



EUROPEAN CENTRAL BANK

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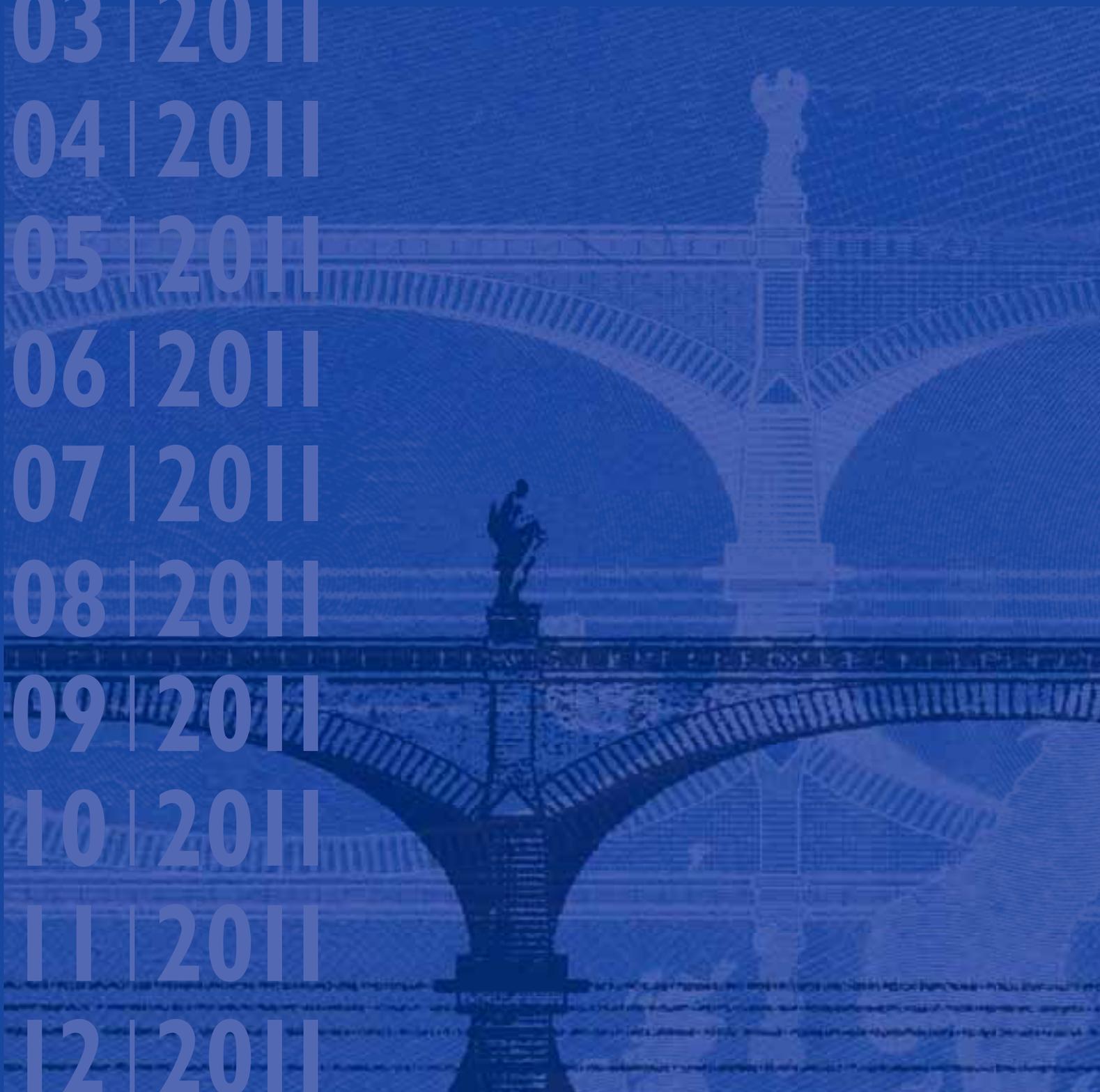
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MONTHLY BULLETIN  
JANUARY

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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

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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	statistical classification of economic activities in the European Union
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 EU practice, the EU countries are listed in this Bulletin using the alphabetical order of the country names in the national languages.**



## EDITORIAL

Based on its regular economic and monetary analyses, the Governing Council confirmed at its meeting on 13 January 2011 that the current key ECB interest rates still remain appropriate. It therefore decided to leave them unchanged. Taking into account all the new information and analyses which have become available since its meeting on 2 December 2010, the Governing Council sees evidence of short-term upward pressure on overall inflation, mainly owing to energy prices, but this has not so far affected its assessment that price developments will remain in line with price stability over the policy-relevant horizon. At the same time, very close monitoring is warranted. Recent economic data are consistent with a positive underlying momentum of economic activity, while uncertainty remains elevated. The monetary analysis indicates that inflationary pressures over the medium term should remain contained. Overall, the Governing Council expects price stability to be maintained over the medium term, thereby supporting the purchasing power of euro area households. Inflation expectations remain firmly anchored in line with the aim of keeping inflation rates below, but close to, 2% over the medium term. The firm anchoring of inflation expectations is of the essence.

Overall, the current monetary policy stance remains accommodative. The stance, the provision of liquidity and the allotment modes will be adjusted as appropriate, taking into account the fact that all the non-standard measures taken during the period of acute financial market tensions are, by construction, temporary in nature. Accordingly, the Governing Council will continue to monitor all developments over the period ahead very closely.

With regard to the economic analysis, following the 0.3% quarter-on-quarter increase in euro area real GDP in the third quarter of 2010, recent statistical releases and survey-based evidence confirm that the positive underlying momentum of economic activity in the euro area remained in place towards the end of 2010. Looking ahead at 2011, euro area exports should benefit from

a continued recovery in the world economy. At the same time, and particularly taking into account the relatively high level of business confidence in the euro area, private sector domestic demand should increasingly contribute to growth, supported by the accommodative monetary policy stance and the measures adopted to restore the functioning of the financial system. However, the recovery in activity is expected to be dampened by the process of balance sheet adjustment in various sectors.

In the Governing Council's assessment, the risks to this economic outlook are still slightly tilted to the downside, with uncertainty remaining elevated. On the one hand, global trade may continue to grow more rapidly than expected, thereby supporting euro area exports. Moreover, strong business confidence could provide more support to domestic economic activity in the euro area than is currently expected. On the other hand, downside risks relate to the tensions in some segments of the financial markets and their potential spillover to the euro area real economy. Further downside risks relate to renewed increases in oil and other commodity prices, protectionist pressures and the possibility of a disorderly correction of global imbalances.

With regard to price developments, euro area annual HICP inflation was 2.2% in December, according to Eurostat's flash estimate, after 1.9% in November. This was somewhat higher than expected and largely reflects higher energy prices. Looking ahead to the next few months, inflation rates could temporarily increase further. They are likely to stay slightly above 2%, largely owing to commodity price developments, before moderating again towards the end of the year. Overall, the Governing Council sees evidence of short-term upward pressure on overall inflation, stemming largely from global commodity prices. While this has not so far affected the Governing Council's assessment that price developments will remain in line with price stability over the policy-relevant horizon, very close monitoring of price developments is warranted. Inflation expectations over the medium to longer term

continue to be firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term.

Risks to the medium-term outlook for price developments are still broadly balanced but could move to the upside. Upside risks relate, in particular, to developments in energy and non-energy commodity prices. Furthermore, increases in indirect taxes and administered prices may be greater than currently expected, owing to the need for fiscal consolidation in the coming years, and price pressures in the production chain could rise further. On the downside, risks relate mainly to the impact on inflation of potentially lower growth, given the prevailing uncertainties.

Turning to the monetary analysis, the annual growth rate of M3 increased to 1.9% in November 2010, after 0.9% in October. This strong increase is in part related to base effects and volatile factors. The annual growth rate of loans to the private sector also increased, rising to 2.0% in November from 1.5% in October. Looking beyond the special factors that operated in November, broad money and loan growth is still low, corroborating the assessment that the underlying pace of monetary expansion is moderate and that inflationary pressures over the medium term should remain contained.

The interest rate constellation continued to exert a significant impact on the growth of monetary aggregates. Looking at M3 components, the interest rates paid on short-term time deposits remained higher than those paid on overnight deposits. As a result, annual M1 growth continued to moderate, standing at 4.6% in November 2010, while the annual growth rate of other short-term deposits continued to become less negative. At the same time, the yield curve has lately become steeper again, implying that the attractiveness of short-term deposits included in M3 has declined somewhat compared with more highly remunerated longer-term assets outside M3.

The annual growth rate of bank loans to the private sector continued to increase in November, partly owing to special factors. At the sectoral level, this strengthening increasingly reflects the upward movement in the growth of loans to non-financial corporations, which stood at -0.1% in November, after -0.5% in October, thereby further confirming that a turning point was reached in the course of 2010. The growth of loans to households remained stronger than that to non-financial corporations, standing at 2.7% in November after 2.9% in October, but the latest data point to some signs of a levelling-off.

Over the past few months banks have expanded the provision of credit to the private sector in an environment in which the overall size of their balance sheets has remained broadly stable. The challenge remains to expand the availability of such credit when demand picks up further. To address this challenge, where necessary, it is essential for banks to retain earnings, to turn to the market to strengthen further their capital bases or to take full advantage of government support measures for recapitalisation.

To sum up, the current key ECB interest rates still remain appropriate. The Governing Council therefore decided to leave them unchanged. Taking into account all the new information and analyses which have become available since its meeting on 2 December 2010, the Governing Council sees evidence of short-term upward pressure on overall inflation, mainly owing to energy prices, but this has not so far affected its assessment that price developments will remain in line with price stability over the policy-relevant horizon. At the same time, very close monitoring is warranted. Recent economic data are consistent with a positive underlying momentum of economic activity, while uncertainty remains elevated. A cross-check of the outcome of the economic analysis with that of the monetary analysis indicates that inflationary pressures over the medium term should remain contained. Overall, the Governing Council expects price stability to be maintained over the medium term, thereby

supporting the purchasing power of euro area households. Inflation expectations remain firmly anchored in line with the aim of keeping inflation rates below, but close to, 2% over the medium term. The firm anchoring of inflation expectations is of the essence.

Turning to fiscal policies, in view of the ongoing vulnerability to adverse market reactions, countries need to do their utmost to meet their deficit targets and put government debt-to-GDP ratios firmly on a downward trajectory. In this regard, the Governing Council takes note of the recently announced measures in some euro area countries to reduce their very large fiscal imbalances. Where necessary, additional corrective measures – preferably on the expenditure side – need to be swiftly defined and implemented. At the same time, all euro area countries should pursue ambitious and credible multi-year consolidation strategies. This will help to strengthen confidence in the sustainability of public finances, reduce risk premia in interest rates and improve the conditions for sound and sustainable growth. Any positive fiscal developments that may emerge, reflecting factors such as a more favourable than expected economic environment, should be exploited to make faster progress with fiscal consolidation.

Substantial and far-reaching structural reforms, complementing fiscal adjustment, should be rapidly implemented to enhance the prospects for higher sustainable growth. Major reforms are particularly necessary in those countries that have experienced a loss of competitiveness in the past or that are suffering from high fiscal and external deficits. The removal of labour market rigidities would further support the adjustment process of these economies. Increasing product market competition, particularly in the services sectors, would also facilitate the restructuring of the economy and encourage innovation. Such measures are crucial for enhancing productivity growth, which is one of the main drivers of long-term growth. All these structural reforms should be supported by the necessary improvements in the structure of the banking

sector. Sound balance sheets, effective risk management and transparent, robust business models remain key to strengthening banks' resilience to shocks and to ensuring adequate access to finance, thereby laying the foundations for sustainable growth and financial stability.

This issue of the Monthly Bulletin contains three articles. The first article reviews recent developments in loans to the private sector and the second analyses trends in potential output in the euro area. The third article examines the measures taken to strengthen global macroeconomic and financial surveillance following the financial crisis.



# ECONOMIC AND MONETARY DEVELOPMENTS

## I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

While the recovery in the global economy proceeded more moderately during most of the second half of 2010 compared with the buoyant growth in the first half, the latest available evidence confirms that the momentum firmed again in the course of the fourth quarter. Inflationary pressures in advanced economies remain contained, even though input prices have been picking up on the back of higher food and commodity prices. By contrast, in dynamic emerging economies, these input price increases together with strong economic activity have caused inflation rates to continue to increase.

### I.1 DEVELOPMENTS IN THE WORLD ECONOMY

The recovery in the global economy continues to move onto a more self-sustained footing. In major advanced economies the latest data suggest that private demand is picking up. Nonetheless, strains on private balance sheets combined with tight credit and weak labour market conditions continue to account for the modest growth performance. Growth in emerging economies remains robust, albeit the latest data point towards a moderate slowdown in activity towards the end of last year. The global Purchasing Managers' Index (PMI) accelerated in December, increasing to 57.1 from 54.6 in November (see Chart 1), supported by a strengthening momentum in both manufacturing and services sectors. The pick-up in activity has also been accompanied by sustained growth in the PMI new orders component.

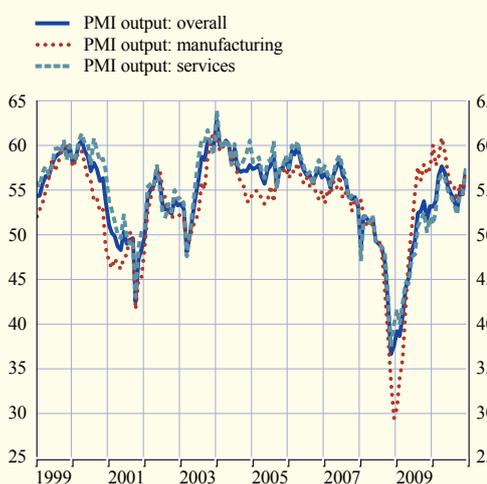
Inflationary pressures in advanced economies remain contained, even though input prices have been picking up on the back of higher food and commodity prices. This reflects the ample amount of spare capacity which prevails. By contrast, in dynamic emerging economies, these input price increases together with strong economic activity have caused inflation rates to continue to increase. In the OECD area, annual consumer price inflation decreased slightly in November to 1.8% compared with 1.9% in October (see Chart 2). Excluding food and energy, inflation increased slightly to 1.2% in November compared with 1.1% in October.

#### UNITED STATES

In the United States, the recovery in economic activity stabilised in the third quarter of 2010, after slowing down in the second quarter. According to the third estimate by the Bureau of

Chart 1 Global PMI output

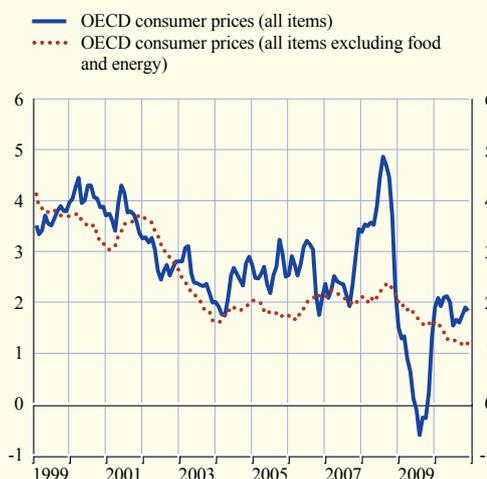
(diffusion index; seasonally adjusted; monthly data)



Source: Markit.

Chart 2 International price developments

(monthly data; annual percentage changes)



Source: OECD.

Chart 3 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.

Economic Analysis, quarter-on-quarter real GDP growth stood at 0.6% (2.6% in annualised terms), up from 0.4% in the second quarter (see Chart 3). Economic activity was supported on the one hand by increases in personal consumption expenditure, business investment, government spending and a strong positive contribution from inventory accumulation, which accounted for more than half of the quarterly rise in real GDP. On the other hand, growth was dampened by a large negative contribution from net trade, as the increase in imports outpaced that of exports, as well as by a renewed weakness in residential investment following the expiration of some housing support initiatives. High-frequency data point to a continuing economic recovery in the fourth quarter as consumer spending growth gained some traction and the momentum in manufacturing activity stabilised towards the end of 2010. Looking ahead, the recovery is expected to remain moderate in the medium term.

Price pressures in the United States remain contained in a context of substantial economic slack. Annual CPI inflation stood at 1.1% in November, having remained within a very small range of 1.1% to 1.2% since June 2010. Excluding food and energy, annual inflation picked up to 0.8%, rebounding from the record low level observed in October. On 21 December, the US Federal Open Market Committee (FOMC) decided to extend its temporary US dollar liquidity swap arrangements with major foreign central banks up to 1 August 2011, with the aim being to improve liquidity conditions in global money markets.

## JAPAN

In Japan, economic activity slowed down in the fourth quarter of 2010, despite the acceleration of real GDP growth in the previous quarter. According to the second preliminary data release by Japan's Cabinet Office, in the third quarter of 2010 real GDP expanded by 1.1% on a quarterly basis,

which is higher than the first preliminary estimate of 0.9%. The upward revision was the result of stronger than initially estimated capital spending and private consumption. In the fourth quarter economic activity was subdued, as the withdrawal of government stimulus measures resulted in a weakening of private consumption and industrial production performance. The December Tankan survey revealed that firms' assessment of current business conditions had deteriorated, with the weakening of sentiment particularly noticeable among manufacturing enterprises. However, the most recent data indicate that the moderation of economic activity in the fourth quarter may be temporary. Exports, which were rather sluggish until recently, picked up in November in nominal terms due to stronger demand from emerging Asia, and in particular China.

Overall consumer price inflation was positive in November for the second consecutive month, standing at 0.1% in year-on-year terms and driven by higher costs for fresh vegetables, cigarettes and utilities. Excluding fresh food, annual CPI inflation was still negative at -0.5 %, whereas excluding fresh food and energy it stood at -0.9 %

On 21 December 2010, the Bank of Japan decided to leave its target for the uncollateralised overnight rate unchanged at between 0.0% and 0.1%.

#### UNITED KINGDOM

In the United Kingdom, the economic recovery has continued. Quarter-on-quarter real GDP growth stood at 0.7% in the third quarter of 2010 after expanding by 1.1% in the second quarter (see Chart 3). Output growth over the quarter was mainly driven by business investment and inventory accumulation. House prices have continued their downward trend in recent months against a background of subdued housing market activity. Looking ahead, inventory adjustments, monetary stimulus, external demand and the past depreciation of the pound sterling should support economic activity. However, domestic demand growth is expected to remain constrained by tight credit conditions, household balance sheet adjustment and substantial fiscal tightening.

Annual CPI inflation has remained elevated, increasing to 3.3% in November 2010 from 3.2% in October. Looking ahead, the lagged effects of the depreciation of the pound sterling, higher commodity prices and the increase in the rate of VAT in January 2011 are expected to exert further upward pressures on consumer prices. In recent quarters the Bank of England's Monetary Policy Committee has maintained the official Bank Rate paid on commercial bank reserves at 0.5%.

#### OTHER EUROPEAN COUNTRIES

On balance, the economic situation continued to improve in the third quarter in the other non-euro area EU countries, while developments in inflation were mixed. Real GDP increased by 2.1% and 1.0% quarter on quarter in the third quarter of 2010 in Sweden and Denmark respectively, suggesting that the recovery gained pace in both countries. The recovery appears to be especially robust in Sweden, supported both by external demand and domestic consumption on the back of strong employment growth. Annual inflation rates increased slightly in both countries, standing at 2.5% in Denmark and at 1.7% in Sweden in November, but remained at rates below other non-euro area EU countries.

In the largest central and eastern European EU countries the recovery continued in the third quarter, mainly supported by external demand and the rebuilding of inventories. Domestic demand remained rather subdued in most countries owing to weak labour and credit market conditions, low capacity utilisation as well as fiscal restraint in some countries. Romania was the only large central and eastern European country with negative growth in the third quarter of 2010, which was



due to the short-term impact of the ongoing fiscal adjustment along with a deteriorating labour market situation. In contrast, growth was especially robust in the third quarter in Poland where, in addition to external demand, improvements in the labour market situation supported the recovery. In November 2010 HICP inflation increased slightly in the Czech Republic and moderated in Poland, Hungary and Romania. Of those countries, Romania has the highest level of inflation; it stood at 7.7% in November 2010, reflecting mainly the impact of the most recent VAT increase in July 2010.

## CHINA

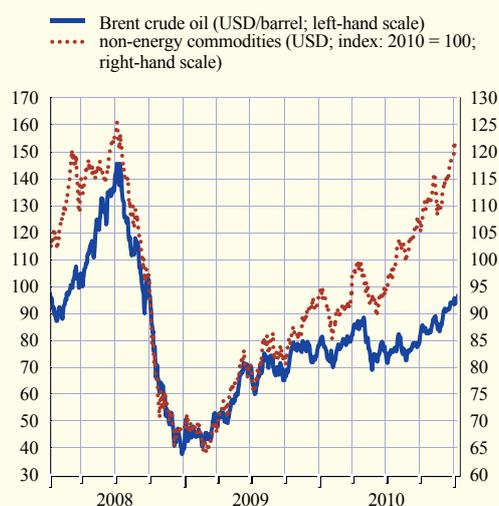
In China, economic activity remained robust in November, as indicated by stronger than expected growth in industrial production, fixed asset investment and trade. Consumer prices increased at the fastest pace in two years – with annual inflation standing at 5.1% in November – mainly on account of rising food prices. Producer prices in turn increased to 6.1% in November from 5% in October, mainly driven by increases in commodity prices. Moreover, despite the administrative measures against property market speculation introduced in April and September 2010, property prices continued to increase in the three months up to November. As abundant domestic liquidity and strong economic activity are also adding to rising inflationary pressures, the People’s Bank of China (PBC) continued to tighten its monetary policy stance. For the second time in 2010, effective from 26 December, the one-year benchmark deposit and lending rates were raised by 25 basis points to 2.75% and 5.81%, respectively. In addition, in order to withdraw excess liquidity the PBC raised the reserve requirement ratio by another 50 basis points; it now stands at an all-time high of 19% in the case of big commercial banks. Moreover, in order to address inflationary pressures in a more flexible manner, the authorities announced a new reserve requirement management system. This system will target individual institutions mainly on the basis of their specific behaviour of lending, as well as their liquidity and capital adequacy ratio.

## 1.2 COMMODITY MARKETS

Oil prices increased in December and early January. Brent crude oil prices stood at USD 96.7 per barrel on 12 January, which is 23.7% higher than at the beginning of 2010, and 11.7% higher than at the beginning of December (see Chart 4). Looking ahead, market participants still expect slightly higher oil prices in the medium term, with futures contracts for December 2012 trading at around USD 96.9 per barrel.

Looking at fundamentals, the demand side of the market is continuously proving its robustness and the International Energy Agency (IEA) has been revising its demand estimates for 2010 upwards. On the supply side, the response to higher demand and prices was however more muted, and OPEC decided not to modify

Chart 4 Main developments in commodity prices



Sources: Bloomberg and HWWI.

production quotas during its last meeting. This translated into a substantial inventory drawdown which, taking into account that the IEA expects global demand to rise by 1.5% in 2011, may hint at tighter market conditions in the near future.

The prices of non-energy commodities also increased significantly in December. Food prices continued to increase strongly, driven in particular by wheat, maize and sugar. Price increases were motivated by a combination of robust demand, and supply concerns related to adverse weather conditions in the southern hemisphere. For further analysis, see also Box 1 on recent developments in food prices. Metal prices have also increased, driven mainly by copper, due to pressure from supply-side constraints. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was 29% higher at the beginning of 2011 than at the beginning of 2010, and 7.5% higher than at the beginning of December 2010.

Box 1

RECENT DEVELOPMENTS IN FOOD COMMODITY PRICES

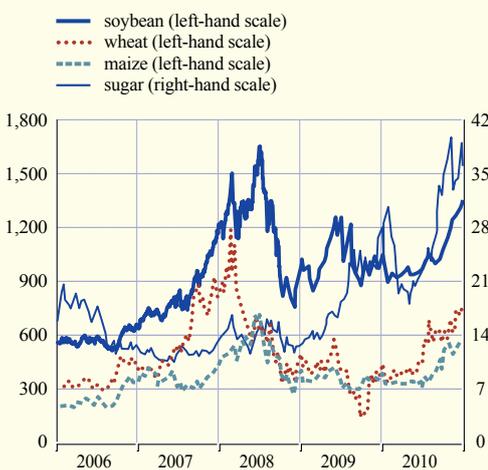
The wide fluctuations in food commodity prices have attracted much attention in recent years. In 2007 and the first half of 2008 prices surged, peaking in July 2008. They then declined before rising again. As they may have far-reaching effects on consumer price inflation, it is essential in respect of the inflation outlook to monitor their developments and drivers, as well as the proper functioning of related markets. This box focuses on the rise in food prices since 2009 and sheds some light on its main drivers.

Food commodity prices rose significantly in 2010. Yet, the prices of various commodities increased at different speeds and times, and were also affected by idiosyncratic factors.

- After the record harvest which followed the price spike of 2007-2008, wheat prices were initially subdued, due to high inventory levels. However, supply disruptions and adverse weather conditions, together with protectionist threats, contributed to another price rally in the second half of 2010. Prices were 91% higher at the end of 2010 than at the beginning of the year (see chart).
- Maize prices moved sideways in 2009 and the first half of 2010, dampened by expectations of a record harvest in 2010. However, recent cuts in production estimates and signs of record imports by China put upward pressure on prices, which were 57% higher at the end of 2010 than at the beginning.

Prices of selected agricultural commodities

(in USD cents per bushel for maize, soybeans and wheat, in USD cents per pound for sugar)



Source: Bloomberg.  
Note: Latest observation refers to 31 December 2010.

- Recent soybean price dynamics have been more subdued than those of wheat and maize. The 2009-2010 harvest was a record one, and prospects for the 2010-2011 harvest are positive as well. This helped to dampen demand-side pressures coming from increasing imports by China. Still, prices were 33% higher at the end of 2010 than at the beginning.
- By contrast, sugar prices have been volatile recently. In 2009, prices almost doubled due to adverse weather conditions and remained volatile subsequently – in spite of the good crop prospects – amid tight inventory levels. Prices were 32% higher at the end of 2010 than at the beginning.

Although recent price pressures in agricultural commodity markets were driven by idiosyncratic factors, there are also some common factors affecting medium to long-run demand trends. First, demand stemming from emerging markets has steadily increased, in line with increasing income levels, and is expected to continue doing so. In addition to higher incomes in emerging economies, urbanisation and changing dietary preferences are pushing up domestic consumer demand for high-value products. The composition of food budgets is shifting to meat, dairy products and fish. Since the production of meat and dairy products requires animal fodder as input, the dietary change will mean stronger demand for crops such as soybeans, maize and grains in general, which are used to produce feed.

Another important structural factor driving demand is that food crops (in particular sugar and maize) are also being used to produce biofuels. Persistently high oil prices and substantial subsidies for biofuel production are expected to sustain demand for these commodities in the future. The two factors – dietary change and biofuels – imply a robustly growing demand for food commodities in the future.

The outlook for prices however crucially depends on the supply-side response as well. First, as regards the speed of response on the supply side, the price elasticity of individual crops is large and relatively fast, taking into account the constraints of the biological cycle. This is also confirmed by the record wheat harvest in 2008, after the price surge of 2007-2008. However, at the aggregate level, the agricultural supply response is low. One reason for the different responses at the individual crop and aggregate level is crop rotation, which largely determines the price response at the individual level, i.e. agricultural land is used for the crop that yields the highest return. When, however, agricultural price increases are broad-based, the supply response from crop rotation is less pronounced as it tends to come from either land expansion or yield growth.

As for land availability worldwide, sufficient arable land remains available. A report from the Food and Agriculture Organization (FAO) of the United Nations<sup>1</sup> suggests that, while the expansion of cultivable land has always helped to raise crop production, yield growth – through the application of technological improvements or the use of fertilisers and machinery – has been much more important in recent decades. It accounted for 70% of the production increase in developing countries during the past 30 years and for nearly all of the increase in advanced economies. Agricultural technologies have however remained largely unchanged over the last two decades, which implies that higher yields cannot be obtained without further improvements. Stable food prices during this period

<sup>1</sup> OECD-FAO (2008). *Agricultural Outlook 2008 - 2017*.

have led to some complacency about global food concerns and to a reduction in R&D funding. A high-price environment may change this situation and stimulate both publicly and privately funded research into yield-enhancing technologies rather than cost-cutting, as was mostly the case over the past decade.<sup>2</sup>

Taken together, these considerations suggest that there will remain upside pressure on food prices in the long run, due to robustly growing global demand. While there is scope for supply-side effects to match the rise in demand, there remains significant uncertainty about the extent and pace of the ability of supply to meet the expected rise in demand and thereby help to limit the rise in food prices.

2 R. Trostle (2008). Global Agricultural Supply and Demand: Factors Contributing to the Recent Increase in Food Commodity Prices. USDA Economic Research Service WRS-0801.

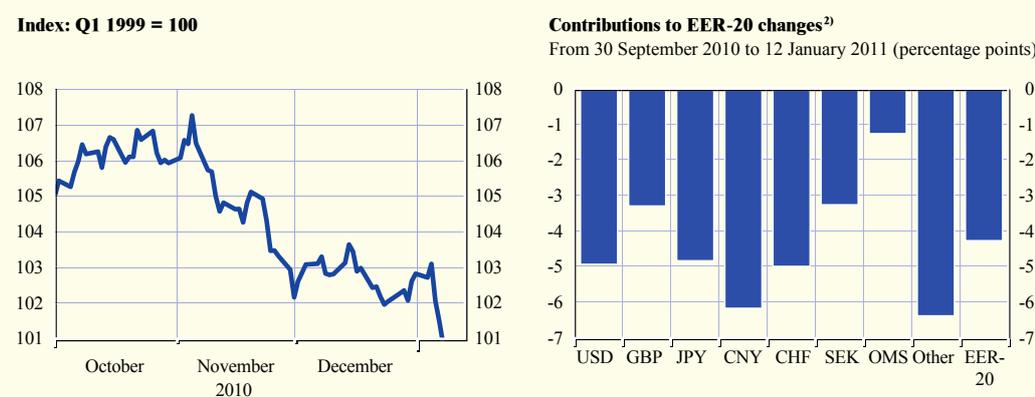
### I.3 EXCHANGE RATES

In the fourth quarter of 2010 the euro depreciated in nominal effective terms, moving below its average level for the year. On 12 January 2011 the nominal effective exchange rate of the euro – as measured against the currencies of 20 of the euro area’s most important trading partners – was 4.3% lower than at the end of September and 4.0% below its average level for 2010 (see Chart 5).

In bilateral terms, during the fourth quarter of 2010, the euro depreciated against all major currencies. Between 30 September 2010 and 12 January 2011 it weakened against the Swiss franc by 5.0%, the Japanese yen by 4.8% and the US dollar by 4.9%. The depreciation against the US dollar, combined with the corresponding depreciation against currencies that are tied to the US currency, accounted

Chart 5 Euro effective exchange rate (EER-20) and its decomposition<sup>1)</sup>

(daily data)



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro against the currencies of 20 of the most important trading partners of the euro area (including all non-euro area EU Member States).

2) Contributions to EER-20 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 pound sterling and the Swedish krona). The category "Other" refers to the aggregate contribution of the currencies of the remaining six trading partners of the euro area in the EER-20 index. Changes are calculated using the corresponding overall trade weights in the EER-20 index.

**Table 1 Euro exchange rate developments<sup>1)</sup>**

(daily data; units of national currency per euro; percentage changes)

	Weight in EER-20	Level on 12 January 2011	Appreciation (+)/depreciation(–) of the euro as at 12 January 2011		
			since:		compared with:
			30 September 2010	1 January 2010	average for 2010
US dollar	19.4	1.300	-4.9	-9.8	-2.1
Pound sterling	17.8	0.832	-3.3	-6.7	-3.1
Chinese renminbi	13.6	8.570	-6.2	-12.8	-4.5
Japanese yen	8.3	108.200	-4.8	-19.0	-6.9
Swiss franc	6.4	1.260	-5.0	-15.1	-8.6
Polish zloty	4.9	3.840	-3.6	-6.3	-3.8
Swedish krona	4.9	8.840	-3.3	-13.2	-7.3
Czech koruna	4.1	24.390	-0.9	-7.2	-3.5
Korean won	3.9	1,445.890	-6.8	-13.0	-5.6
Hungarian forint	3.1	275.570	-0.1	2.1	0.0
NEER <sup>2)</sup>		100.500	-4.3	-10.3	-4.0

Source: ECB.

1) Bilateral exchange rates in descending order based on the corresponding currencies' trade weights in the EER-20 index.

2) Euro nominal effective exchange rate against the currencies of 20 of the most important trading partners of the euro area (EER-20).

for almost half of the overall depreciation in effective terms (see Chart 5). The single currency also depreciated significantly vis-à-vis the so-called commodity currencies (Australian dollar, Canadian dollar and Norwegian krone) and against the pound sterling (see Table 1).

Between 30 September 2010 and 12 January 2011 the currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates. The Latvian lats remained on the weak side of the unilaterally set fluctuation band of +/-1%. On 1 January 2011 Estonia adopted the euro and became the 17th member of the euro area. The conversion rate between the Estonian kroon and the euro was irrevocably fixed, unchanged from the ERM II central rate, at EEK 15.6466 (see also Box 2 – Estonia adopts the euro).

**Box 2****ESTONIA ADOPTS THE EURO**

On 1 January 2011 Estonia adopted the euro and became the 17th member of the euro area. The conversion rate between the Estonian kroon and the euro was irrevocably fixed at 15.6466 kroons to the euro. This was the central rate of the Estonian kroon throughout the country's membership of the Exchange Rate Mechanism II (ERM II).

Estonia is a very small economy in comparison with the rest of the euro area. The aggregate macroeconomic data of the euro area do not change significantly following the latest enlargement (see table below).

Estonia's GDP accounts for only about 0.2% of the GDP of the enlarged euro area. In 2009, its GDP per capita in purchasing power parity (PPP) terms was slightly below 60% of the euro area average. For several years, Estonia was one the EU's fastest growing economies.

Key economic characteristics of Estonia and the euro area

	Reporting period	Unit	Euro area excluding Estonia	Euro area including Estonia	Estonia
<b>Population and economic activity</b>					
Total population <sup>1)</sup>	2010	millions	330.0	331.3	1.3
GDP	2009	EUR billions	8,955.7	8,969.6	13.9
GDP per capita	2009	EUR thousands	27.2	27.1	10.3
GDP per capita (PPP)	2009	EA16=100	100.0	99.8	57.9
GDP (share of world GDP) <sup>2)</sup>	2009	%	15.1	15.1	0.0
<b>Value added by economic activity<sup>3)</sup></b>					
Agriculture, fishing, forestry	2009	% of total	1.6	1.6	2.6
Industry (including construction)	2009	% of total	24.2	24.2	26.4
Services (including non-market services)	2009	% of total	74.2	74.2	71.0
<b>Monetary and financial indicators</b>					
Credit to the private sector <sup>4)</sup>	2009	% of GDP	146.1	146.0	107.2
Stock market capitalisation <sup>5)</sup>	2009	% of GDP	49.3	49.2	2.6
<b>External trade</b>					
Exports of goods and services <sup>6)</sup>	2009	% of GDP	19.7	19.7	69.9
Imports of goods and services <sup>6)</sup>	2009	% of GDP	18.9	18.8	64.3
Current account balance <sup>6)</sup>	2009	% of GDP	-0.6	-0.5	4.5
<b>Labour market<sup>7)</sup></b>					
Labour force participation rate <sup>8)</sup>	2010 Q3	%	71.4	71.4	73.7
Unemployment rate	2010 Q3	%	9.8	9.8	15.7
Employment rate <sup>8)</sup>	2010 Q3	%	64.4	64.4	62.1
<b>General government</b>					
Surplus (+) or deficit (-)	2009	% of GDP	-6.3	-6.3	-1.7
Revenue	2009	% of GDP	44.5	44.5	43.4
Expenditure	2009	% of GDP	50.8	50.8	45.1
Gross debt outstanding	2009	% of GDP	79.2	79.1	7.2

Sources: Eurostat, IMF, European Commission, ECB and ECB calculations.

1) Estimated annual average.

2) GDP shares are based on a purchasing power parity (PPP) valuation of the countries' GDPs.

3) Based on nominal gross value added at basic prices.

4) Comprises loans, holdings of securities other than shares and holdings of shares and other equities.

5) Defined as the total outstanding amount of quoted shares excluding investment funds and money market fund shares issued by euro area/Estonian residents at market value.

6) Balance of payments data. Euro area data are compiled on the basis of transactions with residents of countries outside the euro area (i.e. excluding intra-euro area flows). Data for Estonia include transactions with residents from the rest of the world (i.e. including transactions with the euro area).

7) Referring to the working age population (i.e. those aged between 15 and 64). Data from Labour Force Survey.

8) Share of the working age population (i.e. those aged between 15 and 64).

However, the strong economic expansion, with clear signs of overheating from 2005 to 2007, proved unsustainable and Estonia experienced a pronounced turnaround in economic activity and a severe contraction in 2009. The country's economic adjustment has contributed to the unwinding of some of the external and internal imbalances that built up in the years of very fast growth. More recently, economic activity has started to recover: annual real GDP growth turned positive in the second quarter of 2010 and stood at 5.1% in the third quarter of last year.

Estonia's production structure is broadly similar to that of the euro area. In the Estonian economy, the services sector contributes 71% to total value added and the share of industry (including construction) amounts to 26.4%. Agriculture contributes to the total value added slightly more than in the rest of the euro area. Furthermore, Estonia is a very open economy

and the rest of the euro area is its key trading partner, accounting for 34.2% of its total exports and 38.5% of its total imports. Other important trading partners are Latvia, Lithuania, Russia and Sweden.

The country's financial sector is heavily bank-based. Bank credit to non-government residents amounted to 107.2% of GDP in 2009. Nordic European banking groups dominate the banking sector. The non-banking financial sector plays a more limited role in Estonia than in the rest of the euro area. This is reflected, for example, in its stock market capitalisation, which is low relative to the euro area. Moreover, the Estonian financial system is characterised by the absence of a well-developed market for long-term debt securities denominated in Estonian kroons, which reflects mainly the low level of government debt.

