	11.5	3.1
MFIs	4,139.4	2,142.0	249.6	58.3	1,659.9	72.4	101.8	81.5	62.2	89.0	247.6	525.1	523.7	66.7	401.7
Other sectors	1,290.2	563.6	10.2	22.3	457.7	25.5	48.0	8.0	18.0	23.3	72.3	379.7	84.0	2.6	138.6
2007 Q3 to 2008 Q2	Cumulated transactions														
Direct investment	165.4	25.6	2.8	-3.1	7.2	18.7	0.0	-7.2	5.0	6.4	34.3	-18.3	54.9	0.0	64.8
Abroad	389.6	61.2	3.0	-2.2	34.3	26.1	0.0	-3.4	4.6	13.4	43.7	70.3	100.8	0.0	99.1
Equity/reinvested earnings	282.5	33.2	1.9	-2.9	18.3	15.9	0.0	-4.4	2.6	5.1	25.6	61.5	92.2	0.0	66.7
Other capital	107.2	28.0	1.2	0.6	16.0	10.2	0.0	1.0	1.9	8.4	18.1	8.8	8.6	0.0	32.4
In the euro area	224.2	35.6	0.2	0.8	27.2	7.3	0.0	3.9	-0.4	7.1	9.4	88.6	45.9	0.0	34.3
Equity/reinvested earnings	135.9	32.9	-0.8	-1.6	34.6	0.7	0.0	1.4	0.1	9.3	4.7	46.1	28.4	0.0	13.0
Other capital	88.3	2.7	1.0	2.5	-7.4	6.6	0.0	2.5	-0.5	-2.2	4.7	42.5	17.4	0.0	21.3
Portfolio investment assets	345.1	116.1	-0.6	1.7	102.4	8.8	3.7	11.8	-0.4	21.2	-18.8	86.6	17.2	1.1	110.3
Equity	24.5	-3.4	-1.2	-3.9	0.3	1.1	0.1	4.0	-1.4	-23.3	-18.9	7.6	32.6	-0.2	27.4
Debt instruments	320.6	119.5	0.6	5.6	102.1	7.7	3.6	7.8	0.9	44.5	0.1	79.0	-15.4	1.3	82.9
Bonds and notes	227.9	69.8	0.8	1.0	58.5	7.1	2.4	8.5	0.4	6.8	1.3	59.2	-5.9	1.3	86.5
Money market instruments	92.7	49.8	-0.2	4.6	43.6	0.6	1.2	-0.7	0.5	37.7	-1.2	19.8	-9.5	0.0	-3.6
Other investment	-267.4	-252.0	55.1	3.9	-358.2	50.7	-3.4	0.5	20.3	0.4	-62.8	-165.0	60.6	30.4	100.1
Assets	491.9	24.7	26.4	4.7	-78.6	66.0	6.2	5.0	5.2	14.8	-42.8	189.2	132.9	9.7	153.2
General government	-15.7	-12.0	-1.4	0.1	-11.4	-0.5	1.1	-0.2	0.0	0.0	0.0	0.1	0.0	0.8	-4.4
MFIs	256.6	4.5	27.1	4.9	-95.0	62.6	4.9	4.6	1.3	17.0	-45.8	50.5	102.1	8.9	113.4
Other sectors	251.1	32.1	0.6	-0.3	27.8	3.8	0.1	0.6	3.9	-2.2	3.0	138.6	30.8	0.0	44.1
Liabilities	759.3	276.6	-28.7	0.8	279.6	15.3	9.6	4.5	-15.1	14.4	20.0	354.2	72.2	-20.7	53.2
General government	-4.7	-2.7	0.0	0.0	-1.9	0.0	-0.7	0.0	0.0	0.0	0.1	-0.6	0.1	-1.1	-0.5
MFIs	558.9	259.9	-29.4	-1.6	274.9	9.9	6.1	5.1	-15.8	16.1	9.8	213.9	58.2	-19.6	31.4
Other sectors	205.0	19.4	0.7	2.4	6.7	5.4	4.3	-0.5	0.8	-1.7	10.2	140.8	14.0	0.0	22.2

Source: ECB.

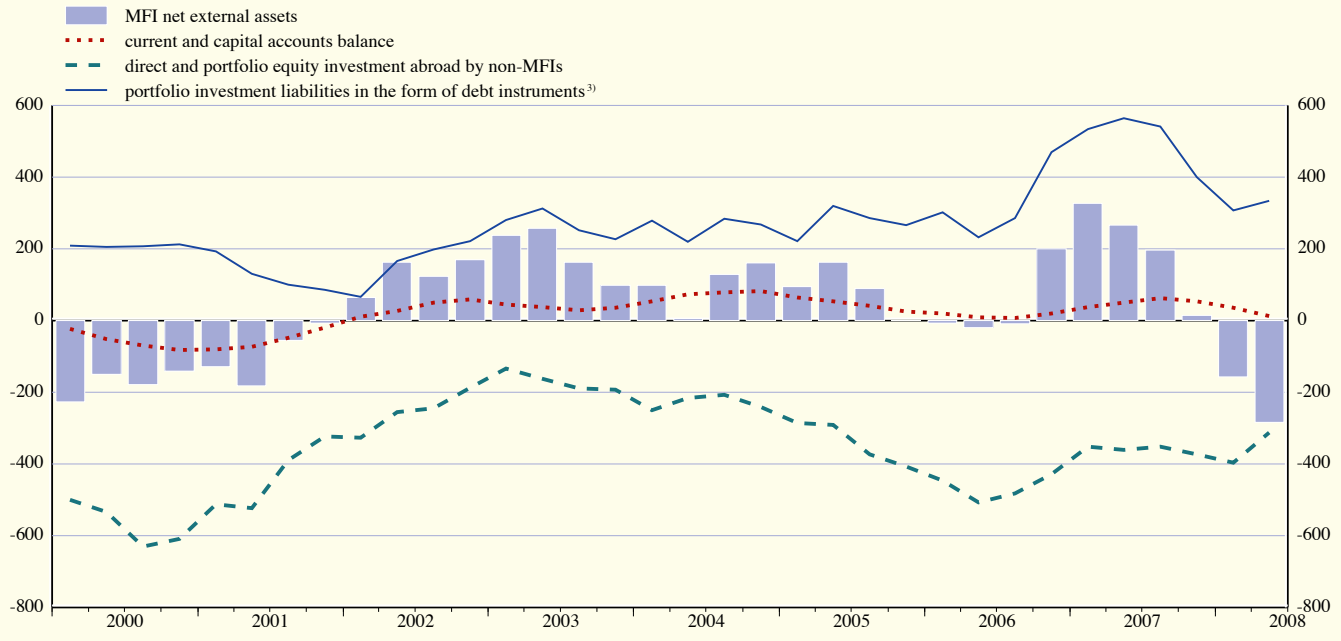
7.4 Monetary presentation of the balance of payments [1]

(EUR billions; transactions)