Reflecting the sharp economic adjustment of recent years, Estonia's unemployment rate is high, standing at 15.7% on average in the third quarter of 2010 compared with 9.8% in the euro area in the same period. While the labour force participation rate in Estonia has remained above the level of the rest of the euro area, the employment rate is currently below the average for the euro area.

Following a series of surpluses or budgetary positions close to balance between 2000 and 2007, fiscal deficits have been recorded since then. As a result of a tight fiscal policy, the deficit remained nonetheless contained in 2009, at 1.7% of GDP, the third-lowest deficit among the EU Member States and well below the euro area average deficit of 6.3% of GDP. The public debt-to-GDP ratio rose to 7.2% in 2009. Estonia is one of the few EU countries currently not subject to the excessive deficit procedure.

In order to fully reap the advantages of the euro and to allow adjustment mechanisms to operate efficiently within the enlarged currency area, Estonia needs to conduct policies that are fully geared towards ensuring the sustainability of its convergence process. Crucial from an ECB perspective, the Estonian authorities must support a low-inflation environment in the years to come, and take forceful action if necessary. In the short term, following the euro changeover, it needs to be ensured that the conversion of kroon prices into euro should not affect the price level.

Looking further ahead, it will be important for Estonia's economy to maintain sustainable convergence. To that end, non-monetary policy areas must enable the economy to cope with country-specific shocks and prevent the recurrence of macroeconomic imbalances. Significantly, the Estonian authorities have emphasised their commitment to ensuring an economic environment that is conducive to sustainable output and employment growth, with balanced macroeconomic conditions, including price stability. Specifically, this implies: i) maintaining prudent fiscal policies; ii) continuing structural reforms to enhance cost competitiveness and productivity; and iii) implementing appropriate financial sector policies to ensure financial stability and avoid any build-up of imbalances. An adherence to this commitment, underpinned by the stability-oriented monetary policy of the ECB, represents the best way to bring sustainable economic growth, job creation and social cohesion to Estonia.

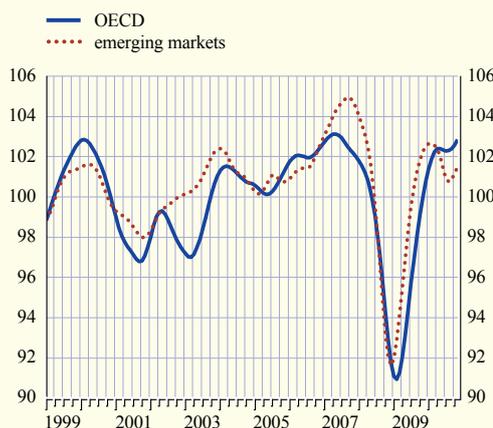
#### 1.4 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

The latest survey-based evidence confirmed that the recovery of the global economy firmed in the final quarter of 2010. The OECD composite leading indicator (CLI) for November increased compared with October, indicating that growth in OECD countries has regained momentum (see Chart 6). Looking ahead, global growth is expected to strengthen gradually, supported by a further normalisation of financing conditions in an environment of accommodative monetary conditions.

The risks to global activity are slightly tilted to the downside, with uncertainty remaining elevated. On the upside, trade may continue to grow faster than expected. On the downside, concerns remain relating to the tensions in some segments of the financial markets, renewed increases in oil and other commodity prices, protectionist pressures and the possibility of a disorderly correction of global imbalances.

Chart 6 OECD composite leading indicators

(monthly data; amplitude-adjusted)



Source: OECD.

Note: The emerging market indicator is a weighted average of the composite leading indicators for Brazil, Russia and China.

## 2 MONETARY AND FINANCIAL DEVELOPMENTS

### 2.1 MONEY AND MFI CREDIT

The annual growth rates of M3 and MFI loans to the private sector increased in November. This largely reflected a strong but probably one-off monthly inflow for repurchase agreements – which, in turn, was mainly due to interbank transactions conducted via trading platforms counted as part of the money-holding sector. Looking beyond this effect, the latest data point to a continued, but modest, recovery in money and loan growth. They confirm the assessment of moderate underlying monetary expansion and contained inflationary pressures over the medium term. Sectoral developments suggest that growth in loans to the private sector is increasingly being supported by a recovery in the annual growth rate of loans to non-financial corporations. Finally, MFIs' main assets expanded moderately in November, with credit to the euro area private sector recording a significant inflow.

#### THE BROAD MONETARY AGGREGATE M3

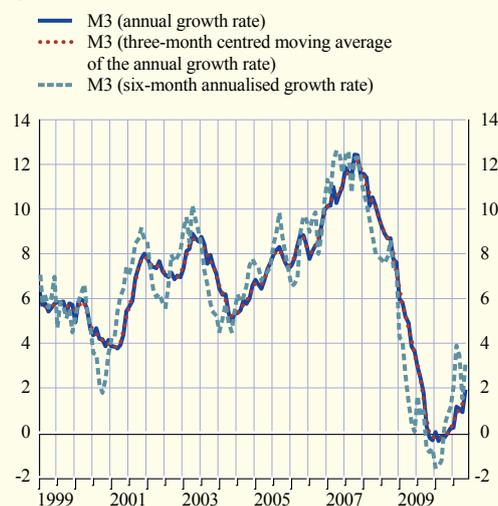
The annual growth rate of M3 increased markedly to stand at 1.9% in November, up from 0.9% in October (see Chart 7). Half of this increase was due to base effects, and the other half reflected strong month-on-month growth of 0.5%. That strong month-on-month growth was due to a large extent to a rise in secured interbank trading activity via central counterparties, transactions which are recorded as repurchase agreements by non-monetary financial intermediaries other than insurance corporations and pension funds (OFIs). Excluding these repo transactions, month-on-month growth in M3 would not have been 0.5% but only marginally positive. Thus, the latest data overstate the pace of the recent recovery in euro area monetary growth.

Developments in M3 and its main components continue to reflect the interest rate constellation. The yield curve has recently become steeper again, implying that the monetary assets included in M3 have lost some of their attractiveness relative to more highly remunerated longer-term assets outside M3. At the same time, the continued positive spread between the interest rates paid on short-term time deposits and those paid on overnight deposits has helped to further narrow the gap between the annual growth rate of M1, which has become less positive, and the annual growth rate of short-term deposits other than overnight deposits (i.e. M2 minus M1), which has become less negative.

On the counterpart side, the marked strengthening observed in annual M3 growth in November was mirrored by a significant increase in the annual growth rate of loans to the private sector. A large part of this reflected an increase in the contribution of loans to OFIs, but the latest data also provide further evidence of a gradual recovery in the annual growth of loans to non-financial corporations (albeit with growth rates still remaining negative) and a levelling-off in the annual growth of loans to households at moderately positive rates.

Chart 7 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

The main assets held by euro area MFIs increased moderately in November. However, looking beyond the volatility of monthly developments, the size of MFI balance sheets was broadly stable in 2010. This stability masked marked declines in inter-MFI lending and holdings of foreign assets, while credit to the private sector continued to expand.

### MAIN COMPONENTS OF M3

Developments within M3 continued to be characterised by a narrowing of the gap between the positive, but declining, annual growth rate of M1 on the one hand and the negative, but rising, annual growth rates of other short-term deposits and marketable instruments on the other.

In particular, the annual growth rate of marketable instruments increased considerably to stand at -0.9% in November, up from -7.6% in October. This was largely accounted for by an increase in secured interbank trading activity via central counterparties, transactions which are recorded as repurchase agreements by the OFI sector. However, the upward momentum in the annual growth rate of marketable instruments is still visible when correcting for this effect, as in November it also reflected renewed purchases of money market fund shares and short-term MFI debt securities, following outflows in recent months.

The annual growth rate of M1 decreased slightly further to stand at 4.6% in November, down from 4.9% in October. This decline was modest when compared with previous months, but conceals a significant monthly outflow for overnight deposits. The decline in M1 growth has been driven largely by the interest rate constellation: the remuneration of overnight deposits has remained relatively stable, while that of other short-term deposits and longer-term deposits has increased, thereby raising the opportunity cost of holding overnight deposits.

The annual growth rate of short-term deposits other than overnight deposits increased to -0.4% in November, up from -1.2% in October. This reflected an increase in the annual growth rate of short-term time deposits (i.e. deposits with an agreed maturity of up to two years); the annual growth rate of savings deposits (i.e. deposits redeemable at notice of up to three months) was unchanged. The improvement in the annual growth rate of short-term time deposits reflected a base effect, as there was a significant monthly outflow for this category of deposit in November. The outflow was broadly based across countries and sectors and may reflect the reallocation of funds away from this monetary asset following the recent widening of the spread between its remuneration and that of longer-term financial assets. Inflows for short-term savings deposits declined slightly in November, but remained robust.

The annual growth rate of M3 deposits – which comprise short-term deposits and repurchase agreements and represent the broadest monetary aggregate for which a timely sectoral breakdown is available – increased significantly to stand at 3.5% in November, up from 2.9% in October. Again, this essentially reflects a strong increase in the contribution of OFIs owing to the aforementioned increase in repo transactions. OFIs continue to account for most of the upturn in M3 growth, and repo transactions have been a key driver of the increase in OFIs' holdings of M3 deposits. The contributions of the household and non-financial corporation sectors were stable at positive levels in November. However, while the contribution of the non-financial corporation sector has been broadly stable from June, the contribution of households increased significantly over this period.

### MAIN COUNTERPARTS OF M3

As regards the counterparts of M3, the annual growth rate of total MFI credit to euro area residents increased further to stand at 3.8% in November, up from 3.1% in October (see Table 2).

**Table 2 Summary table of monetary variables**

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

	Outstanding amount as a percentage of M3 <sup>1)</sup>	Annual growth rates					
		2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Oct.	2010 Nov.
<b>M1</b>	<b>49.1</b>	<b>12.3</b>	<b>11.3</b>	<b>10.3</b>	<b>7.9</b>	<b>4.9</b>	<b>4.6</b>
Currency in circulation	8.4	7.5	6.2	6.4	6.6	5.8	5.7
Overnight deposits	40.8	13.3	12.4	11.1	8.1	4.7	4.4
<b>M2 - M1 (= other short-term deposits)</b>	<b>39.0</b>	<b>-7.6</b>	<b>-8.2</b>	<b>-8.0</b>	<b>-5.1</b>	<b>-1.2</b>	<b>-0.4</b>
Deposits with an agreed maturity of up to two years	18.9	-22.0	-22.7	-21.5	-16.1	-8.8	-7.5
Deposits redeemable at notice of up to three months	20.1	15.8	13.3	10.3	8.3	7.3	7.3
<b>M2</b>	<b>88.2</b>	<b>2.2</b>	<b>1.7</b>	<b>1.4</b>	<b>1.8</b>	<b>2.1</b>	<b>2.3</b>
<b>M3 - M2 (= marketable instruments)</b>	<b>11.8</b>	<b>-11.4</b>	<b>-11.7</b>	<b>-9.8</b>	<b>-6.6</b>	<b>-7.6</b>	<b>-0.9</b>
<b>M3</b>	<b>100.0</b>	<b>0.3</b>	<b>-0.2</b>	<b>-0.1</b>	<b>0.7</b>	<b>0.9</b>	<b>1.9</b>
<b>Credit to euro area residents</b>		<b>3.0</b>	<b>1.9</b>	<b>1.8</b>	<b>2.1</b>	<b>3.1</b>	<b>3.8</b>
Credit to general government		14.2	9.9	9.2	7.8	12.0	12.7
Loans to general government		3.1	3.7	6.7	6.5	13.3	19.2
Credit to the private sector		0.9	0.3	0.2	0.8	1.2	1.9
Loans to the private sector		-0.6	-0.4	0.2	1.0	1.5	2.0
Loans to the private sector adjusted for sales and securitisation		0.3	-0.2	0.2	1.0	1.7	2.4
<b>Longer-term financial liabilities (excluding capital and reserves)</b>		<b>6.7</b>	<b>5.5</b>	<b>4.4</b>	<b>2.6</b>	<b>2.6</b>	<b>2.9</b>

Source: ECB.

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

As part of this, the annual growth rate of credit to general government increased somewhat further, to 12.7% in November, having increased strongly in October on account of transactions relating to the transfer of MFI assets to a German “bad bank” (see Box 3 for a description of the impact of these transfers on MFI credit to the euro area private sector).

### Box 3

#### REVISITING THE IMPACT OF ASSET TRANSFERS TO “BAD BANKS” ON MFI CREDIT TO THE EURO AREA PRIVATE SECTOR

The financial crisis has prompted some euro area countries to establish “bad bank” schemes in order to enable credit institutions to remove from their balance sheets assets that are at risk of severe impairment or are difficult to value. An earlier Monthly Bulletin box published in anticipation of the implementation of these schemes provided a stylised description of the expected implications for MFI balance sheet statistics.<sup>1</sup> Since then, sizeable transfers to three schemes have taken place, involving portfolios of both loans and securities, and recipient entities that do not belong to the MFI sector. This box summarises the main effects of the transfers, focusing on credit to the euro area private sector.<sup>2</sup>

1 See the box entitled “The impact of ‘bad banks’ on MFI balance sheet statistics”, *Monthly Bulletin*, ECB, March 2010.

2 For the purposes of this box, the “euro area private sector” comprises all resident sectors with the exception of the MFI and general government sectors, while “credit” comprises financing provided to these sectors in the form of either loans or debt securities.

### The importance of a careful analysis of MFI credit to the private sector

The focus on MFI credit to the private sector stems from the fact that developments in bank lending make a significant contribution to the assessment of the nature of monetary expansion. The analysis of MFI credit growth also offers insight into the operation of the monetary policy transmission mechanism and financing conditions in the economy. As a result, such analysis has been of particular importance from a monetary policy perspective during the financial crisis.

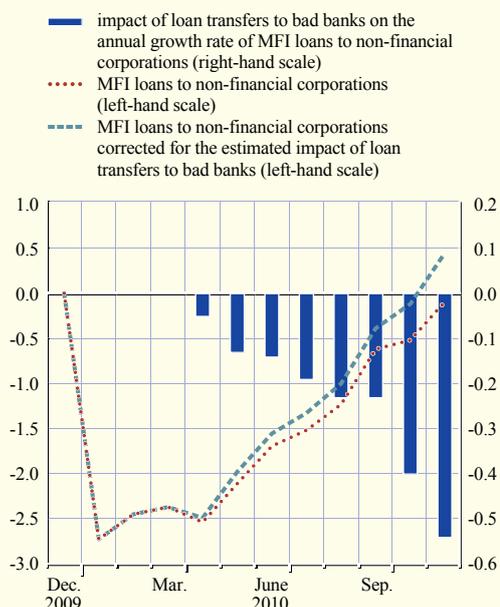
In this context, it is important to identify changes in the growth of MFI credit to the private sector that reflect pure asset/liability management transactions on the part of specific MFIs. Such transactions are, on the whole, unrelated to the actual flow of credit being made available to the private sector, with the most prominent example being the true-sale securitisation of loan portfolios.<sup>3</sup> The Eurosystem's statistical framework allows the effect that true-sale securitisation and other loan sales have on the growth of MFI loans to be quantified, and a statistical series adjusted for these effects is published on a regular basis.<sup>4</sup> Since transfers of loan portfolios to bad banks are a type of loan sale, their impact is removed from the headline data published for MFI loans in the series "adjusted for sales and securitisation". However, given the specific, non-recurring nature of these transfers, the following section discusses the impact that transfers to bad banks have had on MFI loans to non-financial corporations, the main category of loan affected by the current schemes.<sup>5</sup>

### The impact of asset transfers to bad banks on MFI loans to non-financial corporations

The transfer of loans from MFI portfolios to bad banks is estimated to have reduced the annual growth rate of MFI loans to euro area non-financial corporations by approximately 0.5 percentage point as at end-November 2010

Chart A The impact of transfers to bad banks on MFI loans to non-financial corporations

(annual percentage changes; percentage points)



Sources: ECB and ECB estimates.

3 Strictly speaking, this requires that the securitisation give rise to the derecognition of these loans from the originating MFI's balance sheet, which may not always be the case. For more information, see the box entitled "The impact of MFI loan securitisation on monetary analysis in the euro area", *Monthly Bulletin*, ECB, September 2005, and the box entitled "The importance of accounting standards for interpreting MFI loan statistics", *Monthly Bulletin*, ECB, March 2008.

4 See the box entitled "Publication of data on MFI loans to the private sector adjusted for sales and securitisation", *Monthly Bulletin*, ECB, February 2009. More recently, a breakdown distinguishing between the effect of loan sales and securitisation for loans to households and the effect for loans to non-financial corporations has been made available through the ECB's Statistical Data Warehouse (<http://sdw.ecb.europa.eu/>).

5 In 2010 the implementation of three bad bank schemes had an impact on the consolidated and aggregated balance sheet of the euro area MFI sector. Two of these schemes were established under the German Financial Market Stabilisation Act of 2008, with a third scheme established under the Irish National Asset Management Agency (NAMA) Act of 2009. Detailed information on the German schemes is available at [www.soffin.de](http://www.soffin.de), and details of the Irish scheme can be found at [www.nama.ie](http://www.nama.ie)

(see Chart A).<sup>6</sup> This is somewhat less than the maximum impact of 0.75 percentage point expected in the earlier box on the basis of information available on euro area bad bank schemes in early 2010. The difference mainly reflects the fact that the implementation of the transfers started later than initially envisaged. However, given that further loan transfers have been announced but not conducted as at end-November 2010, it is expected that the estimated peak effect will eventually be broadly confirmed.

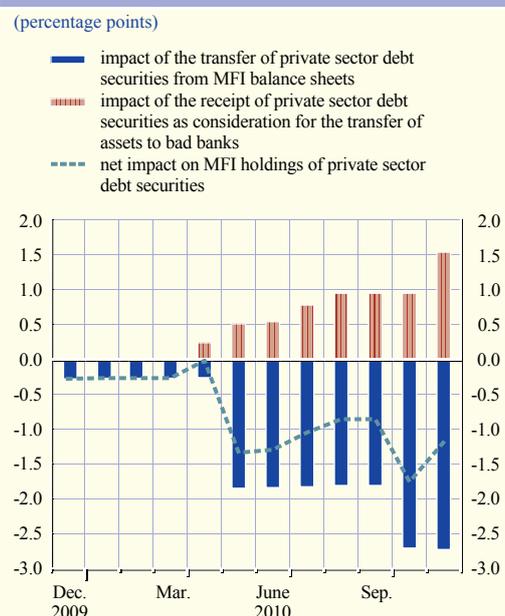
As can be seen in Chart A, a turning point in the annual growth rate of MFI loans to the non-financial corporation sector can be identified in early 2010 irrespective of whether allowance is made for the effect of transfers to bad banks. At the same time, the strength of the gradual recovery in MFI lending to this sector is somewhat underestimated by the unadjusted data, with the result that positive growth can, as at end-November 2010, be observed only in the adjusted series.

#### The impact on MFI holdings of debt securities issued by the euro area private sector

Asset transfers to bad banks have also had a significant effect on MFI holdings of debt securities issued by the euro area private sector, which represent the second-largest component of MFI credit to this sector. The securities transferred have primarily been issued by non-monetary financial intermediaries other than insurance corporations and pension funds (OFIs) and have consisted mainly of structured finance securities such as asset-backed securities and collateralised debt obligations. Transfers of debt securities issued by euro area non-financial corporations have been significantly smaller. The transfer of private sector debt securities to bad banks has substantially reduced the annual growth rate of the associated MFI statistical series, with the impact as at end-November 2010 estimated at approximately 2.75 percentage points (see Chart B).<sup>7</sup>

A further impact stems from the fact that, in one particular scheme, the consideration received by the transferring banks in exchange for the loans eligible for the scheme takes the form of debt securities issued by the purchasing bad bank. Since in that scheme the bad bank entity is, for statistical purposes, classified as part of

**Chart B The impact of transfers to bad banks on the annual growth rate of MFI holdings of euro area private sector debt securities**



Source: ECB estimates.

<sup>6</sup> The transfers have had a larger impact on the amount of outstanding MFI loans to non-financial corporations. This is due to the fact that most of the loans transferred were written down substantially prior to their transfer. As write-downs are not considered to be financial transactions in a statistical sense, they do not affect the annual growth rates, since growth rates are calculated excluding the effects of non-transaction-related changes in outstanding amounts of loans. However, write-downs do reduce the stock of outstanding loans on MFI balance sheets.

<sup>7</sup> Unlike loans to the private sector, a statistical series for MFI holdings of private sector debt securities adjusted for sales and securitisation is not regularly published by the ECB, given the inherently tradable nature of these assets.

the OFI sector, which is part of the private sector, MFI holdings of private sector debt securities have increased as a result of the transfers.<sup>8</sup> When taking this countervailing effect into account, the net impact on the annual growth rate of MFI holdings of private sector debt securities as at end-November 2010 is reduced to approximately 1.25 percentage points (see Chart B). Adding this net impact to the statistically recorded series would mean that the annual growth rate of such holdings had consistently been significantly positive since mid-2010. However, as in the case of MFI loans to non-financial corporations, making this adjustment would not alter the direction of developments in the annual growth rate or the timing of the turning point.

While this box looks only at the impact that asset transfers to bad banks have had on MFI credit to the euro area private sector, it should be noted that these transactions have also had a substantial impact on other items in the MFI statistical balance sheet. For instance, many of the assets transferred have consisted of claims (in the form of both loans and holdings of debt securities) vis-à-vis entities not resident in the euro area. This has had a significant dampening effect on euro area MFIs' holdings of external assets. Furthermore, some of the assets transferred have been claims on the euro area general government sector. However, an even larger share of the consideration received has taken the form of better-rated claims on the same sector, mostly in the form of debt securities issued by the bad banks purchasing the assets, thereby resulting in an overall net increase in MFI credit to general government. In addition, some of the transactions with bad banks have had implications for MFI balance sheets that span several euro area countries and have an impact on the aggregated MFI balance sheets of more than one euro area country.<sup>9</sup> This underlines the importance of considering the euro area as a whole when examining the effects of asset transfers to bad banks.

### Conclusions

The detailed analysis of developments in MFI credit to the euro area private sector is a key part of a broad-based monetary analysis. This box shows that asset transfers to bad banks have had a significant impact on two of the main components of MFI credit to the private sector – namely loans to non-financial corporations and holdings of private sector debt securities – but do not alter the broad assessment of credit dynamics made on the basis of the unadjusted data. Looking ahead, the relatively small volume of transfers envisaged under existing bad bank schemes which had still not been completed by the end of November 2010 implies a moderate further effect on MFI balance sheets in the coming months.

<sup>8</sup> In the remaining cases, the bad bank entity is classified as part of the general government sector.

<sup>9</sup> For statistics on national aggregated MFI balance sheets, see the "Statistics" section of the ECB's website (<http://www.ecb.europa.eu>).

The annual growth rate of credit to the euro area private sector increased significantly to stand at 1.9% in November, up from 1.2% in October, with larger contributions by both loans and securities. The annual growth rate of loans to the private sector increased to 2.0%, up from 1.5% in October, but this increase was, to some extent, overstated by the aforementioned repo transactions, which generate an increase in loans to OFIs. At the same time, November saw a relatively strong increase in securitisation activity, which weakened the monthly flow of loans to the private sector. The fact that the securities generated in this process were almost entirely retained by the originating MFIs also accounts for a large part of the increase recorded in November in MFI holdings of private sector securities.

In addition to the rise in loans to OFIs, the increase seen in November in the annual growth rate of loans to the private sector also reflected the continued recovery in the annual growth rate of loans to non-financial corporations. This rose to -0.1% in November, up from -0.5% in October (see Table 3). The monthly flow of loans to non-financial corporations was positive in November, and its increase compared with October was broadly based across maturities. The pick-up in the growth of loans to non-financial corporations has remained modest thus far, possibly reflecting the uneven economic recovery across countries and economic sectors in the euro area, as well as differences in the extent to which individual sectors need – and are able to have – recourse to bank loans, rather than financing themselves by means of internally generated funds and/or market-based funding.

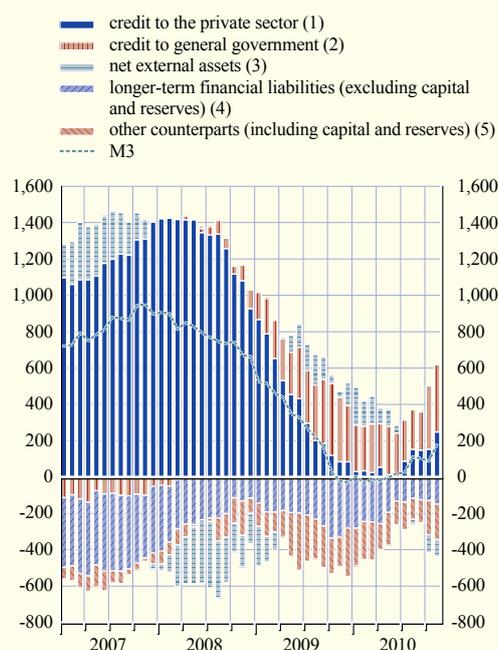
As regards loans to households, the annual growth rate declined marginally to stand at 2.7% in November (down from 2.9% in October), owing mainly to somewhat weaker growth in loans for house purchase. On balance, the data for recent months point to a levelling-off in the growth of loans to households, but when taking into account the derecognition of loans in the context of securitisation transactions, the growth rate remains on a modest upward trend. The annual growth rate of other lending also decreased slightly further to stand at 2.3% in November, while that of consumer credit became less negative and stood at -0.4% in that month. These two categories of loan have alternated between positive and negative monthly flows in recent months and do not currently point to a clear trend.

Among the other counterparts of M3, the annual growth rate of MFIs' longer-term financial liabilities (excluding capital and reserves) increased slightly for the third consecutive month in November. This increase reflected a sizeable inflow for deposits with an agreed maturity of over two years, which was attributable largely to rebalancing associated with securitisation activity where loans are not derecognised. The annual growth rate of long-term MFI debt securities held by the money-holding sector remained broadly stable, despite a positive monthly flow. The annual growth rate of capital and reserves increased only slightly to stand at 7.2% in November (up from 6.9% in October), as the impact of the large-scale recapitalisation of banks in some euro area countries in November was largely offset by a base effect.

An annual outflow of €92 billion was recorded in November for MFIs' net external asset position, compared with an outflow of €98 billion in October (see Chart 8). The negative annual flow for net external assets reflects persistent annual outflows for external assets (specifically securities other than shares), while the annual flow for external liabilities has turned marginally positive in recent months.

Chart 8 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.

Overall, looking beyond special factors related to repurchase agreements, the latest data point to a continuation of the modest recovery in euro area money and loan growth. The assessment that underlying monetary expansion is moderate and medium-term inflationary pressures stemming from monetary developments are contained continues to hold.

## 2.2 SECURITIES ISSUANCE

*The annual growth rate of debt securities issued by euro area residents remained broadly stable in October 2010, given that a pause in the contraction of debt securities issuance by MFIs compensated for the moderation of growth in other sectors. In particular, the persistently moderate debt issuance by the non-financial corporate sector may reflect the ongoing normalisation of demand for bank loans observed over recent months. The annual growth rate of issuance of quoted shares increased slightly, although still remaining at a subdued level.*

### DEBT SECURITIES

At 3.2% in October 2010, the annual growth rate of debt securities issued by euro area residents remained broadly stable in comparison with the previous month (see Table 4). Whereas short-term debt issuance has been recovering in recent months, long-term debt issuance remained broadly unchanged. Specifically, the pace of decline in short-term debt issuance continued to moderate, with the growth rate standing at -3.9% in October, around one percentage point higher than in September. At the same time, the annual growth rate of long-term debt issuance remained at around 4.1%. The annualised and seasonally adjusted six-month growth rate of debt securities issued, which captures short-term trends better, declined to 3.3% in October, from 3.6% in September, on account of a contraction in all sectors except the general government (see Chart 9). Specifically, issuance by general government rose to 7.9% in October, up by more than one percentage point in comparison with the previous month.

**Table 3 MFI loans to the private sector**

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

	Outstanding amount as a percentage of the total <sup>1)</sup>	Annual growth rates					
		2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Oct.	2010 Nov.
<b>Non-financial corporations</b>	<b>42.5</b>	<b>-1.4</b>	<b>-2.5</b>	<b>-2.2</b>	<b>-1.3</b>	<b>-0.5</b>	<b>-0.1</b>
Up to one year	24.2	-11.9	-12.3	-10.8	-8.3	-5.6	-4.3
Over one and up to five years	19.4	-0.2	-3.4	-4.6	-3.4	-2.1	-1.9
Over five years	56.5	3.9	3.2	3.1	2.9	2.5	2.5
<b>Households<sup>2)</sup></b>	<b>46.5</b>	<b>0.3</b>	<b>1.7</b>	<b>2.6</b>	<b>2.8</b>	<b>2.9</b>	<b>2.7</b>
Consumer credit <sup>3)</sup>	12.5	-1.0	-0.6	-0.4	-0.6	-0.8	-0.4
Lending for house purchase <sup>3)</sup>	71.6	0.2	2.0	3.0	3.4	3.6	3.4
Other lending	15.9	1.9	2.6	3.2	2.9	2.6	2.3
<b>Insurance corporations and pension funds</b>	<b>0.9</b>	<b>-12.4</b>	<b>-9.3</b>	<b>-9.1</b>	<b>-0.8</b>	<b>5.2</b>	<b>14.2</b>
<b>Other non-monetary financial intermediaries</b>	<b>10.2</b>	<b>0.1</b>	<b>0.2</b>	<b>0.9</b>	<b>2.7</b>	<b>3.6</b>	<b>7.1</b>

Source: ECB.

Notes: MFI sector including the Eurosystem; sectoral classification based on the ESA 95.

For further details, see the relevant technical notes.

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

2) As defined in the ESA 95.

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

**Table 4 Securities issued by euro area residents**

Issuing sector	Amount outstanding (EUR billions) 2010 October	Annual growth rates <sup>1)</sup>					
		2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 September	2010 October
<b>Debt securities</b>	<b>15,784</b>	<b>9.9</b>	<b>6.5</b>	<b>4.7</b>	<b>3.4</b>	<b>3.1</b>	<b>3.2</b>
MFIs	5,267	2.9	1.6	0.5	-0.5	-0.3	0.1
Non-monetary financial corporations	3,229	19.5	7.6	2.9	0.8	0.6	0.4
Non-financial corporations	853	16.5	14.8	15.1	10.3	8.7	8.5
General government	6,436	12.7	9.9	8.3	7.6	6.9	6.8
<i>of which:</i>							
Central government	5,995	12.9	9.9	8.1	7.1	6.2	6.2
Other general government	441	10.5	10.5	11.4	15.3	16.6	16.0
<b>Quoted shares</b>	<b>4,530</b>	<b>2.8</b>	<b>2.9</b>	<b>2.5</b>	<b>1.8</b>	<b>1.7</b>	<b>1.8</b>
MFIs	514	8.9	8.3	6.6	5.2	5.1	7.3
Non-monetary financial corporations	332	2.7	5.4	5.2	4.2	4.0	4.0
Non-financial corporations	3,683	1.9	1.9	1.5	1.0	0.9	0.8

Source: ECB.

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

As regards the maturity structure, the annual rate of increase in issuance of long-term fixed rate debt securities continued along the downward trend recorded over the past year, standing below 7.0% in October. The annual growth rate of long-term floating rate debt securities issuance edged up to -0.5% in October. Similarly, the annual rate of growth in issuance of short-term debt securities, although likewise remaining negative as was the case over the past year, rose by one percentage point in comparison with September to stand at -3.9% in October.

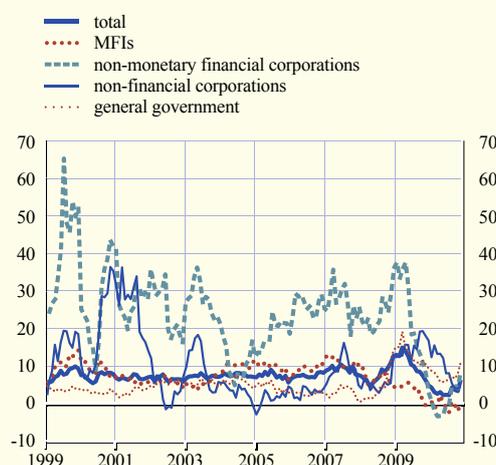
From a sectoral perspective, debt issuance by non-financial corporations and the general government continued to moderate somewhat from the high levels recorded in the recent past. In October the annual increase in debt securities issued by non-financial corporations in the euro area declined marginally to 8.5%; the drop in net issuance of long-term debt securities was partially offset by the rise in net short-term issuance. The ongoing moderation in debt securities issuance by non-financial corporations may partly reflect the normalisation of demand for bank loans observed in recent months.

Public borrowing remained robust in October. The annual growth of debt securities issued by the general government sector declined only marginally to 6.8% in October, from 6.9% in the previous month. High debt issuance activity on the part of the general government sector means that public sector funding needs remain high in the euro area.

Turning to the financial sector, the data available show that the stock of MFIs' market debt has remained almost unchanged on an annual basis in comparison with September, following the

**Chart 9 Sectoral breakdown of debt securities issued by euro area residents**

(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

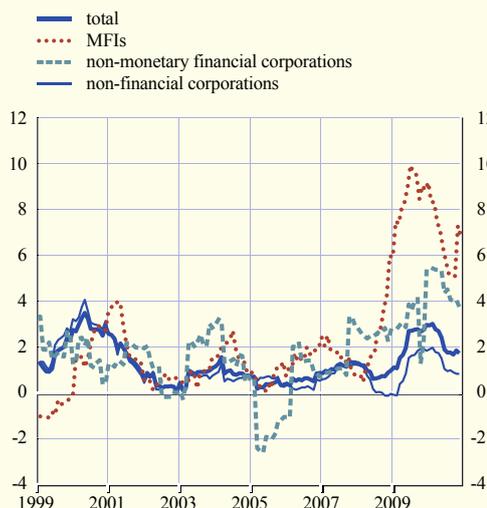
contraction recorded since May. Finally, the annual growth rate of debt securities issued by non-monetary financial corporations declined from 0.6% in September to 0.4% in October.

### QUOTED SHARES

The annual growth rate of all quoted shares issued by euro area residents increased to around 1.9% in October, from 1.7% in the previous month, primarily on account of buoyant equity issuance by MFIs (see Chart 10). Indeed, compared with September, the annual rate of increase in equity issuance by MFIs rose by more than two percentage points to reach 7.3% in October. Robust equity issuance by MFIs reflects the ongoing efforts of many euro area banks to strengthen their balance sheets by replenishing their capital bases. At the same time, the annual growth of quoted shares issued by non-financial and non-monetary financial corporations remained broadly unchanged at 0.8% and 4.0% respectively.

Chart 10 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.

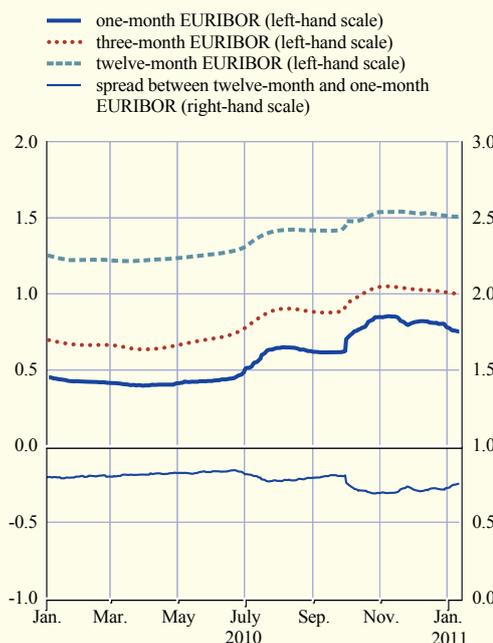
### 2.3 MONEY MARKET INTEREST RATES

Money market rates declined slightly between early December 2010 and early January 2011, but remained relatively high by comparison with the levels seen in 2010. The maintenance period starting on 8 December 2010 saw the EONIA continue its pattern of standing at a higher level at the beginning of the period, before gradually decreasing towards the end.

Unsecured money market interest rates declined slightly between early December 2010 and early January 2011, while remaining relatively stable over this period. On 12 January the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.75%, 1.00%, 1.23% and 1.51% respectively – i.e. around 6, 3, 3 and 2 basis points lower than the levels observed on 1 December. As a result, the spread between the twelve-month and one-month EURIBOR – an indicator of the slope of the money market yield curve – increased by around 4 basis points over that period (see Chart 11).

Chart 11 Money market interest rates

(percentages per annum; spread in percentage points; daily data)



Sources: ECB and Reuters.

Between 1 December and 12 January the money market rate derived from the three-month EONIA swap index decreased by more than the corresponding unsecured rate. The three-month EONIA swap rate stood at 0.63% on 12 January, around 7 basis points lower than on 1 December. As a result, the spread between this money market rate and the corresponding unsecured EURIBOR increased to around 37 basis points on 12 January, around 4 basis points higher than on 1 December.

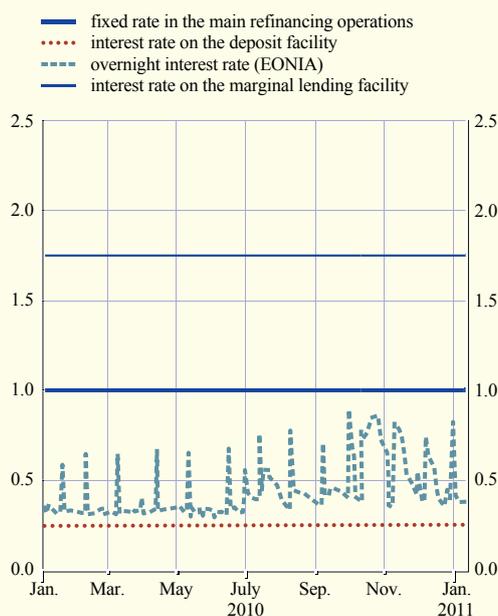
The interest rates implied by the prices of three-month EURIBOR futures maturing in March, June, September and December 2011 stood at 1.08%, 1.22%, 1.36% and 1.52% respectively on 12 January, representing declines of around 7 and 2 basis points for the first two contracts and increases of 3 and 7 basis points for the last two by comparison with the levels observed on 1 December. This implies a steepening of the forward curve.

The behaviour of the EONIA during the 12th maintenance period of the year, starting on 8 December, was similar to that observed in the previous two maintenance periods, with the EONIA settling at higher levels early in the maintenance period, before gradually declining towards the end of the period. This pattern is driven by market participants' desire to frontload liquidity and has become more apparent since the second one-year longer-term refinancing operation (LTRO) matured at end-September 2010, with excess liquidity decreasing. More precisely, the EONIA increased from 0.47% on 1 December to 0.74% at the start of the maintenance period on 8 December, before gradually decreasing to stand at 0.38% on 12 January (with the maintenance period ending on 18 January). On 31 December this pattern was interrupted by a temporary jump to 0.82% owing to an end-of-year effect (see Chart 12).

In the main refinancing operations conducted on 7, 14, 21 and 28 December 2010 and 4 and 11 January 2011, the ECB allotted €197.3 billion, €187.8 billion, €193.5 billion, €227.9 billion, €195.7 billion and €180.1 billion respectively. The ECB also conducted two LTROs in December, both as fixed rate tender procedures with full allotment: a special-term operation on 7 December with a maturity of one maintenance period (in which €68.1 billion was allotted), and a three-month LTRO on 22 December (in which €149.5 billion was allotted). In addition, the ECB conducted a fine-tuning operation on 22 December in the form of a 13-day bridging operation, in which €20.6 billion was allotted. Furthermore, the ECB conducted six one-week liquidity-absorbing operations on 7, 14, 21 and 28 December and 4 and 11 January as variable rate tender procedures with a maximum bid rate of 1.00%. In the last of these operations, the ECB absorbed €74 billion, which corresponded to the value of purchases under the Securities Markets Programme, taking into account transactions up to and including 7 January.

**Chart 12 ECB interest rates and the overnight interest rate**

(percentages per annum; daily data)



Sources: ECB and Reuters.

In line with the somewhat higher levels of excess liquidity during the most recent maintenance period, average daily recourse to the deposit facility increased to €61.6 billion in the period from 8 December to 12 January, up from the €44.7 billion observed in the previous maintenance period.

## 2.4 BOND MARKETS

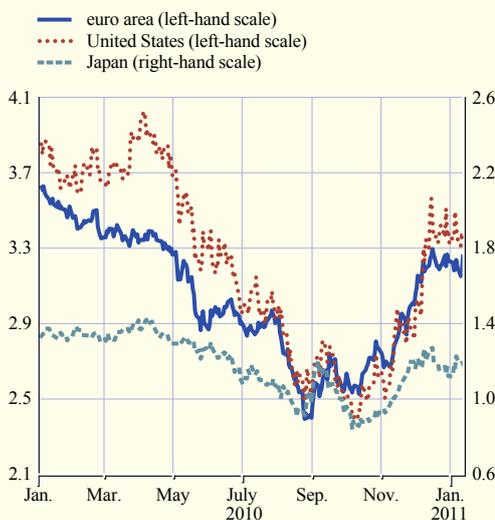
*In the course of December 2010 and early January 2011, the yields on AAA-rated long-term euro area government bonds and on long-term US government bonds increased as a result of both positive economic news and policy announcements in the United States. Intra-euro area sovereign bond yield spreads narrowed slightly across all euro area countries except Greece. However, strains in euro area sovereign debt markets remained high in December, and were not confined only to Greece, Ireland and Portugal. Data on long-term break-even inflation rates in December point towards a slight increase in market participants' inflation expectations (and related premia) over longer horizons. Implied bond market volatility remained at somewhat elevated levels on both sides of the Atlantic.*

Compared with levels at the end of November, AAA-rated long-term euro area government bond yields rose by 30 basis points standing at 3.3% on 12 January 2011, and thus continued the upward trend initiated in September 2010. In the United States, long-term bond yields increased by 60 basis points over the same period, standing at 3.4% on 12 January (see Chart 13). Consequently, the nominal interest rate differential between ten-year government bonds in the United States and the euro area turned positive, rising from -20 basis points at the end of November to about 10 basis points on 12 January. In Japan, ten-year government bond yields remained broadly unchanged at 1.2% on that date. Implied volatility in both markets, however, remained significantly higher than at the end of 2009 and at levels similar to those recorded during the financial market turmoil of early May 2010. Other indicators of tensions in the bond markets, such as estimates of the liquidity premia priced into high-volume and safe euro area bonds, show that the demand for safe and liquid bonds increased in December, but remained lower than during the flight-to-liquidity episodes recorded in May 2010.

Developments in AAA-rated long-term euro area bond yields have been driven primarily by positive macroeconomic releases showing that the euro area recovery remains well in place. In the United States, economic data releases drove market developments to a lesser extent, with a series of policy announcements proving to be the main driving force behind developments in yields. In particular, the tax plan announced by the Obama Administration at the beginning of December consisted mainly of a prolongation of tax exemptions introduced by

Chart 13 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.

the Bush Administration and an extension of unemployment insurance benefits. The impact of such policies on economic activity is expected to be positive, but the increase in yields may also reflect a deterioration of the long-term US debt outlook.

In December and early January, euro area countries' ten-year government bond yield spreads vis-à-vis their German counterpart narrowed somewhat across all euro area countries except Greece. However, strains in euro area sovereign debt markets remained high in December and – as in November – were not confined to only Greece, Ireland and Portugal. Tensions were also visible in other euro area countries such as Spain, Italy and Belgium. The slight narrowing of the spreads is attributed by market participants to the increased activity associated with the ECB's Securities Market Programme. Information from the markets for credit default swaps (CDSs) continued to point to tensions in euro area sovereign debt markets. As a result of these tensions, euro area CDSs currently stand 20 basis points higher than the average CDS of EU countries in eastern Europe.

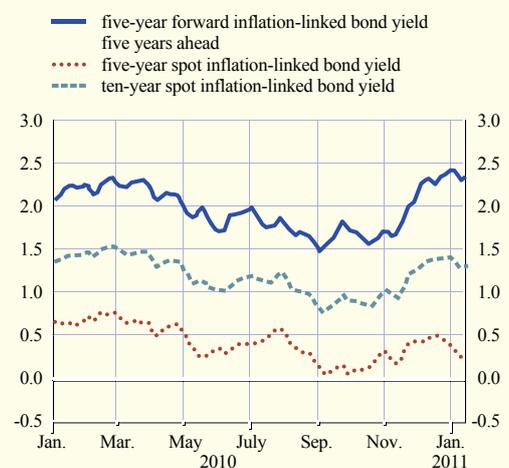
Following the announcement of the aid package for Ireland and the agreement reached on the establishment of a permanent European Stability Mechanism at the end of November, euro area countries' ten-year government bond yield spreads vis-à-vis Germany narrowed somewhat. This decline in ten-year bond spreads was not offset by rating agencies' downgrade of Ireland in early December, suggesting that this downgrade had already been priced into Irish long-term bond yields. However, in the second half of December, the announcement that Portugal's rating was being placed under review and the publication of an IMF report suggesting not only that Ireland might miss the targets set for the reduction of its deficit, but also that the risk of contagion spreading from Ireland was significant caught markets' attention. As a result, the decline in ten-year bond yield spreads of early December was mostly reversed. Sovereign bond spreads vis-à-vis Germany tightened in early January, after market reports that the Eurosystem was actively buying in these markets.

Yields on ten-year inflation-linked euro area government bonds remained broadly unchanged in December, while real yields on corresponding five-year bonds declined by 10 basis points (see Chart 14). On 12 January, real five and ten-year spot yields were 0.3% and 1.4% respectively. Having reached historically low values at the end of the third quarter of 2010, real yields in the euro area showed a sustained upward trend on the back of improving economic data for most of the fourth quarter of 2010.

In the period under review, implied forward break-even inflation rates (five-year forward five years ahead) in the euro area increased by around 20 basis points to stand at 2.2% on 12 January (see Chart 15). This suggests a slight increase in market participants' inflation expectations (and related premia) over longer horizons.

**Chart 14 Euro area zero coupon inflation-linked bond yields**

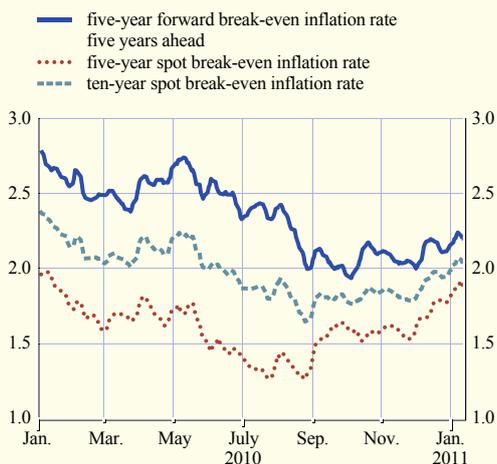
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Reuters and ECB calculations.

**Chart 15 Euro area zero coupon break-even inflation rates**

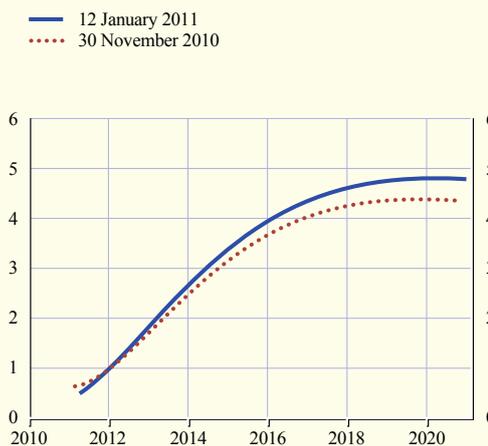
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Reuters and ECB calculations.

**Chart 16 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.

The development of the term structure of short-term forward rates in the euro area shows how the overall behaviour of long-term euro area bond yields can be decomposed into changes in interest rate expectations (and related risk premia) at different horizons (see Chart 16). The increased level of long-term bond yields in comparison with that at the end of November, which is most likely due to improving economic conditions, has shifted the term structure of short-term forward rates upwards by 50 basis points for horizons beyond three years' maturity.

Investment-grade corporate bond spreads rose slightly in December and early January, for most rating classes of debt issued by both financial and non-financial corporations. The increase was highest for BBB-rated debt issued by financial corporations. At the euro area level, current spreads remained well below the peaks reached in May 2010 and were slightly lower than those recorded at the beginning of 2010. Once again, issuance activity of both financial and non-financial corporations remained dynamic at the euro area level in December. However, spreads on bonds issued by financial corporations in Greece, Ireland and Portugal currently stand at levels well above those recorded during the turmoil of early May 2010, and issuance activity in those countries remains subdued.

## 2.5 INTEREST RATES ON LOANS AND DEPOSITS

*In November 2010 most MFI lending rates for non-financial corporations continued to rise, both for short and for long maturities, in line with developments in market interest rates. Most MFI lending rates for households increased slightly in the case of short maturities, but remained broadly unchanged for long maturities.*

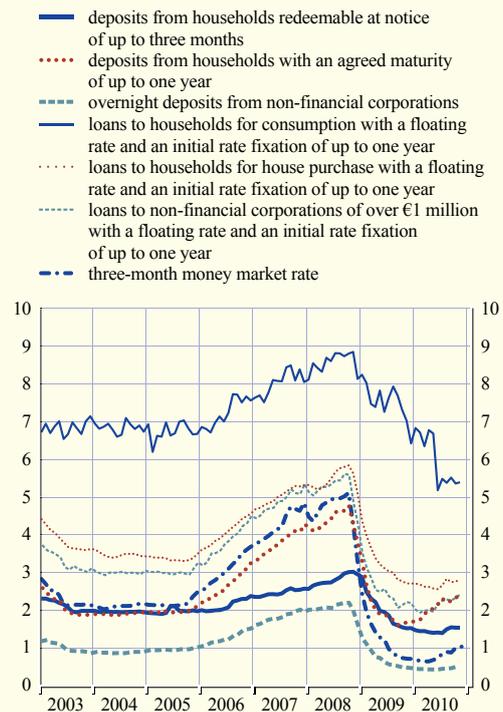
In November 2010 the vast majority of short-term MFI interest rates on deposits remained broadly unchanged for both households and non-financial corporations. Most short-term rates on loans to households and non-financial corporations increased somewhat (see Chart 17). More precisely, short-term interest rates on loans to households for house purchase rose slightly to 2.8%, while the more volatile rates on consumer credit remained stable at around 5.4%. By contrast, average rates on overdrafts extended to households declined marginally to 8.6%. As regards non-financial corporations, banks' short-term rates on both small loans (i.e. loans up to €1 million) and large loans (i.e. loans of more than €1 million) increased by around 10 basis points to stand at 3.5% and 2.4% respectively. Interest rates on overdrafts remained broadly unchanged at 3.8%. With the EURIBOR increasing slightly by 4 basis points in November 2010, the spread between short-term MFI lending rates and the three-month money market rate remained constant for loans to households for house purchase, while it rose marginally for loans to non-financial corporations (see Chart 18).

From a longer-term perspective, between end-September 2008 (i.e. immediately prior to the beginning of the cycle of monetary policy easing in the wake of the bankruptcy of Lehman Brothers) and end-November 2010, short-term rates on both loans to households for house purchase and loans to non-financial corporations decreased by 300 and 320 basis points respectively. This compares with a decline of 400 basis points in the three-month EURIBOR and indicates a significant pass-through of market rate changes to bank lending rates. The overall tendency of the short-term lending rates on loans to households and non-financial corporations to rise, as exhibited over the last few months, appears to indicate that the gradual pass-through of past reductions in key ECB interest rates has come to an end.

Turning to longer maturities, MFI interest rates on long-term deposits declined for both households and non-financial corporations. By contrast, interest rates on longer-term loans to non-financial corporations continued to rise, while those on loans to households for house purchase remained broadly stable (see Chart 19). Specifically, at 3.8%, the rates on loans to households for house purchase with an initial rate fixation period of over five and up to ten years were broadly unchanged around all-time lows. As regards non-financial corporations, the average rates for small-sized loans with an initial rate fixation period of over one and up to five years and those with an initial rate fixation period of over five years increased somewhat to 4.3% and 3.8% respectively. The average rates on large loans with both medium and long-term rate fixation periods increased by around 10 basis points to stand at 3.0% and 3.6% respectively.

**Chart 17 Short-term MFI interest rates and a short-term market rate**

(percentages per annum; rates on new business)



Source: ECB.

Note: Data as of June 2010 may not be fully comparable with those prior to that date owing to methodological changes arising from the implementation of Regulations ECB/2008/32 and ECB/2009/7 (amending Regulation ECB/2001/18).

**Chart 18 Spreads of short-term MFI interest rates vis-à-vis the three-month money market rate**

(percentage points; rates on new business)

- loans to non-financial corporations of over €1 million with a floating rate and an initial rate fixation of up to one year
- ..... loans to households for house purchase with a floating rate and an initial rate fixation of up to one year
- - - deposits from households with an agreed maturity of up to one year



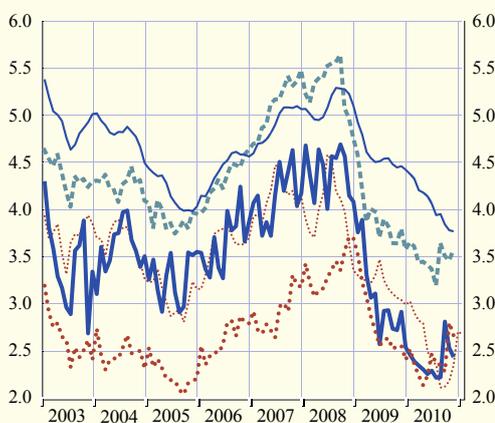
Source: ECB.

Notes: For the loans, the spreads are calculated as the lending rate minus the three-month money market rate. For the deposits, the spread is calculated as the three-month money market rate minus the deposit rate. Data as of June 2010 may not be fully comparable with those prior to that date owing to methodological changes arising from the implementation of Regulations ECB/2008/32 and ECB/2009/7 (amending Regulation ECB/2001/18).

**Chart 19 Long-term MFI interest rates and a long-term market rate**

(percentages per annum; rates on new business)

- deposits from non-financial corporations with an agreed maturity of over two years
- ..... deposits from households with an agreed maturity of over two years
- - - loans to non-financial corporations of over €1 million with an initial rate fixation of over five years
- loans to households for house purchase with an initial rate fixation of over five and up to ten years
- ..... seven-year government bond yield



Source: ECB.

Note: Data as of June 2010 may not be fully comparable with those prior to that date owing to methodological changes arising from the implementation of Regulations ECB/2008/32 and ECB/2009/7 (amending Regulation ECB/2001/18).

Viewed from a longer-term perspective, since September 2008, euro area banks have adjusted their rates on long-term loans to non-financial corporations more or less in line with the decline in AAA-rated long-term government bond yields. Over the same period, long-term rates on loans to households have not fallen by as much, reflecting a more incomplete and sluggish pass-through for households. In recent months longer-term interest rates for loans to households have continued to decline, and their spread vis-à-vis AAA-rated long-term government bond yields has been receding since August. On the other hand, long-term interest rates on loans to non-financial corporations have been on an upward trend over recent months, with a resulting widening of their spread vis-à-vis long-term government bond yields.

With interest rates on deposits broadly unchanged and the vast majority of bank lending rates increasing somewhat, the loan-deposit margins on new loans edged up slightly in November 2010. Average margins on outstanding amounts, after declining gradually from the level recorded at the beginning of 2010, have stabilised in recent months around levels broadly similar to those recorded in the corresponding period of 2009. Relatively stable margins will contribute positively to the net interest income and profitability of euro area banks.

## 2.6 EQUITY MARKETS

*Between the end of November 2010 and early January 2011, stock prices in the euro area and the United States increased by 8.0% and 8.3% respectively. These increases were supported by broadly positive economic news on both sides of the Atlantic. At the same time, stock market uncertainty, as measured by implied volatility, generally decreased only slightly. Listed euro area companies recorded strong earnings growth, which was evenly spread across all sectors.*

In the course of December 2010 and early January 2011, global stock prices increased markedly. Overall, euro area stock prices, as measured by the broad-based Dow Jones EURO STOXX index, rose by 8.0%, while the Standard and Poor's 500 index in the United States was up by 8.3% between the end of November and 12 January (see Chart 20). Over the same period, stock prices in Japan, as measured by the Nikkei 225 index, rose by 3.8%.

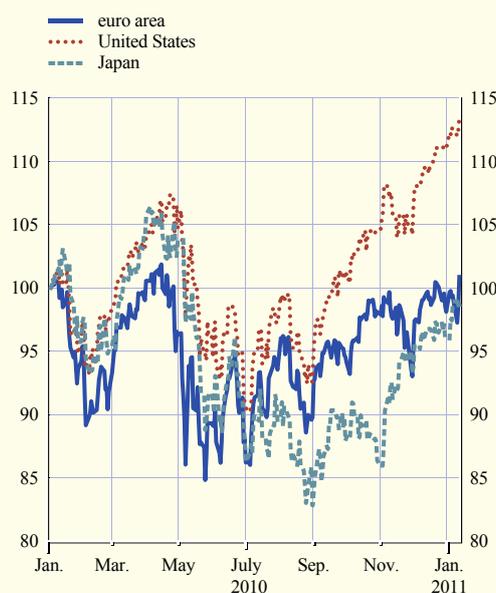
Developments in euro area equity markets were driven, on the one hand, by generally positive economic data and better than expected earnings announcements and, on the other, by the tensions in euro area sovereign debt markets, which remained very high in December and at levels similar to those of early May 2010. Contrary to developments in early May 2010, the recent re-intensification of tensions in sovereign debt markets has not triggered strong flight-to-liquidity behaviour on the part of investors, suggesting that concerns about the economic outlook may largely have dissipated at the euro area level.

In both the euro area and the United States, stock market uncertainty, as measured by implied volatility, declined throughout most of December from the high levels recorded after the intensification of tensions in some euro area sovereign debt markets in November, but edged up again towards the end of the month. This notwithstanding, stock market volatility ended the period under review 6 percentage points lower in the euro area and 4 percentage points lower in the United States (see Chart 21). Despite the re-intensification of tensions in sovereign debt markets in the last months of 2010, the volatility of stock markets remains well below the levels recorded in May.

Stock prices indices in the euro area increased across all sectors in December. Euro area financial stock prices rose by 7.2%, thus partly reversing the decline recorded in earlier months. Euro area non-financial stock prices have meanwhile continued the positive trend displayed for most of the second half of 2010. Developments in stock market prices in December were positive across all

Chart 20 Stock price indices

(index: 1 January 2010 = 100; daily data)

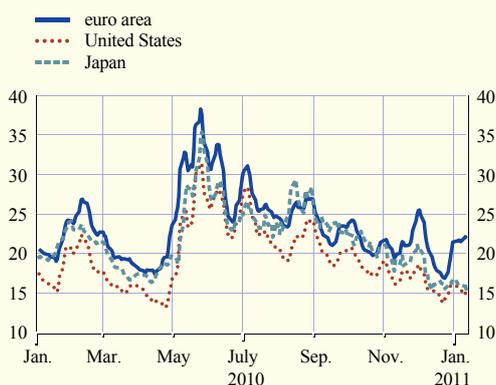


Sources: Reuters and Thomson Financial Datastream.

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

Chart 21 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.

countries, albeit with more moderate gains in Greece and Ireland, where sovereign debt tensions remained high. Developments in US stock prices were also positive across all sectors.

The development in both actual and expected earnings provided an overall positive picture of the profitability of listed companies in the euro area. The growth of actual annual earnings per share of the firms listed on the Dow Jones EURO STOXX index was 35% in December, after 31% in November. Earnings-per-share growth 12 months ahead is likewise forecast to be relatively strong at 16%. At the sectoral level, the annual growth of earnings per share in both the financial and the industrial sectors was strong in December, at around 30%. Overall, earnings growth was high in December. Reported earnings were also slightly better than expected by market participants.

## 3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation rose to 2.2% in December 2010, from 1.9% in each of the previous two months. This increase was somewhat higher than expected and largely reflects higher energy prices. Looking ahead to the next few months, HICP inflation rates could temporarily increase further. They are likely to stay slightly above 2%, largely owing to commodity price developments, before moderating again towards the end of the year. While price developments are expected to remain in line with price stability over the policy-relevant horizon, very close monitoring of price developments is warranted. Risks to the medium-term outlook for price developments are still broadly balanced, but could move to the upside.

### 3.1 CONSUMER PRICES

According to Eurostat's flash estimate, the euro area annual HICP inflation rate increased to 2.2% in December 2010, up from 1.9% in the previous two months (see Table 5). Official estimates of the breakdown of HICP inflation in December are not yet available, but it appears that the increase was related mostly to the energy component. Oil prices increased to €70 per barrel in December, from about €60 in previous months.

In November, the last month for which an official breakdown is available, the annual rate of overall HICP inflation was 1.9%, which was unchanged compared with October (see Chart 22). The stability of the overall HICP inflation rate in November was the outcome of a lower annual rate of change in the energy component and slightly higher inflation rates in the other components, with the exception of services price inflation.

The annual rate of change in energy prices declined in November, reflecting in part lower liquid fuel and transport energy prices in annual terms. This decline was due to a downward base effect, which more than compensated for the 0.8% month-on-month increase in energy prices brought about by rising oil prices.

The annual growth rate of total food prices (including alcohol and tobacco) increased somewhat further to stand at 1.8% in November, marginally higher than in October. As for the sub-components,

**Table 5 Price developments**

(annual percentage changes, unless otherwise indicated)

	2009	2010	2010 July	2010 Aug.	2010 Sep.	2010 Oct.	2010 Nov.	2010 Dec.
<b>HICP and its components</b>								
Overall index <sup>1)</sup>	0.3	.	1.7	1.6	1.8	1.9	1.9	2.2
Energy	-8.1	.	8.1	6.1	7.7	8.5	7.9	.
Unprocessed food	0.2	.	1.9	2.4	2.5	2.4	2.7	.
Processed food	1.1	.	0.9	1.0	1.0	1.2	1.3	.
Non-energy industrial goods	0.6	.	0.5	0.4	0.6	0.7	0.8	.
Services	2.0	.	1.4	1.4	1.4	1.4	1.3	.
<b>Other price indicators</b>								
Industrial producer prices	-5.1	.	4.0	3.6	4.3	4.4	4.5	.
Oil prices (EUR per barrel)	44.6	60.7	58.9	59.9	59.8	60.2	63.1	69.6
Non-energy commodity prices	-18.5	44.6	52.5	47.6	54.7	47.5	48.1	49.4

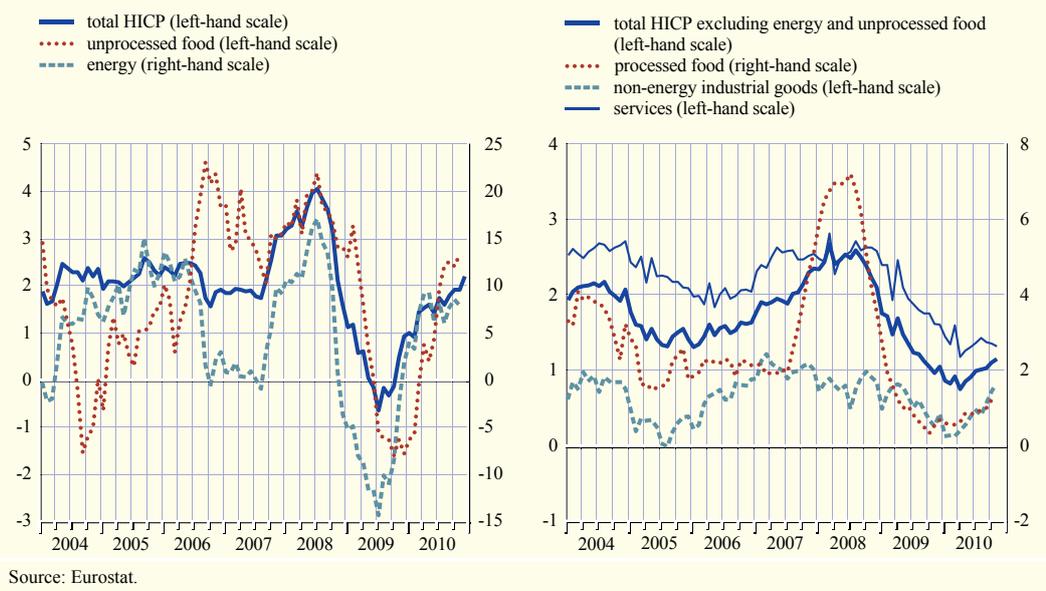
Sources: Eurostat, ECB and ECB calculations based on Thomson Financial Datastream data.

Note: The non-energy commodity price index is weighted according to the structure of euro area imports in the period 2004-06.

1) HICP inflation in December 2010 refers to Eurostat's flash estimate.

Chart 22 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



the rate of growth in unprocessed food prices increased to 2.7%, from around 2.4% in previous months, mainly owing to higher prices for meat and vegetables. This is the highest annual inflation rate for unprocessed food since March 2009. The year-on-year change in the prices of processed food edged up further to 1.3%. Part of this increase can be explained by the strong growth in tobacco prices over this period, which in turn relates to increases in tobacco taxes in some euro area countries. The annual rate of change in processed food prices excluding tobacco, which should be mostly affected by food commodity price fluctuations, was 0.4% in November, well below the average of 1.8% since 1999. So far, it thus appears that the impact of higher food commodity prices (see Box 1) has hardly been transmitted to consumers in the euro area.

Excluding all food and energy items, which represent around 30% of the HICP basket, annual HICP inflation stood at 1.1% in November, unchanged from the previous month. Of the two components of HICP inflation excluding food and energy, non-energy industrial goods price inflation recorded a further small increase to 0.8%, the highest annual growth rate since June 2009. This increase was largely driven by developments in Germany, where non-energy goods price inflation increased substantially in November, mainly owing to stronger clothing price developments. In contrast, services price inflation declined marginally, but remained in the range of 1.3-1.4% observed during most of 2010.

Box 4 presents the inflation differentials in the euro area since the introduction of the euro. It discusses the main determinants of these differentials and the related challenges that need to be addressed in the future.

**Box 4**
**DETERMINANTS OF INFLATION DIFFERENTIALS IN THE EURO AREA**

Following the sharp and rapid narrowing of inflation differentials in the run-up to the start of Stage Three of EMU in 1999, inflation differentials across the euro area countries have been relatively large in the last decade, but not significantly larger than those seen in other monetary unions. When conducting monetary policy, it is important for the ECB to take into account regional and sectoral information on the source and nature of economic shocks, as well as to monitor and understand the underlying reasons for inflation differentials, even though it formulates its policy with a view to maintaining price stability for the euro area as a whole. This box discusses the main determinants of inflation differentials in the euro area since the introduction of the euro and the related challenges that need to be addressed in the future.

The table shows the annual inflation rates for the euro area countries since 1999. Three main observations can be made. First, at 1.97% on average over the period, the euro area inflation rate has been very close to the ECB's objective of keeping inflation rates below, but close to, 2% over the medium term. Second, in some countries, inflation rates have almost continuously exceeded

**Inflation rates in the euro area**

(annual percentage changes; 1999-2010)

	<b>Euro area</b>	<b>BE</b>	<b>DE</b>	<b>IE</b>	<b>GR</b>	<b>ES</b>	<b>FR</b>	<b>IT</b>	<b>CY</b>
1999	1.1	1.1	0.6	2.5	<i>2.1</i>	2.2	0.6	1.7	<i>1.1</i>
2000	2.1	2.7	1.4	5.3	<i>2.9</i>	3.5	1.8	2.6	<i>4.9</i>
2001	2.3	2.4	1.9	4.0	<i>3.7</i>	2.8	1.8	2.3	<i>2.0</i>
2002	2.2	1.6	1.4	4.7	<i>3.9</i>	3.6	1.9	2.6	<i>2.8</i>
2003	2.1	1.5	1.0	4.0	<i>3.4</i>	3.1	2.2	2.8	<i>4.0</i>
2004	2.1	1.9	1.8	2.3	<i>3.0</i>	3.1	2.3	2.3	<i>1.9</i>
2005	2.2	2.5	1.9	2.2	<i>3.5</i>	3.4	1.9	2.2	<i>2.0</i>
2006	2.2	2.3	1.8	2.7	<i>3.3</i>	3.6	1.9	2.2	<i>2.2</i>
2007	2.1	1.8	2.3	2.9	<i>3.0</i>	2.8	1.6	2.0	<i>2.2</i>
2008	3.3	4.5	2.8	3.1	<i>4.2</i>	4.1	3.2	3.5	<i>4.4</i>
2009	0.3	0.0	0.2	-1.7	<i>1.3</i>	-0.2	0.1	0.8	<i>0.2</i>
2010	1.5	2.2	1.1	-1.7	<i>4.7</i>	1.7	1.7	1.6	<i>2.6</i>
<b>Average</b>	<b>2.0</b>	<b>2.0</b>	<b>1.5</b>	<b>2.5</b>	<b>3.4</b>	<b>2.8</b>	<b>1.7</b>	<b>2.2</b>	<b>2.4</b>
	<b>LU</b>	<b>MT</b>	<b>NL</b>	<b>AT</b>	<b>PT</b>	<b>SI</b>	<b>SK</b>	<b>FI</b>	<b>Standard deviation</b>
1999	1.0	2.3	2.0	0.5	2.2	<i>6.1</i>	<i>10.4</i>	1.3	0.7
2000	3.8	<i>3.0</i>	2.3	2.0	2.8	<i>8.9</i>	<i>12.2</i>	2.9	1.1
2001	2.4	2.5	5.1	2.3	4.4	<i>8.6</i>	7.2	2.7	1.1
2002	2.1	2.6	3.9	1.7	3.7	<i>7.5</i>	3.5	2.0	1.1
2003	2.5	<i>1.9</i>	2.2	1.3	3.3	<i>5.7</i>	<i>8.4</i>	1.3	1.0
2004	3.2	2.7	1.4	2.0	2.5	3.7	7.5	0.1	0.8
2005	3.8	2.5	1.5	2.1	2.1	2.5	2.8	0.8	0.9
2006	3.0	2.6	1.7	1.7	3.0	2.5	4.3	1.3	0.7
2007	2.7	<i>0.7</i>	1.6	2.2	2.4	3.8	<i>1.9</i>	1.6	0.7
2008	4.1	4.7	2.2	3.2	2.7	5.5	3.9	3.9	0.9
2009	0.0	1.8	1.0	0.4	-0.9	0.9	0.9	1.6	0.9
2010	2.8	1.9	0.8	1.6	1.3	2.1	0.6	1.6	1.3
<b>Average</b>	<b>2.6</b>	<b>2.8</b>	<b>2.1</b>	<b>1.7</b>	<b>2.5</b>	<b>3.1</b>	<b>0.8</b>	<b>1.8</b>	

Notes: Standard deviation is calculated as the unweighted standard deviation of euro area countries' annual inflation rates. For 2010, the calculations are based on data available to November. The numbers in italics indicate the data for years before the country joined the euro area. The averages are calculated for the period since the country joined the euro area.

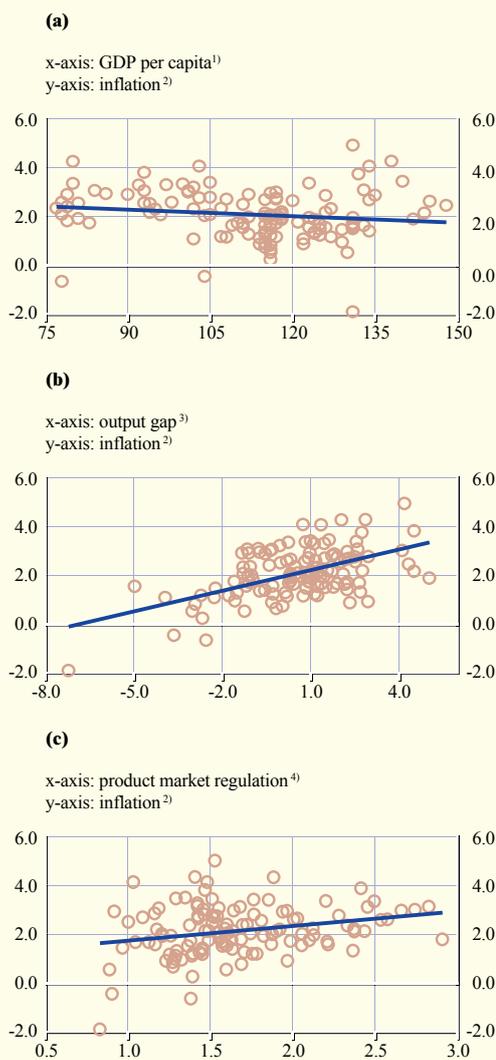
the euro area average and other countries have experienced prolonged periods of below average inflation. Third, inflation differentials have increased markedly since 2010, mainly as a result of measures undertaken by some countries to help restore their competitiveness and to consolidate their public finances. For instance, wage cuts and indirect tax increases in some euro area countries have caused their inflation rates to deviate significantly from the euro area average.<sup>1</sup>

The inflation dispersion over the past decade can in theory be attributed to various factors, including price convergence as a result of the economic catching-up process in some countries and cross-country differences in business cycles. The relationship between these factors and the annual inflation rates across euro area countries between 1999 and 2009 is shown in panels (a) and (b) of the chart.

Regarding price convergence as a result of the economic catching-up process, economic theory suggests that a country's average price level tends to be correlated with its level of economic development: the prices of both tradable and non-tradable goods and services tend to be lower in countries with lower per capita GDP, and vice versa. As income in the relatively less prosperous countries converges towards that of the relatively more prosperous ones, higher price rises in the catching-up countries are to be expected. Panel (a) of the chart points to a negative link between the euro area countries' inflation rates and their income level per capita. However, this link appears to be rather weak, indicating that catching-up phenomena have only played a minor role in explaining the inflation differentials in the euro area.

With regard to the differences in cyclical positions across countries, fluctuations in

### Determinants of euro area inflation between 1999 and 2009



Sources: AMECO database; Eurostat; OECD; World Bank's World Development Indicators; Conway, P., Janod, V. and Nicoletti, G. (2005); and ECB calculations.

1) GDP per capita in purchasing power standards, relative to the EU27 average.

2) Euro area countries' annual HICP inflation net of contributions from indirect taxes and administered prices, expressed as annual percentages.

3) The output gap is defined as actual GDP divided by potential GDP. Potential GDP is calculated from a Cobb-Douglas production function that includes labour, capital and trend total factor productivity.

4) Summary indicator on a scale from 0 (least restricted) to 6 (most restricted).

1 In this context it is notable that there is a high correlation between movements in the HICP and developments in unit labour costs across countries.

aggregate demand are known to explain a substantial part of inflation developments and inflation differentials in the euro area.<sup>2</sup> Inflationary pressures stemming from fluctuations in demand are usually linked to the output gap, which is defined as the deviation of actual output from its equilibrium level. The link between output gap and inflation developments is known as the Phillips curve. In panel (b) of the chart, the output gap is measured as a percentage of potential GDP at market prices, estimated by the European Commission using a Cobb-Douglas production function that includes trend total factor productivity. The chart shows that low inflation rates tend to be associated with negative output gaps, as actual output is below its potential, with the economy moving along a short-run Phillips curve.<sup>3</sup> In this context, it is important to note that the cyclical differences in inflation observed over the past decade stemmed partly from the fact that fiscal, macro-prudential and structural policies did not live up to the requirements of a monetary union in all countries. In some countries, the conduct of fiscal policy was quite often too loose and not in line with the Stability and Growth Pact. Furthermore, inflationary pressures were stoked by rigidities in labour and product markets. Moreover, unsustainable and over-optimistic expectations regarding growth prospects in certain countries spurred a boom in asset and real estate prices. Thus, as a result of excessive growth in domestic demand, national prices and costs increased more than the euro area average in these countries, which resulted in losses in competitiveness.