	B.o.p. items balancing transactions in the external counterpart of M3											Memo: Transactions in the external counterpart of M3
	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total of columns 1 to 10	
		By resident units abroad (non-MFIs)	By non-resident units in the euro area	Assets	Liabilities		Assets	Liabilities				
				Non-MFIs	Equity [2]	Debt instruments [3]	Non-MFIs	Non-MFIs				
	1	2	3	4	5	6	7	8	9	10	11	12
2005	24.7	-344.2	153.6	-266.4	212.6	265.4	-155.8	151.0	-17.3	-30.4	-6.7	-0.1
2006	19.8	-381.6	264.2	-286.6	239.7	469.7	-225.9	223.7	3.2	-150.5	175.6	200.3
2007	53.2	-428.5	363.4	-184.1	50.3	399.5	-341.3	232.3	-54.1	-77.6	13.2	13.7
2007 Q2	2.5	-121.9	67.4	-57.5	31.2	139.3	-73.1	43.0	-7.3	-19.2	4.4	-0.3
Q3	18.8	-94.6	78.1	-51.2	1.7	58.8	-130.7	176.2	-15.4	-118.8	-77.1	-67.2
Q4	17.3	-107.6	126.1	-19.4	-40.8	33.2	-39.2	0.4	-19.2	61.9	12.7	-7.0
2008 Q1	-2.4	-139.2	44.3	-21.3	6.4	75.9	-63.0	40.7	-21.0	6.8	-72.8	-83.3
Q2	-21.4	-17.9	-25.3	-87.5	-38.4	165.6	-2.4	-17.0	-9.1	-65.7	-119.1	-127.0
2007 Aug.	2.1	-30.3	34.1	-14.3	-24.2	28.1	-9.8	33.1	-3.6	-64.5	-49.3	-51.1
Sep.	7.9	-39.6	18.0	-14.6	3.4	12.2	-152.1	139.0	-3.1	-1.3	-30.2	-24.4
Oct.	5.9	-43.1	63.4	-12.5	-24.8	7.7	-26.2	3.6	-2.7	42.4	13.8	11.9
Nov.	3.9	-41.3	49.0	-1.2	-7.9	55.5	-15.9	3.4	-11.2	-0.9	33.5	28.6
Dec.	7.4	-23.2	13.7	-5.6	-8.1	-30.1	2.9	-6.6	-5.3	20.4	-34.6	-47.5
2008 Jan.	-12.4	-86.5	28.3	6.4	-9.6	53.0	0.2	26.6	-26.9	7.0	-14.0	-18.4
Feb.	12.2	-34.1	15.8	-4.6	19.2	4.3	-36.1	-9.3	2.5	13.1	-16.9	-13.8
Mar.	-2.2	-18.6	0.2	-23.0	-3.2	18.5	-27.0	23.4	3.4	-13.3	-41.9	-51.0
Apr.	-4.3	21.8	-40.1	-21.1	-44.4	53.2	-0.1	-12.3	-2.8	-25.5	-75.6	-73.1
May	-20.0	-11.3	4.5	-44.5	-1.3	48.2	-8.2	0.2	-9.9	-23.7	-65.8	-69.9
June	2.8	-28.4	10.4	-21.9	7.4	64.2	5.8	-4.9	3.5	-16.6	22.3	16.0
July	2.0	-38.2	12.4	-5.8	-9.5	4.5	-4.4	12.1	2.0	3.7	-21.1	-4.5
Aug.	-7.4	-13.9	3.5	-1.6	-26.3	11.9	7.9	-9.5	-5.8	34.5	-6.7	-8.3
	12-month cumulated transactions											
2008 Aug.	-4.0	-356.3	178.9	-150.1	-105.2	303.2	-253.2	165.5	-56.1	40.0	-237.2	-254.4

C34 Main b.o.p. transactions underlying the developments in MFI net external assets [1]

(EUR billions; 12-month cumulated transactions)



Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General notes.
2) Excluding money market fund shares/units.
3) 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.)					
			Total				Memo:	Total				Memo:	
	Exports	Imports		Intermediate	Capital	Consumption	Manufactures		Intermediate	Capital	Consumption	Manufactures	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Values (EUR billions; annual percentage changes for columns 1 and 2)												
2004	9.0	9.3	1,144.4	543.7	246.3	313.8	995.0	1,075.7	604.7	184.3	256.8	770.4	130.0
2005	7.8	13.4	1,238.3	589.8	269.0	333.9	1,068.7	1,227.3	705.9	208.2	277.0	845.9	187.0
2006	11.6	13.7	1,384.9	686.4	296.4	365.4	1,182.9	1,397.4	856.7	216.5	304.6	942.9	224.6
2007	8.5	5.7	1,502.5	737.6	324.9	393.6	1,275.7	1,475.0	899.6	224.5	323.6	1,008.4	223.9
2007 Q1	9.1	5.2	367.9	180.6	79.8	96.6	311.5	359.5	217.1	56.4	79.8	250.0	48.2
Q2	9.5	3.7	371.0	182.0	80.5	97.0	316.7	361.4	221.7	54.0	79.3	249.7	53.1
Q3	10.3	6.4	382.0	187.5	82.2	100.4	326.4	374.2	226.5	57.9	82.5	259.0	57.7
Q4	5.4	7.3	381.5	187.6	82.4	99.5	321.2	379.8	234.2	56.3	82.1	249.6	64.9
2008 Q1	6.7	9.4	395.1	194.1	84.0	103.8	331.5	396.3	247.3	57.3	81.6	256.2	70.1
Q2	7.5	11.2	395.7	196.2	83.5	103.0	331.4	400.5	254.7	54.5	80.7	253.6	75.1
2008 Mar.	-1.9	5.4	128.7	62.9	27.1	33.2	107.7	130.4	82.3	18.6	26.4	83.8	24.0
Apr.	16.3	15.8	135.9	67.4	28.6	36.0	112.7	135.0	84.9	18.6	27.4	84.7	23.9
May	2.7	7.2	129.4	64.1	27.2	33.5	108.4	131.3	83.7	17.9	26.5	83.8	24.3
June	4.0	10.8	130.4	64.7	27.7	33.4	110.2	134.2	86.1	17.9	26.8	85.2	26.9
July	9.1	15.4	134.0	67.0	28.3	34.2	110.5	140.6	90.4	19.3	27.4	86.5	30.5
Aug.	-1.7	7.4	133.1	.	.	.	110.4	139.2	.	.	.	86.6	.
	Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)												
2004	9.0	6.4	117.5	114.9	120.2	118.6	118.6	108.0	104.1	108.8	117.6	109.0	106.2
2005	4.7	5.0	123.5	119.7	129.8	123.6	124.6	114.0	107.5	123.5	123.6	117.1	110.6
2006	7.8	6.0	133.5	133.6	140.3	131.2	134.4	121.0	117.8	128.5	131.3	126.1	110.0
2007	6.1	4.2	141.6	139.0	151.6	139.5	142.1	125.9	120.1	136.9	138.4	133.6	107.9
2007 Q1	7.2	6.4	139.9	137.3	149.4	137.1	139.2	126.3	121.6	136.1	137.1	132.4	109.7
Q2	6.6	3.5	139.6	136.8	149.6	137.7	140.5	124.8	120.2	132.3	137.0	132.4	106.9
Q3	7.6	5.4	143.5	140.7	153.2	141.9	145.0	126.4	119.2	141.5	139.4	136.5	106.9
Q4	3.3	1.7	143.5	141.1	154.1	141.3	143.6	126.2	119.4	137.9	140.0	133.2	108.2
2008 Q1	3.8	-0.9	146.2	142.7	154.4	145.6	146.9	126.1	119.7	139.0	137.6	134.8	109.5
Q2	5.0	-1.0	145.3	141.9	154.2	144.1	146.9	123.1	116.4	133.9	138.2	133.9	102.8
2008 Mar.	-4.1	-4.7	142.6	138.1	148.7	139.7	142.9	123.7	117.7	136.0	135.0	132.7	109.5
Apr.	13.9	5.3	150.6	147.5	158.8	151.5	149.9	127.6	121.0	137.8	140.3	134.6	107.0
May	0.9	-4.7	143.2	139.4	151.1	141.9	145.1	121.6	115.2	132.5	137.2	133.1	100.5
June	0.7	-3.5	142.1	138.9	152.7	138.8	145.6	120.0	113.0	131.3	137.0	134.0	101.1
July	4.9	-1.6	144.7	141.7	154.7	141.9	144.8	121.3	113.5	141.7	137.3	133.9	107.5
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Unit value indices (n.s.a.; 2000 = 100; annual percentage changes for columns 1 and 2)												
2004	-0.1	2.7	97.6	96.6	95.7	101.2	97.3	97.4	98.3	92.3	99.0	96.3	99.6
2005	2.9	8.0	100.4	100.6	96.8	103.3	99.4	105.2	111.1	91.8	101.5	98.5	137.7
2006	3.6	7.4	104.0	104.9	98.7	106.5	102.0	113.0	123.1	91.9	105.1	101.9	166.5
2007	2.2	1.4	106.3	108.4	100.1	107.9	104.1	114.6	126.8	89.4	106.0	102.8	169.3
2007 Q1	1.7	-1.0	105.4	107.5	99.7	107.9	103.8	111.3	120.9	90.3	105.5	102.9	143.5
Q2	2.8	0.2	106.6	108.8	100.5	107.8	104.5	113.3	124.9	89.0	104.9	102.8	162.1
Q3	2.5	0.9	106.7	108.9	100.3	108.3	104.4	115.8	128.7	89.3	107.2	103.4	176.2
Q4	2.0	5.6	106.6	108.7	100.0	107.8	103.7	117.7	132.8	89.0	106.3	102.2	195.5
2008 Q1	2.8	10.4	108.3	111.2	101.6	109.1	104.6	122.9	139.9	89.8	107.5	103.6	208.7
Q2	2.4	12.4	109.1	113.0	101.2	109.4	104.6	127.4	148.4	88.7	105.8	103.3	238.5
2008 Mar.	2.4	10.5	108.5	111.7	102.2	109.1	104.8	123.8	142.0	89.4	106.4	103.3	214.1
Apr.	2.2	10.0	108.5	112.1	101.1	109.2	104.6	124.1	142.6	88.5	106.1	102.9	218.9
May	1.8	12.5	108.6	112.7	100.9	108.3	103.9	126.8	147.7	88.4	105.1	102.9	236.4
June	3.3	14.8	110.3	114.2	101.5	110.6	105.3	131.3	154.8	89.2	106.3	104.0	260.3
July	4.0	17.3	111.3	116.0	102.5	110.6	106.2	136.1	161.7	88.9	108.6	105.7	277.9
Aug.	.	.	.	.	.	.	.	.	.	.	.	.	.