In addition to the above-mentioned factors, labour and product market rigidities may contribute to inflation differentials. In fact, there are substantial differences among euro area countries in terms of the degree of flexibility in their labour and product markets, and these differences can affect both the generation of cost pressures and their transmission to consumer prices. There are various ways to measure the degree of regulation across countries. This box uses an index of product market regulation compiled by the OECD.<sup>4</sup> Panel (c) of the chart shows that during the period under review countries with more protected product markets (a relatively high number on the horizontal axis) had, on average, higher inflation rates than those with less protected markets (a similar relationship is also found for various indices of labour market regulation).

Quantifying the relative impact of each of these factors is challenging and requires a formal econometric framework. Nevertheless, at first glance, cyclical differences and differences in product market regulation appear to have played an important role in explaining inflation differentials in the euro area.

The experience of the past ten years can provide lessons for the future. Several countries have suffered significant losses in competitiveness in recent years owing to unsound fiscal, macroeconomic and structural policies. These problems were visible well before the financial crisis, but the crisis has dramatically exposed the consequences of countries not fully meeting their responsibilities as members of EMU. The policies that spurred over-optimistic expectations should not be repeated and it is essential that countries regain and maintain strong fiscal positions. Moreover, as discussed in this box, structural reforms could go a long way towards narrowing inflation differentials in the euro area, which in turn would enable a smoother functioning of monetary policy for the euro area as a whole. Of particular importance in this respect are the elimination of wage indexation schemes, the creation of sufficiently flexible wage-setting

2 See “Inflation differentials in the euro area: potential causes and policy implications”, ECB, September 2003.

3 See the box entitled “The links between economic activity and inflation in the euro area” in the September 2009 issue of the Monthly Bulletin.

4 See Conway, P., Janod, V. and Nicoletti, G., “Product market regulation in OECD countries: 1998 to 2003”, *OECD Economics Department Working Papers*, No 419, 2005, OECD.

mechanisms which allow for sector and region-specific wage differentiation and the strengthening of product market competition, especially in the more sheltered non-tradable sector. Introducing such reforms would have the additional benefit of narrowing the competitiveness gaps that have been exposed by the financial crisis and promoting closer economic convergence in the euro area.

### 3.2 INDUSTRIAL PRODUCER PRICES

Industrial producer price inflation (excluding construction) edged up to 4.5% in November, from 4.4% in October, after having hovered around 4% since the summer of 2010. Looking at a breakdown of industrial producer prices (see Chart 23), the annual rate of increase in the energy component remained unchanged at 8.8% as a downward base effect was offset by a month-on-month increase owing to higher oil prices. Producer price inflation excluding energy increased by 0.1 percentage point to 3.0%, driven by upward movements in the intermediate and consumer goods components, which reflected higher commodity prices. In particular, producer price inflation for consumer goods increased to 1.5% in November – the highest rate since November 2008 – mostly on account of non-durables. The increase in non-durables inflation was driven by food producer prices. The annual rate of increase of the latter – driven by the surge in food commodity prices – rose to 4.2%, from 3.4% in October. However, despite recent rises in food producer prices, their growth rates so far have remained weaker than those recorded in 2007, when double-digit food producer price inflation was recorded. The annual rate of change in producer prices for consumer goods excluding food and tobacco edged up further to 0.1%, the first

Chart 23 Breakdown of industrial producer prices

(annual percentage changes; monthly data)

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



Sources: Eurostat and ECB calculations.

Chart 24 Producer input and output price surveys

(diffusion indices; monthly data)

- manufacturing; input prices
- ... manufacturing; prices charged
- - - services; input prices
- services; prices charged



Source: Markit.

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

positive annual rate since May 2009. Notwithstanding the small increases since July this year, this measure signals still low pipeline pressures for underlying inflation.

Survey indicators up to December signal rising price pressures (see Chart 24). In December, the Purchasing Managers' Index input and output price indices for the manufacturing and services sectors increased and the composite input and output price indices were above their historical averages for the fifth month in a row. The input price index for manufacturing picked up sharply, rising from 69.0 in November to 74.1 in December, slightly above its May 2010 peak, whereas the input price index for services increased marginally compared with November. The increases in the output price indices indicate that input cost increases from higher raw material and commodity prices are, to some extent, being passed on to customers. The manufacturing output price index rose to its highest level since September 2008, whereas the services output price index rose for the first time since October 2008 to slightly above the theoretical no-change mark of 50.

### 3.3 LABOUR COST INDICATORS

Labour cost indicators for the third quarter of 2010 continued to show subdued wage pressures. Preliminary information on negotiated wages for the first month of the fourth quarter suggests that the pattern of moderate wage growth continued in the fourth quarter of 2010, in line with continuously weak labour market conditions.

The annual rate of growth in euro area negotiated wages slowed to 1.4% in the third quarter of 2010, a record low since the start of the series in 1991 (see Table 6 and Chart 25). The decline of 0.5 percentage point compared to the previous quarter related in particular to a decline in the annual growth rate of wages resulting from collective wage agreements in Germany and to a lesser extent in Italy, whereas wage growth in the other countries for which data are available changed little.

Annual hourly labour cost growth in the euro area also slowed in the third quarter of 2010, to 0.8% from 1.6% in the second quarter. This too is the lowest growth rate observed since the start of this series in 2001. Within overall euro area hourly labour costs, non-wage costs continued to grow faster than the wages and salaries component in the third quarter, but growth in both components slowed to a similar extent. The deceleration in annual hourly labour cost growth was not broad-based across countries, and some countries (e.g. Cyprus, Luxembourg, Austria and Slovakia) recorded

**Table 6 Labour cost indicators**

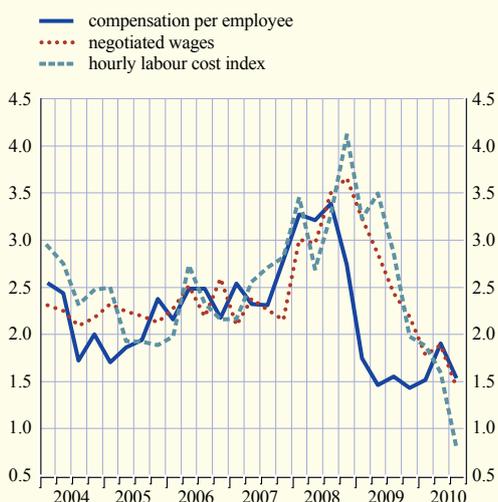
(annual percentage changes, unless otherwise indicated)

	2008	2009	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3
Negotiated wages	3.3	2.7	2.4	2.2	1.8	1.9	1.4
Hourly labour cost index	3.4	2.9	2.9	2.0	2.0	1.6	0.8
Compensation per employee	3.2	1.5	1.6	1.4	1.5	1.9	1.5
<i>Memo items:</i>							
Labour productivity	-0.3	-2.3	-1.9	0.0	2.1	2.5	2.1
Unit labour costs	3.5	3.9	3.5	1.4	-0.5	-0.6	-0.5

Sources: Eurostat, national data and ECB calculations.

Chart 25 Selected labour cost indicators

(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

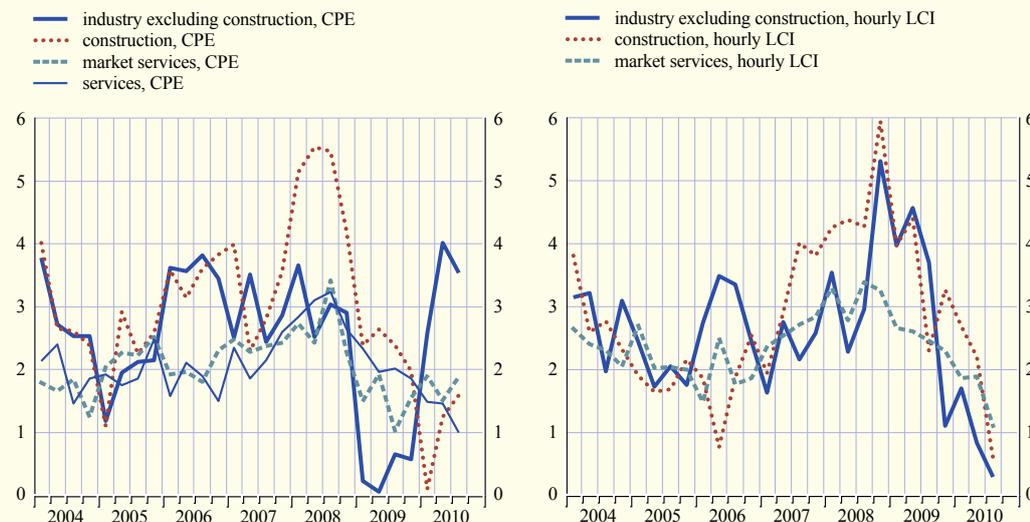
strong acceleration. The annual growth rate of compensation per employee slowed to 1.5% in the third quarter of 2010 from 1.9% in the second quarter. This decrease in the annual growth rate reflects not only a deceleration in the growth of compensation per hour, but also a similar deceleration in the growth of hours worked per employee. This decline was, with a few exceptions, broad-based across countries. Labour productivity, measured per person employed, continued to grow at a robust pace in the third quarter of 2010 (2.1%) and exceeded the growth rate of compensation per employee. This resulted in negative annual growth in unit labour costs for the third consecutive quarter.

Sectoral developments show that the deceleration in the annual rate of change in the labour cost index in the third quarter of 2010 was broad-based across sectors (see Chart 26). The decline in the growth rate was most pronounced in the construction sector. The decline in the growth

rate of compensation per employee in the third quarter came from a slowing of compensation per employee growth in services and industry excluding construction, whereas it increased somewhat in market services and construction.

Chart 26 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

In the next few months HICP inflation rates could temporarily increase a little further. They are likely to stay slightly above 2%, largely owing to commodity price developments, before moderating again towards the end of the year. Overall, there is evidence of short-term upward pressure on overall inflation, stemming largely from global commodity prices. While price developments are expected to remain in line with price stability over the policy-relevant horizon, very close monitoring of price developments is warranted. Inflation expectations over the medium to longer term continue to be firmly anchored in line with the Governing Council's aim of keeping inflation below, but close to, 2% over the medium term.

Risks to the medium-term outlook for price developments are still broadly balanced, but could move to the upside. Upside risks relate, in particular, to developments in energy and non-energy commodity prices. Furthermore, increases in indirect taxes and administered prices may be greater than currently expected, owing to the need for fiscal consolidation in the coming years, and price pressures in the production chain could rise further. On the downside, risks relate mainly to the impact on inflation of potentially lower growth, given the prevailing uncertainties.

## 4 OUTPUT, DEMAND AND THE LABOUR MARKET

Economic activity has been expanding since the middle of 2009. Following the 0.3% quarter-on-quarter increase in euro area real GDP in the third quarter of 2010, recent statistical releases and survey-based evidence confirm that the underlying positive momentum of the recovery remained in place towards the end of 2010.

Looking ahead, euro area real GDP growth is expected to be supported by the continued recovery in the world economy, with a positive effect on demand for euro area exports. In addition, and particularly taking into account the relatively high level of business confidence, private sector domestic demand should increasingly contribute to growth, supported by the accommodative monetary policy stance and the measures adopted to restore the functioning of the financial system. However, the process of balance sheet adjustment in various sectors is expected to dampen the pace of the recovery. The risks to the economic outlook are still viewed as slightly tilted to the downside, with uncertainty remaining elevated.

### 4.1 REAL GDP AND DEMAND COMPONENTS

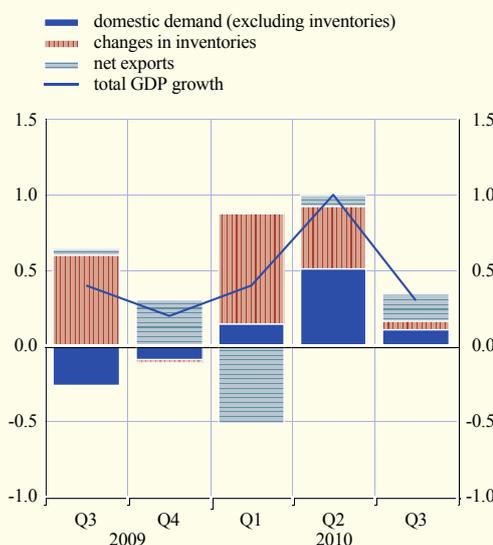
The euro area economy has been expanding at a moderate pace since the middle of 2009, following five consecutive quarters of decline in GDP. According to Eurostat's second estimate, euro area real GDP rose by 0.3%, quarter on quarter, in the third quarter of 2010, compared with a strong rise of 1.0% in the previous quarter (see Chart 27). Available indicators suggest ongoing GDP growth in the fourth quarter of 2010. This is in line with survey-based expectations (for an assessment of the forecast performance of survey-based expectations, see Box 5).

In the third quarter of 2010 real GDP growth was driven by positive contributions from net exports, domestic demand and inventories.

Turning to the components of domestic demand, private consumption increased by 0.1%, quarter on quarter, in the third quarter of 2010, somewhat less than in the three preceding quarters. Among available indicators for the fourth quarter, retail sales remained unchanged, month on month, in October and declined in November. Retail sales data up to November, together with survey data for retail sales in December, suggest that the quarterly growth rate of retail sales in the fourth quarter of 2010 could be slightly negative (see Chart 28). Consumer confidence increased in the fourth quarter of 2010 and stood at a level slightly above its long-term average in December. According to the European Commission's consumer survey, expected major purchases remained unchanged in the fourth quarter. Overall, recent information suggests that private consumption continued to grow in the fourth quarter of 2010, albeit at moderate rates and with differences between countries, partly owing to fiscal measures.

Chart 27 Real GDP growth and contributions

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



Sources: Eurostat and ECB calculations.

## THE FORECASTING PERFORMANCE OF EXPERT SURVEYS

The expectations of economic agents regarding the future development of key macroeconomic variables play a crucial role in shaping their economic decisions, such as those concerning consumption or investment, which, in turn, affect macroeconomic outcomes. Given such interdependence, it is of interest to investigate the actual predictive ability of economic agents, in particular those who conduct systematic macroeconomic analysis and produce economic forecasts as part of their business.

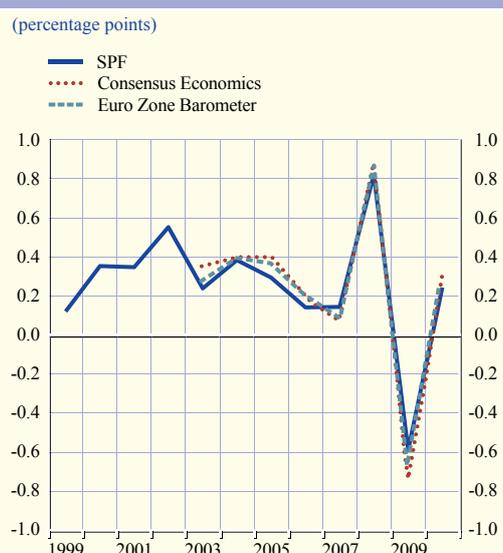
Various surveys are available that assess the expectations of private agents. Some of these surveys typically ask panels of professional forecasters, such as financial market participants or research institutes, for their forecasts of the main economic indicators for one or more countries or regions and at several time horizons. This box investigates the accuracy of forecasts for euro area inflation, GDP growth and the unemployment rate provided by three long-established surveys, namely the ECB Survey of Professional Forecasters (SPF), Consensus Economics and the Euro Zone Barometer.<sup>1</sup>

### Inflation expectations

Chart A shows the forecast errors (computed as the realised values minus the predicted values) for the forecasts made every January for the coming year by the three surveys. The forecast errors from the three surveys are extremely close and are positive for every year, with the exception of 2009, a year in which oil prices fell sharply. Results are also broadly similar when considering the forecasts made in the January of a given year for the following year, although in this case the errors for 2008 and 2009 are around 1.5 percentage points, in absolute value, as opposed to 0.8 percentage point for the current year.

The period for which forecast errors from all three surveys are available is from 2003 to 2010 for the current year, and from 2004 to 2010 for the following year. Over these periods, the mean error is positive and around 0.2 percentage point for both the current and following year (see Chart Ba), meaning that SPF, Consensus Economics and Euro Zone Barometer expectations for the current and following years have underestimated actual inflation, on average, over the last seven to eight years.

Chart A Inflation forecast errors (current year)

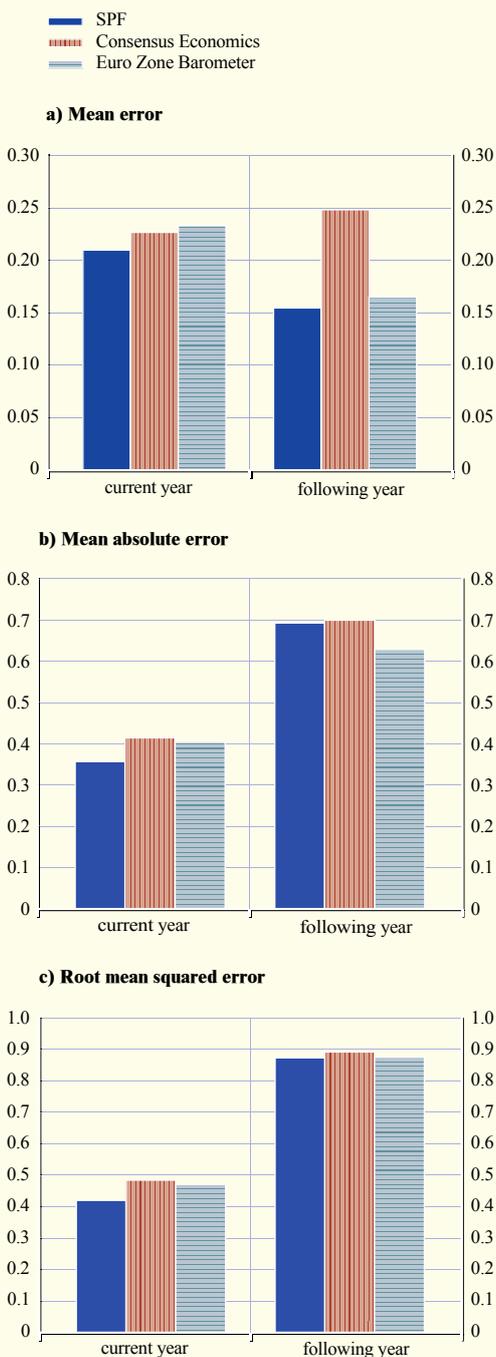


Source: ECB staff calculations.

<sup>1</sup> Consensus Economics and the Euro Zone Barometer are conducted on a monthly basis, while the SPF is a quarterly survey. This box focuses only on those rounds which are comparable in terms of available information at the time of the survey and forecast horizon.

Chart B Average inflation forecast errors

(percentage points; current year: 2003-10 average; following year: 2004-10 average)



Source: ECB staff calculations.

However, this underestimation of inflation in the euro area has to be assessed in the light of the influence of several factors. In fact, since 1999 HICP inflation has been affected by several unexpected upside shocks. The main explanation for the systematic underestimation of the inflation rate seems to be the oil price, which turned out to be higher than the level implied by oil futures throughout the whole period, with the exception of 2009. Rises in food price inflation during certain periods also help to explain positive forecast errors. In 2001, for instance, unprocessed food prices were driven up by the BSE and foot-and-mouth diseases and, in 2008, processed food prices increased following rises in commodity prices in the previous year. Such developments are the most difficult to forecast. In fact, when considering HICP inflation excluding energy and unprocessed food prices, the downward bias of the expectations decreases, at least for the period from 1999 to 2006.<sup>2</sup> Finally, events such as unexpected indirect tax increases and the effects of the euro cash changeover in 2002 also caused positive inflation forecast errors.

The mean error statistic averages out positive and negative errors. In order to compare the quality of forecasts, it is thus more appropriate to refer to the mean absolute error (MAE). The differences in performance across the surveys are small also when considering this indicator. The MAEs computed over the 2003-10 and 2004-10 periods are between 0.3 percentage point and 0.4 percentage point for the current year, while they are between 0.6 percentage point and 0.7 percentage point for the following year (see Chart Bb). The picture looks very similar when considering the root mean squared error (RMSE), which provides another measure of the size of the errors, but giving greater weight to the outliers (see Chart Bc). In general, the similarity of the performance across the surveys may also reflect the fact that several of the respondents participate in more than one of the surveys.

<sup>2</sup> This analysis was carried out using SPF data. See Bowles, C., Friz, R., Genre, V., Kenny, G., Meyler, A. and Rautanen, T., "The ECB survey of professional forecasters (SPF) – A review after eight years' experience", *Occasional Paper Series*, No 59, ECB, 2007.

With respect to longer horizons, Chart C reports forecasts from Consensus Economics for six to ten years ahead (denoted by green diamonds), together with the corresponding actual average inflation rate for six to ten years ahead (denoted by red dots) and the inflation rate at the time the forecasts were made (denoted by the blue line). According to forecasts made in April 1991 for the average 1996-2000 inflation rate, forecasters expected significantly higher inflation than the actual outcome. Consensus Economics' inflation expectations for the euro area six to ten years ahead steadily decreased from above 3% in 1991, when the inflation rate was around 4%, to just below 2% in 1999. The fall in expectations probably reflected the decline in actual inflation in the context of the run-up to Stage Three of EMU. Indeed, it should be recalled that, on 13 October 1998, the Governing Council of the ECB announced the quantitative definition of price stability as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%". Since then, Consensus Economics' inflation expectations six to ten years ahead have remained at this level.

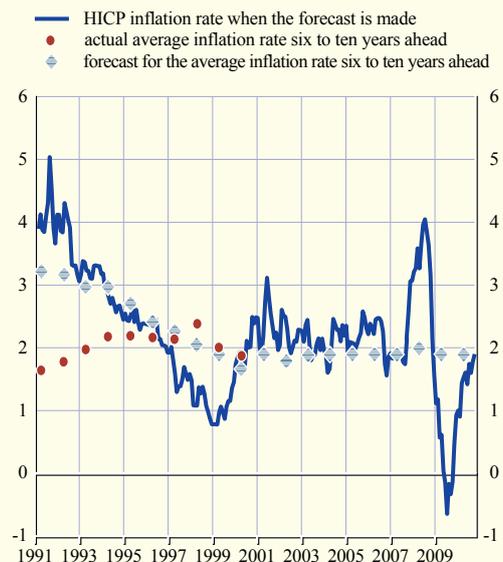
### Real GDP growth expectations

While inflation forecast errors have generally been one-sided, growth forecast errors do not display any systematic pattern. Chart D shows the forecast errors for euro area real GDP growth, based on forecasts made every January for the coming year. Again, differences between the surveys are minor. Growth was overestimated in the 2001-03 period and during the 2008-10 financial crisis, while it was underestimated in the years immediately preceding the crisis.

The profile of the forecast errors for GDP growth indicates that, in contrast to inflation, growth has been hit by more symmetric shocks. The 9/11 terrorist attacks, the tensions generated by the war in Iraq, and the bursting of the dot.com bubble negatively affected

**Chart C Consensus Economics forecast and euro area HICP inflation rate**

(annual percentage changes)

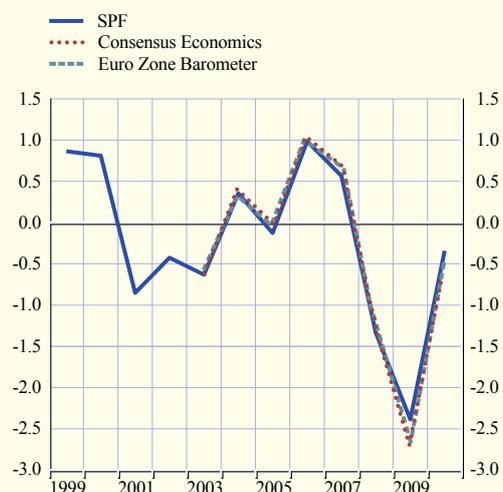


Source: ECB staff calculations.

Notes: Euro area inflation expectations for six to ten years ahead between 1990 and 2002 have been constructed by aggregating country data provided by Consensus Economics (see Castelnuovo et al., 2003). Expectations for the euro area as a whole have been provided by Consensus Economics as of 2003. The data are taken from the April surveys.

**Chart D Real GDP growth forecast errors (current year)**

(percentage points)



Source: ECB staff calculations.

euro area growth in the early 2000s, contributing to negative prediction errors. In the subsequent period, i.e. the run-up to the financial crisis, which was characterised by strong global expansion and booming asset prices fuelled by surging leverage, GDP growth was underestimated. With respect to the financial crisis, the factors explaining the large forecast error include: i) the collapse of Lehman Brothers, which was an unexpected shock with a global dimension; ii) the subsequent unprecedented plunge in confidence, which led to a sharp retrenchment in consumption and investment; iii) the unexpected global spread of the crisis accompanying this, as well as the associated collapse in global trade; iv) earlier expectations that the euro area might have started to decouple from the United States, which may initially have led to an underestimation of the speed of the transmission of US financial shocks and their repercussions overseas; v) a possible general underestimation of the impact of financial shocks on economic activity.

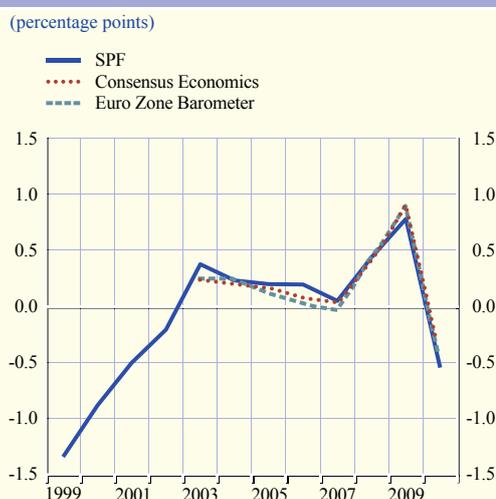
The mean errors over the 2003-10 and 2004-10 periods for forecasts made every January for the coming year and the following year are around -0.4 and -1 percentage point, respectively. This result is driven by the large negative errors in 2008 and 2009. With respect to MAEs and RMSEs, the three surveys are even closer to each other than in the case of inflation errors, and the general result is that activity forecasts have been less accurate than inflation forecasts. In fact, the MAE for current year forecasts is slightly below 0.9 percentage point, while it is around 1.6 percentage points for forecasts for the following year. RMSEs are slightly above 1 percentage point and slightly below 2.5 percentage points for forecasts for the current and following year, respectively.

### Expectations for the unemployment rate

Chart E shows forecast errors for the euro area unemployment rate for January forecasts made for the current year. In the period between 1999 and 2002, when only SPF forecasts were available, the unemployment rate was overestimated. In the following years up to 2008, all three surveys slightly underestimated the unemployment rate.

The largest error in the unemployment rate forecast, which was related to the financial crisis, was seen in 2009. This can largely be explained by a swift labour market response in those euro area economies which previously had large proportions of employees on temporary contracts. However, given that one would expect the unemployment forecast errors to mirror those for activity, and given that forecasts overestimated growth by around 2.5 percentage points in 2009, the underestimation of the unemployment rate for 2009 of around 1 percentage point was actually modest. In contrast, the unemployment rate was overestimated in 2010. This reflects a number of positive surprises in labour markets, most notably the German labour market, which was able to retain more workers than expected.

Chart E Unemployment forecast errors (current year)



Sources: ECB staff calculations.

With respect to forecasting performance statistics, the MAE for current year forecasts is around 0.3 percentage point, while it is around 0.8 percentage point for forecasts for the following year. The RMSEs are 0.4 and 1 percentage point for current and following year forecasts, respectively.

To sum up, the three surveys considered are broadly comparable in terms of forecasting performance. Overall, an analysis of the accuracy of survey-based expectations suggests that, over the past decade, with the exception of 2009, professional forecasters systematically underestimated inflation. This can be explained by the fact that euro area inflation has been hit by several unexpected one-sided shocks, notably those stemming from global commodity markets. There is less evidence of such systematic errors for GDP growth, which was both overestimated and underestimated during the period under consideration. Finally, the unemployment rate has not been overestimated since 2003, with the notable exception of 2010.

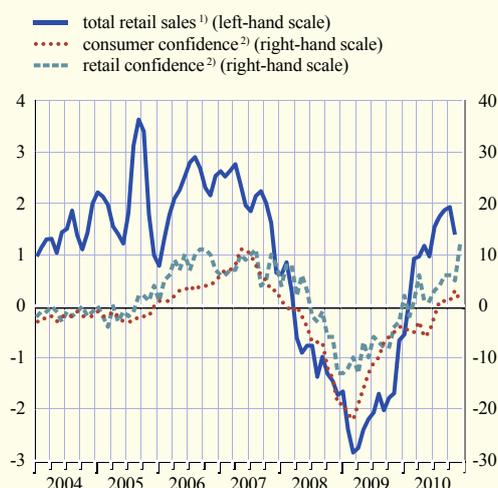
Gross fixed capital formation decreased by 0.3%, quarter on quarter, in the third quarter of 2010, after a strong increase of 2.0% in the previous quarter, which was partly related to temporary factors. The breakdown of investment for the third quarter of 2010 shows a decline in construction investment, after temporary factors had led to a very high level in the previous quarter. This decline was partly offset by an increase in non-construction investment.

Available information suggests that investment remained subdued in the fourth quarter. In October construction production was below its level in the third quarter. Survey indicators for the fourth quarter of 2010 also point to developments in the construction sector remaining negative. In terms of non-construction investment, in November industrial production of capital goods – an indicator of future investment – stood more than 3% above the level observed in the third quarter. Survey indicators on industrial confidence also indicate positive growth rates in non-construction investment, with a further rise in the Purchasing Managers' Index (PMI) and in European Commission surveys in the fourth quarter of 2010, compared with the third. Overall, with slightly negative figures in construction investment and positive growth rates in non-construction investment, total investment is expected to be subdued in the fourth quarter of 2010, and it is projected to grow moderately in 2011.

As regards trade flows, both import and export volumes slowed in the third quarter of 2010, growing by 1.5% and 1.9% respectively, quarter on quarter. Owing to the stronger increase in exports, net trade made a positive contribution of 0.2 percentage point to GDP growth in the third quarter of 2010. Recent data and surveys suggest that

**Chart 28 Retail sales and confidence in the retail trade and household sectors**

(monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.

Notes: From May 2010 onwards, European Commission business survey data refer to the NACE Rev. 2 classification.

1) Annual percentage changes; three-month moving averages; working day-adjusted. Excludes fuel.

2) Percentage balances; seasonally and mean-adjusted.

euro area trade continued to recover in the fourth quarter of 2010. According to Eurostat data, the values of total euro area exports increased at a slightly faster pace in October 2010, whereas imports grew at a slower pace, compared with the third quarter averages. As global activity continues to recover, some pick-up in euro area exports may be expected in the near term. The PMI for new export orders in the euro area manufacturing sector up to December 2010 remains well above the expansion/contraction threshold of 50 and points towards new export orders growing at their fastest rate in seven months.

Inventories made a slightly positive contribution to quarter-on-quarter GDP growth in the third quarter of 2010, of 0.1 percentage point, having contributed strongly in the first and second quarters of the year. The current level of inventories suggests that a small amount of restocking has occurred since the beginning of 2010, following the destocking during the recession. Looking ahead, both surveys and anecdotal evidence indicate that the contribution of inventories to euro area GDP growth could be slightly negative in the remainder of 2010. This is, however, subject to some statistical uncertainty surrounding the way inventories are estimated.

#### 4.2 OUTPUT, SUPPLY AND LABOUR MARKET DEVELOPMENTS

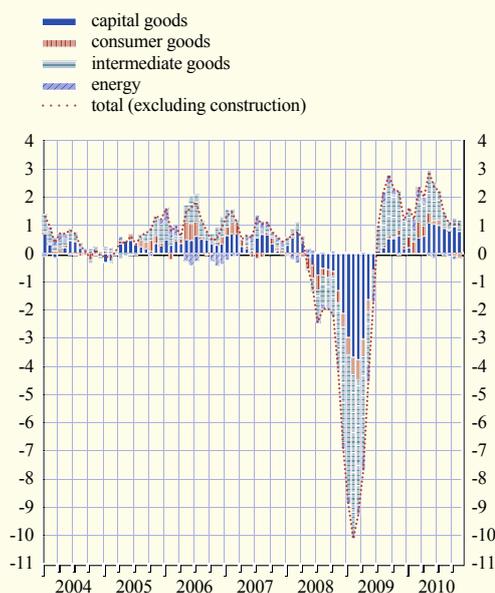
According to Eurostat's second estimate, real value added grew by 0.3%, quarter on quarter, in the third quarter of 2010, compared with 0.8% in the second quarter. The growth rate was fuelled by increased activity in the services sector, while the contribution from industrial activity to the quarterly rate of change in value added was practically zero.

In the industrial sector (excluding construction), value added grew by 0.4%, on a quarterly basis, in the third quarter of 2010, compared with 2.0% in the previous quarter. Services value added increased by 0.4% in the third quarter of 2010, slightly less than in the previous quarter. Value added in the construction sector declined by 0.7% in the third quarter of 2010, after an increase in the second quarter. The increase in value added in the construction sector in the second quarter was exceptional, as it was mainly due to the reversal of the unusual fall in the first quarter, which stemmed from the adverse weather conditions that affected many euro area countries in the winter months.

As regards developments in the fourth quarter of 2010, industrial production (excluding construction) increased in November and stood almost 2% above the level observed in the third quarter (see Chart 29). Industrial new orders grew in October, but were only slightly above the level observed in the third quarter of 2010. These indicators suggest ongoing growth in the industrial sector. Meanwhile, activity in the

**Chart 29 Industrial production growth and contributions**

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

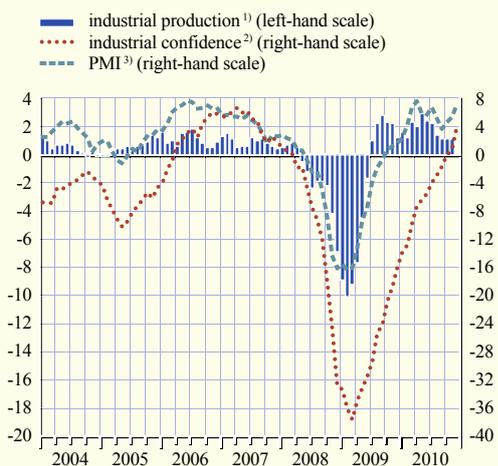


Sources: Eurostat and ECB calculations.

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

**Chart 30 Industrial production, industrial confidence and the PMI**

(monthly data; seasonally adjusted)



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

Notes: Survey data refer to manufacturing. From May 2010 onwards, European Commission business survey data refer to the NACE Rev. 2 classification.

- 1) Three-month-on-three-month percentage changes.
- 2) Percentage balances.
- 3) Purchasing Managers' Index; deviations from an index value of 50.

construction sector still seems to be subdued. Construction production in October stood about 1% below the level observed in the third quarter, and survey indicators point to weak developments in the construction sector.

Survey information shows that economic activity continued to expand in the fourth quarter of 2010. The PMI for the manufacturing sector increased in the fourth quarter, compared with the previous quarter, and stood close to 56. The PMI for the services sector declined somewhat from the third quarter, but stood at 54.3, indicating that activity was increasing, although at a somewhat slower pace than in the previous quarter (see Chart 30). Other business surveys, such as the European Commission's business surveys, have increased and confirm signals provided by the PMI that activity grew in the fourth quarter.

#### LABOUR MARKET

Recent information suggests ongoing stabilisation in the euro area labour market. According to Eurostat's second national

account release, the number of people in employment in the euro area was roughly stable, on a quarterly basis, in the first three quarters of 2010. This is an improvement on the sharp contraction in employment observed in 2009. Hours worked, which declined sharply during the downturn, increased in all three quarters.

**Table 7 Employment growth**

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

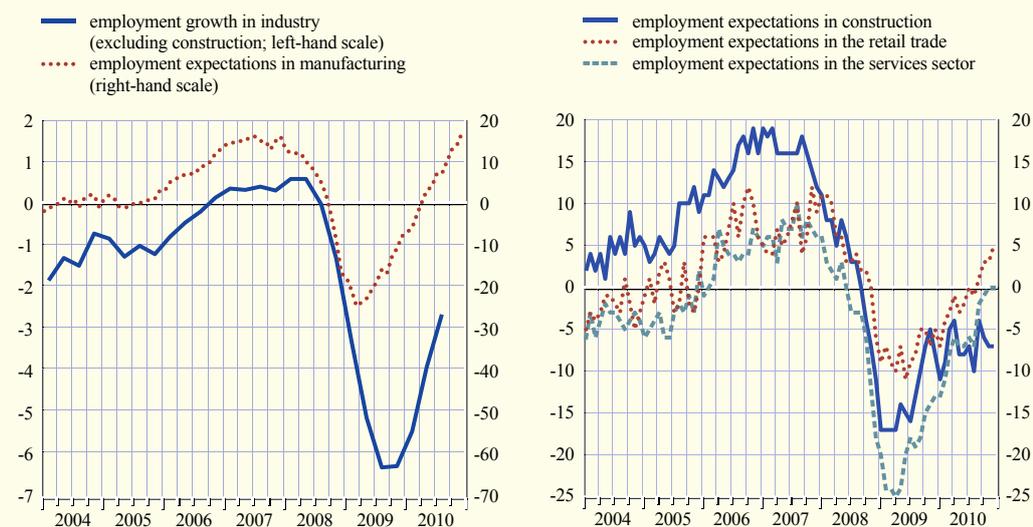
	Persons					Hours				
	Annual rates		Quarterly rates			Annual rates		Quarterly rates		
	2008	2009	2010 Q1	2010 Q2	2010 Q3	2008	2009	2010 Q1	2010 Q2	2010 Q3
Whole economy	0.8	-1.8	0.0	0.1	0.0	0.7	-3.3	0.1	0.3	0.1
<i>of which:</i>										
Agriculture and fishing	-1.7	-2.2	0.0	-1.1	-0.2	-1.9	-2.6	-1.3	-0.2	-0.8
Industry	-0.7	-5.7	-0.8	-0.3	-0.6	-0.9	-8.6	-0.3	0.4	-0.1
Excluding construction	0.0	-5.3	-0.8	-0.3	-0.4	-0.5	-8.9	0.0	0.6	0.4
Construction	-2.1	-6.6	-1.0	-0.2	-1.1	-1.8	-8.0	-0.9	0.0	-1.2
Services	1.4	-0.5	0.3	0.3	0.2	1.4	-1.4	0.4	0.3	0.3
Trade and transport	1.2	-1.7	-0.1	-0.1	0.0	0.9	-2.7	0.0	0.1	0.1
Finance and business	2.1	-2.1	0.5	1.0	0.3	2.5	-3.4	0.2	0.9	0.5
Public administration <sup>1)</sup>	1.2	1.4	0.5	0.2	0.2	1.4	1.1	0.8	0.2	0.3

Sources: Eurostat and ECB calculations.

1) Also includes education, health and other services.

Chart 31 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)



Sources: Eurostat and European Commission Business and Consumer Surveys.

Notes: Percentage balances are mean-adjusted. From May 2010 onwards, European Commission business survey data refer to the NACE Rev. 2 classification.

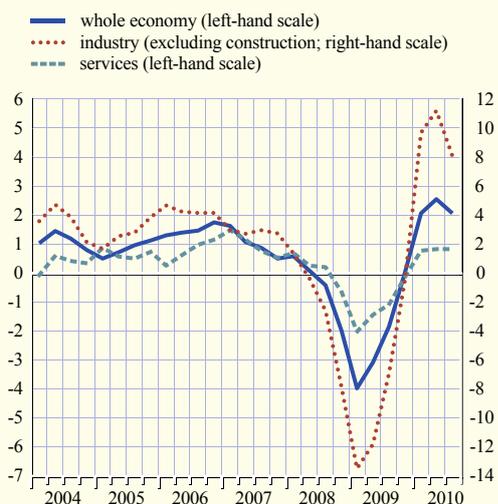
At a sectoral level, headcount employment increased in two of the three services sub-sectors – finance and business, and public administration – while remaining unchanged in the other – trade and transportation. It declined in industry (excluding construction), construction and agriculture (see Table 7 and Chart 31). However, hours worked recovered in all three services sub-sectors, as well as in industry (excluding construction). This is in line with the fact that a large part of the decline in total hours worked in 2009 took place via reductions in individual work time accounts rather than via headcount employment, in particular in industry (excluding construction), with the result that the recovery has been stronger in terms of hours worked per person than in terms of increased employment.

In annual terms, the recovery in euro area output growth, combined with the job losses seen in recent quarters, has contributed to positive growth in labour productivity. In year-on-year terms, aggregate euro area productivity (measured as output per employee) increased in the third quarter of 2010 by 2.1%, year on year, compared with 2.5% in the second quarter (see Chart 32). Productivity per hour worked has exhibited a similar pattern, rising a further 1.3%, year on year, in the third quarter of 2010, after increasing by 1.8% in the second quarter.

The euro area unemployment rate remained unchanged in November, at 10.1%. It is showing signs of stabilisation, having hovered around 10% since the end of 2009 (see Chart 33). Looking ahead, survey indicators point to a further stabilisation in euro area unemployment in the months ahead and to improving employment expectations in the manufacturing and services sectors, according to the PMI and European Commission surveys.

### Chart 32 Labour productivity

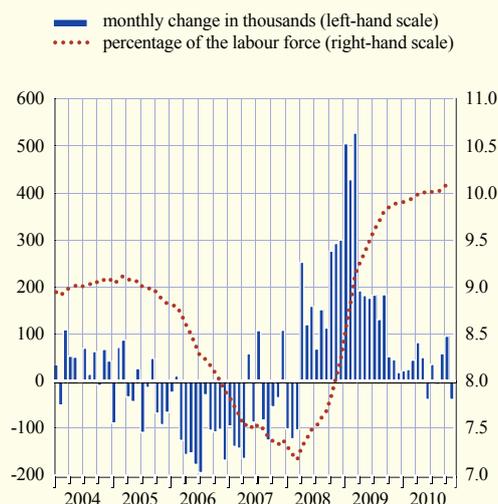
(annual percentage changes)



Sources: Eurostat and ECB calculations.

### Chart 33 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

#### 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

Looking ahead, recent data releases and surveys confirm that the positive underlying momentum of the recovery in the euro area remained in place towards the end of 2010. This is also the assessment of survey-based expectations. Activity is supported by the continued recovery in the world economy, with a positive effect on euro area exports. Private sector domestic demand should increasingly contribute to growth, in particular given the relatively high level of business confidence, supported by the accommodative monetary policy stance and measures adopted to restore the functioning of the financial system. However, the process of balance sheet adjustment in various sectors is expected to dampen the pace of the recovery.

With uncertainty remaining elevated, the risks to the economic outlook are still seen as slightly tilted to the downside, with uncertainty remaining elevated. On the upside, global trade may recover more strongly than projected. In addition, strong business confidence could provide more support to domestic economic activity in the euro area than currently expected. On the downside, concerns remain with respect to renewed tensions in some segments of the financial markets and their potential spillover to the euro area real economy. Further downside risks relate to renewed increases in oil and other commodity prices, protectionist pressures and the possibility of a disorderly correction of global imbalances.

## ARTICLES

# RECENT DEVELOPMENTS IN LOANS TO THE PRIVATE SECTOR



Developments in loans to the private sector are assessed regularly as part of the ECB's economic and monetary analyses. This assessment has been particularly important and challenging since the onset of the financial tensions, as the nature of the tensions might imply specific constraints on lending, which could, in turn, aggravate the impact on the macroeconomy. This article reviews recent developments in loans to the private sector and has three main findings. First, the financial crisis had various impacts on growth in loans to the euro area private sector, but they were limited by the ECB's non-standard monetary policy measures. Second, a comparison of actual loan developments with historical regularities indicates that, over the business cycle, they were broadly in line with what was to be expected, especially when taking into account the severity of the recession. Third, loan supply factors have exerted significant downward pressure on loan growth since the start of the financial tensions in mid-2007, but they were quantitatively less important than other factors, such as demand-related factors. The outright credit crunch that was sometimes conjectured by external observers did not materialise.

### I INTRODUCTION

The major economic downturn experienced in the euro area between 2008 and 2009, and the subsequent recovery observed in recent quarters, coincided with strong movements in the growth rate of credit to the private sector. In particular, the annual growth rate of MFI loans to the private sector declined, in nominal terms, from above 11% to slightly negative values in late 2009 and early 2010, before moving into positive territory thereafter (see Chart 1).

Credit cycles have been a feature of advanced economies for a long time, and their analysis is of relevance for monetary policy purposes. Indeed, for monetary analysis, the relevance of developments in loans to the private sector over the cycle stems from the fact that they are the main counterpart to aggregate money, so that their assessment is necessary for understanding and interpreting monetary developments.<sup>1</sup> Moreover, in the euro area, unlike in the United States, bank loans are the most important source of external financing, not only for households but also for non-financial corporations. They therefore play a very important role in shaping developments in economic activity and in the transmission of the monetary policy stance to the economy.<sup>2</sup>

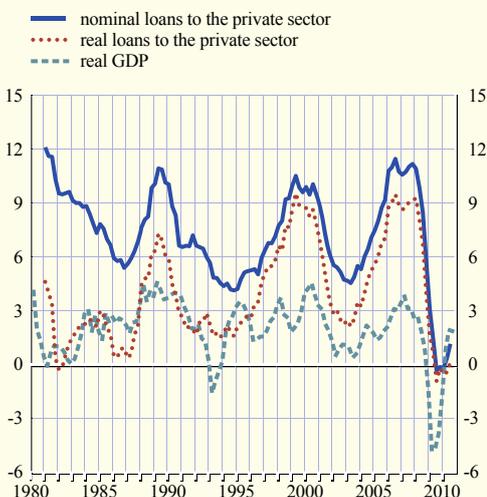
The assessment of developments in loans to the private sector has become particularly important since the onset of the financial tensions.

Key questions that have been raised over the past three years include: i) the extent to which credit markets have themselves become a source of instability rather than simply propagating disturbances that originate in other sectors of the economy; and ii) when private sector loan

- 1 See, for example, Papademos, L. and Stark, J. (eds.), *Enhancing monetary analysis*, ECB, Frankfurt am Main, October 2010.
- 2 For more details, see the article entitled "Monetary policy and loan supply in the euro area", *Monthly Bulletin*, ECB, Frankfurt am Main, October 2009.

Chart 1 MFI loans to the private sector

(annual percentage changes)



Sources: ECB and Eurostat.

Note: The real series has been calculated using the GDP deflator.

growth will recover from the unprecedented fall that took place in the aftermath of the default of Lehman Brothers in September 2008.

Against this background, Section 2 of this article reviews recent developments in loans to the private sector and discusses the possible impact of the recent crisis on such loans. Section 3 describes the main stylised facts, or historical regularities, that characterise developments in loans to the euro area private sector. Section 4 provides an overview of alternative approaches to estimating the relative impact of supply and demand factors on these developments. The final section offers some concluding remarks.

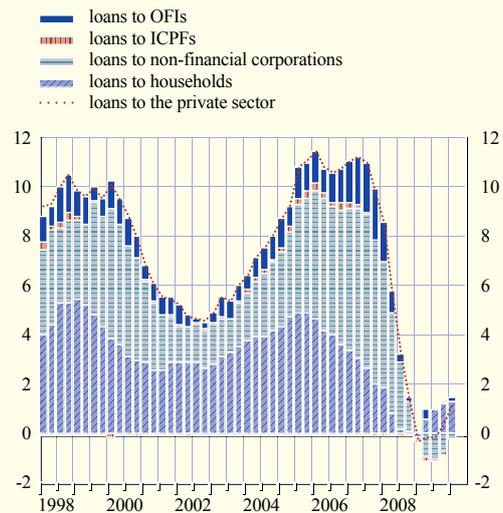
## 2 THE IMPACT OF THE FINANCIAL CRISIS

In order to assess the extent of the impact of the recent financial crisis on developments in bank loans, it is useful to look at developments in loans to individual institutional sectors, as they may have been affected differently by the specific factors at work during the crisis. Indeed, the discussion in this article will focus mostly on loans to households and loans to non-financial corporations, which, on average, have accounted for about 90% of the total growth in loans to the private sector since 1998 (see Chart 2). This section, after discussing briefly some of the effects of the crisis that may have had only a limited impact on overall developments in loans to the private sector, will then focus on the effects of the crisis on the banking sector. Thereafter, it will review the monetary policy measures used to counteract the adverse impact of the crisis and finally it will examine the developments in loans to non-financial corporations and to households during the crisis.

The financial crisis, which started in mid-2007 and intensified in the aftermath of the collapse of Lehman Brothers, triggered sharp movements in economic activity and bank lending rates. While the impact of these movements is likely to explain a large part of the developments in loans during the financial crisis, other factors

**Chart 2 Breakdown of MFI loans to the private sector**

(annual percentage changes; percentage points)



Source: ECB.

Notes: "OFIs" stands for other financial (non-monetary) intermediaries. "ICPFs" stands for insurance corporations and pension funds.

also played a role. For instance, in the early phases of the crisis and owing to the perceived risk of bank funding being more difficult to access, firms seem to have drawn down available credit lines and thus kept loan growth strong at a point when economic activity was already decelerating. Other "distortionary" effects include the effective closure of the securitisation market and even "re-intermediation" effects. However, the upward impact of these on loan growth was more than offset by banks' "retained" securitisation activity, whereby they continued to securitise loans, not to sell them in the market, but in order to pledge the securities as collateral in ECB's funding operations. Later on in the crisis, the introduction of "bad bank" schemes in some countries also had a distortionary, but to date limited, downward impact on growth in loans to the private sector.<sup>3</sup>

<sup>3</sup> For a more detailed discussion, see the article entitled "Monetary analysis in an environment of financial turmoil", *Monthly Bulletin*, ECB, Frankfurt am Main, November 2009, and the box entitled "The impact of 'bad banks' on MFI balance sheet statistics", *Monthly Bulletin*, ECB, Frankfurt am Main, March 2010.

In the context of the intensification of the financial crisis from September 2008 onwards, banks began a process of deleveraging, which reflected their reduced ability to access some sources of financing, as well as attempts to adjust their balance sheets. Euro area MFIs' main assets decreased substantially in 2009, but since early 2010 they have started to accumulate again. The decline in assets and leverage ratios observed in 2009 largely reflected MFIs' reductions of, first, their external assets and, subsequently, their positions vis-à-vis one another (inter-MFI transactions). Inevitably, balance sheet constraints within the euro area banking system had some impact on banks' credit standards. However, this may not have been a major factor behind the decline in private sector loan growth, as banks may have attempted, to some extent, to shield their retail borrower relationships. In 2010 the accumulation of assets by the MFI sector started again, driven mainly by inter-MFI loans, claims on the Eurosystem, loans to euro area non-MFIs and purchases of government bonds, although said accumulation was very weak in the summer.

During the crisis the ECB's non-standard measures have been instrumental in supporting the banking system, and thus indirectly also the credit markets, by considerably improving market liquidity and helping to alleviate bank funding risks. Although these measures did not prevent a significant decline in private sector loan growth, without them the decrease would most likely have been more pronounced, given the decline in economic activity. More precisely, these measures, which have become known as "enhanced credit support", were designed to sustain financing conditions and credit flows above and beyond what could be achieved through reductions in key ECB interest rates alone. As a result of these measures, adopted from October 2008 onwards, money market interest rates, money market spreads and interest rates on bank loans declined significantly, and banks' liquidity positions improved (see Chart 3).<sup>4</sup> These measures, and subsequent initiatives such as the covered bond purchase programme, have helped to sustain financial

Chart 3 Bank lending survey indicator of banks' liquidity positions



Source: ECB.

Notes: The indicator represents the assessment of banks' liquidity positions as a factor affecting the credit standards applied to the approval of loans or credit lines for enterprises. The net percentages are defined as the difference between the percentage of banks reporting that this factor contributed to a tightening and those reporting that it contributed to an easing.

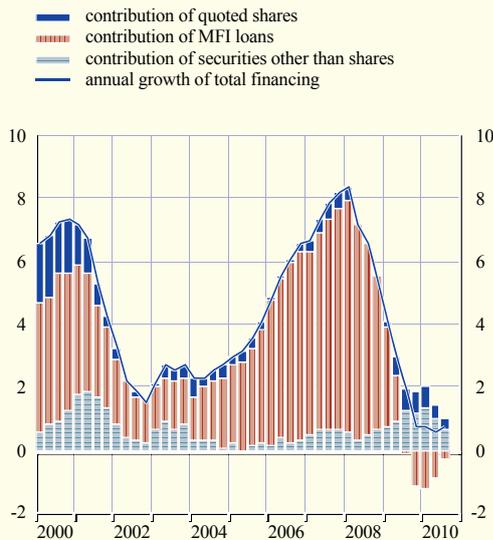
intermediation in the euro area and have been instrumental in maintaining the availability of credit for households and companies.

Growth in lending to euro area non-financial corporations started to decline gradually in 2008 and continued to do so throughout the first half of 2010. One explanation for the prolonged weakness in lending to non-financial corporations may have been the apparent and relatively high level of replacement of bank loans with the issuance of debt securities and quoted shares that took place between the first half of 2009 and the first half of 2010 (see Chart 4). More generally, the developments in corporate financing during the financial crisis suggest that the weakness in lending to non-financial corporations largely reflected a financial strategy whereby enterprises prefer to

<sup>4</sup> For more details, see the article entitled "The ECB's response to the financial crisis", *Monthly Bulletin*, ECB, Frankfurt am Main, October 2010.

**Chart 4 Main sources of financing for non-financial corporations**

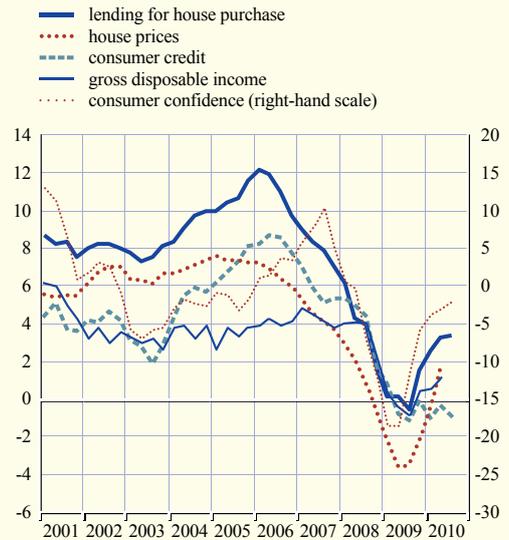
(annual percentage changes; percentage points)



Source: ECB.

**Chart 5 Loans to households, disposable income, house prices and consumer confidence**

(annual percentage changes; percentage points)



Source: ECB.

Note: Consumer confidence is reported as a deviation from the long-run average.

use internal or market-based funding in order to reduce their indebtedness and dependence on banks. However, it is not a priori clear to what extent such strategies and the associated disintermediation process have been a reaction to bank loans being more difficult to access or a reflection of the relative costs of financing. It is also an open question as to what extent the increased recourse to market-based funding relative to bank loans is a more lasting development, which may imply a weaker recovery of loans in comparison with previous episodes.

As regards loans to households, lending for house purchase and consumer credit have been following divergent trends in recent quarters. After a steep decline between 2007 and mid-2009, which ran in parallel to a similar decline in house prices, growth in lending for house purchase has since recovered significantly (see Chart 5). By contrast, consumer credit growth, which experienced a similarly steep fall between 2007 and mid-2009, has remained in negative territory in the most recent quarters.

On the one hand, this is due partly to the weak growth in disposable income, the ongoing low levels of consumer confidence and the high level of uncertainty. On the other hand, the divergence of these two main sub-components of loans to households, as well as the weakness in lending to non-financial corporations, may be related to a preference of banks, in periods of perceived macroeconomic risks, to grant loans for house purchase which are collateralised and can more easily be used to back covered bonds, the market for which has meanwhile recovered. As housing market developments have been very different across euro area countries in past years, the argument with regard to collateralised loans is unlikely to hold equally for all countries. However, for the euro area as a whole, the impact of the financial crisis on loans for house purchase has been less strong and persistent than in other economies, owing to the absence of large sub-prime mortgage markets and the fact that housing is most likely still perceived as a safer investment in the longer run, while most other longer-term investments are currently viewed as being uncertain or offering low returns.

Overall, the financial crisis and the responses of market participants and macroeconomic policies have generated a number of factors that could explain the extent to which loan growth has behaved differently in the past three years from what would have been expected on the basis of the main macroeconomic determinants. Section 3 looks into how different the behaviour of loan growth has actually been.

### 3 HISTORICAL REGULARITIES

The stylised facts, or historical regularities, of the business cycle are a useful reference point for the assessment of and outlook for loan developments. Of course, no cycle is exactly the same and so some deviations from historical regularities are to be expected. Nevertheless, they are important in assessing how strong the effect of specific factors may be on credit markets and the overall economy at any moment in time. Indeed, a question frequently raised in recent months has been whether growth in loans to non-financial corporations will start to recover roughly one year after the beginning of the recovery of real GDP growth, as has typically been observed in past economic cycles, or whether specific forces might imply a delayed upturn.

Between 1980 and 2010 nominal MFI lending to the private sector in the euro area increased at

an average annual rate of around 7.5%, or 4.1% in real terms (see the table). The average annual growth of its two main sectoral components, loans to households and loans to non-financial corporations, was similar, both in nominal and real terms. These growth rates, especially those in real terms, can be used as a benchmark for the strength of growth to be expected in the middle of the cycle in the absence of distortionary factors.

As regards the cyclical properties of growth in loans to the private sector, it can be observed that the annual growth of both total loans and the main components are procyclical, i.e. they tend to have a positive degree of co-movement with real GDP growth. Moreover, their degree of association with the cycle tends to be strong, as signalled by the high value for the maximum correlation. However, the average lead or lag time for loan growth tends to vary across components (see the last column of the table). Indeed, while total private sector loan growth tends to lag the cycle by, on average, two quarters, this conceals different patterns across the two main components. In particular, while the growth of household loans tends to lead the cycle by, on average, one quarter, that of loans to non-financial corporations tends to lag the cycle by about three quarters. Similar average leads and lags are found for the turning points in the annual growth rates of total loans and the main components relative to those in

#### Stylised facts about lending to the private sector over the business cycle in the euro area

(percentages; annual percentage changes; number of quarters)

	Average weight	Average growth	Standard deviation	Properties over the business cycle		
				Cyclicity	Maximum correlation	Average lead/lag
Loans to the private sector	100.0	7.5	2.7	procyclical	65.4	-2
Loans to households	47.7	7.6	2.4	procyclical	60.7	1
Loans for house purchase	28.5	9.2	3.1	procyclical	50.6	1
Consumer credit	7.0	6.7	3.2	procyclical	50.9	1
Other household lending	12.0	4.7	2.8	procyclical	32.9	-1
Loans to non-financial corporations	44.4	7.4	4.1	procyclical	70.7	-3
Loans of up to 1 year	29.3	6.1	6.9	procyclical	75.0	-3
Loans of over 1 year	15.1	8.1	3.2	procyclical	55.2	-3
Loans to financial corporations	7.9	8.5	12.1	acyclical	7.7	7

Sources: ECB and ECB calculations.

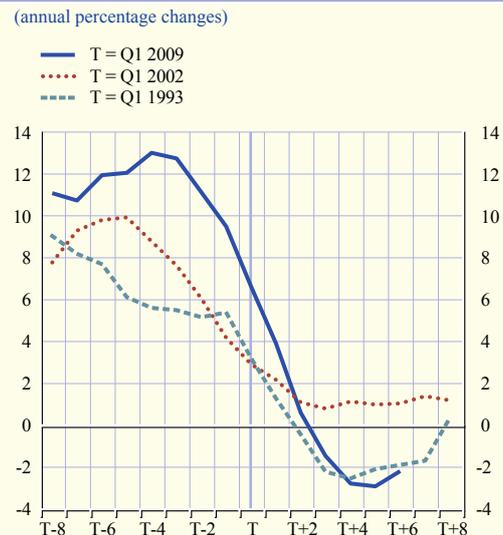
Note: Based on year-on-year growth rates of quarterly nominal data over the period from the first quarter of 1980 to the third quarter of 2010, unless stated otherwise.

real GDP growth, and average leads and lags are also very similar for these series in real and nominal terms.<sup>5</sup> At the same time, dynamic correlations suggest that while the lag of growth in lending to non-financial corporations is statistically significant, the lead of household loan growth is not. In other words, household loan growth may be more appropriately classified as coincident relative to the cycle, with a relatively large range of uncertainty in the average lead/lag cyclical relationship.

Various factors are likely to explain these different average leads and lags of the main loan components. For instance, the leading, or coincident, nature of household loan growth may reflect the fact that households adjust their spending behaviour relatively quickly once there are signs of a new phase of the business cycle. The decline in both house prices and interest rates during slowdowns, for example, typically encourages some households to resume their demand for housing loans when expectations of a recovery strengthen. The lagging pattern of loans to non-financial corporations, by contrast, may reflect the fact that firms have alternative sources of financing, and may first turn to internal funds, the availability of which increases as cash flows improve during the recovery, or they may finance themselves by issuing securities. At the same time, other factors may also be relevant, such as the possible preference of banks during a recovery first to increase their lending to households, rather than to firms, because household loans, notably those for house purchase, are better collateralised, and because firms' balance sheet conditions take some time to improve.

For purposes of interpreting recent loan developments in terms of historical regularities, it can be interesting to focus on episodes of major downturns. When comparing loan developments during the early 1990s, early 2000s and current swing, the far greater severity of the recent recession by historical standards, but also the strength of the recovery experienced in recent quarters, have to be kept in mind. For historical comparisons, it is more appropriate to focus

**Chart 6 MFI loans to non-financial corporations during major slowdowns and recoveries since 1990**



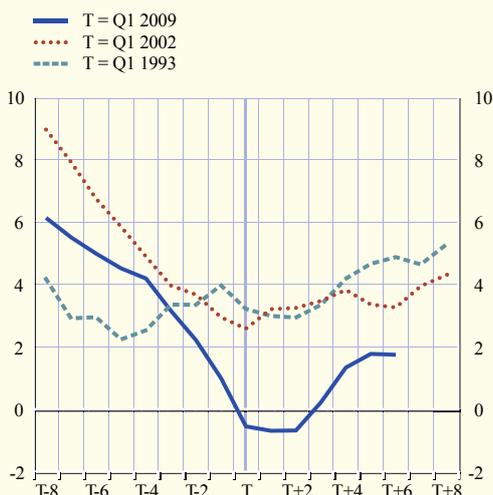
Sources: ECB and ECB calculations.  
Notes: Turning points identified by the Bry-Boschan algorithm applied to the annual growth rate series. Period T represents a quarter in which a trough in real GDP growth was identified in a major downturn.

on real loan series, i.e. loans deflated by the GDP deflator, as the higher inflation rates observed in the early 1990s, for example, would distort the picture. Chart 6 indicates that the annual growth in real lending to non-financial corporations has fallen more in recent quarters than in all of the previous episodes considered, although the difference to the episode in the early 1990s is minor. However, if the trough in the annual growth in real lending in the first quarter of 2010 is confirmed by future data, this would place it about four quarters after that in real GDP growth, much like average historical developments, including those recorded for the recoveries in the early 1990s and early 2000s. The growth in real lending to households declined significantly more during the recent slowdown than in previous episodes (see Chart 7). This was no doubt due to the far greater severity of the housing market slowdown in the latest episode. Moreover, in the most recent episode, a turning

<sup>5</sup> See, for example, the evidence discussed in the box entitled "Loans to the non-financial private sector over the business cycle", *Monthly Bulletin*, ECB, Frankfurt am Main, October 2009.

**Chart 7 MFI loans to households during major slowdowns and recoveries since 1990**

(annual percentage changes)



Sources: ECB and ECB calculations.

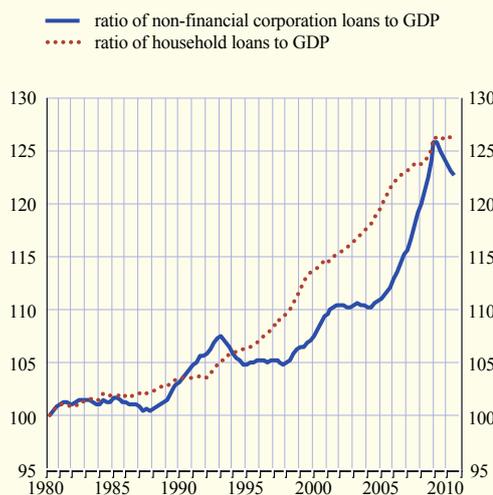
Notes: Turning points identified by the Bry-Boschan algorithm applied to the annual growth rate series. Period T represents a quarter in which a trough in real GDP growth was identified in a major downturn.

point in real household loan growth appears to have taken place two quarters after that in real GDP growth. This stands in contrast to the typical leading, or coincident, pattern of real household loan growth, but is not unprecedented as it can also be observed in the case of the slowdown in the early 1990s. However, the latest recovery in real household loan growth seems to have been more dynamic than in previous recoveries, which can be explained by the fact that, in the latter episodes, real loan growth had declined to a far lesser extent.

Despite the fact that growth in real lending to both non-financial corporations and households

**Chart 8 Ratios of outstanding amounts of MFI loans to GDP (normalised)**

(percentages; Q2 1980 = 100)



Sources: ECB and ECB calculations.

declined more during the recent slowdown than in previous episodes, taking into account the severity of the recent recession, these declines do not seem to have been excessive. For instance, the ratio of non-financial corporation loans to GDP fell during the most recent quarters by a similar amount as during the early 1990s, while the ratio of household loans to GDP has remained broadly stable in recent quarters, as it did in the early 1990s (see Chart 8). The view that, once account is taken of the weakness of economic activity, recent developments are broadly in line with historical regularities, is confirmed by an assessment based on a Bayesian vector autoregressive (VAR) model (see Box 1).

### A MODEL-BASED ASSESSMENT OF DEVELOPMENTS IN MFI LOANS TO NON-FINANCIAL CORPORATIONS DURING THE FINANCIAL CRISIS

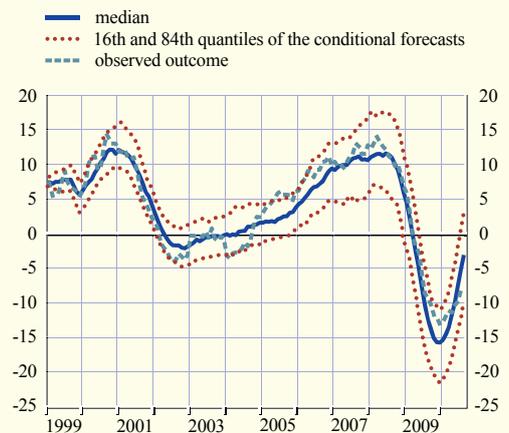
The severity of the recent financial crisis and economic downturn has raised the question as to whether the structural relationships that governed the euro area economy prior to the crisis have remained valid, both during and after the crisis. Giannone et al. describe a large Bayesian vector autoregressive (VAR) model (with 42 variables) for the euro area that captures the complex dynamic relationships between the macroeconomic, financial, credit and monetary variables in the pre-crisis period (i.e. prior to August 2007).<sup>1</sup> In this box, this model is used to assess whether the developments in short-term loans to non-financial corporations (the most cyclically responsive component of total loans to non-financial corporations) in the financial crisis/recession period can be accounted for by pre-crisis economic relationships after controlling for the intensity of the economic recession.

In order to take into account the economic structure of the euro area prevailing before the financial crisis, the model is estimated with data for the period up to July 2007. Then, given the estimated VAR parameters, expectations for all the variables included in the model are computed for the period from January 1999 to August 2010, conditional on: i) the values of all variables up to December 1998; and ii) exclusively those of the real macroeconomic variables (i.e. industrial production in the euro area and the United States, and unemployment in the euro area) from January 1999 to August 2010. In so doing, the forecasts are only conditional on the shocks that drove the business cycle in the euro area over the last decade. Finally, conditional expectations are compared with the corresponding outcomes.

In view of the fact that the estimated VAR parameters reflect the economic structure of the euro area prevailing until July 2007, the comparison of conditional forecasts and the observed outcome should be interpreted differently when looking at the pre and post-crisis periods. If, for a specific variable, large differences between the outcome and conditional expectations already appear in the pre-crisis period, then the most likely conclusion is that the variable is not strongly cyclical, i.e. sources of fluctuations other than the shocks driving the business cycle are relevant in explaining its dynamics. The comparison of pre-crisis outcomes and expectations based on real activity variables can be considered to be a rough test of the cyclical nature of the variables included in the model.

#### Short-term MFI loans to non-financial corporations

(annual percentage changes)



Source: ECB.

Notes: The solid blue line in the chart is the median, while the dotted red lines represent the 16th and the 84th quantiles of the distribution of the conditional forecasts. The dashed green line refers to the observed outcome.

<sup>1</sup> For a complete description of the model, see Giannone, D., Lenza, M. and Reichlin, L., "Money, credit, monetary policy and the business cycle in the euro area" in Papademos, L. and Stark, J. (eds.), *Enhancing monetary analysis*, ECB, Frankfurt am Main, October 2010, pp. 252-262.

If, instead, large discrepancies between the outcome and expectations appear, above all, in the post-crisis period, then it is more likely that they are due to a change in the dynamic relationships linking the variables to the rest of the economy. The chart presents the results of the aforementioned exercise for the annual growth rates of short-term loans to non-financial corporations. The dashed green line refers to the observed outcome, while the solid blue line and the two dotted red lines refer to the median, the 16th and the 84th quantiles respectively of the distribution of the conditional forecasts. It shows that the conditional forecasts and the observed outcome for the annual growth rates of loans to non-financial corporations are very similar throughout the period under review and that there were no anomalies during the crisis. Moreover, it seems that the post-crisis evolution of loans was not very surprising, given the state of the business cycle. In other words, during the financial crisis, euro area credit markets do not seem to have behaved differently to what would have been expected on the basis of the state of and the outlook for the business cycle and empirical pre-crisis regularities.

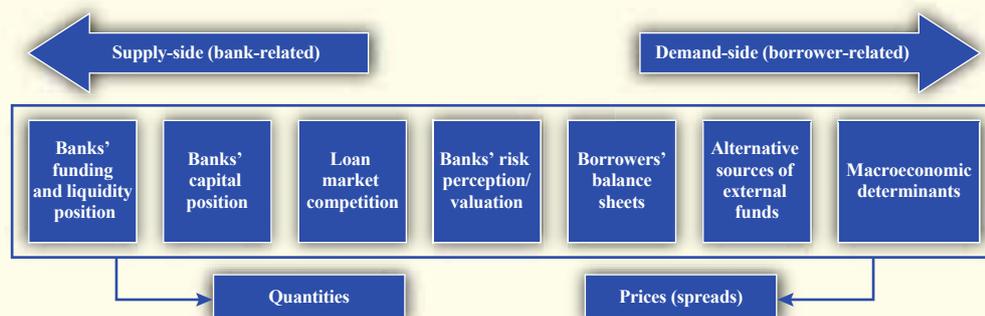
#### 4 FACTORS DRIVING DEMAND VERSUS THOSE DRIVING SUPPLY

##### GENERAL CONSIDERATIONS

While historical regularities are a useful reference point, they do not allow for a distinction between demand and supply-side influences on loan developments, which is important from a policy perspective. For instance, the economic policy implications are very different if private sector loans do not grow sufficiently to support the economy because of an impaired availability of capital and stable funding within the banking system, or because potential borrowers have no demand for loans, owing to limited spending and investment opportunities. At the same time, supply and demand forces are very difficult to assess for various reasons.

First, from a conceptual point of view, it is sometimes difficult to distinguish credit supply factors from other factors. In general, the supply of credit is determined by the ability and willingness of banks to lend. This ability and willingness may depend on factors related to the banks' own financing situation, the availability and price of funding that is reflected in liquidity management, their capital position constraints (which also depend on the composition of their asset portfolios) and competition from other banks in the loan market (see Chart 9). The above-mentioned factors relate primarily to supply-side effects, but both supply and demand-side forces might be at work simultaneously in other cases – they may overlap or interfere. For example, a channel of influence on loan developments where the overlap is most obvious

Chart 9 Schematic presentation of supply and demand-side factors that influence loan developments



Source: ECB.

is banks' risk perception of potential borrowers. The classification of such a factor as related to supply or demand depends on the information at the banks' disposal, how they evaluate the risk and the level of their risk aversion, as well as on the actual condition of borrowers' balance sheets and their economic prospects. From the perspective of potential borrowers, loan demand is influenced by the general macroeconomic conditions and outlook, by the borrower-specific situation (such as the balance sheets and income of specific firms and households) and by the prospects for, and the availability (access and price) of, alternative financing sources, such as market debt and internal financing in the case of non-financial corporations.

While the rationing of credit is often understood in terms of quantities, the supply can also be reduced via factors that are included in prices (as in the case of risk premia). In general, the amount of lending offered to the market will be dependent on its price, as will the amount of loans demanded, so that prices will always affect quantities. For various reasons related, for example, to asymmetric information problems, banks may restrict lending even if borrowers are willing to pay the requested price (as they would in accepting specific price terms). The extreme case of such restrictions in non-price terms is a "credit crunch" where banks restrict the supply of loans, regardless of borrowers' willingness to pay the required or higher price.

Second, the measurement of these forces is a difficult task. To this end, it is important to monitor and analyse several relevant indicators. In this respect, a sectoral perspective is key, as loans to households, non-financial corporations and other financial intermediaries are likely to be governed, to some extent, by different driving forces. Moreover, it is necessary to combine alternative types of indicator. For example, it is important to assess a possible decline in non-financial corporations' loan growth in conjunction with alternative sources of firm financing, which may indicate a simple substitution of sources of

funding. If that is the case, it becomes useful to assess whether such substitution is voluntary or forced, in which case other indicators relating to the cost of these alternative sources of financing need to be assessed (alternative spreads). Relevant information can also be obtained from surveys, such as the ECB's bank lending survey (BLS) and the survey on the access to finance of small and medium-sized enterprises (SMEs) in the euro area. Although an assessment of available indicators and data can go a long way in interpreting loan developments, the picture needs to be completed with quantitative estimates of the relative importance of demand and supply-side factors.

Third, estimates of supply and demand-driven forces are often model-dependent, and vary across approach and model specifications. Estimates can be obtained from approaches ranging from time series models, such as regressions using indicators derived from the BLS, to structural models, such as structural VAR or dynamic stochastic general equilibrium models. It should be borne in mind that the estimates of the influence of credit supply factors derived from these models may also vary because the different approaches capture factors that do not correspond in full. Indeed, time series approaches can at best capture some correlation between the survey indicators that can be associated with credit supply and loan developments. By contrast, structural models – given that they are rooted in economic theory – allow for a causal analysis and are based on a differentiation between structural shocks that result from unexpected changes in, or deviations from, typical behaviour and transmission mechanisms. The former, which may include credit supply shocks, for instance, are forces that initiate fluctuations, which are then transmitted via several propagation mechanisms, some of which operate through credit markets. Overall, it is useful to cross-check results derived from alternative approaches, but it is important to keep the different nature of the estimates in mind.