Source: Eurostat.

7.5 Trade in goods

(EUR billions, unless otherwise indicated; seasonally adjusted)

2. Geographical breakdown

	Total	European Union 27 (outside the euro area)				Russia	Switzer-land	Turkey	United States	Asia			Africa	Latin America	Other countries
		Denmark	Sweden	United Kingdom	Other EU countries						China	Japan			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Exports (f.o.b.)														
2004	1,144.4	25.8	42.1	204.5	133.9	35.9	66.6	31.8	172.7	225.7	40.4	33.3	64.6	40.7	100.2
2005	1,238.3	29.0	45.2	203.3	153.2	43.7	70.8	34.7	185.3	244.2	43.3	34.1	73.4	46.9	108.6
2006	1,384.9	31.7	49.9	216.8	189.8	55.2	77.3	38.8	199.8	271.7	53.7	34.5	77.7	54.4	121.7
2007	1,502.5	33.7	55.3	229.0	220.0	67.1	82.0	41.0	194.9	296.3	60.4	34.3	87.3	61.6	134.4
2007 Q1	367.9	8.3	13.5	56.8	52.3	15.6	20.5	10.2	49.5	71.9	14.3	8.7	21.4	15.0	32.8
Q2	371.0	8.4	13.9	56.0	53.9	16.7	20.0	9.9	48.7	73.1	14.8	8.8	21.5	15.5	33.4
Q3	382.0	8.5	14.2	58.7	56.5	17.3	20.6	10.4	49.4	75.3	15.5	8.5	22.2	15.6	33.5
Q4	381.5	8.5	13.7	57.4	57.4	17.5	20.8	10.5	47.3	75.9	15.7	8.2	22.3	15.6	34.7
2008 Q1	395.1	8.8	13.9	57.5	60.3	19.2	20.8	11.7	48.4	78.3	16.7	8.5	23.8	16.0	36.2
Q2	395.7	8.9	14.2	57.6	61.2	19.4	21.8	11.0	46.4	77.3	16.9	8.4	24.6	16.2	37.2
2008 Mar.	128.7	2.9	4.6	18.6	19.9	6.5	7.0	3.8	15.2	25.8	5.5	2.8	7.9	5.2	11.2
Apr.	135.9	2.9	4.7	20.2	20.9	6.5	7.3	3.9	16.3	26.0	5.8	2.8	8.1	5.3	13.8
May	129.4	3.0	4.7	18.6	20.0	6.4	7.2	3.6	14.8	25.6	5.5	2.8	8.1	5.4	12.1
June	130.4	3.0	4.8	18.8	20.3	6.5	7.3	3.6	15.3	25.7	5.6	2.8	8.4	5.5	11.3
July	134.0	3.1	4.9	19.0	20.8	6.7	7.1	3.7	14.9	25.6	5.7	2.8	8.7	5.9	13.6
Aug.	133.1	.	.	.	.	6.6	7.1	3.5	15.2	25.3	5.3	2.7	8.7	5.7	.
	% share of total exports														
2007	100.0	2.2	3.7	15.2	14.6	4.5	5.5	2.7	13.0	19.7	4.0	2.3	5.8	4.1	8.9
	Imports (c.i.f.)														
2004	1,075.7	25.4	40.0	144.8	115.5	56.6	53.3	23.2	113.4	309.1	92.3	54.1	72.9	45.2	76.3
2005	1,227.3	26.4	42.4	153.2	127.8	76.3	58.1	25.5	120.2	363.5	118.1	53.2	96.0	53.8	84.1
2006	1,397.4	28.5	48.0	167.2	152.3	95.6	62.3	29.4	125.9	418.5	144.5	57.0	110.5	66.3	93.0
2007	1,475.0	28.1	51.7	167.8	174.4	97.7	67.1	32.3	131.2	445.9	170.2	58.5	113.0	74.9	90.8
2007 Q1	359.5	7.0	12.9	40.7	41.3	22.8	17.0	7.9	33.5	111.0	42.5	14.9	26.7	18.2	20.4
Q2	361.4	7.0	12.8	41.9	42.6	23.9	16.5	7.9	32.3	108.5	40.3	14.4	27.0	18.4	22.7
Q3	374.2	7.2	12.9	42.7	45.0	23.6	17.1	8.2	33.1	113.8	44.2	14.8	28.1	18.9	23.6
Q4	379.8	6.8	13.1	42.5	45.5	27.4	16.5	8.3	32.3	112.6	43.1	14.4	31.2	19.5	24.1
2008 Q1	396.3	7.2	14.1	43.7	47.9	28.0	16.9	8.3	34.0	116.6	43.5	14.6	34.0	19.5	26.1
Q2	400.5	7.7	13.3	41.6	48.5	29.1	17.1	8.4	33.1	116.1	43.7	14.0	36.5	20.4	28.8
2008 Mar.	130.4	2.3	4.6	14.3	16.1	9.3	5.6	2.8	11.3	38.7	14.1	4.8	11.1	6.5	8.0
Apr.	135.0	2.6	4.5	14.2	16.6	10.0	5.7	2.8	11.1	38.9	14.6	4.9	12.3	6.8	9.3
May	131.3	2.6	4.4	13.6	15.9	9.8	5.6	2.8	10.9	38.0	14.5	4.5	11.7	6.8	9.5
June	134.2	2.4	4.3	13.9	16.0	9.3	5.8	2.8	11.1	39.3	14.6	4.6	12.5	6.7	10.0
July	140.6	2.9	4.4	14.0	16.0	11.5	6.0	2.8	11.9	41.1	15.6	4.6	12.5	6.8	10.8
Aug.	139.2	.	.	.	.	10.0	5.8	2.7	11.0	40.8	15.9	4.8	13.1	6.9	.
	% share of total imports														
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	7.7	5.1	6.2
	Balance														
2004	68.7	0.4	2.2	59.6	18.4	-20.7	13.3	8.6	59.3	-83.4	-52.0	-20.8	-8.3	-4.5	24.0
2005	11.0	2.6	2.8	50.1	25.4	-32.5	12.7	9.2	65.1	-119.3	-74.8	-19.1	-22.6	-6.9	24.5
2006	-12.6	3.2	1.9	49.7	37.5	-40.4	15.0	9.4	73.9	-146.8	-90.8	-22.4	-32.8	-11.9	28.7
2007	27.6	5.6	3.6	61.2	45.6	-30.6	14.8	8.7	63.7	-149.6	-109.8	-24.2	-25.7	-13.3	43.6
2007 Q1	8.5	1.3	0.6	16.1	10.9	-7.2	3.5	2.3	16.0	-39.1	-28.2	-6.2	-5.2	-3.2	12.4
Q2	9.6	1.3	1.1	14.1	11.3	-7.2	3.5	2.0	16.4	-35.4	-25.5	-5.6	-5.5	-2.9	10.7
Q3	7.8	1.3	1.3	16.0	11.5	-6.3	3.5	2.1	16.3	-38.5	-28.7	-6.3	-6.0	-3.3	9.9
Q4	1.7	1.7	0.6	14.9	11.8	-9.9	4.3	2.2	15.0	-36.6	-27.5	-6.2	-8.9	-3.9	10.6
2008 Q1	-1.2	1.6	-0.2	13.8	12.4	-8.8	3.9	3.5	14.5	-38.2	-26.8	-6.1	-10.2	-3.5	10.0
Q2	-4.9	1.3	0.9	15.9	12.7	-9.7	4.6	2.6	13.3	-38.9	-26.9	-5.6	-12.0	-4.2	8.4
2008 Mar.	-1.8	0.6	0.0	4.3	3.8	-2.8	1.4	1.0	4.0	-12.9	-8.6	-2.0	-3.2	-1.2	3.2
Apr.	1.0	0.3	0.1	6.0	4.3	-3.5	1.5	1.0	5.3	-12.8	-8.7	-2.1	-4.3	-1.5	4.5
May	-2.0	0.4	0.3	5.1	4.1	-3.4	1.7	0.8	3.9	-12.4	-9.0	-1.7	-3.6	-1.5	2.6
June	-3.9	0.6	0.5	4.9	4.4	-2.8	1.4	0.8	4.1	-13.7	-9.1	-1.8	-4.1	-1.2	1.3
July	-6.7	0.2	0.5	4.9	4.8	-4.8	1.1	1.0	3.0	-15.5	-10.0	-1.9	-3.8	-0.9	2.8
Aug.	-6.1	.	.	.	.	-3.4	1.4	0.8	4.2	-15.5	-10.6	-2.1	-4.4	-1.3	.