## SURVEY-BASED EVIDENCE

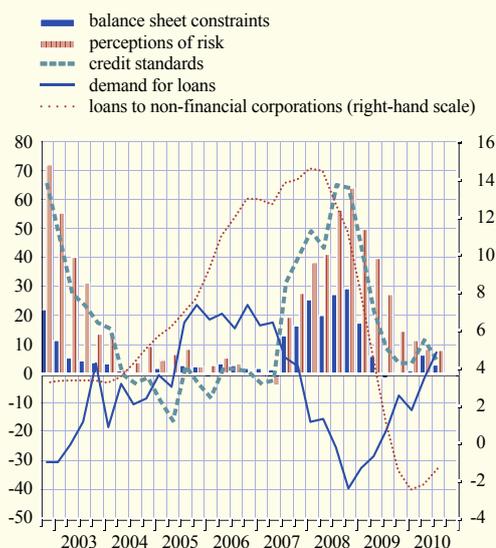
Qualitative evidence on the relevance of various supply and demand forces related to loan developments can be obtained from indicators derived from the BLS, which provides information on loan demand and the credit standards applied by banks.<sup>6</sup>

When using the net tightening of credit standards in the BLS as an indicator of supply influences on loan developments, it should be borne in mind that this series comprises different factors, which can be classified into three groups (“perceptions of risk”, “balance sheet constraints” and “competition”). The “perceptions of risk” factors summarise banks’ assessment of the impact that macroeconomic conditions have on borrowers’ risk profiles and creditworthiness. This can be considered a supply-side influence to the extent that it determines banks’ willingness to lend. However, it also – to a certain degree – reflects a usual reaction over the business cycle that does not indicate a supply-side influence where the banking sector itself is the origin of credit curtailment. In this respect, it is the “balance sheet constraints” that can be interpreted as “pure” supply-side factors (in the sense of proxying for the “bank lending channel” of monetary policy transmission), as would be associated with a credit crunch scenario, for instance, whereas the “perceptions of risk” factors also include information related to loan demand. The “competition” factor includes competition from other banks, from non-banks and from market finance. Although this factor has played a major role in the past, it has proved to be less significant in explaining developments over the cycle during the financial crisis, and therefore it will not be discussed in the paragraphs that follow.

Charts 10 and 11 show that, in the course of 2008, the net tightening of credit standards as a result of balance sheet constraints reached its highest level observed since the start of the BLS (early 2003, with information starting at the end of 2002) for both non-financial corporations and households (lending for house purchase).

Chart 10 MFI loans to non-financial corporations and related BLS indicators

(net percentages; annual percentage changes)



Source: ECB.

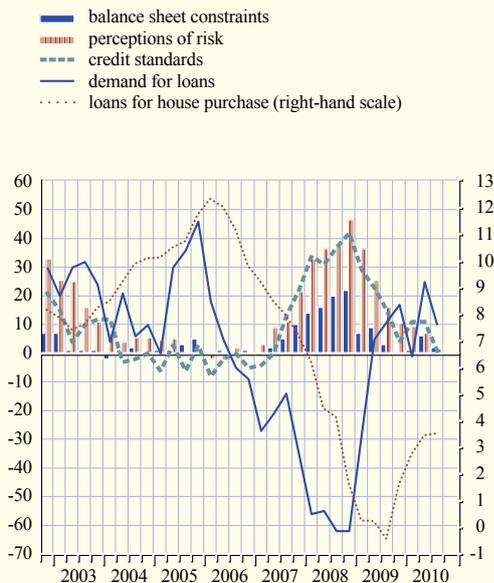
This indicates that “pure” supply-side constraints may have accounted for a significant proportion of the slowdown observed in bank lending activity. The survey data also indicate that, in relative terms, the factors that are summarised in the “perceptions of risk” group have played a clearly larger role. The importance of loan demand developments is confirmed by the indicator for loan demand, which has fallen sharply since the start of the financial crisis and reached historical lows towards the end of 2008. Since 2009 credit standards have tightened to a gradually diminishing extent, while balance sheet constraints have played a minor role and demand has appeared to recover gradually.

Survey evidence from the BLS can usefully be complemented with the results from the survey on the access to finance of small and medium-sized enterprises (SMEs) in the euro area. The latest SME survey suggests that smaller firms were affected by

<sup>6</sup> See *Bank lending survey for the euro area*, ECB, Frankfurt am Main, October 2010.

**Chart 11 MFI loans to households for house purchase and related BLS indicators**

(net percentages; annual percentage changes)

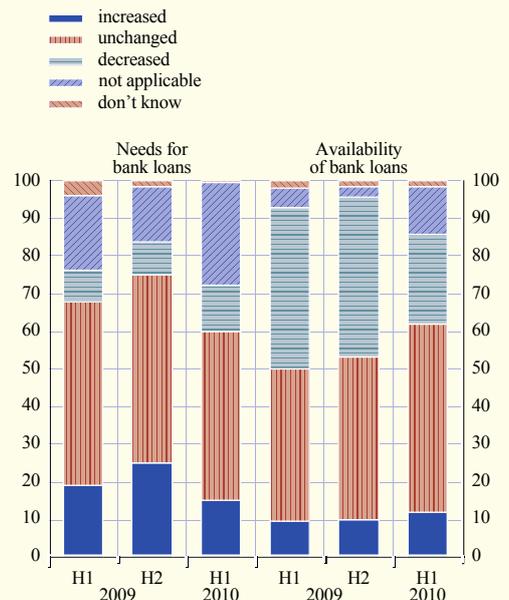


Source: ECB.

restrictions on their credit supply more than larger firms in 2009 and in the first half of 2010.<sup>7</sup> At the same time, this survey indicates that external financing needs tended to recede in the first half of 2010, possibly owing to improvements in internal financing situations (see Chart 12). Moreover, there were some signs of improvement in the availability of external financing. On balance, SMEs continued to perceive an overall deterioration in the availability of external sources of financing, but this deterioration appears to have been significantly less severe than in 2009. Survey results also point to a higher success rate when applying for a bank loan and to a slightly greater willingness of banks to provide loans, against the background of a general improvement in the general and firm-specific economic outlook. The situation of large firms was perceived to be more favourable than that of SMEs. Indeed, large firms reported net increases in the availability of external finance for most sources of financing in the first half of 2010.

**Chart 12 Euro area SMEs' assessment of their need for, and the availability of, bank loans**

(net percentages)



Source: ECB.

Note: H1 2010 corresponds to the period from March to September 2010.

Overall, survey data indicate that supply-side factors represented a constraint on growth in loans to the private sector during most of 2008 and 2009, but that this constraint has loosened significantly in the most recent quarters. These data also suggest that demand-side factors played a key role during the crisis and the subsequent recovery.

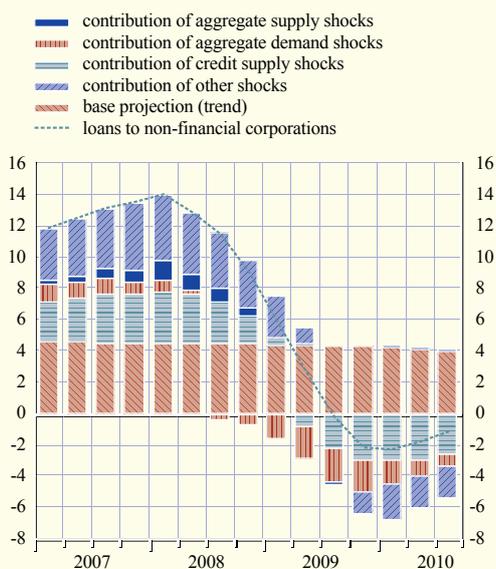
#### MODEL-BASED EVIDENCE

While reduced-form models can provide some estimates of the impact of some supply-side factors on loan growth, only structural models allow for a causal analysis. As an illustration of such an approach, Charts 13 and 14 show the decomposition of the annual growth in loans to non-financial corporations and households into the contributions of different shocks using a structural VAR model. The model identifies loan supply shocks,

<sup>7</sup> See *Survey on the access to finance of SMEs in the euro area – March to September 2010*, ECB, Frankfurt am Main, October 2010.

**Chart 13 Historical decomposition of growth in loans to euro area non-financial corporations based on a structural VAR model**

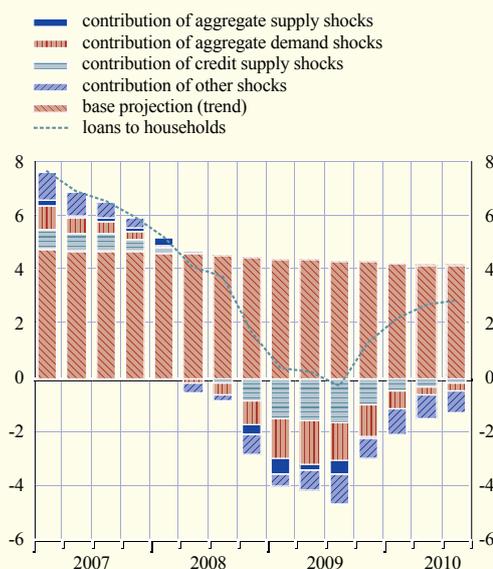
(annual percentage changes; percentage points)



Source: ECB.

**Chart 14 Historical decomposition of growth in loans to euro area households based on a structural VAR model**

(annual percentage changes; percentage points)



Source: ECB.

among other types of shock, by imposing sign restrictions on the impulse response functions based on economic theory (see Box 2 for more details). The decomposition suggests that loan supply shocks have not been among the main driving forces of growth in loans to the non-financial private sector since the financial crisis started in mid-2007, although they have had a noticeable impact, especially in certain quarters. During the initial phase of the financial crisis, loan supply shocks had a positive impact, although this impact faded gradually. By the second quarter of 2009 loan supply shocks had started to have a visible downward impact on loan growth. In relative terms, credit supply shocks had a greater effect on the pattern of growth in loans to non-financial corporations than on that of household loan growth. Indeed, according to these estimates, in the case of enterprises, these shocks accounted for almost half of the downward deviation of loan growth from the trend growth between the second quarter of 2009 to the third quarter of 2010. In the case of loans to households,

by contrast, these shocks accounted only for about one-quarter of the downward shift over the same period.

At the same time, other shocks, especially aggregate demand shocks (a category that includes shocks to consumption, investment, fiscal policy and monetary policy), appear to have contributed markedly to the recent moderation in loan growth. This category of shocks presumably implied a systematic response of loan demand and supply (part of the propagation mechanisms) that can explain a large part of the loan growth. Indeed, these shocks started to contribute negatively to loan growth developments in mid-2008, before credit supply shocks, for both households and non-financial corporations. Thus, the evidence provided by this model indicates that, although loan supply shocks have played a non-negligible role, other forces have shaped the pattern of private sector loan growth to a large extent since the start of the financial crisis, many of which can be associated with demand factors.

Structural models can take into account several important channels through which credit supply shocks move through the economy, showing that they can affect real GDP in various ways. Box 2, entitled “Analysis of the impact of credit supply factors on economic activity using structural models”, illustrates how alternative structural models can enhance the analysis of

the impact of credit supply factors on the overall economy. The main conclusion of the analysis presented in the box is that the impact of credit supply factors on real annual GDP growth has been significant, especially in 2009, but that this impact diminished gradually during 2010, becoming of minor importance by the third quarter.

## Box 2

### ANALYSIS OF THE IMPACT OF CREDIT SUPPLY FACTORS ON ECONOMIC ACTIVITY USING STRUCTURAL MODELS

Structural models, loosely defined here as models that have a direct link to economic theory, are a natural reference point for the identification and quantitative analysis of the forces driving loans to the private sector. They include a wide range of frameworks, ranging from more theory-driven models, such as dynamic stochastic general equilibrium (DSGE) models, to more data-driven models, such as structural vector autoregressive (VAR) models. These models allow for a causal analysis of the impact of credit factors on the economy and take into account (more or less explicitly) the main channels through which disturbances are transmitted across the economy. This box illustrates how the analysis of loan developments can be enhanced with two types of structural model, namely structural VAR and DSGE, both estimated with euro area data and each including loans to the private sector. In particular, it looks at two examples of the structural VAR model and one example of the DSGE model.

#### The models used

The first model used is a structural VAR model that identifies loan supply shocks, among other types of shock (shocks to aggregate demand and shocks to aggregate supply), by imposing sign restrictions based on economic theory.<sup>1</sup> The second model is the DSGE model developed by Darracq et al.<sup>2</sup> Within this model, the set of “financial” shocks includes disturbances to the lending rate margins, borrowers’ credit risk, loan-to-value ratios and bank capital frictions. “Financial” shocks therefore portray both price and non-price credit supply factors. A third approach to identifying the credit supply shock is the direct use of information from the ECB’s bank lending survey. A panel VAR methodology is employed to exploit the cross-sectional

1 The model is estimated using five variables: real GDP, the GDP deflator, short-term interest rates (EURIBOR), the spread between lending rates and short-term interest rates, and the volume of loans. As regards the identification of structural shocks, for example, loan supply shocks are identified on the basis of the responses of some variables: an expansionary loan supply shock (i.e. a shock giving rise to an increase in real GDP) would imply a decline in the spread and an increase in the volume of loans within the same quarter.

2 See Darracq Paries, M., Kok Sorensen, C. and Rodriguez Palenzuela, D., “Macroeconomic propagation under different regulatory regimes: Evidence from an estimated DSGE model for the euro area”, *Working Paper Series*, No 1251, ECB, Frankfurt am Main, October 2010. The model embeds a monopolistic banking sector and bank capital frictions, and is estimated on the basis of euro area data, including bank loans and lending rates.

information generated by the individual euro area countries, as suggested by Ciccarelli et al.<sup>3</sup> A VAR specification is adopted to make full use of the bank lending spreads to non-financial corporations.

Structural models allow each series in the model to be decomposed in terms of contributions from various structural shocks. They imply that, in the absence of shocks, the variables would remain at steady-state values (or at the long-run average). Thus, it is possible to decompose the deviations of each series from its average for each quarter, in terms of both the contributions from shocks that took place in that quarter and the effect from shocks that took place in the previous quarters, the effects of which are persisting on account of propagation mechanisms. This structural decomposition differs from the decomposition derived from reduced-form models, as the latter are statistical in nature and cannot be given a structural interpretation. At the same time, caution is necessary when comparing the decomposition of shocks across structural models, as broadly defined shocks, such as “credit supply shocks”, can involve a number of very different factors, depending on the concrete specification of the models.

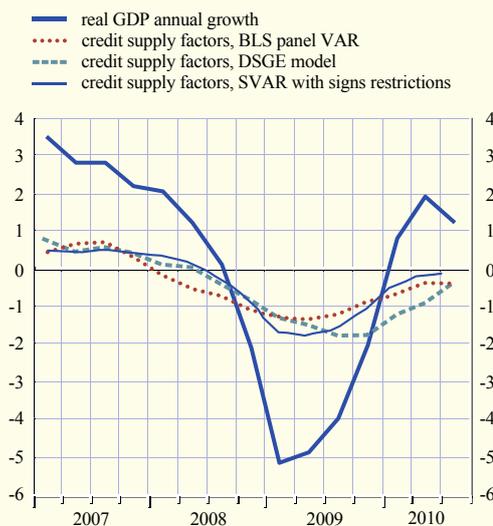
### The evidence on the effect of credit supply factors on real GDP

The decompositions of real GDP growth based on these three models show some differences, but also share some important similarities. The differences are due, in part, to the fact that the set of shocks identified differs somewhat. This box focuses on the estimated impact of credit supply factors on real GDP growth, and, in this respect, these models produce rather similar results.

Indeed, all three models suggest that loan supply shocks have not been among the main driving forces of real GDP growth since the financial crisis started in mid-2007, although they have had a noticeable impact in certain quarters (see the chart). During the initial phases of the financial crisis, loan supply shocks had only a minor impact on economic activity. By the fourth quarter of 2008, however, the effect of loan supply shocks had already had a visible downward impact, and overall accounted for almost one-third of the downward deviation of real GDP growth from the trend growth between the third quarter of 2008 and the first quarter of 2010. In the first half of 2009, when the downward impact was at its strongest, these shocks accounted for almost 2 percentage points of the decline in real GDP growth.

#### Comparison of the impact of credit supply factors on real annual GDP growth across model estimates

(annual percentage change; percentage points)



Source: ECB.

3 Ciccarelli M., Maddaloni, A. and Peydró, J.L., “Trusting the bankers: a new look at the credit channel of monetary policy”, *Working Paper Series*, No 1228, ECB, Frankfurt am Main, July 2010. Specifically, the model includes the annual growth rate of GDP, the annual growth rate of the GDP deflator, BLS demand conditions for loans to non-financial corporations, BLS credit supply conditions to non-financial corporations, short-term and long-term spreads on loans to non-financial corporations and the annual growth rate of loans to non-financial corporations. The model imposes a static shock-identification scheme using the Cholesky ordering of the variables as mentioned above, and the shocks on the BLS credit supply conditions are interpreted as credit supply shocks.

At the same time, shocks other than those that can be associated with loan supply (including aggregate supply shocks, such as technology shocks or shocks to the costs of production, and aggregate demand shocks, such as shocks to consumption and investment) appear to have contributed markedly to the moderation in real GDP growth observed in 2008 and 2009. The role of these other shocks can be assessed by noting the difference between the actual growth in real GDP and the estimated impact of loan supply factors. Thus, the evidence provided by these models indicates that, although loan supply shocks have played a non-negligible role, other forces have mainly shaped the pattern of private sector loan growth since the start of the financial crisis.

Overall, the estimates presented on the basis of different structural models point to a visible impact of credit supply factors on real annual GDP growth, especially in 2009. It is remarkable that both the size and the profile of the estimated impact of these factors on economic activity are very similar, despite the differences in the models. At the same time, the estimates presented also provide consistent messages with regard to the general picture of the relatively more important effects resulting from factors other than credit supply.

## 5 CONCLUDING REMARKS

The nature and extent of the financial tensions that have unfolded since mid-2007 suggest that loan developments may have followed a distinctly different pattern from that in earlier business and credit cycles. In particular, problems in the banking sector, disintermediation tendencies in the financing of the non-financial corporation sector and the severe crisis in the housing markets of some euro area countries have all suggested that, this time around, the growth in bank loans to households and non-financial corporations may not be in line with historical regularities.

However, the analysis suggests that, taking into account the particular severity of the recent recession, developments in private sector loan growth appear to be broadly in line with historical regularities over the business cycle. The impact of the financial crisis was significant, but was limited considerably by non-standard monetary policy measures.

Model-based evidence suggests that loan supply factors have had a significant downward impact on loan growth since the start of the financial tensions in mid-2007. At the same time, an assessment of the relative role of supply factors shows that other factors, including demand-related factors, were quantitatively

more important than those related to loan supply. A credit crunch, fears of which have sometimes been voiced by external observers, did not materialise.

Looking ahead, some risks remain. In particular, the sovereign debt crisis that started in 2010 has also affected credit markets in some euro area countries, especially in the case of loans to non-financial corporations, although the impact at the aggregate euro area level has been contained. Moreover, on the supply side, some uncertainty remains with respect to the future adjustment of banks' balance sheets. Hence, a close and continuous monitoring of credit markets in the euro area is warranted.

## TRENDS IN POTENTIAL OUTPUT

*Measures of potential output are useful for distinguishing between longer-term trends and shorter-term cyclical movements in the economy. According to a variety of estimates, the potential output of the euro area economy fell significantly in the wake of the financial crisis. It is likely that the financial crisis has led to a one-off permanent loss in the level of potential output, owing to the economic effects of the downsizing of some sectors, such as the financial and construction sectors, following their disproportionate expansion during the boom. However, it is yet to be seen whether this will also affect the longer-term growth rate of potential output. The longer-term effects of the financial crisis on potential growth will depend very much on the flexibility of the economy in adjusting to this shock.*

*Irrespective of the long-run effects of the financial crisis on potential growth, the ageing population in the euro area will have a dampening effect on future potential output growth. Without far-reaching structural reforms supporting long-term economic growth, it appears unlikely that the euro area will achieve the previously measured potential growth rates of 2% or above in the coming decade. Such reforms are also important to help ensure that the financial crisis does not have a longer-term downward impact on the potential growth rate of the economy.*

*The output gap, which is defined as the difference between actual and potential output, can be regarded as an indicator of over or under-utilisation of the productive capacity of the economy over the business cycle. During the recent economic downturn, actual output has fallen below the level of potential output, which has led to a significant negative euro area output gap. This is likely to have contributed to the current lower inflationary pressures. However, recent evidence seems to confirm that the link between the output gap and inflation is rather weak in the euro area.*

### I INTRODUCTION

The concept of potential output is generally understood to measure the medium-to-long-term level of sustainable real output in the economy. While measures of potential output growth abstract from short-term cyclical movements, they can still fluctuate from year to year, reflecting supply conditions, such as changes in the key production inputs of capital and labour and their productivity, as well as variations in investment and the degree of unemployment persistence. Therefore, variations in annual measures of potential output growth should be distinguished from the long-run trend rate of potential output growth, which is primarily determined by the rate of technical progress and population growth.

Measures of potential output are also used to derive additional indicators, such as cyclically adjusted government budget balances, which are used to assess the fiscal policy stance. However,

it must be noted that potential output cannot be observed directly, but has to be inferred from existing data using statistical and econometric methods. There is considerable uncertainty in the measurement of potential output, which translates across to the derived indicators.<sup>1</sup>

The latest economic downturn in the context of the financial crisis had a sizeable adverse short-term impact on output. It is a widely held view that potential output may have been affected as well. The effect of the financial crisis on potential output has implications not only for economic activity, but also for the assessment of possible short-run downward price pressures emanating from excess capacity. Looking further forward, an ageing population in the

<sup>1</sup> For a more detailed discussion of the role of potential output measures in macroeconomic analysis and the uncertainty surrounding its measurement, see “Potential output and output gaps: concept, uses and estimates”, *Monthly Bulletin*, ECB, October 2000. See also “Potential output in the euro area”, *Monthly Bulletin*, ECB, July 2009.

euro area will also have a dampening effect on future potential output.

This article is organised as follows. First, the various concepts and measures of potential output are described. Second, the article reviews the evolution of and current developments in estimates of potential growth, considers how they may have been affected by the latest economic downturn and discusses the longer-term outlook for potential growth. Third, the evolution of and current developments in estimates of the output gap and its link to inflation are examined. The article concludes with implications and suggestions for economic policy.

## 2 THE CONCEPT OF POTENTIAL OUTPUT AND ITS MEASUREMENT

Potential output is generally understood to provide an indication of the medium-to-long-term level of sustainable real output in the economy and its rate of growth. It is also referred to as the level of output which can be achieved using available production factors without creating inflationary pressures. The level of potential output and its rate of growth are affected by many factors, among which the institutional framework in which the economy operates as well as structural economic policies play a major role. The output gap, defined as the percentage deviation of the actual level of output from the potential level, measures the degree of utilisation of production factors in the economy and is often regarded as an indicator of the state of the business cycle and, among others, as an indicator of possible inflationary pressures.

The evolution of potential output depends on developments in a number of underlying factors, foremost among them supply conditions such as the endowments of the economy relating to the key production inputs of capital and labour and their productivity. Hence, potential output growth reflects developments in these supply-side elements which, in turn, are linked to various factors such as demographic and

labour market trends, variations in investment and technological innovations.

The capacity of an economy to produce is shaped by the legal and economic framework. Prominent features of this framework which influence potential output are: the tax system; the definition of property laws; the efficiency of the legal and educational systems; regulations in product, labour and financial markets; and the existence of a stable, credible and efficient monetary system. In general, changes in these framework conditions can have a sizeable impact on the growth capacity of the economy. Thus, economic reforms aimed at increasing competition and minimising disincentives to invest in capital and human resources are key to raising the medium- and long-term productive capacity of the economy. Furthermore, technological innovation is an additional crucial source of variation in an economy's productive capacity (namely product and process innovations), which, by definition, is difficult to predict, but which can be seen as the main driver of economic growth in the long run. Finally, it is evident that major economic crises can affect potential growth, as part of the stock of real and human capital may depreciate more rapidly or become obsolete during severe downturns, while institutional rigidities may prevent a quick re-employment of the productive resources that become idle or under-utilised in such crises.

All in all, this suggests that the rate of potential growth can change substantially over time. Furthermore, as the impact of these factors on economic growth cannot be measured with certainty, and because the level of potential output or its rate of growth cannot be observed directly but has to be inferred from existing data using statistical and econometric methods,<sup>2</sup> estimates of potential output are surrounded by considerable uncertainty. This is particularly the case in the current environment, as the long-term economic implications of the financial crisis are still unclear.

2 See footnote 1.

### 3 RECENT DEVELOPMENTS AND OUTLOOK FOR POTENTIAL OUTPUT

In the context of the recent sharp global downturn, the uncertainty regarding the medium-term outlook for the growth of euro area GDP as well as that of the rest of the world is particularly high. In the following, estimates by international institutions of potential growth for the euro area at the current juncture are presented and the main drivers behind the recent developments in potential output are analysed. In addition, the outlook for potential output growth is discussed.

#### RECENT DEVELOPMENTS IN POTENTIAL OUTPUT GROWTH

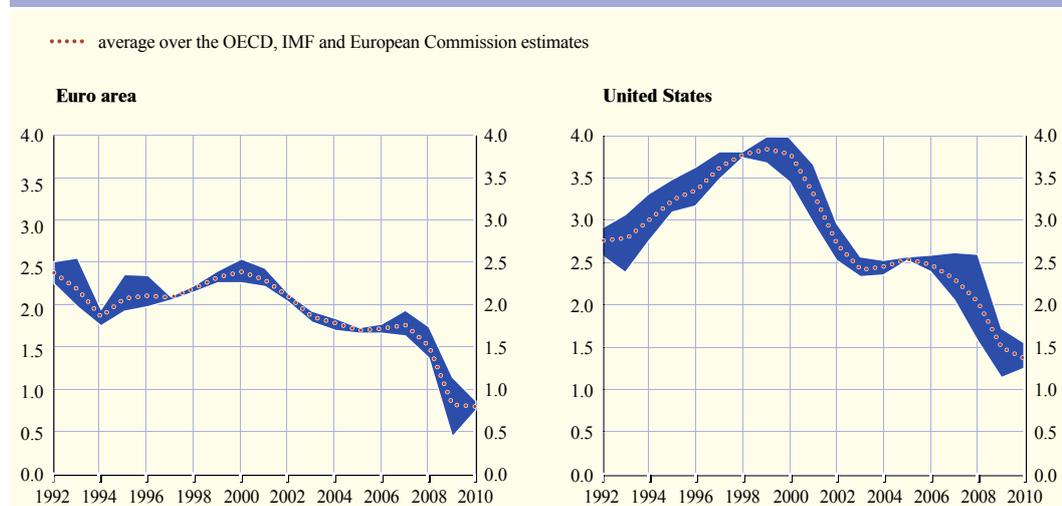
Recent estimates of potential output provided by the OECD, the IMF and the European Commission indicate that potential growth in the euro area is estimated to have fallen significantly during the recent economic downturn. The average rate of annual potential growth was estimated to be around 1.9% in the period 2000-07, with a relatively narrow range of estimates over this period (see Chart 1). This compares with an average estimate of

the annual rate of potential growth of 0.9% in the years 2008-10. In this latter period, the range between the estimates provided by the institutions also increased.

The sizeable fall in estimates of potential growth is not unique to the euro area: the rate of potential growth in the United States, although estimated to be at a higher level than in the euro area, was on average estimated to decline by a similar amount, from 2.5% in the period 2000-07 to 1.8% over the years 2008-10.

The approaches of international institutions to the estimation of potential output are based on the concept of a macroeconomic production function which relates output to technology levels and to the key inputs of labour and capital. Under some simplifying assumptions, such an approach allows for a decomposition of potential growth into contributions from changes in the usage of capital and labour in the economy, as well as from changes in the productivity of these factors. The latter effect is also called “total factor productivity” (TFP) and its contribution to potential GDP growth can be understood as a rough measure of the rate of technical progress of

Chart 1 Range of estimates of potential output growth for the euro area and the United States



Sources: *Economic Outlook*, OECD, December 2010; *World Economic Outlook*, IMF, October 2010; and European Commission, AMECO database, autumn 2010.

the economy. In the long run, technical progress is the only source of increases in economic wealth measured by GDP per capita.

The breakdown of potential output growth estimates according to the contributions of labour, capital and productivity for the euro area is provided in Chart 2, on the basis of estimates made by the European Commission.<sup>3</sup> The chart reveals, first, a remarkable trend in the period 2000-07 before the financial crisis: the contributions from total factor productivity halved from about 1% in 2000 to ½% in 2007, whereas the contributions of the accumulation of the capital stock and the labour input remained relatively stable. Second, the potential growth factors have been affected by the latest economic downturn to different degrees: while the estimates of the contribution from TFP changed only marginally, the decline in potential growth in the context of the financial crisis is generally explained by lower contributions from the labour and capital inputs. The fall in the labour contribution to growth is due to an increase in estimates of the structural rate of

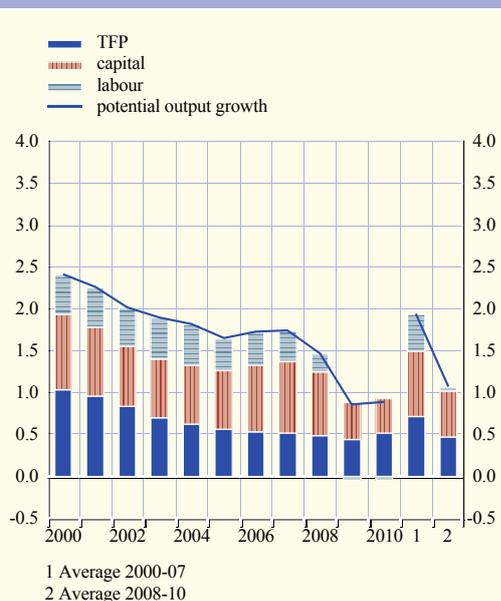
unemployment (the NAIRU – non-accelerating inflation rate of unemployment), lower labour market participation rates, and estimates of a steeper trend decline in hours worked. Furthermore, the lower contribution from the capital stock reflects the decline in investment in the context of the recent economic downturn. This is in line with the general finding that capital and employment tend to be depressed for an extended period of time after financial crises, while TFP seems to suffer less and recover more quickly.<sup>4</sup>

The longer-term impact of the crisis on potential output is uncertain. There are indeed several reasons why the financial crisis may be associated with structural shocks which can lead to a longer-lasting downward shift in the level of potential output or even persistently lower growth rates of potential output.<sup>5</sup>

First, a lasting decline in the level of potential output can originate from the adjustment of the excess capacity which accumulated during the period preceding the crisis. Such an adjustment process would give rise to a fall in investment levels combined with an acceleration in the depreciation or obsolescence of some vintages of the capital stock. Indeed, the latest economic downturn might in some countries result in a significant downsizing of some sectors, such as the financial and construction sectors, following their disproportionate expansion during the boom.

Second, a fall in the level of potential output can originate from a reduction in the trend level of labour input as a consequence of the depreciation of labour skills due to long-term unemployment. As the downturn was particularly pronounced, and as specific sectors were disproportionately affected, this may also exacerbate the labour market “mismatch”,

Chart 2 Contributions to potential growth for the euro area over the period 2000-10



Sources: European Commission, AMECO database, autumn 2010.

3 A comparable breakdown is not available for estimates by the IMF and the OECD.

4 See *World Economic Outlook*, IMF, Chapter 4, October 2009.

5 See “Potential output in the euro area”, *Monthly Bulletin*, ECB, July 2009.

i.e. the matching of unemployed workers to vacancies may be disrupted as sectoral reallocation may change the range of skills required. Such frictions in the labour market can bring about a temporary but persistent increase in structural unemployment.

Longer-term effects of the financial crisis on the rate of growth of potential output are more uncertain. Such effects may emerge where the financial crisis has depressed current and expected profits over a protracted period and led to increases in risk premia, and where the supply of credit has become constrained resulting in tighter lending standards and higher effective borrowing costs.<sup>6</sup> Such developments can slow down investment, and consequently the accumulation of capital, over a longer period of time. Furthermore, real and nominal rigidities in labour markets may hinder the reallocation of labour resources and limit the adjustment of wages, leading to weak labour demand and a persistent pattern of lower employment growth. A deep recession may also cut potential labour force growth by discouraging groups in the labour force from participating in the labour market and by reducing immigration flows.

The factors mentioned above, together with a possible longer-lasting subsidisation of unprofitable sectors, may impede the process of restructuring and adversely affect innovation activities, thereby bringing about a lasting downward shift in productivity and hence in potential output growth. However, when less efficient firms and activities are removed from the market and substituted by more efficient ones, efficiency and productivity growth may improve in the medium and long

term, thereby contributing to an increase in potential output growth. Box 1 presents empirical evidence showing that such a restructuring process is crucial for economies to maintain high productivity growth and that it would also be a key factor in ensuring that an economy grows out of an economic downturn.

Experiences with past financial crises can give an impression of how crucial economic policy responses are for the long-run impact of a financial crisis on potential output.<sup>7</sup> For instance, the recessions which started in 1991 in Sweden and Finland were relatively short-lived and did not result in a long-lasting reduction of potential output growth. This was largely due to the quick resolution of the banking crises in those countries, as well as comprehensive economic restructuring processes triggering an increased contribution of TFP to potential growth. By contrast, an insufficiently resolute policy reaction to a financial crisis may have contributed to the slowdown in long-run potential growth in Japan in the course of the 1990s.

All in all, the financial crisis is likely to have led to a downward shift in the level of potential output. The extent to which potential output growth has also been affected is highly uncertain, not least since the impact on growth depends to a large extent on policy responses to the recent economic downturn.

6 See the box entitled “Developments in potential output in the light of changes in oil prices and credit risk premia”, *Monthly Bulletin*, ECB, December 2008.

7 “Impact of the current economic and financial crisis on potential output”, *European Economy Occasional Papers*, No 49, European Commission, June 2009.

Box I

**TOTAL FACTOR PRODUCTIVITY AND STRUCTURAL PATTERNS IN FIRMS' DYNAMICS FOR SELECTED EURO AREA COUNTRIES**

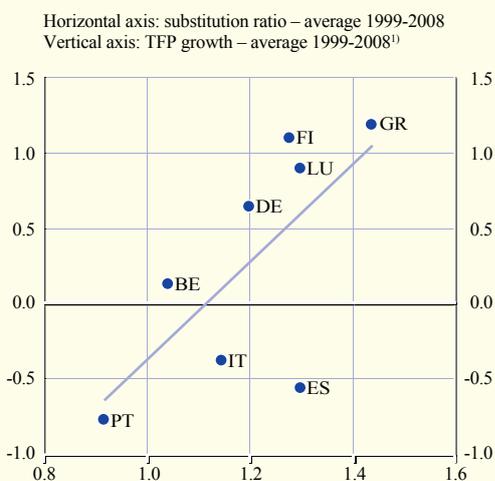
The link between firms' dynamics, economic activity and total factor productivity (TFP) has been widely discussed in the economic literature. The shedding of unproductive firms and the entry of more productive ones is a process that has been identified as an important driver of changes in aggregate productivity growth.<sup>1</sup>

Structural features of firms' entry-exit processes seem to be a particularly relevant economic issue for TFP and potential output, particularly during large recessions such as the recent economic and financial crisis. Therefore, a better understanding of firms' exit and entry dynamics is key to the design of policies that will enhance productivity and long-term growth and provide the right conditions for a durable recovery from the crisis. This box sheds light on firms' dynamics in selected euro area countries based on data on firms' births and deaths.

The available data seem to support the view that a Schumpeterian type of creative destruction is a key feature of euro area firms' dynamics. As can be observed in Chart A, a higher level of firm births relative to deaths is broadly in line with a higher growth rate of TFP.<sup>2</sup> A possible interpretation of this finding is that new firms entering the market are more innovative in comparison to surviving firms and those which are exiting. An intensification of competition due

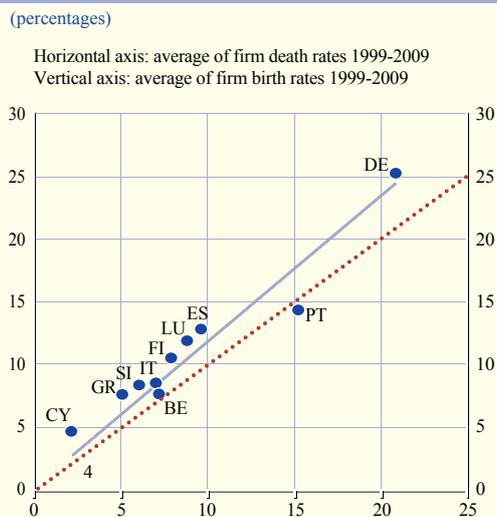
1 See Bartelsman and Doms (2000).  
 2 However, it should be noted that a significant correlation does not necessarily suggest the existence of a causal relationship among the variables.

**Chart A Substitution ratio and TFP growth**



Sources: Conference Board Total Economy Database, and ECB calculations.  
 Note: The substitution ratio relates firm birth rates to firm death rates.  
 1) Percentage changes.

**Chart B Average firm birth and death rates**



Source: ECB calculations.  
 Note: The dotted line is a 45-degree line.  
 Birth and death rates are defined as the ratio between the number of firms entering or exiting in a given year and the total number of firms that existed the year before.

to a greater number of firms in the market – a result of the entry of newcomers – may also be a driver of this innovation-enhancing process.<sup>3</sup>

Chart B suggests a strong relationship between firm birth and death rates within the individual euro area countries. However, birth and death rates differ widely across countries, with the majority of these rates falling within the range of 5-10% of the total stock of firms.<sup>4</sup> In most of the euro area countries, the birth rates exceed the death rates on average over time, implying a positive net growth in the number of firms.

In summary, the “churning” of firms in terms of faster birth rates than death rates seems to be positively correlated with TFP growth. Accordingly, structural reforms which enhance the setting-up of firms, such as reducing red tape and regulations for new firm start-ups, as well as measures which foster competition and innovation and reduce product and labour market rigidities, should be seen as means to enhance TFP growth and boost the growth rate of potential output in the euro area.

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3 Additionally, the contribution of entries and exits to aggregate productivity growth may vary across sectors. As Lopez and Puente (2007) show for Spain, new firms in the service sector tend to be less productive than entries in the industry sector.