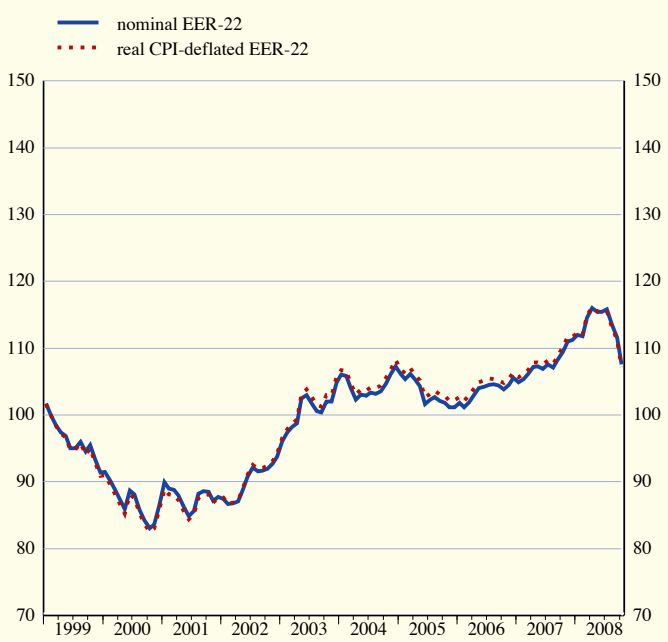
Source: Eurostat.

8 EXCHANGE RATES

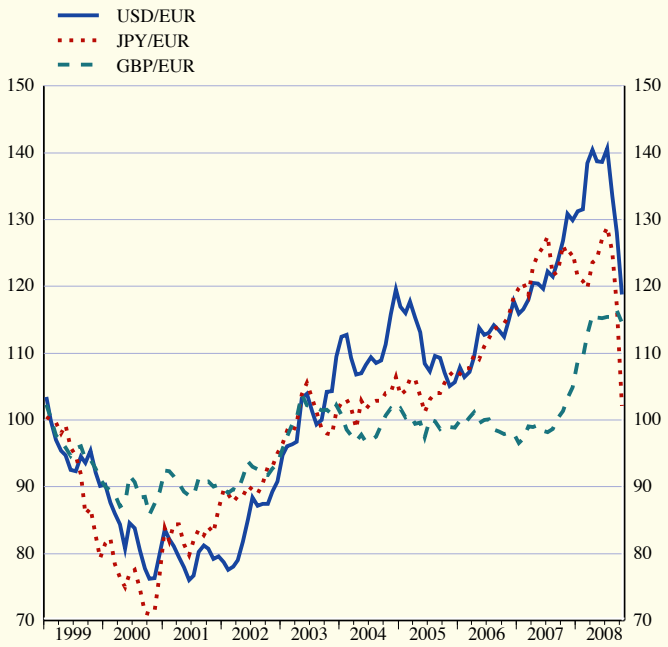
8.1 Effective exchange rates [1]
(period averages; index 1999 Q1=100)

	EER-22						EER-42	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2005	103.3	104.2	102.5	102.0	102.3	101.4	109.7	103.7
2006	103.6	104.6	103.0	101.9	102.4	100.9	110.0	103.4
2007	107.7	108.3	106.8	105.8	105.6	103.9	114.2	106.6
2007 Q3	107.6	108.2	106.7	105.9	105.5	103.8	114.1	106.4
Q4	110.5	111.2	109.5	108.4	107.4	106.3	117.0	109.0
2008 Q1	112.7	113.1	111.2	110.8	110.4	108.7	119.4	110.8
Q2	115.7	115.7	113.0	113.8	112.7	112.3	122.6	113.2
Q3	113.7	113.3	109.9	.	.	.	120.4	110.7
2007 Oct.	109.4	110.1	108.7	-	-	-	115.8	108.0
Nov.	111.0	111.7	109.9	-	-	-	117.6	109.6
Dec.	111.2	111.7	110.0	-	-	-	117.6	109.4
2008 Jan.	112.0	112.3	110.4	-	-	-	118.3	109.9
Feb.	111.8	111.9	110.4	-	-	-	118.2	109.5
Mar.	114.6	115.0	112.8	-	-	-	121.5	112.8
Apr.	116.0	116.1	113.8	-	-	-	123.1	113.8
May	115.5	115.5	112.8	-	-	-	122.4	113.0
June	115.4	115.4	112.2	-	-	-	122.4	112.9
July	115.8	115.5	112.2	-	-	-	122.8	113.0
Aug.	113.5	113.2	109.8	-	-	-	120.0	110.3
Sep.	111.6	111.2	107.7	-	-	-	118.3	108.6
Oct.	107.6	107.2	103.6	-	-	-	115.0	105.5
	% change versus previous month							
2008 Oct.	-3.6	-3.6	-3.7	-	-	-	-2.8	-2.8
	% change versus previous year							
2008 Oct.	-1.7	-2.7	-4.6	-	-	-	-0.6	-2.3

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.

8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Danish krone	Swedish krona	Pound sterling	US dollar	Japanese yen	Swiss franc	South Korean won	Hong Kong dollar	Singapore dollar	Canadian dollar	Norwegian krone	Australian dollar
	1	2	3	4	5	6	7	8	9	10	11	12
2005	7.4518	9.2822	0.68380	1.2441	136.85	1.5483	1,273.61	9.6768	2.0702	1.5087	8.0092	1.6320
2006	7.4591	9.2544	0.68173	1.2556	146.02	1.5729	1,198.58	9.7545	1.9941	1.4237	8.0472	1.6668
2007	7.4506	9.2501	0.68434	1.3705	161.25	1.6427	1,272.99	10.6912	2.0636	1.4678	8.0165	1.6348
2008 Q1	7.4534	9.3996	0.75698	1.4976	157.80	1.6014	1,430.84	11.6737	2.1107	1.5022	7.9583	1.6533
Q2	7.4599	9.3517	0.79286	1.5622	163.35	1.6114	1,590.82	12.1845	2.1346	1.5769	7.9401	1.6559
Q3	7.4592	9.4738	0.79504	1.5050	161.83	1.6115	1,600.93	11.7372	2.1010	1.5650	8.0604	1.6955
2008 Apr.	7.4603	9.3699	0.79487	1.5751	161.56	1.5964	1,555.98	12.2728	2.1493	1.5965	7.9629	1.6933
May	7.4609	9.3106	0.79209	1.5557	162.31	1.6247	1,613.18	12.1341	2.1259	1.5530	7.8648	1.6382
June	7.4586	9.3739	0.79152	1.5553	166.26	1.6139	1,604.95	12.1425	2.1278	1.5803	7.9915	1.6343
July	7.4599	9.4566	0.79308	1.5770	168.45	1.6193	1,604.58	12.3004	2.1438	1.5974	8.0487	1.6386
Aug.	7.4595	9.3984	0.79279	1.4975	163.63	1.6212	1,566.23	11.6932	2.1024	1.5765	7.9723	1.6961
Sep.	7.4583	9.5637	0.79924	1.4370	153.20	1.5942	1,630.26	11.1905	2.0549	1.5201	8.1566	1.7543
Oct.	7.4545	9.8506	0.78668	1.3322	133.52	1.5194	1,759.07	10.3368	1.9666	1.5646	8.5928	1.9345
	% change versus previous month											
2008 Oct.	-0.1	3.0	-1.6	-7.3	-12.8	-4.7	7.9	-7.6	-4.3	2.9	5.3	10.3
	% change versus previous year											
2008 Oct.	0.0	7.4	13.0	-6.4	-19.1	-9.1	35.1	-6.3	-5.7	12.6	11.6	22.1

	Czech koruna	Estonian kroon	Latvian lats	Lithuanian litas	Hungarian forint	Polish zloty	Slovak koruna	Bulgarian lev	New Romanian leu	Croatian kuna	New Turkish lira
	13	14	15	16	17	18	19	20	21	22	23
2005	29.782	15.6466	0.6962	3.4528	248.05	4.0230	38.599	1.9558	3.6209	7.4008	1.6771
2006	28.342	15.6466	0.6962	3.4528	264.26	3.8959	37.234	1.9558	3.5258	7.3247	1.8090
2007	27.766	15.6466	0.7001	3.4528	251.35	3.7837	33.775	1.9558	3.3353	7.3376	1.7865
2008 Q1	25.564	15.6466	0.6973	3.4528	259.30	3.5759	33.069	1.9558	3.6887	7.2852	1.8036
Q2	24.830	15.6466	0.6997	3.4528	248.04	3.4070	31.403	1.9558	3.6521	7.2556	1.9717
Q3	24.093	15.6466	0.7045	3.4528	236.07	3.3081	30.312	1.9558	3.5768	7.1827	1.8235
2008 Apr.	25.064	15.6466	0.6974	3.4528	253.75	3.4421	32.374	1.9558	3.6428	7.2654	2.0500
May	25.100	15.6466	0.6987	3.4528	247.69	3.4038	31.466	1.9558	3.6583	7.2539	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
July	23.528	15.6466	0.7035	3.4528	231.82	3.2591	30.319	1.9558	3.5764	7.2297	1.9128
Aug.	24.287	15.6466	0.7039	3.4528	235.88	3.2920	30.334	1.9558	3.5271	7.1947	1.7669
Sep.	24.497	15.6466	0.7060	3.4528	240.68	3.3747	30.283	1.9558	3.6248	7.1223	1.7843
Oct.	24.768	15.6466	0.7093	3.4528	260.15	3.5767	30.459	1.9558	3.7479	7.1639	1.9612
	% change versus previous month										
2008 Oct.	1.1	0.0	0.5	0.0	8.1	6.0	0.6	0.0	3.4	0.6	9.9
	% change versus previous year										
2008 Oct.	-9.4	0.0	0.9	0.0	3.6	-3.5	-9.4	0.0	11.8	-2.2	14.8

	Brazilian real [1]	Chinese yuan renminbi	Icelandic krona	Indonesian rupiah	Malaysian ringgit	Mexican peso [1]	New Zealand dollar	Philippine peso	Russian rouble	South African rand	Thai baht
	24	25	26	27	28	29	30	31	32	33	34
2005	3.0360	10.1955	78.23	12,072.83	4.7119	13.5643	1.7660	68.494	35.1884	7.9183	50.068
2006	2.7333	10.0096	87.76	11,512.37	4.6044	13.6936	1.9373	64.379	34.1117	8.5312	47.594
2007	2.6594	10.4178	87.63	12,528.33	4.7076	14.9743	1.8627	63.026	35.0183	9.6596	44.214
2008 Q1	2.6012	10.7268	101.09	13,861.78	4.8325	16.1862	1.8960	61.211	36.3097	11.2736	46.461
Q2	2.5882	10.8687	119.09	14,460.45	5.0183	16.2919	2.0129	67.174	36.9108	12.1648	50.437
Q3	2.4986	10.2969	125.69	13,868.99	5.0209	15.5214	2.1094	68.422	36.4917	11.7055	50.959
2008 Apr.	2.6602	11.0237	116.65	14,497.21	4.9819	16.5608	1.9960	65.790	37.0494	12.2729	49.752
May	2.5824	10.8462	117.46	14,436.99	5.0081	16.2402	2.0011	66.895	36.9042	11.8696	49.942
June	2.5185	10.7287	123.28	14,445.41	5.0666	16.0617	2.0424	68.903	36.7723	12.3467	51.649
July	2.5097	10.7809	123.61	14,442.77	5.1258	16.1119	2.0900	70.694	36.8261	12.0328	52.821
Aug.	2.4103	10.2609	122.07	13,700.21	4.9843	15.1269	2.1097	67.307	36.2502	11.4680	50.697
Sep.	2.5712	9.8252	131.33	13,430.23	4.9461	15.2805	2.1293	67.113	36.3727	11.5899	49.264
Oct.	2.9112	9.1071	274.64	13,283.63	4.6895	16.8177	2.1891	63.882	35.2144	12.9341	45.872
	% change versus previous month										
2008 Oct.	13.2	-7.3	109.1	-1.1	-5.2	10.1	2.8	-4.8	-3.2	11.6	-6.9
	% change versus previous year										
2008 Oct.	13.5	-14.7	218.2	2.6	-2.3	9.2	16.8	1.6	-0.5	34.2	2.2

Source: ECB.