4 The degree of heterogeneity/homogeneity may hide asymmetries, such as regulatory factors affecting the likelihood of opening a new firm or sunk costs related to the foreclosure of existing firms and the consequential opening of renewed businesses.

## LONGER-TERM OUTLOOK FOR POTENTIAL GROWTH

Looking further ahead, future potential output in the euro area is also likely to be affected by the ageing of the population. Population ageing dampens the rate of growth of the labour force, giving rise to a lower supply of labour and thereby attenuating the growth rate of potential output in the medium and longer term.

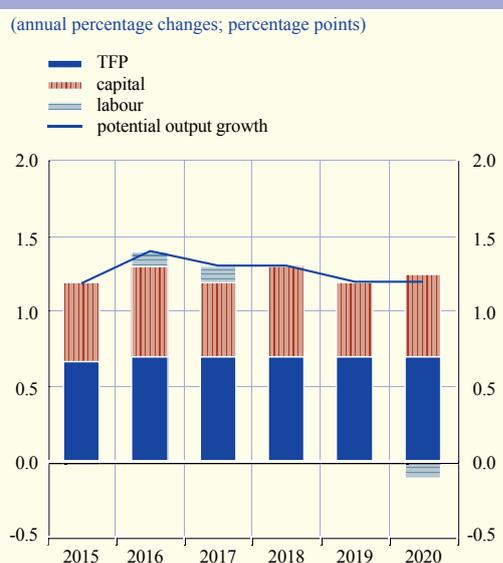
The recent European Commission medium-term projection of potential growth for the euro area<sup>8</sup> – as shown in Chart 3 – points to a notable long-run decline in future potential growth rates in the euro area if there are no major changes in economic policies which would contribute to increasing the potential rate of growth. This is due to the reduction in the size of its working age population: the annual rate of change in the population aged 15-64 years in the euro area is projected to decline and therefore the overall contribution of the labour input – as measured by total hours worked in the economy – to annual potential growth is estimated to fall and become negative by 2020. The projections carry forward the 2007 pre-crisis growth contributions of about

½ percentage point by the rate of technical change and of ¼ percentage point by capital accumulation, reflecting the assumption of an unchanged stance in structural economic policies in the euro area. Together with an assumed negative contribution by the labour input reflecting the projected impact of ageing, this yields an estimated rate of growth as low as 1¼% for the euro area in 2020. Thus, even without incorporating any lasting negative impact of the latest economic downturn on potential output growth rates, the impact of an ageing population will significantly reduce potential output growth in the euro area in the long run if no economic reforms take place.

## 4 THE OUTPUT GAP AND INFLATION

The latest economic downturn had a large downward cyclical impact on activity. Such impacts are reflected in measures of the output gap, which is defined as the percentage difference between the actual and potential level of real GDP. Like measures of potential output, measures of the output gap are subject to uncertainties as well.

Chart 3 Medium-term scenario for potential growth of the euro area



Source: *European Economy*, European Commission, 7, December 2010, pp. 48-66.

The output gap can be regarded as an indicator of the degree of usage of the economy's production capacities, reflecting short-term variations in demand. As productive capacities such as capital stock or human skills can be fully adjusted only in the medium term and cannot be immediately aligned with fluctuations in demand, the utilisation of existing production resources will change over the business cycle. Thus, a positive output gap indicates a high utilisation of capacity in times of strong demand, while a negative output gap indicates that demand falls short of the production volume that can potentially be provided with existing production capacities.

<sup>8</sup> See European Commission, *European Economy*, 7, December 2010, pp. 48-66. The population growth assumptions underlying these projections are broadly in line with the 2009 Ageing Report (see "The 2009 Ageing Report: Underlying Assumptions and Projection Methodologies for the EU-27 Member States (2007-2060)", *European Economy*, No 7/2008, p. 209, table entitled "Euro Area – Main Demographic and Macroeconomic Assumptions").

Accordingly, although inflation is ultimately a monetary phenomenon, the output gap is often seen as a key determinant of inflationary pressures in the short run. Put simply, the more actual output exceeds its potential level (i.e. the wider the output gap), the stronger the upward pressure on prices. Conversely, the more production capacities lie idle (and the output gap is in negative territory), the greater the incentive for firms to stimulate demand for their products by cutting prices or reducing price increases.

The latest economic downturn depressed demand to a greater extent than supply, and therefore resulted in a marked decline in the output gap in both the euro area and the United States. As estimates of the output gap shown in Chart 4 suggest, the output gap started shrinking in both economies in 2007. However, when the financial crisis intensified, the decline was amplified, and the output gap is estimated to have eventually reached an exceptionally deep trough in 2009, giving rise to the most severe downturn in peacetime since the Great Depression in the 1930s.<sup>9</sup> Meanwhile, the negative output gap is expected to shrink somewhat in 2010 in both the euro area and the United States.

The marked fall in the output gap in 2008 and 2009 has contributed to a lower annual rate of HICP inflation in the euro area. However, the effect has been contained, and there is a widespread consensus amongst forecasters that inflation in the euro area will remain positive over the medium term. This outlook seems to be broadly in line with historical experience, when movements in economic slack played only a limited role in the inflation process in the euro area. As Chart 5 shows, the relationship between the output gap and price developments has been mixed in the past, and it suggests that, on average, relatively large movements in output gaps are required to affect euro area inflation in a significant way.<sup>10</sup>

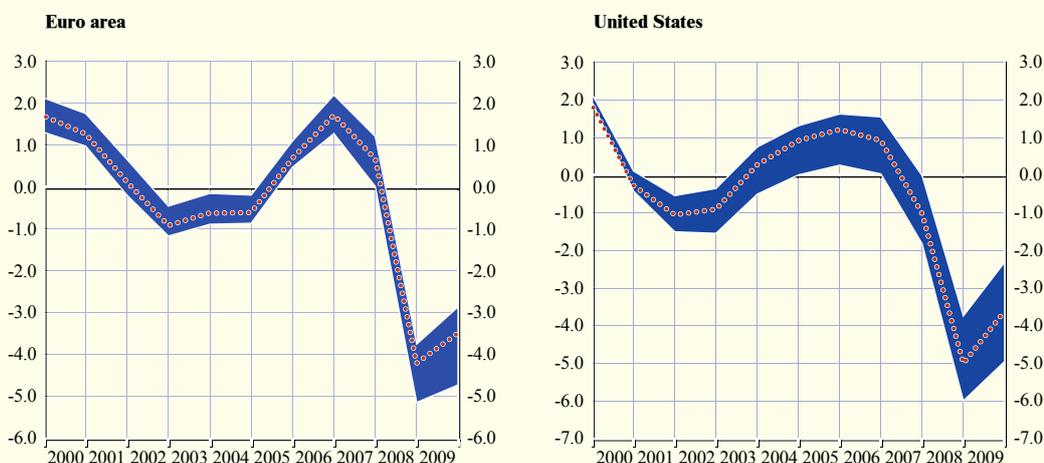
There are a number of explanations for the recent trends in inflation. As shown in more

- 9 The latest recession differs significantly from a typical recession. For a more detailed description of the recent downturn from a historical perspective, see “The latest euro area recession in a historical context”, *Monthly Bulletin*, ECB, November 2009.
- 10 See, for instance, Musso, A., Stracca, L. and von Dijk, D., “Instability and nonlinearity in the euro area Phillips curve”, *Working Paper Series*, No 811, ECB, 2007, as well as Fagan, G. and Morgan, J., *Econometric models of the euro area central banks*, Edward Elgar Press, 2005.

Chart 4 Range of estimates of the output gap in the euro area and the United States

(as a percentage of GDP)

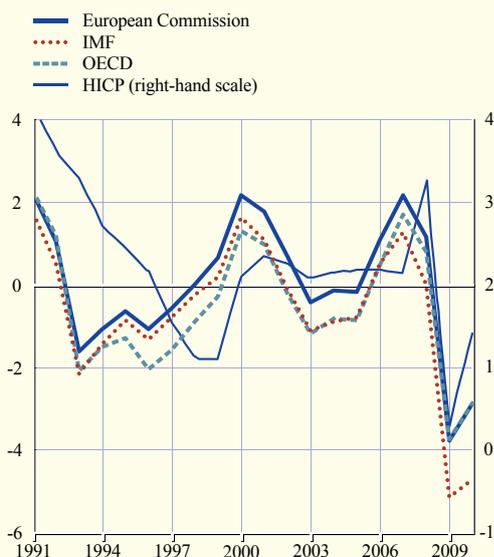
..... average over the OECD, IMF and Commission estimates



Sources: *Economic Outlook*, OECD, December 2010; *World Economic Outlook*, IMF, October 2010; European Commission, AMECO database, autumn 2010.

**Chart 5 Selected measures of the euro area output gap and annual overall HICP inflation**

(annual percentage changes; percentage of GDP)



Sources: European Commission, IMF, OECD and Eurostat.  
Notes: Values of all variables except the annual rate of change of the HICP are shown on the left-hand scale. Estimates of output gaps in 2010 and 2011 are projections. Data for HICP excluding energy and food in 2010 are based on available monthly observations.

detail in Box 2 on the basis of a technical analysis of the link between the output gap and inflation in a Phillips curve framework, a key factor is inflation expectations, which play a strong role in shaping inflation developments. Over the past year, inflation expectations in the euro area have remained well-anchored, with medium-term measures of inflation expectations staying close to 2%, in line with the ECB's mandate of maintaining price stability.<sup>11</sup> At the same time, the euro area has also been characterised by wage and price rigidities, such as stickiness in wages deriving from multi-year contracts, minimum wage arrangements, or the indexation of wage agreements to inflation

developments. In general, nominal rigidities can be expected to give rise to significant non-linearities or asymmetries in the response of prices to changes in activity: firms may be more reluctant to move prices down than up, and workers may particularly resist reductions in nominal wages.<sup>12</sup> These types of wage and price rigidities also mute the disinflationary response to a deterioration in economic conditions.

Overall, while a sizeable slack in the economy can exert a mitigating impact on price pressures in the near term, changes in prices and wages in the euro area are characterised by a substantial degree of rigidity, reducing the impact the output gap has on shaping the inflation profile, and well-anchored inflation expectations also play a crucial role. Furthermore, uncertainty in the measurement of potential output translates into the output gap. Thus, if the abrupt slowdown in activity were to reflect a negative impact of supply-side factors to a greater extent than currently assumed, the level of potential output would be lower and the output gap would be less negative. Therefore, the assessment of the impact of the current downturn on inflation is also uncertain.

<sup>11</sup> Several studies find an increasing role for inflation expectations in estimated Phillips curves. For example, based on estimated Phillips curves for a panel of OECD economies, Anderton et al. (2010) find that the impact of the output gap on inflation may be becoming weaker over time, possibly due to changes in monetary policy that have contributed to low and well-anchored inflation expectations. See Anderton, R., Galesi, A., Lombardi, M. and di Mauro, F., "Key elements of global inflation", in *Challenges to inflation in an era of relative price shocks*, Reserve Bank of Australia Conference Volume, 2010.

<sup>12</sup> More details on price-setting in the euro area are provided in "New survey evidence on wage setting in Europe", *Monthly Bulletin*, ECB, February 2009 and in "Price-setting behaviour in the euro area", *Monthly Bulletin*, ECB, November 2005.

## Box 2

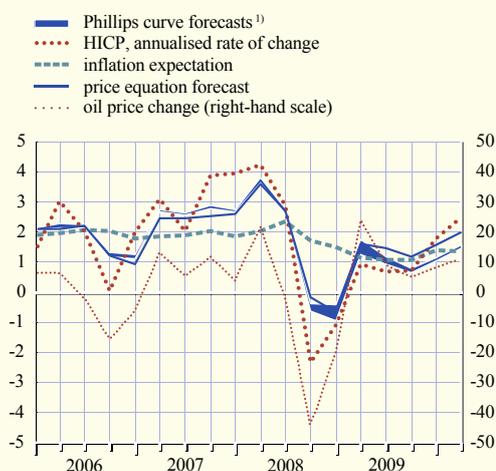
## THE LINK BETWEEN INFLATION AND THE OUTPUT GAP: AN ILLUSTRATION BASED ON A PHILLIPS CURVE FRAMEWORK

A standard framework for understanding the relationship between the output gap and inflation is the Phillips curve. In its original formulation, the Phillips curve presented a simple short-term relationship between inflation and the unemployment rate.<sup>1</sup> Modern variants acknowledge that potential output can also vary over time and therefore relate inflation to deviations of economic activity from its potential level – the output gap.<sup>2</sup> They also recognise the influence of firms' and workers' expectations on price- and wage-setting behaviour. Empirical estimates of the Phillips curve thus include proxies for inflation expectations – either forward-looking (e.g. expectations based on surveys of economic forecasts) or more backward-looking (i.e. expectations based on past inflation) – reflecting that expectations mechanisms can also be formed adaptively in response to developments in inflation. Finally, Phillips curve models of inflation also attempt to capture the influence of other exogenous supply-side factors such as changes in oil and other commodity prices. Since changes in these prices tend to be passed through to headline HICP inflation, substantial movements in these variables have a significant effect on inflation in the short run.

This box illustrates the possible impact of economic slack – as measured by the output gap – on inflation, on the basis of a simple but broadly standard Phillips curve framework. The impact of different variables explaining inflation in such a framework can be estimated by regressing the quarter-on-quarter, annualised rate of change of the overall HICP on the following main explanatory variables:<sup>3</sup> (i) the measure of one-year-ahead inflation expectations from the Consensus Economics survey, (ii) the value of HICP inflation in the preceding quarter (as a means of capturing inertia and rigidity in the adjustment of prices), (iii) the quarterly rate of change of the oil price in euro (as a way of capturing an important exogenous supply-side driver of inflation), and (iv) a measure of the output gap. In order to assess the importance of the output gap as a driver of inflation, an alternative estimation has also been carried out excluding the output gap. In a second step, the impact parameters derived from the model estimations can be used to derive two types of inflation predictions conditioned on the values of the explanatory

## Actual HICP inflation and model predictions of HICP inflation based on estimated output gaps, oil price changes and inflation expectations

(quarter-on-quarter percentage changes)



Sources: Eurostat, Datastream, Consensus Economics survey, European Commission (AMECO database), OECD, IMF and ECB calculations.

Note: Values of all variables except the oil price change are shown on the left-hand scale.

1) Range implied by the range of output gap estimations by the European Commission, the OECD and the IMF. The European Commission and IMF estimates of annual values of output gaps have been interpolated to obtain quarterly values.

1 See Phillips (1958).

2 See Kuttner (1994).

3 The regression models are estimated on the basis of the ordinary least squares method with data from Q1 1991 to Q2 2010.

variables: first, the Phillips curve predictions incorporating the impact of the output gap as measured by different institutions – the European Commission, the IMF and the OECD – and second, a prediction of inflation excluding the output gap impact but still reflecting the impact of the remaining explanatory variables (i.e., price equation forecast).<sup>4</sup>

The chart illustrates the main results of this exercise for the period Q1 2006 – Q2 2010. The two types of predictions are very similar, and they both broadly match the observed inflation. The explanation for this result is that the variation in inflation is primarily captured by factors other than the output gap: first, the overall level of inflation is broadly determined by inflation expectations, which have remained comparatively stable over the recent recession. Second, the quarter-on-quarter variations in overall inflation mainly reflect exogenous impacts such as oil price changes.

Summing up, the results of this analysis suggest that for the euro area over this period, the output gap has played only a limited role in shaping inflation developments, while other determinants, such as inflation expectations and changes in oil prices, have been more important.

## References

Kuttner, K.N., “Estimating Potential Output as a Latent Variable”, *Journal of Business and Economic Statistics*, 12, 1994, pp. 361-368.

Phillips, A.W., “The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom”, *Economica*, 25, 1958, pp. 283-299.

<sup>4</sup> Standard statistics indicate that the estimated models perform well overall: all explanatory variables are statistically significant at conventional significance levels, with the exception of lagged inflation in the Phillips curve models. The part of the variance in inflation explained by the explanatory variables is in the range of 73-76% for the Phillips curve models, depending on the estimates of output gaps used. Without using the output gap in the regression model, the share of the explained variance amounts to 73%. The component of inflation unexplained by the explanatory variables is captured by the regression residuals. They are assumed to reflect only unsystematic random influences and should be uncorrelated and normally distributed over time. On the basis of standard statistical tests, these assumptions hold broadly for the Phillips curve models, while the respective diagnostic statistics for the regression model without the output gap are weaker. Overall, taking the output gap into account in these models of inflation developments improves their statistical properties, whereas the actual economic impact of the output gap on inflation is limited.

## 5 CONCLUSIONS

The financial crisis has been accompanied by a slowdown in the potential output growth rate of the euro area, and similar falls in potential output can be observed in other economies, such as the United States. In principle, the financial crisis should only have a temporary effect on the potential growth rate of the economy, i.e. it should only lead to a single downward shift in the level of potential output. However, this will depend on a variety of factors, particularly the flexibility of the economy and the policy reaction to the financial crisis.

Looking further ahead, the ageing of the population will contribute to a lower growth rate of potential output in the euro area in the medium and longer term. On the basis of currently available estimates, it does not seem likely that the euro area will reach the pre-crisis levels of potential growth of 2% or above over the coming decade.

The prospect of a slowdown in potential output growth in the longer term suggests that far-reaching structural economic reform efforts are needed in the euro area to support a lasting increase in production and employment

and to pave the way for a recovery in the long-term sustainable economic growth prospects to become firmly established. Past experiences show that enhancing productivity growth is key to sustaining high levels of long-term growth, particularly in the aftermath of a financial crisis.

The main determinants of gains in productivity in the medium and long term are the rate of technological innovation in the economy, the speed with which less efficient sectors of the economy can restructure, and how flexible the economy is in allowing resources made unemployed or under-utilised during the financial crisis to be re-employed more productively. Therefore, the prospects for potential growth depend very much on the policy framework. A sufficiently flexible institutional framework will help the restructuring process and ensure that the latest economic downturn does not lead to the economy getting locked onto a lower potential output growth path in the medium and longer term. Hence, economic policy needs to aim at strengthening the adjustment capacity and flexibility of labour and product markets. This can best be achieved by facilitating appropriate wage-setting and enhancing labour mobility across sectors and regions. Fostering competition and strengthening investment incentives would also speed up the process of restructuring and boost productivity.

The latest economic downturn has seen some moderation in inflation due to the sizeable negative output gap which opened up over the financial crisis. However, in line with historical regularities, the downward reaction of inflation in the euro area to changes in the output gap has been relatively contained. Inflation expectations are crucial determinants of the inflation process. As these expectations have remained well-anchored by the ECB's monetary policy during the crisis, at levels below but close to 2% over the medium term, this has contributed to shielding inflation developments from

deflationary pressure during the crisis. It is also likely that downward rigidities in wages and prices in the economy played a role in limiting the downward reaction of inflation.



# THE FINANCIAL CRISIS AND THE STRENGTHENING OF GLOBAL POLICY COOPERATION

ARTICLES

The financial crisis and the strengthening of global policy cooperation

*The recent global financial crisis has thrown a spotlight on global macroeconomic and financial surveillance. The years preceding the crisis were characterised by unprecedented strong global growth, combined with low inflation rates, low interest rates and low risk premia. However, at the same time, the world economy experienced a formidable build-up of systemic risks, fuelled by the expansion of economic and financial imbalances in countries around the globe as well as excessive leverage by market participants. The multifaceted nature of the crisis has spawned a number of explanations as to its cause and a variety of policy prescriptions for restoring international stability. This article examines the international monetary system in the run-up to the global financial crisis and the extent to which global macroeconomic and financial surveillance is being reformed as a result of the lessons learned. It focuses on the efforts being made to improve the surveillance of the system, to refine crisis prevention and resolution mechanisms, to increase the system's strength and resilience more broadly and to enhance global policy cooperation.*

## I INTRODUCTION

The international monetary system can be defined as a global framework for cross-border monetary transactions, i.e. the set of rules and broader conditions that underpin balance of payments transactions, such as the issuance and use of international currencies, capital flow and exchange rate regimes, and rapidly rising interconnectedness among countries, including those at different levels of economic and financial development. Ideally, an international monetary system should provide a stable environment to accommodate the global flow of payments, facilitate international financial intermediation, provide liquidity to countries so that they can meet their international obligations, and ultimately support, via flows of funds and investment, sustainable growth and development at both national and global levels. That is, the international public good of external stability should be delivered by a properly functioning and sustainable international monetary system.

The international monetary system is “international” in that it makes global transactions (including local transactions in foreign currency) possible and “monetary” in that it concerns the use of currencies as a means of payment, a unit of account and a store of value. As such, it is different from the international financial system, even though these two systems are strongly interdependent, i.e. the stability of one system cannot be ensured without the stability of the

other. With regard to the term “system”, today’s international monetary system is the outcome of the interaction between the policy decisions of individual countries and market forces and, as such, is not a “system” in the sense of a planned and organised framework. It is thus very elastic and adaptable in nature compared with, for instance, the Bretton Woods system, which prevailed between the end of the Second World War and 1971. This is its strength, but it may also become its weakness if the policies of the system’s main actors pay insufficient attention to longer-term macroeconomic and financial stability concerns and negative externalities affecting other countries.

Against this backdrop, this article examines the international monetary system in the run-up to the global financial crisis that started in summer 2007 (Section 2) and the extent to which it is being reformed – through institutions and fora such as the IMF and the G20 – as a result of the lessons learned from the crisis (Section 3). The multifaceted nature of the crisis has spawned a variety of explanations as to its cause and, consequently, a variety of policy prescriptions for restoring international stability. This article focuses on efforts to improve the surveillance of the system (Section 3.1), the refinement of crisis prevention and resolution mechanisms (Section 3.2), ways to increase the system’s strength and resilience (Section 3.3), and attempts to enhance global cooperation and improve the take-up of IMF policy advice (Section 3.4).

## 2 THE INTERNATIONAL MONETARY SYSTEM AT THE TIME OF THE CRISIS

### FEATURES OF THE INTERNATIONAL MONETARY SYSTEM

In the run-up to the global financial crisis, the international monetary system had a number of defining characteristics that remain prevalent. First, in contrast to previous international monetary systems, the current system comprises a mixture of flexible and fixed exchange rate regimes, with larger, more advanced economies pursuing freely floating exchange rates, and less advanced or smaller economies inclining towards a greater degree of fixity. The stronger form of fixing (pegging) has a clear regional focus, with, most notably, several East Asian economies and major commodity exporters (especially oil exporters in the Middle East) pegging their currencies more or less tightly to the US dollar, and (smaller) economies in or near Europe pegging theirs – again more or less tightly – to the euro.

Second, following widespread capital account liberalisation in the early 1990s, most economies, both advanced and emerging, began to reduce restrictions on inflows and outflows of capital, with the notable exception of China, the dominant emerging market.

Third, notwithstanding the regime change in the international monetary system in 1971, the US dollar retains a very important role in the system for payments, invoicing, pegging and reserve denomination, although since its creation in 1999 the euro has played an important role for economies in the neighbourhood of the euro area.<sup>1</sup> The size of the US economy, its deep and liquid financial markets and its past track record of price stability are important determinants of the US dollar's attractiveness.

Fourth, over the past decade the international monetary system has experienced accelerating growth in the accumulation of official foreign exchange reserves by a relatively small number of countries, the currencies of which are mostly pegged to the US dollar.

Fifth, the international monetary system is interlinked with an international financial system characterised by deregulated financial markets in which prices for and quantities of financial assets are determined by the forces of supply and demand. Viewed globally, financial market development is grossly uneven, as the more established financial markets enjoy a “virtuous circle” of attracting foreign investment for intermediation, which helps to deepen financial market liquidity and spur financial innovation, further increasing demand for their services and thus hampering financial market development elsewhere.<sup>2</sup>

Sixth, while some of the rules, procedures and policies that support the efficient functioning of the international monetary system have been agreed internationally by policy-makers (such as global, regional and bilateral surveillance, and crisis prevention and resolution mechanisms), other features have developed over time as the outcome of policy decisions by individual countries and market forces (such as the global constellation of exchange rate regimes, the choice of key international currencies, and the discretionary unilateral or coordinated provision of liquidity). In theory, the rules should be designed to support the system's stability, in particular by discouraging actions and activities that are inconsistent with ensuring the international public good of external stability. Countries' obligations towards the IMF and its members are a notable example of such rules. However, as evidenced by the recent crisis, these rules were not adequately enforced. This shortcoming can be traced in part to the widespread, but in hindsight misplaced, faith in the disciplining effect of markets on countries' policy actions, as well as the lack of political willingness and peer pressure to enforce internationally agreed rules.

1 See *Review of the international role of the euro*, ECB, July 2010.

2 See Dorrucchi, E., Meyer-Cirkel, A. and Santabárbara, D., “Domestic financial development in emerging economies: evidence and implications”, *Occasional Paper Series*, No 102, ECB, April 2009.

**VULNERABILITIES IN THE SYSTEM**

The most striking aspect of the international monetary system before the crisis was the increasingly large build-up of current account surpluses in a relatively small number of countries and of deficits in an even smaller number, predominantly the United States. The incentives of surplus and deficit countries, though different, were aligned and mutually compatible, giving rise to widening imbalances. Both relied on growth strategies which focused heavily on a single source of demand.

Several surplus countries relied on export-led growth with the assistance of a peg to the US dollar. The by-product of this was a massive accumulation of reserves as appreciation pressure on their currencies was held in check by the peg. This trend coincided with the desire among Asian countries in the wake of the Asian crisis of the late 1990s to build up precautionary reserves. The degree to which the accumulation of reserves, and the growth path of that accumulation, are determined by precautionary motives, as opposed to being a by-product of the maintenance of an undervalued pegged exchange rate, is the subject of much debate and may have changed over time.

On the flip side, deficit countries relied primarily on consumption for growth, as income growth languished – especially in the United States – and house prices boomed, which led to a massive build-up of household debt. This debt accumulation was accommodated by financial markets that were shifting from an originate-and-hold to an originate-and-distribute model of financing. Financial products became increasingly complex and opaque, contributing to an underpricing of risk. This coincided with a trend by national authorities towards lighter regulation, in the expectation that market discipline would suffice. What followed was a sustained compression of risk premia in the search for yield, leading to asset price bubbles and an ever greater build-up of debt.

Thus, unbalanced domestic growth in both deficit and surplus countries and unbalanced

international payments among key economies were intrinsically linked, and this exposed a major weakness in the system, namely, the inadequacy of corrective mechanisms. International financial institutions, charged with overseeing individual countries and system stability, were aware of growing imbalances, but lacked the authority to enforce policy recommendations. The IMF's multilateral consultation in 2006/2007 identified necessary policies, but was let down by weak implementation by the main economies concerned. Moreover, although the multilateral consultation offered a new approach to coordinating responses to global problems (by involving a small number of key parties in a common dialogue) the countries concerned did not assume the necessary ownership of the process, and the international community did not warm to this approach. In addition, the IMF's 2007 Decision on Bilateral Surveillance over Members' Policies was not able to exert sufficient pressure on the key countries behind the imbalances and, ultimately, its implementation had to be softened to allow the surveillance process to continue. Furthermore, not all countries took advantage of the IMF/World Bank Financial Sector Assessment Program (FSAP), and those that did often paid little heed to the policy recommendations made. Finally, market-based corrective mechanisms could not operate where the exchange rates of key surplus countries were prevented from adjusting sufficiently, and income constraints on debt accumulation in deficit countries were circumvented by innovative debt instruments coupled with weak internal credit controls and insufficiently rigorous regulation and monitoring. In sum, neither financial markets (which were active in intermediating increasing volumes of liquidity), nor national authorities (which were focused on satisfying domestically-oriented mandates) contributed sufficiently to promoting global stability.

As a result, the tensions eventually erupted, not in the international monetary system, but in the domestic financial system of the United States, putting an end to the asset price

rise/debt accumulation spiral and causing some financial markets to seize up. These then spread throughout the global system, ultimately spilling over into the real economy and sending shockwaves throughout the international monetary system.<sup>3</sup>

The global financial crisis that started to unfold in August 2007 revealed starkly the inadequate appreciation at all levels (in international financial institutions, national authorities and the private sector) of the degree and nature of the integration of economic and financial activities both within economies and across the globe. It became clear that financial sector surveillance sorely lagged developments, that the understanding of macro-financial linkages (the links between financial market activity and macroeconomic developments) was weak, and that macro-prudential linkages (the links between prudential regulations for financial institutions and their impact on macroeconomic developments) were largely unexplored. Addressing these shortcomings – the weakness of corrective mechanisms and inadequate understanding of global interlinkages – should constitute a key element of any reform.

### 3 THE REFORM OF THE INTERNATIONAL MONETARY SYSTEM

The advent of the crisis revealed that the extraordinary global growth of the world economy over the previous years had not represented a new trend growth rate, but was rather the unsustainable outcome of a combination of misdirected, though aligned, private and public sector incentives, accommodated by an innovative, dynamic financial sector and a very loosely anchored international monetary system. The multi-dimensional nature of the crisis has prompted a multitude of policy prescriptions for restoring the international financial system to health, improving the international monetary system and rebalancing national and global economic growth. The following sections focus on the efforts being made in four key areas: improving the surveillance of the system, refining

crisis prevention and resolution mechanisms; increasing the system's strength and resilience; and enhancing global cooperation and improving the take-up of IMF policy advice.

#### 3.1 THE NEED FOR BETTER SURVEILLANCE

Assessing surveillance is an asymmetric exercise: the quality of surveillance only becomes evident when it fails. The crisis has revealed that surveillance did not succeed in keeping up with the increasing complexity of globalisation. To varying degrees, shortcomings were evident in all areas of surveillance – multilateral, financial sector and bilateral.

##### MULTILATERAL SURVEILLANCE

The high and increasing degree of interconnectedness of the global economy necessitates a greater emphasis on multilateral surveillance. Since the crisis, several multilateral surveillance exercises have been strengthened, new exercises have been or are being created, and yet more measures are under discussion. The IMF, along with other organisations and fora, in particular the G20 and the Financial Stability Board (FSB), are working on improving the surveillance of the global economy in order to increase its resilience and help promote sustainable growth.

One of the potentially most significant innovations in multilateral surveillance is the G20's Framework for Strong, Sustainable and Balanced Growth, launched at the Pittsburgh Summit in September 2009. Its aim is to ascertain the mutual compatibility of national policies with a view to achieving shared objectives. In essence, the twenty most systemically important economies review each others' policy actions and frameworks using common assumptions and with technical assistance from the IMF in order to identify the global effect of their combined plans (the "base case scenario").

3 For further details on the debate concerning the role of the international monetary system in the global financial crisis, see Dorrucchi, E. and McKay, J., "The international monetary system after the financial crisis", *Occasional Paper Series*, ECB, forthcoming.

Building on this scenario, the G20 explores the scope to improve the global outcome by defining the necessary policy measures and undertakes to make policy adjustments where feasible. This mutual assessment process marks a new approach to global surveillance in that a shared objective is agreed at the leaders' level, and the G20 members then engage in a dynamic process of data and scenario analysis, as well as policy assessment, in order to achieve that objective. The first cycle took place in 2010 and the onus is now on G20 members to act on the mutually agreed recommendations. The process is still insufficiently advanced to judge its contribution to more effective surveillance, but, with its broad scope, the engagement of leaders from the twenty most systemically important economies, and the concomitant high visibility, it represents a concerted effort to improve global economic performance.

Turning to the IMF, it has a unique responsibility to promote the global public good of global monetary stability<sup>4</sup> and, to this end, it conducts multilateral surveillance. The findings are reported most prominently in its flagship publication, the World Economic Outlook, but also in the Global Financial Stability Report and Regional Economic Outlooks. The crisis brought into sharper focus some shortcomings in IMF surveillance, and since then, various proposals for improvement have been put forward.

One of the first steps taken was to improve the consistency of the World Economic Outlook and the Global Financial Stability Report and to highlight in much greater detail the macro-financial linkages and spillovers. In a new initiative, the IMF will prepare pilot "spillover reports", i.e. reports on outward spillovers from systemically large economies or groups of economies, the policies of which may have an impact on the stability of the international monetary system. Such reports are intended to fill a gap in the IMF's surveillance by focusing on the implications for other economies of one economy's policies, and by consulting with members both where the spillovers originate

and where they have an impact. The trial spillover reports will be conducted for five economies (China, the euro area, Japan, the United Kingdom and the United States) and are to be completed by summer 2011.

Discussions have also taken place regarding the conclusion of a multilateral surveillance decision (akin to the Decision on Bilateral Surveillance over Members' Policies agreed in 2007) to provide guidance on the role of staff and the expectations of members regarding the scope and modalities of multilateral surveillance. Finally, consideration is being given to enhancing regional surveillance. Given that some regional organisations also conduct their own surveillance, possible synergies and complementarities are being explored between the surveillance by the IMF and that conducted by regional bodies.

#### FINANCIAL SECTOR SURVEILLANCE

When examining ways to improve financial sector surveillance, it was evident that part of the problem was the mismatch between the national locus of supervisory responsibility and the international arena of financial markets and economic interaction. A central institution or forum was needed to address these issues, and the G20 identified the Financial Stability Forum (FSF) as being best placed in this regard. As a result, the FSF was subsequently transformed into the Financial Stability Board (FSB). This involved providing it with its own charter, broadening its mandate to better promote financial stability, expanding its membership and giving it a range of new tasks with specific and ambitious deadlines for completion. The FSB has thus become the overarching body in charge of coordinating financial stability issues at the global level and reports to the G20.

A key feature of the FSB's work is collaboration with other institutions. It collaborates with the

<sup>4</sup> The IMF has a mandate to "oversee the international monetary system in order to ensure its effective operation" (see Article IV of the Articles of Agreement).

IMF in the field of macro-prudential surveillance<sup>5</sup> in an “early warning exercise” that flags vulnerabilities, especially with regard to cross-sector and cross-border interlinkages. The results are presented semi-annually to the International Monetary and Financial Committee (IMFC). Together, the IMF, FSB and the BIS have offered guidance to national authorities on how to ascertain whether financial institutions, instruments and markets are systemically important.<sup>6</sup> This work has spawned efforts to improve the collection of relevant data. The FSB is also working with regulatory bodies to develop recommendations to mitigate pro-cyclicality, and with the BIS and accounting standards bodies to develop macro-prudential tools. It will take time for new coordination and collaboration procedures to become established, but the process is underway, and represents the “globalisation” of surveillance and supervision that is needed in order to keep up with global financial and economic activity.

Given its mandate to promote the stability of the international monetary system, the IMF has over the years moved gradually towards covering financial markets, and the crisis has strengthened the case for it to play a greater role in financial surveillance. The IMF/World Bank FSAP has been overhauled to sharpen the focus on vulnerabilities, allow more regular monitoring through a modular approach to surveillance and off-site monitoring, and ensure a more thorough follow-up of recommendations. The financial stability assessment under the FSAP has been made mandatory for 25 IMF members with systemically important financial sectors and is to feature regularly in their bilateral surveillance. Work is already under way to better integrate FSAP results into Article IV reports.

The IMF also intends to construct a global financial risk map, with a geographic element, to track the build-up of systemic risks and to better identify how financial and policy shocks propagate across markets and economies. Gaps

in financial data will need to be addressed to make this undertaking successful.

#### **BILATERAL SURVEILLANCE**

At the international level, bilateral surveillance is the preserve of the IMF. Under Article IV of the IMF’s Articles of Agreement, the IMF has a duty to conduct regular surveillance to ensure that its members comply with their obligations. Over the past two decades the IMF has taken several steps to strengthen its bilateral surveillance in response to critical reviews of its surveillance activities (such as that by the Independent Evaluation Office), for example with the 2007 Decision on Bilateral Surveillance over Members’ Policies. In examining how to improve bilateral surveillance further in response to the crisis, the focus has been primarily on three areas: (i) finding ways to improve the take-up rate of IMF policy recommendations or “traction”; (ii) learning more from bilateral surveillance through the preparation of reports on cross-cutting themes for countries facing similar circumstances; and (iii) moving towards greater monitoring of capital flows.

With regard to the first area, the lack of traction is closely linked to the reasons why the imbalances which built-up in the international monetary system were not corrected. The IMF’s lack of authority to impose policies on its members is not a new issue,<sup>7</sup> and the IMF has long sought to improve the implementation rate

5 The respective duties and division of responsibilities between the IMF and the FSB were set out in a joint letter by the Managing Director of the IMF and the Chairman of the FSB in November 2008. The IMF focuses on macroeconomic issues and the FSB provides input on prudential issues in line with each institution’s comparative advantage.

6 See “Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations”, FSB/IMF/BIS, October 2009.

7 As far back as 1999, a group of independent experts noted in their External Evaluation of IMF Surveillance, that “surveillance is hardly ever going to be a primary influence on a country’s policy actions.” More recently, the 2010 report by the Independent Evaluation Office on “IMF Interactions with Member Countries” found that traction was lowest in advanced economies and large emerging markets.

of its policy recommendations, mainly by improving its analysis and its method of engaging with members.<sup>8</sup> The ideas currently being explored include increased engagement with regional organisations or country groups – as the IMF is already doing by providing technical support to the G20 – and closer involvement of ministers in the surveillance procedure,<sup>9</sup> so as to ensure top-level commitment. More broadly, the quota and governance reform of the IMF is intended to improve the representativeness and legitimacy of the institution, which should also lead to greater relevance and effectiveness.

To better exploit bilateral surveillance and so gain more insight into cross-cutting themes, the IMF produces a number of reports. The most significant is the Fiscal Monitor, first released in July 2009 and now published on a semi-annual basis, which provides a comprehensive analysis of fiscal developments from a global perspective.

With regard to capital flows, a debate is ongoing as to whether the IMF's mandate should be extended to improve surveillance in this area. While there is general support for strengthening the IMF's monitoring of capital flows and its advisory role, there is reluctance to move towards measures that would control flows in view of the fact that the great strides in capital account liberalisation contributed to an unleashing of growth potential. The question remains as to how to maximise the benefits while minimising the risks associated with capital account openness.