1) For these currencies the ECB computes and publishes euro reference exchange rates as from 1 January 2008. Previous data are indicative.

9 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
	HICP											
2006	7.4	2.1	1.9	4.4	6.6	3.8	4.0	1.3	6.6	4.3	1.5	2.3
2007	7.6	3.0	1.7	6.7	10.1	5.8	7.9	2.6	4.9	1.9	1.7	2.3
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
Q2	14.0	6.7	3.7	11.5	17.5	12.3	6.8	4.3	8.6	4.0	3.6	3.4
Q3	12.5	6.5	4.6	11.0	15.6	12.0	6.3	4.4	8.2	4.5	4.0	4.8
2008 May	14.0	6.8	3.6	11.4	17.7	12.3	6.9	4.3	8.5	4.0	3.7	3.3
June	14.7	6.6	4.2	11.5	17.5	12.7	6.6	4.3	8.7	4.3	4.0	3.8
July	14.4	6.8	4.4	11.2	16.5	12.4	7.0	4.5	9.1	4.4	3.8	4.4
Aug.	11.8	6.2	4.8	11.1	15.6	12.2	6.4	4.4	8.1	4.4	4.1	4.7
Sep.	11.4	6.4	4.5	10.8	14.7	11.3	5.6	4.1	7.3	4.5	4.2	5.2
	General government deficit (-)/surplus (+) as a % of GDP											
2005	1.9	-3.6	5.2	1.5	-0.4	-0.5	-7.8	-4.3	-1.2	-2.8	2.4	-3.4
2006	3.0	-2.7	5.1	2.9	-0.2	-0.4	-9.3	-3.8	-2.2	-3.5	2.3	-2.7
2007	0.1	-1.0	4.9	2.7	0.1	-1.2	-5.0	-2.0	-2.6	-1.9	3.6	-2.8
	General government gross debt as a % of GDP											
2005	29.2	29.8	36.4	4.5	12.4	18.4	61.7	47.1	15.8	34.2	50.9	42.3
2006	22.7	29.6	30.5	4.3	10.7	18.0	65.6	47.7	12.4	30.4	45.9	43.4
2007	18.2	28.9	26.2	3.5	9.5	17.0	65.8	44.9	12.9	29.4	40.4	44.2
	Long-term government bond yield as a % per annum, period average											
2008 Apr.	4.80	4.72	4.29	-	5.93	4.59	8.02	5.99	7.35	4.46	4.06	4.62
May	4.95	4.84	4.42	-	5.93	4.80	8.08	6.10	7.26	4.52	4.18	4.84
June	5.17	5.13	4.82	-	6.25	5.33	8.50	6.42	7.15	4.94	4.43	5.16
July	5.17	4.90	4.78	-	6.57	5.49	8.11	6.45	7.28	5.06	4.37	5.00
Aug.	5.17	4.47	4.49	-	6.60	5.47	7.77	6.11	8.20	4.95	4.11	4.67
Sep.	5.17	4.42	4.37	-	6.60	5.45	7.99	5.89	8.32	4.98	3.90	4.58
	3-month interest rate as a % per annum, period average											
2008 Apr.	6.77	4.11	5.00	6.33	5.96	5.05	8.54	6.29	11.59	4.28	4.86	5.92
May	6.88	4.14	5.14	6.39	5.74	5.17	8.40	6.41	10.87	4.32	4.96	5.83
June	7.02	4.21	5.32	6.41	6.15	5.45	8.87	6.58	11.29	4.34	5.02	5.93
July	7.19	4.11	5.38	6.37	6.23	5.77	8.99	6.62	11.41	4.33	5.09	5.83
Aug.	7.31	3.81	5.38	6.35	6.26	5.75	8.33	6.52	12.11	4.31	5.12	5.77
Sep.	7.32	3.81	5.42	6.34	6.35	5.80	8.62	6.56	13.00	4.25	5.33	5.91
	Real GDP											
2006	6.3	6.8	3.9	10.4	12.2	7.8	3.9	6.2	7.9	8.5	4.1	2.8
2007	6.2	6.6	1.7	6.3	10.3	8.9	1.3	6.7	6.0	10.4	2.7	3.0
2008 Q1	7.0	5.4	-0.6	0.2	3.3	6.9	1.2	6.2	8.2	8.7	1.8	2.3
Q2	7.1	4.6	1.0	-1.1	0.1	5.2	1.7	6.0	9.3	7.6	0.9	1.5
Q3	.	.	.	.	.	2.8	.	.	.	.	.	.
	Current and capital accounts balance as a % of GDP											
2006	-17.1	-2.3	2.9	-14.6	-21.3	-9.5	-7.1	-2.1	-10.5	-7.1	7.8	-3.3
2007	-20.6	-1.2	0.7	-16.9	-21.8	-12.8	-5.1	-3.6	-13.5	-4.7	8.3	-3.6
2007 Q4	-26.1	-1.3	2.1	-14.6	-14.7	-11.7	-3.8	-3.3	-13.5	-6.8	9.0	-1.5
2008 Q1	-25.1	4.0	-2.0	-11.2	-17.2	-15.2	-3.2	-3.6	-13.5	-0.5	10.0	-1.3
Q2	-27.0	-5.0	3.5	-9.3	-12.5	-15.1	-6.1	-3.4	-14.7	-7.6	4.6	-3.2
	Unit labour costs											
2006	4.4	1.2	1.7	8.7	15.6	10.2	1.3	0.1	4.8	1.5	-0.2	2.3
2007	14.2	3.1	3.9	19.8	25.0	10.6	4.9	3.1	14.8	0.6	4.5	1.2
2007 Q4	14.5	1.1	3.4	19.5	24.0	10.9	-	-	-	-1.6	5.3	0.3
2008 Q1	16.8	5.2	7.1	19.4	23.5	10.9	-	-	-	5.5	1.8	1.3
Q2	17.7	3.7	3.8	13.8	20.4	11.4	-	-	-	6.2	0.7	2.1
	Standardised unemployment rate as a % of labour force (s.a.)											
2006	9.0	7.2	3.9	5.9	6.8	5.6	7.5	13.9	7.3	13.3	7.0	5.4
2007	6.9	5.3	3.8	4.7	6.0	4.3	7.4	9.6	6.4	11.2	6.1	5.3
2008 Q1	6.3	4.5	3.2	4.4	6.4	4.5	7.7	7.8	5.8	10.4	5.9	5.2
Q2	5.9	4.4	3.1	3.9	6.2	4.7	7.8	7.3	5.9	10.2	5.8	5.3
Q3	5.6	4.3	2.9	4.1	6.5	4.9	7.8	6.7	.	10.0	5.9	.
2008 May	5.9	4.5	3.2	3.9	6.1	4.7	7.8	7.3	5.9	10.2	5.7	5.3
June	5.8	4.4	3.1	3.8	6.2	4.8	7.8	7.1	5.9	10.1	5.7	5.5
July	5.7	4.4	2.9	3.9	6.3	5.0	7.8	6.9	.	10.1	5.7	5.6
Aug.	5.6	4.3	2.9	4.0	6.5	5.0	7.9	6.7	.	10.0	5.9	.
Sep.	5.6	4.3	2.9	4.2	6.8	4.6	7.9	6.5	.	10.0	6.1	.

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

9.2 In the United States and Japan

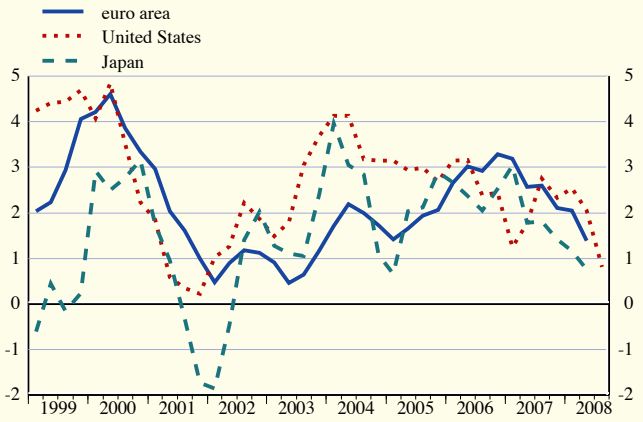
(annual percentage changes, unless otherwise indicated)

1. Economic and financial developments

	Consumer price index	Unit labour costs [1]	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money [2]	3-month interbank deposit rate [3]	10-year zero coupon government bond yield [3] end-of-period	Exchange rate [4] as national currency per euro	Fiscal deficit (-)/ surplus (+) as a % of GDP	Gross public debt [5] as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
	United States										
2004	2.7	0.8	3.6	3.1	5.5	4.7	1.62	4.80	1.2439	-4.4	48.9
2005	3.4	2.2	2.9	4.2	5.1	4.3	3.56	5.05	1.2441	-3.3	49.1
2006	3.2	2.8	2.8	2.8	4.6	5.0	5.19	5.26	1.2556	-2.2	48.5
2007	2.9	2.7	2.0	1.8	4.6	5.7	5.30	4.81	1.3705	-2.9	49.3
2007 Q3	2.4	2.0	2.8	2.2	4.7	6.0	5.45	5.34	1.3738	-3.0	48.8
Q4	4.0	0.9	2.3	2.5	4.8	5.7	5.02	4.81	1.4486	-3.2	49.3
2008 Q1	4.1	0.0	2.5	2.0	4.9	6.3	3.26	4.24	1.4976	-4.0	50.4
Q2	4.4	0.6	2.1	-0.1	5.3	6.2	2.75	4.81	1.5622	-5.7	49.6
Q3	5.3	.	0.8	-2.6	6.0	5.9	2.91	4.58	1.5050	.	.
2008 June	5.0	-	-	-0.5	5.5	5.9	2.77	4.81	1.5553	-	-
July	5.6	-	-	-1.3	5.7	6.2	2.79	4.80	1.5770	-	-
Aug.	5.4	-	-	-1.8	6.1	5.3	2.81	4.63	1.4975	-	-
Sep.	4.9	-	-	-4.8	6.1	6.2	3.12	4.58	1.4370	-	-
Oct.	.	-	-	.	.	.	4.06	4.61	1.3322	-	-
	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	0.2	-0.6	2.4	4.5	4.1	1.0	0.30	1.85	146.02	-1.4	159.5
2007	0.1	-1.6	2.0	2.8	3.8	1.6	0.79	1.70	161.25	.	.
2007 Q3	-0.1	-1.5	1.8	2.6	3.8	1.9	0.89	1.88	161.90	.	.
Q4	0.5	-1.5	1.4	3.4	3.8	2.0	0.96	1.70	163.83	.	.
2008 Q1	1.0	-0.1	1.2	2.3	3.9	2.2	0.92	1.48	157.80	.	.
Q2	1.4	.	0.8	1.0	4.0	2.0	0.92	1.88	163.35	.	.
Q3	2.2	.	.	-1.3	.	2.2	0.90	1.72	161.83	.	.
2008 June	2.0	.	-	0.1	4.1	2.2	0.92	1.88	166.26	-	-
July	2.3	.	-	2.4	4.0	2.1	0.92	1.77	168.45	-	-
Aug.	2.1	.	-	-6.9	4.2	2.4	0.89	1.70	163.63	-	-
Sep.	2.1	.	-	0.3	.	2.2	0.91	1.72	153.20	-	-
Oct.	.	.	-	.	.	.	1.04	1.59	133.52	-	-

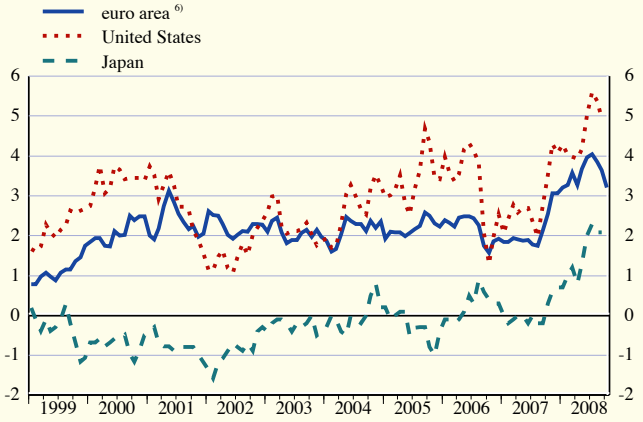
C37 Real gross domestic product

(annual percentage changes; quarterly)



C38 Consumer price indices

(annual percentage changes; monthly)



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

1) 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.
3) Percentages per annum. For further information on 3-month interbank deposit rate, see Section 4.6.
4) For more information, see Section 8.2.
5) Gross consolidated general government debt (end of period).
6) Data refer to the changing composition of the euro area. For further information, see the General notes.

LIST OF CHARTS

TECHNICAL NOTES

RELATING TO THE EURO AREA OVERVIEW

CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

The average growth rate for the quarter ending in month t is calculated as:

a) $$\left(\frac{0.5I_t + \sum_{i=1}^{2} I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^{2} I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where I_t is the index of adjusted outstanding amounts as at month t (see also below). Likewise, for the year ending in month t, the average growth rate is calculated as:

b) $$\left(\frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

RELATING TO SECTIONS 2.1 TO 2.6

CALCULATION OF TRANSACTIONS

Monthly transactions are calculated from monthly differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If L_t represents the outstanding amount at the end of month t, C_t^M the reclassification adjustment in month t, E_t^M the exchange rate adjustment and V_t^M the other revaluation adjustments, the transactions F_t^M in month t are defined as:

c) $$F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly transactions F_t^Q for the quarter ending in month t are defined as:

d) $$F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where L_{t-3} is the amount outstanding at the end of month t-3 (the end of the previous quarter) and, for example, C_t^Q is the reclassification adjustment in the quarter ending in month t.

For those quarterly series for which monthly observations are now available (see below), the quarterly transactions can be derived as the sum of the three monthly transactions in the quarter.

CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

Growth rates may be calculated from transactions or from the index of adjusted outstanding amounts. If F_t^M and L_t are defined as above, the index I_t of adjusted outstanding amounts in month t is defined as:

e) $$I_t = I_{t-1} \times \left(1 + \frac{F_t^M}{L_{t-1}}\right)$$

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" sub-section of the "Statistics" section.

The annual growth rate a_t for month t – i.e. the change in the 12 months ending in month t – may be calculated using either of the following two formulae:

f) $$a_t = \left[\prod_{i=0}^{11} \left(1 + F_{t-i}^M / L_{t-1-i} \right) - 1 \right] \times 100$$

g) $$a_t = \left(I_t / I_{t-12} - 1 \right) \times 100$$

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.

Growth rates for intra-annual periods may be derived by adapting formula g). For example, the month-on-month growth rate a_t^M may be calculated as:

$$h) \quad a_t^M = \left(I_t \Big/ I_{t-1} - 1 \right) \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as $(a_{t+1} + a_t + a_{t-1})/3$, where a_t is defined as in f) or g) above.

CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If F_t^Q and L_{t-3} are defined as above, the index I_t of adjusted outstanding amounts for the quarter ending in month t is defined as:

$$i) \quad I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}} \right)$$

The annual growth rate in the four quarters ending in month t, i.e. a_t, may be calculated using formula g).

SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS [1]

The approach used relies on a multiplicative decomposition through X-12-ARIMA.[2] The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.[3] The resulting estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and revaluations, in turn yielding seasonally adjusted transactions. Seasonal (and trading day) factors are revised at annual intervals or as required.

RELATING TO SECTIONS 3.1 TO 3.5

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.

3 It follows that for the seasonally adjusted series, the level of the index for the base period, i.e. December 2001, generally differs from 100, reflecting the seasonality of that month.

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_t^M represents the transactions (net issues) in month t and L_t the level outstanding at the end of the month t, the index I_t of notional stocks in month t is defined as:

$$\text{j)} \quad I_t = I_{t-1} \times \left(1 + \frac{N_t}{L_{t-1}}\right)$$

As a base, the index is set equal to 100 on December 2001. The growth rate a_t for month t corresponding to the change in the 12 months ending in month t, may be calculated using either of the following two formulae:

k) $$a_t = \left[\prod_{i=0}^{11}\left(1 + {N^M_{t-i}}/{L_{t-1-i}}\right) - 1\right] \times 100$$

l) $$a_t = \left({I_t}/{I_{t-12}} - 1\right) \times 100$$

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an "N" is used rather than an "F". The reason for this is to distinguish between the different ways of obtaining "net issues" for securities issues statistics and the equivalent "transactions" calculated used for the monetary aggregates.

The average growth rate for the quarter ending in month t is calculated as:

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_t is the index of notional stocks as at month t. Likewise, for the year ending in month t, the average growth rate is calculated as:

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_t for month t corresponding to the change in the 6 months ending in month t, may be calculated using either of the following two formulae:

o) $$a_t = \left[\prod_{i=0}^{5}\left(1 + {N^M_{t-i}}/{L_{t-1-i}}\right) - 1\right] \times 100$$

p) $$a_t = \left({I_t}/{I_{t-6}} - 1\right) \times 100$$

RELATING TO TABLE 1 IN SECTION 5.1

SEASONAL ADJUSTMENT OF THE HICP [4]

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page 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:

$$a_t = \left(\prod_{i=t-3}^{t} \left(1 + \frac{F_i}{L_{i-1}} \right) - 1 \right) \times 100$$

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 5 November 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 vis-à-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" (ECB, November 2002) explains practices that NCBs are 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[1], as last amended by Regulation ECB/2003/10[2].

In line with this Regulation, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

Section 2.9 shows end-of-quarter outstanding amounts for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and therefore includes, among the liabilities, holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond funds, mixed funds, real estate funds and other funds) and by type of investor (general public funds and special investors' funds). Section 2.10 shows the aggregated balance sheet for each investment fund sector, as identified by investment policy and type of investor.

1 OJ L 356, 30.12.1998, p. 7.
2 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 3.4 (financial balance sheet, quoted shares).

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 issues or redeems shares for cash excluding investments in the issuers' own shares. 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[3]. 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 car registrations are adjusted for the variations in the number of working days.

3 Svensson, L. E., 1994, "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051.

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 statistics[4]. 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[5]. Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial production reflects the value added of the industries concerned.

World market prices of raw materials (Table 2 in Section 5.1) measures price changes of euro-denominated euro area imports compared with the base period.

The labour cost indices (Table 3 in Section 5.1) measure the changes in labour costs per hour worked in industry (including construction) and market services. Their methodology is laid down in Regulation (EC) No 450/2003 of the European Parliament and of the Council of 27 February 2003 concerning the labour cost index[6] and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003[7]. 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 seeking work as a share of the labour force, using harmonised criteria and definitions. The labour force estimates underlying the

4 OJ L 162, 5.6.1998, p. 1.
5 OJ L 86, 27.3.2001, p. 11.
6 OJ L 69, 13.3.2003, p. 1.
7 OJ L 169, 8.7.2003, p. 37.

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 2000[8] 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[9]. 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 based on the Task Force's recommendations, is available on the ECB's website.

8 OJ L 172, 12.7.2000, p. 3.
9 OJ L 179, 9.7.2002, p. 1.
10 OJ L 354, 30.11.2004, p. 34.
11 OJ L 159, 20.6.2007, p. 48.

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 working-day, 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 the Eurosystem's international reserves" (October 2000), which can be downloaded from the ECB's website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

Section 7.4 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 and corresponds to the basic classes of goods in the System of National Accounts. 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 in external trade data.

EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate (EER) indices for the euro, calculated by the ECB on the basis of weighted averages of bilateral exchange rates of the euro against the currencies of the euro area's trading partners. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with the trading partners in the periods 1995-1997 and 1999-2001, and are calculated to account for third-market effects. The EER indices result from the linking at the beginning of 1999 of the indices based on 1995-1997 weights to those based on 1999-2001 weights. The EER-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.

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[1]

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 allotment amount again at the beginning of 2008.

11 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.

7 AUGUST, 4 SEPTEMBER AND 2 OCTOBER 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 4.25%, 5.25% and 3.25% respectively.

8 OCTOBER 2008

The Governing Council of the ECB decides to decrease the minimum bid rate on the main refinancing operations by 50 basis points to 3.75%, starting from the operations to be settled on 15 October 2008. In addition, it decides to decrease by 50 basis points the interest rates on both the marginal lending facility and the deposit facility, to 4.75% and 2.75% respectively, with immediate effect. Moreover, the Governing Council decides that, as from the operation settled on 15 October, the weekly main refinancing operations will be carried out through a fixed-rate tender procedure with full allotment at the interest rate on the main refinancing operation. Furthermore, as of 9 October, the ECB will reduce the corridor of standing facilities from 200 basis points to 100 basis points around the interest rate on the main refinancing operation. The two measures will remain in place for as long as needed, and at least until the end of the first maintenance period of 2009, on 20 January.

15 OCTOBER 2008

The Governing Council of the ECB decides to further expand the collateral framework and enhance the provision of liquidity. To do so, the Governing Council decides: (i) to expand the list of assets eligible as collateral in Eurosystem credit operations, with this expansion remaining in force until the end of 2009, (ii) to enhance the provision of longer-term refinancing, with effect from 30 October 2008 and until the end of the first quarter of 2009, and (iii) to provide US dollar liquidity through foreign exchange swaps.

6 NOVEMBER 2008

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 50 basis points to 3.25%, starting from the operations to be settled on 12 November 2008. In addition, it decides to decrease by 50 basis points the interest rates on both the marginal lending facility and the deposit facility, to 3.75% and 2.75% respectively, with effect from 12 November 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 4½%.

Reserve requirement: the minimum amount of reserves a credit institution is required to hold with the Eurosystem. Compliance is determined on the basis of the average of the daily balances over a maintenance period of around one month.

Survey of Professional Forecasters (SPF): a quarterly survey that has been conducted by the ECB since 1999 to collect macroeconomic forecasts on euro area inflation, real GDP growth and unemployment from a panel of experts affiliated to financial and non-financial organisations based in the EU.

Unit labour costs: a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation per employee to labour productivity (defined as GDP at constant prices per person employed).

Variable rate tender: a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

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.

ISSN 1561-0136