### 3.2 IMPROVING CRISIS PREVENTION AND RESOLUTION MECHANISMS

Since the crisis, much attention has been focused on finding better ways to help countries which, as a result of the crisis, are experiencing payment difficulties, either directly or via contagion effects. Progress has been made at both the international and regional levels.

### IMF FACILITIES

In the midst of the crisis, doubts were raised about whether the IMF would have enough resources and the right instruments to support countries facing financial distress. As a consequence, the IMF has increased its lending capacity and overhauled its lending toolkit. With regard to the former, IMF members followed up on the commitment made by G20 leaders at their meeting in London on 2 April 2009 to treble the resources available to the Fund to USD 750 billion. This came initially through bilateral financing and, to that end, several emerging and advanced economies entered into bilateral loan and note purchase agreements with the Fund. These loans will be subsequently incorporated into an expanded New Arrangement to Borrow.<sup>10</sup> In April 2010 the expansion and reform of the New Arrangement to Borrow was approved and is now awaiting ratification by the participating countries.<sup>11</sup> In November 2010 the IMF also agreed on a further quota increase which, once implemented, will double the quota resources of the Fund. This will be accompanied by a commensurate reduction in the resources available under the New Arrangement to Borrow in order to preserve the quota-based character of the IMF.

8 These efforts included outreach activities, for example to think tanks, parliamentarians and labour unions, in order to reach stakeholders beyond the policy-makers; adjusting the IMF's human resources policies in order to achieve a more tailored mix of experience; and increasing the leverage from public and peer pressure through greater transparency.

9 There is a proposal to create an International Monetary and Financial Board for this purpose.

10 In addition, G20 leaders agreed to support a new special drawing right (SDR) allocation of USD 250 billion to provide additional reserve assets to the IMF membership. On 28 August 2009 a general SDR allocation equivalent to USD 250 billion entered into force, and was followed on 9 September 2009 by the special SDR allocation of around USD 32 billion, pending since 1997, after the United States agreed to the Fourth Amendment of the Articles of Agreement. Moreover, the London Summit declaration supported "at least USD 100 billion of additional lending by the multilateral development banks, to ensure USD 250 billion of support for trade finance, and to use the additional resources from agreed IMF gold sales for concessional finance for the poorest countries".

11 The total pledges under the new/expanded New Arrangement to Borrow amount to SDR 367.5 billion.

As regards the lending toolkit, in March 2009 the Fund introduced the Flexible Credit Line, raised lending limits and placed stronger emphasis on ex ante conditionality. The Flexible Credit Line is a precautionary lending facility that requires only ex ante conditionality and is intended for top-performing countries with strong policy track records. This instrument was refined in August 2010, with the removal of the access limit and extension of the duration.<sup>12</sup>

Also in August 2010 as part of the lending reform, the new Precautionary Credit Line was created. This is intended for IMF members with sound policies, which nonetheless do not meet the high qualification requirements for the Flexible Credit Line, and is therefore available to more countries.<sup>13</sup> These changes suggest an increased role for the IMF, with a shift from lending largely on the basis of *actual* balance of payments needs to lending for *potential* balance of payments problems (“precautionary” lending).

Current discussions on how to further enhance the IMF’s lending role are mainly focused on the potential reinforcement of the “global financial safety net” and on how to enhance collaboration between the Fund and regional pools. Views differ on whether the IMF should introduce a mechanism that could be activated in response to systemic shocks and, if so, what its design should be. Views also differ as to whether such a mechanism could reduce the stigma attached to IMF lending and thus avoid the further build-up of precautionary reserves in emerging markets without creating moral hazard. Discussions on how to step up IMF collaboration with regional pools are also ongoing, with proposals for involvement by the IMF ranging from the supply of technical assistance, to the provision of a financial “backstop” to regional resources.

#### REGIONAL FACILITIES AND SURVEILLANCE

At the regional level, relevant organisations are also developing their crisis prevention and resolution policies. Most prominent among these are the newly created financing facilities

and surveillance arrangements in Europe and the further elaboration of the Chiang Mai Initiative in Asia.

In Europe, prior to the crisis non-euro area EU Member States suffering balance of payments difficulties could obtain assistance from the EU under the medium-term financial assistance facility. In the light of crisis-related developments, the financing capacity of the medium-term financial assistance facility was increased to €50 billion. In May 2010 two new facilities were established which augment lending amounts and extend coverage to euro area countries: the European Financial Stabilisation Mechanism (EFSM) and the European Financial Stability Facility (EFSF),<sup>14</sup> both of which envisage the involvement of the IMF in any programme. To help prevent a crisis occurring in the first place, the EU is overhauling its economic governance and surveillance under the auspices of the Van Rompuy Task Force, in particular the framework to enhance fiscal discipline and the oversight of competitiveness developments.

12 As a result of the changes, Flexible Credit Line arrangements can now be approved for either one year or two years with an interim review of qualification after one year. Previously, arrangements were for either six months or one year with an interim review after six months. The previous implicit cap on access of 1,000% of a member’s IMF quota has been removed, and access decisions will now be based on the financing needs of individual countries. The procedures leading up to the approval of the arrangement have also been modified, with earlier involvement of the IMF’s Executive Board to assess the contemplated level of access and its impact on the IMF’s liquidity position. The nine qualification criteria used both by staff and the IMF’s Executive Board to assess the merits of a country’s application remain unchanged, but a number of relevant indicators have been added to each category in order to provide further guidance on compliance.

13 Qualification will be assessed in five broad areas: (i) external position and market access; (ii) fiscal policy; (iii) monetary policy; (iv) financial sector soundness and supervision; and (v) data adequacy. While requiring strong performance in most of these areas, the Precautionary Credit Line allows access to precautionary resources for members that have moderate vulnerabilities in one or two areas. Other features include streamlined ex post conditions (which may or may not include performance criteria) monitored through semi-annual program reviews, and frontloaded access (with up to 500% of quota made available upon approval of the arrangement, and up to 1,000% of quota in total after 12 months).

14 For further details, see Box 4, *Financial Stability Review*, ECB, December 2010.

In Asia, the Chiang Mai Initiative, a network of bilateral currency swap arrangements set up in 2000, has been further developed. In view of the crisis, the ASEAN+3 finance ministers (representing the ten members of ASEAN plus China, Japan and South Korea) agreed on 3 May 2009 to transform their existing bilateral currency swap agreements into a single regional pooling arrangement by implementing a plan for multilateralisation and increased the resources available. Like the EU and euro area facilities, disbursement of financial assistance to a regional member envisages IMF involvement (for example, access to finance under the Chiang Mai Initiative above 20% of the agreed credit line requires an IMF programme to be in place). Furthermore, plans were drawn up to create an independent regional surveillance agency and enhance regional cooperation beyond mere information-sharing and peer review.

### 3.3 OTHER AVENUES TO STRENGTHEN INTERNATIONAL COOPERATION

Looking beyond enhanced surveillance and crisis prevention and resolution mechanisms, other avenues to increase the resilience of the international financial system are also being debated or pursued. These include currency issues, as well as improving the regulation and supervision of financial sectors and of the global financial system in order to strengthen monetary stability.

Thought is being given by some observers to developing a global, artificial currency. Such a currency could take one of two possible forms, a currency basket or a supranational fiat currency. A prime candidate for a currency basket would be the SDR. Proponents of an enhanced role for the SDR argue that the SDR currency basket, would: (i) be a more stable store of value and unit of account than its constituent currencies and hence have lower exchange rate volatility; (ii) imply a reduced need for real exchange rate adjustment for pegs to the SDR compared with pegs to a national currency; and (iii) enable investors to take more account

of global monetary conditions in the pricing of assets, rather than the conditions prevailing in the economy of the dominant international currency.

That having been said, for the SDR to develop a truly global role, its liquidity would need to be substantially increased, not merely through greater issuance by the IMF and an increase in the number of countries using it, but also through the development of a private sector SDR market.

The second proposal, which is to create a global supranational currency, raises many questions. First, what could be a really global central bank and where would it derive its authority from. Second, for the currency to be attractive internationally, it would need to be fully credible, which implies that its supply would have to be carefully managed according to an appropriate rule.

### FINANCIAL SECTOR REGULATION AND SUPERVISION

The financial crisis has thrown a spotlight on the shortcomings of regulation and supervision by showing that regulators and supervisors were not fully able to detect the accumulation of risks in the financial system. The crisis highlighted the need to supplement the pre-crisis approach to regulation and supervision, which focused on the stability of individual intermediaries (the micro-prudential approach), with an approach that looks at the stability of the whole system by taking more account of the risks stemming from interactions between market players (the macro-prudential approach).

Several recent initiatives go in this direction. At its meetings in July and September 2010, the Group of Governors and Heads of Supervision, the oversight body of the Basel Committee on Banking Supervision, endorsed the design and calibration of a package of proposals to strengthen global capital and liquidity regulations. This package, which is also referred to as Basel III, includes measures aimed at strengthening the resilience of the financial

sector by improving the quality and quantity of capital, as well as introducing additional capital requirements in the form of capital buffers, a supplementary leverage ratio, and new rules for a liquidity risk framework. In this context, Basel III is also aimed at mitigating the procyclicality of the financial system by introducing a counter-cyclical buffering mechanism.

In addition, work is ongoing within the FSB to reduce the moral hazard posed by systemically important financial institutions, as well as the systemic risks arising from the interconnectedness of such institutions. Furthermore, consideration is being given to the role of accounting rules requiring marking-to-market measurement as well as backward-looking loan loss provisioning regimes.

The G20 Summit held in November 2010 endorsed the core elements of the new financial regulatory framework, including bank capital and liquidity standards. In addition, it endorsed the measures to better regulate and resolve systemically important financial institutions.

### 3.4 ENHANCING GLOBAL GOVERNANCE

In the light of the global financial crisis, the need for improved cooperation and collective action has become even more evident. The more integrated the global economic and financial system becomes, the weaker the ability of individual national authorities to steer domestic economic and financial activity towards promoting sustainable growth in a way that preserves systemic stability and, hence, the greater the need for enhanced global cooperation.

The rise of the G20 as the primary forum for global governance, eclipsing the G7, is recognition of the need for enhanced global cooperation. As mentioned above, the G20's Framework for Strong, Sustainable and Balanced Growth is a major innovation in global cooperation. Whereas IMF policy recommendations have often gone unheeded,

the G20's mutual assessment process contains elements that may improve the take-up rate and so increase the probability of success of collective action. First, and most importantly, by establishing this Framework, the G20 focuses attention on the issue, adding political momentum at the highest level,<sup>15</sup> and makes members accountable at every summit meeting for progress towards their shared objectives. Second, the range of participants is broad enough to include all relevant parties, but smaller than the IMF's Board of Governors or the IMFC, which should help to make discussions more manageable. At the same time, these features are no guarantee of traction: recommendations risk being too vague, there are no sanctions or penalties for non-compliance and the level of commitment shown at the height of the crisis may wane as economies start to recover. At a broader level, the legitimacy of the G20 may be challenged as the urgency of responding to the crisis subsides, which could undermine the undertaking.

The transformation of the FSF into the FSB is also recognition of the need for enhanced global cooperation. The FSB is helping to improve dialogue among the authorities responsible for financial sector issues and the implementation, where appropriate, of recognised standards and corrective policies. First and foremost, a potentially important component of the broadened mandate of the FSB is the commitment made by all of its members to undergo periodic peer reviews. These will be based, among other reports, on published IMF/World Bank FSAP reports, and will be used not only to monitor individual countries (e.g. their adherence to policy recommendations in FSAPs and Reports on the Observance of

15 In 2009 the G20 agreed that "members also have a responsibility to the community of nations to assure the overall health of the global economy. Regular consultations, strengthened cooperation on macroeconomic policies, the exchange of the experiences on structural policies, and ongoing assessment can strengthen our cooperation and promote the adoption of sound policies." (see paragraph 3 of the G20 Framework for Strong, Sustainable and Balanced Growth, following the annex to the Leaders' Statement from the Pittsburgh Summit).

Standards and Codes), but also along thematic lines (i.e. monitoring the implementation across members of particular policies or standards agreed within the FSB). Second, the FSB has set up a process of monitoring compliance with international regulatory and supervisory standards for cooperation and information-sharing, in a “non-cooperative jurisdiction” process. This exercise extends beyond the FSB’s membership to have a global reach. Where it finds shortcomings, the FSB highlights jurisdictions “for further evaluation” and draws on IMF/World Bank assessments of compliance with FSAP recommendations or Reports on the Observance of Standards and Codes. It also intends to introduce an incentive system to induce jurisdictions to keep up with reforms. In a third key initiative, the FSB has set up an Implementation Monitoring Network to monitor compliance with G20 and FSB recommendations. These three initiatives represent useful steps that maintain a focus on countries’ implementation record. The use of fora other than the IMF or World Bank to check on compliance with IMF and World Bank policy recommendations increases the pressure on countries to comply.

Finally, with regard to the IMF, work is ongoing to reform and modernise the governance structure of the institution following calls to make it more legitimate and representative. Ultimately, these changes should also improve the responsiveness of members to the IMF’s advice and peer review. To this end, it has been agreed to realign quota shares under the current quota reform and to change the composition of the IMF’s Executive Board. Both steps will strengthen the voice and representation of emerging markets and developing countries. Discussions are also ongoing concerning other aspects of governance, such as reforming the IMF’s advisory body, the IMFC, and the selection procedures for top management positions in the IMF and other international financial institutions. All these efforts seek to strengthen supranational authority in order to better provide the global public good of international monetary and financial stability, given that this goal is beyond the mandate of

national governments and not a natural outcome of the behaviour of profit-oriented markets, which is often biased towards satisfying short-term performance targets.

#### 4 CONCLUSIONS

In conclusion, despite the fact that the crisis erupted within the financial system, its root causes were entwined with the build-up of, and failure to correct, global payments imbalances under the international monetary and financial system. As a result, policy-makers have started to strengthen the functioning of the system. Key among these are measures to bolster global cooperation, enhance surveillance and improve crisis prevention and resolution mechanisms. While this work is unlikely to, and need not, alter the fundamental nature of the international monetary and financial system, it remains important to shape it in such a way that it reduces global and domestic imbalances over time, while preserving international stability to support global growth and development. It calls for global cooperation, as well as greater legitimacy and hence more authority for supranational organisations and fora to protect global stability. It calls for incentives for market participants and national authorities to align themselves with the promotion of systemic stability, and it requires policy-makers to embrace a systemic perspective and to be prepared to implement policies which, while also serving national interests, support a stable international monetary and financial system, and thus contribute to a thriving global economy.



# EURO AREA STATISTICS





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

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#### ENLARGEMENT OF THE EURO AREA ON 1 JANUARY 2011 TO INCLUDE ESTONIA

In January 2011 Estonia joined the euro area, bringing the number of euro area countries to 17.

Unless otherwise indicated, all data series including observations for 2011 relate to the “Euro 17” (i.e. the euro area including Estonia) for the whole time series. For interest rates, monetary statistics, the HICP and reserve assets (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), euro area statistical series take into account the changing composition of the euro area.

Detailed information on the current and past compositions of the euro area can be found in the General Notes.

#### Conventions used in the tables

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



# EURO AREA OVERVIEW

## Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

### 1. Monetary developments and interest rates <sup>1)</sup>

	M1 <sup>2)</sup>	M2 <sup>2)</sup>	M3 <sup>2),3)</sup>	M3 <sup>2),3)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>2)</sup>	Securities other than shares issued in euro by non-MFI corporations <sup>2)</sup>	3-month interest rate (EURIBOR; % per annum; period averages)	10-year spot rate (% per annum; end of period) <sup>4)</sup>
	1	2	3	4	5	6	7	8
2009	9.5	4.8	3.3	-	1.6	23.4	1.22	3.76
2010	.	.	.	.	.	.	0.81	3.36
2010 Q1	11.3	1.7	-0.2	-	-0.4	8.4	0.66	3.46
Q2	10.3	1.4	-0.1	-	0.2	4.3	0.69	3.03
Q3	7.9	1.8	0.7	-	1.0	2.2	0.87	2.67
Q4	.	.	.	-	.	.	1.02	3.36
2010 July	8.2	1.5	0.2	0.5	0.8	1.9	0.85	3.01
Aug.	7.8	2.1	1.2	0.8	1.3	2.6	0.90	2.48
Sep.	6.2	2.0	1.1	1.0	1.3	2.2	0.88	2.67
Oct.	4.9	2.1	0.9	1.3	1.5	2.0	1.00	2.86
Nov.	4.6	2.3	1.9	.	2.0	3.2	1.04	3.11
Dec.	.	.	.	.	.	.	1.02	3.36

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

	HICP <sup>1)</sup>	Industrial producer prices	Hourly labour costs	Real GDP (s.a.)	Industrial production excluding construction	Capacity utilisation in manufacturing (%)	Employment (s.a.)	Unemployment (% of labour force; s.a.)
	1	2	3	4	5	6	7	8
2009	0.3	-5.1	2.9	-4.1	-14.9	71.1	-1.8	9.4
2010	.	.	.	.	.	.	.	.
2010 Q2	1.5	3.0	1.6	2.0	9.0	76.3	-0.6	10.0
Q3	1.7	4.0	0.8	1.9	7.0	77.4	-0.1	10.0
Q4	.	.	.	.	.	.	.	.
2010 July	1.7	4.0	-	-	7.4	77.2	-	10.0
Aug.	1.6	3.6	-	-	8.5	-	-	10.0
Sep.	1.8	4.3	-	-	5.6	-	-	10.0
Oct.	1.9	4.4	-	-	7.1	77.6	-	10.1
Nov.	1.9	4.5	-	-	7.4	-	-	10.1
Dec.	2.2	.	-	-	.	-	-	.

### 3. External statistics

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)			Reserve assets (end-of-period positions)	Net international investment position (as a % of GDP)	Gross external debt (as a % of GDP)	Effective exchange rate of the euro: EER-21 <sup>5)</sup> (index: 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Combined direct and portfolio investment				Nominal	Real (CPI)	
2009	-43.7	39.4	15.9	462.4	-16.2	116.4	111.7	110.6	1.3948
2010	.	.	.	.	.	.	104.6	103.0	1.3257
2010 Q1	-19.3	2.7	-7.9	498.7	-14.7	120.4	108.7	107.0	1.3829
Q2	-21.3	3.9	21.4	583.3	-12.4	123.6	103.1	101.8	1.2708
Q3	-14.4	7.0	-3.7	552.2	.	.	102.3	100.9	1.2910
Q4	.	.	.	.	.	.	104.4	102.5	1.3583
2010 July	4.9	7.6	-17.5	535.6	.	.	102.5	101.1	1.2770
Aug.	-10.3	-4.3	0.5	573.2	.	.	102.1	100.6	1.2894
Sep.	-9.0	3.7	6.1	552.2	.	.	102.5	100.8	1.3067
Oct.	-2.2	6.7	3.7	555.6	.	.	106.1	104.2	1.3898
Nov.	.	.	.	597.5	.	.	104.8	102.8	1.3661
Dec.	.	.	.	.	.	.	102.6	100.6	1.3220

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) Data refer to the changing composition of the euro area. For further information, see the General Notes.
- 2) Annual percentage changes for monthly data refer to the end of the month, whereas those for quarterly and yearly data refer to the annual change in the period average. See the Technical Notes for details.
- 3) 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.
- 4) Based on AAA-rated euro area central government bond yield curves. For further information, see Section 4.7.
- 5) For a definition of the trading partner groups and other information, please refer to the General Notes.



# MONETARY POLICY STATISTICS

## I.1 Consolidated financial statement of the Eurosystem (EUR millions)

### 1. Assets

	17 December 2010	24 December 2010	31 December 2010	7 January 2011
<b>Gold and gold receivables</b>	334,382	334,384	367,402	367,432
<b>Claims on non-euro area residents in foreign currency</b>	219,603	220,176	223,995	225,011
<b>Claims on euro area residents in foreign currency</b>	25,295	25,955	26,941	26,770
<b>Claims on non-euro area residents in euro</b>	19,631	19,084	22,592	19,343
<b>Lending to euro area credit institutions in euro</b>	538,830	513,127	546,747	493,963
Main refinancing operations	187,814	193,470	227,865	195,691
Longer-term refinancing operations	349,674	298,217	298,217	298,217
Fine-tuning reverse operations	0	20,623	20,623	0
Structural reverse operations	0	0	0	0
Marginal lending facility	1,340	804	25	45
Credits related to margin calls	2	14	17	9
<b>Other claims on euro area credit institutions in euro</b>	37,454	42,049	45,654	46,845
<b>Securities of euro area residents in euro</b>	456,351	459,550	457,427	458,435
Securities held for monetary policy purposes	133,356	134,484	134,829	134,927
Other securities	322,995	325,065	322,598	323,508
<b>General government debt in euro</b>	34,969	34,969	34,954	34,954
<b>Other assets</b>	278,716	276,859	278,719	293,142
<b>Total assets</b>	1,945,232	1,926,154	2,004,432	1,965,895

### 2. Liabilities

	17 December 2010	24 December 2010	31 December 2010	7 January 2011
<b>Banknotes in circulation</b>	833,830	842,295	839,702	834,831
<b>Liabilities to euro area credit institutions in euro</b>	379,217	334,700	378,008	332,504
Current accounts (covering the minimum reserve system)	266,704	206,123	212,739	176,862
Deposit facility	40,321	55,371	104,458	80,965
Fixed-term deposits	72,000	72,500	60,784	73,500
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	192	706	27	1,176
<b>Other liabilities to euro area credit institutions in euro</b>	2,113	2,528	2,808	2,295
<b>Debt certificates issued</b>	0	0	0	0
<b>Liabilities to other euro area residents in euro</b>	78,247	87,656	79,791	89,316
<b>Liabilities to non-euro area residents in euro</b>	43,222	44,692	47,703	43,589
<b>Liabilities to euro area residents in foreign currency</b>	1,328	1,651	1,995	2,152
<b>Liabilities to non-euro area residents in foreign currency</b>	13,987	14,381	14,346	14,740
<b>Counterpart of special drawing rights allocated by the IMF</b>	53,665	53,665	54,480	54,552
<b>Other liabilities</b>	164,696	169,657	175,932	181,898
<b>Revaluation accounts</b>	296,740	296,740	331,524	331,545
<b>Capital and reserves</b>	78,187	78,188	78,143	78,473
<b>Total liabilities</b>	1,945,232	1,926,154	2,004,432	1,965,895

Source: ECB.

**1.2 Key ECB interest rates**

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

	With effect from: <sup>b)</sup>		Main refinancing operations			Marginal lending facility		
	Deposit facility		Fixed rate tenders	Variable rate tenders	Change	Level	Change	
	Level	Change	Fixed rate	Minimum bid rate				
			1	2	3	4	5	6
1999	1 Jan.	2.00	-	3.00	-	-	4.50	-
	4 <sup>2)</sup>	2.75	0.75	3.00	-	...	3.25	-1.25
	22	2.00	-0.75	3.00	-	...	4.50	1.25
	9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
	5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000	4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
	17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
	28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
	9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
	28 <sup>3)</sup>	3.25	...	-	4.25	...	5.25	...
	1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
	6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
2001	11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
	31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
	18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
	9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50
2002	6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003	7 Mar.	1.50	-0.25	-	2.50	-0.25	3.50	-0.25
	6 June	1.00	-0.50	-	2.00	-0.50	3.00	-0.50
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 <sup>4)</sup>	3.25	0.50	-	-	-	4.25	-0.50
	15 <sup>5)</sup>	3.25	...	3.75	-	-0.50	4.25	...
	12 Nov.	2.75	-0.50	3.25	-	-0.50	3.75	-0.50
	10 Dec.	2.00	-0.75	2.50	-	-0.75	3.00	-0.75
2009	21 Jan.	1.00	-1.00	2.00	-	-0.50	3.00	...
	11 Mar.	0.50	-0.50	1.50	-	-0.50	2.50	-0.50
	8 Apr.	0.25	-0.25	1.25	-	-0.25	2.25	-0.25
	13 May	0.25	...	1.00	-	-0.25	1.75	-0.50

Source: ECB.

- 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 both to the deposit and marginal lending facilities and to the main refinancing operations (with changes effective from the first main refinancing operation following the Governing Council decision), unless otherwise indicated.
- 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.
- 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.
- 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. The standing facilities corridor was restored to 200 basis points as of 21 January 2009.
- 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 tender procedures <sup>1), 2)</sup>

(EUR millions; interest rates in percentages per annum)

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

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	Variable rate tender procedures			Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
1	2	3	4	5	6	7	8	
<b>Main refinancing operations</b>								
2010 29 Sep.	166,361	129	166,361	1.00	-	-	-	7
6 Oct.	197,049	148	197,049	1.00	-	-	-	7
13	185,984	145	185,984	1.00	-	-	-	7
20	184,030	151	184,030	1.00	-	-	-	7
27	183,439	190	183,439	1.00	-	-	-	7
3 Nov.	178,350	144	178,350	1.00	-	-	-	7
10	175,035	146	175,035	1.00	-	-	-	7
17	186,033	177	186,033	1.00	-	-	-	7
24	177,103	165	177,103	1.00	-	-	-	7
1 Dec.	179,694	163	179,694	1.00	-	-	-	7
8	197,283	155	197,283	1.00	-	-	-	7
15	187,814	159	187,814	1.00	-	-	-	7
22	193,470	160	193,470	1.00	-	-	-	7
29	227,865	233	227,865	1.00	-	-	-	7
2011 5 Jan.	195,691	179	195,691	1.00	-	-	-	7
12	180,081	169	180,081	1.00	-	-	-	7
<b>Longer-term refinancing operations</b>								
2010 14 July	49,399	34	49,399	1.00	-	-	-	28
29	23,166	70	23,166	1.00	-	-	-	91
11 Aug.	39,148	36	39,148	1.00	-	-	-	28
26	19,083	49	19,083	1.00	-	-	-	91
8 Sep.	37,903	27	37,903	1.00	-	-	-	35
30	104,009	182	104,009	1.00	-	-	-	84
13 Oct.	52,236	34	52,236	1.00	-	-	-	28
28 <sup>5)</sup>	42,475	132	42,475	.	-	-	-	91
10 Nov.	63,618	44	63,618	1.00	-	-	-	28
25 <sup>5)</sup>	38,211	189	38,211	.	-	-	-	91
8 Dec.	68,066	56	68,066	1.00	-	-	-	42
23 <sup>5)</sup>	149,466	270	149,466	.	-	-	-	98

#### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	Variable rate tender procedures			Running for (...) days	
					Fixed rate	Minimum bid rate	Maximum bid rate	Marginal rate <sup>4)</sup>		Weighted average rate
1	2	3	4	5	6	7	8	9	10	
2010 3 Nov.	Collection of fixed-term deposits	90,877	61	63,500	-	-	1.00	0.62	0.57	7
9	Collection of fixed-term deposits	148,480	147	148,378	-	-	1.00	0.80	0.78	1
10	Collection of fixed-term deposits	72,702	50	64,000	-	-	1.00	0.80	0.68	7
11	Reverse transaction	12,552	23	12,552	1.00	-	-	-	-	6
17	Collection of fixed-term deposits	80,760	61	65,000	-	-	1.00	0.73	0.63	7
24	Collection of fixed-term deposits	91,432	60	66,000	-	-	1.00	0.51	0.45	7
1 Dec.	Collection of fixed-term deposits	77,700	52	67,000	-	-	1.00	0.48	0.41	7
7	Collection of fixed-term deposits	147,047	139	147,047	-	-	1.00	0.80	0.79	1
8	Collection of fixed-term deposits	98,343	56	69,000	-	-	1.00	0.72	0.65	7
15	Collection of fixed-term deposits	96,587	57	72,000	-	-	1.00	0.55	0.49	7
22	Collection of fixed-term deposits	81,024	44	72,500	-	-	1.00	0.60	0.42	7
23	Reverse transaction	20,623	32	20,623	1.00	-	-	-	-	13
29	Collection of fixed-term deposits	60,784	41	60,784	-	-	1.00	1.00	0.66	7
2011 5 Jan.	Collection of fixed-term deposits	92,078	68	73,500	-	-	1.00	0.45	0.38	7
12	Collection of fixed-term deposits	99,490	65	74,000	-	-	1.00	0.45	0.41	7

Source: ECB.

- The amounts shown may differ slightly from those in Section 1.1 owing to operations that have been allotted but not settled.
- With effect from April 2002, split tender operations (i.e. operations with a one-week maturity conducted as standard tender procedures in parallel with a main refinancing operation) are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.
- On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tender procedures. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids. On 8 October 2008 the ECB announced that, starting from the operation to be settled on 15 October 2008, 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. On 4 March 2010 the ECB decided to return to variable rate tender procedures in the regular three-month longer-term refinancing operations, starting with the operation to be allotted on 28 April 2010 and settled on 29 April 2010.
- In liquidity-providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.
- In the final one-year longer-term refinancing operation, which was settled on 17 December 2009, in the six-month longer-term refinancing operations settled on 1 April and 13 May 2010, and in the three-month longer-term refinancing operations settled on 28 October, 25 November and 23 December 2010, the rate at which all bids were satisfied was indexed to the average minimum bid rate in the main refinancing operations over the life of the operation.

**1.4 Minimum reserve and liquidity statistics**

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

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

Reserve base as at: <sup>1)</sup>	Total	Liabilities to which a 2% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied		
		Overnight deposits and deposits with an agreed maturity or notice period of up to 2 years	Debt securities issued with a maturity of up to 2 years	Deposits with an agreed maturity or notice period of over 2 years	Repos	Debt securities issued with a maturity of over 2 years
	1	2	3	4	5	6
2008	18,169.6	10,056.8	848.7	2,376.9	1,243.5	3,643.7
2009	18,318.2	9,808.5	760.4	2,475.7	1,170.1	4,103.5
2010 June	19,018.2	9,998.7	721.2	2,586.9	1,314.3	4,397.2
July	18,966.5	9,918.6	703.0	2,594.9	1,344.0	4,405.9
Aug.	19,138.1	10,019.3	707.4	2,618.7	1,366.2	4,426.5
Sep.	18,836.5	9,944.2	670.0	2,566.5	1,307.2	4,348.6
Oct. <sup>2)</sup>	18,986.1	9,901.3	658.2	2,632.5	1,399.4	4,394.8

**2. Reserve maintenance**

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2009	210.2	211.4	1.2	0.0	1.00
2010	211.8	212.5	0.7	-0.5	1.00
2010 10 Aug.	214.3	215.7	1.4	0.0	1.00
7 Sep.	213.9	215.3	1.4	0.0	1.00
12 Oct.	211.9	213.1	1.2	0.0	1.00
9 Nov.	214.0	215.2	1.2	0.0	1.00
7 Dec.	211.8	212.5	0.7	-0.5	1.00
2011 18 Jan. <sup>3)</sup>	210.5	.	.	.	.

**3. Liquidity**

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts	Base money
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations <sup>5)</sup>	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations <sup>4)</sup>							
	1	2	3	4	5	6	7	8	9	10	11	12
2009	407.6	55.8	593.4	0.7	24.6	65.7	9.9	775.2	150.1	-130.2	211.4	1,052.3
2010	511.1	179.5	336.3	1.9	130.4	44.7	70.8	815.9	94.4	-79.1	212.5	1,073.1
2010 13 July	500.9	167.5	573.2	0.3	140.2	230.4	54.4	813.0	126.5	-56.5	214.4	1,257.8
10 Aug.	543.4	185.4	432.2	0.1	121.4	96.7	67.5	819.3	95.2	-11.8	215.7	1,131.7
7 Sep.	543.2	153.1	435.0	0.6	121.8	83.7	66.9	816.0	86.8	-15.0	215.3	1,115.0
12 Oct.	531.3	164.5	392.6	0.7	128.3	68.8	64.8	814.1	96.4	-39.8	213.1	1,096.1
9 Nov.	511.3	183.0	340.0	0.8	124.5	41.9	68.8	813.5	92.1	-72.0	215.2	1,070.7
7 Dec.	511.1	179.5	336.3	1.9	130.4	44.7	70.8	815.9	94.4	-79.1	212.5	1,073.1

Source: ECB.

- End of period.
- The end-October 2010 reserve base is used for the calculation of the reserve requirements of euro area credit institutions for the maintenance period ending in January 2011 and therefore includes the reserve bases of credit institutions in Estonia. For reserve base figures as of end-October 2010, credit institutions located in other euro area countries may have decided to deduct from their own reserve bases any liabilities owed to credit institutions located in Estonia.
- Owing to the adoption of the euro by Estonia on 1 January 2011, the reserve requirement is an average - weighted by the number of calendar days - of the reserve requirements for the then 16 countries of the euro area for the period 8-31 December 2010 and the reserve requirements for the 17 countries now in the euro area for the period 1-18 January 2011.
- Includes liquidity provided under the Eurosystem's covered bond purchase programme and the Eurosystem's securities markets programme.
- Includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations.  
For more information, please see: <http://www.ecb.europa.eu/mopo/liq/html/index.en.html>



# MONEY, BANKING AND INVESTMENT FUNDS

## 2.1 Aggregated balance sheet of euro area MFIs <sup>1)</sup>

(EUR billions; outstanding amounts at end of period)

### 1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents				Money market fund shares/units <sup>2)</sup>	Holdings of shares/other equity issued by euro area residents	External assets	Fixed assets	Remaining assets	
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Eurosystem														
2008	2,982.9	1,803.0	20.6	0.6	1,781.8	362.3	319.5	3.3	39.4	-	14.4	484.7	8.6	309.9
2009	2,829.9	1,475.6	19.5	0.7	1,455.4	451.7	368.3	7.5	75.9	-	16.5	556.7	8.5	321.0
2010 Q2	3,390.3	1,822.1	18.8	0.9	1,802.4	535.8	425.7	9.7	100.4	-	15.8	670.0	8.6	338.1
Q3	3,024.2	1,459.0	18.5	0.9	1,439.6	550.3	439.5	9.6	101.2	-	16.7	645.7	8.7	343.8
2010 July	3,104.2	1,569.6	18.7	0.9	1,550.0	537.9	428.7	9.6	99.6	-	16.1	620.2	8.6	351.8
Aug.	3,101.4	1,529.1	18.7	0.9	1,509.5	544.8	434.2	9.7	100.9	-	16.6	664.0	8.7	338.2
Sep.	3,024.2	1,459.0	18.5	0.9	1,439.6	550.3	439.5	9.6	101.2	-	16.7	645.7	8.7	343.8
Oct.	3,028.1	1,449.8	18.5	0.9	1,430.4	559.3	448.8	9.7	100.8	-	17.0	643.6	8.7	349.7
Nov. <sup>(p)</sup>	3,117.8	1,467.0	18.5	0.9	1,447.5	561.8	451.0	9.7	101.2	-	16.6	688.2	8.7	375.4
MFIs excluding the Eurosystem														
2008	31,830.5	18,050.8	968.3	10,774.8	6,307.7	4,628.1	1,245.4	1,406.4	1,976.3	98.7	1,196.7	4,746.6	211.7	2,897.9
2009	31,144.9	17,702.4	1,001.7	10,783.3	5,917.5	5,060.6	1,483.2	1,497.2	2,080.2	85.1	1,235.1	4,251.7	220.7	2,589.2
2010 Q2	32,569.1	18,266.2	1,068.0	10,989.4	6,208.8	5,105.5	1,573.8	1,506.1	2,025.6	67.3	1,228.3	4,572.9	221.4	3,107.6
Q3	32,087.2	17,896.5	1,068.9	10,986.0	5,841.6	5,082.2	1,566.1	1,546.8	1,969.3	62.6	1,244.1	4,385.5	220.0	3,196.3
2010 July	32,092.5	18,060.0	1,056.8	10,981.6	6,021.6	5,104.8	1,572.4	1,541.2	1,991.2	64.7	1,229.6	4,428.3	219.6	2,985.5
Aug.	32,667.5	18,019.6	1,064.4	10,979.7	5,975.5	5,117.5	1,566.7	1,543.5	2,007.3	64.8	1,241.7	4,571.1	219.4	3,433.4
Sep.	32,087.2	17,896.5	1,068.9	10,986.0	5,841.6	5,082.2	1,566.1	1,546.8	1,969.3	62.6	1,244.1	4,385.5	220.0	3,196.3
Oct.	31,874.7	17,822.7	1,148.5	10,961.2	5,713.0	5,112.0	1,648.2	1,521.1	1,942.7	61.4	1,252.0	4,334.7	220.7	3,071.2
Nov. <sup>(p)</sup>	31,982.5	17,844.6	1,204.0	11,069.5	5,571.2	5,101.8	1,593.3	1,556.1	1,952.3	61.5	1,249.2	4,456.4	221.8	3,047.2

### 2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents			Money market fund shares/units <sup>3)</sup>	Debt securities issued <sup>4)</sup>	Capital and reserves	External liabilities	Remaining liabilities	
			Total	Central government	Other general government/other euro area residents						MFIs
	1	2	3	4	5	6	7	8	9	10	11
Eurosystem											
2008	2,982.9	784.7	1,247.2	68.8	16.6	1,161.7	-	0.1	273.8	378.3	298.9
2009	2,829.9	829.3	1,192.3	102.6	22.1	1,067.6	-	0.1	320.9	140.0	347.4
2010 Q2	3,390.3	835.4	1,631.0	137.2	21.4	1,472.4	-	0.1	413.5	142.5	367.9
Q3	3,024.2	837.0	1,293.8	89.2	10.6	1,194.0	-	0.0	403.6	131.3	358.5
2010 July	3,104.2	844.1	1,370.3	102.8	11.9	1,255.5	-	0.1	396.5	137.2	356.0
Aug.	3,101.4	837.5	1,344.7	97.0	8.6	1,239.1	-	0.1	424.6	135.9	358.7
Sep.	3,024.2	837.0	1,293.8	89.2	10.6	1,194.0	-	0.0	403.6	131.3	358.5
Oct.	3,028.1	838.7	1,294.5	100.6	12.6	1,181.3	-	0.0	406.2	130.7	357.9
Nov. <sup>(p)</sup>	3,117.8	840.5	1,331.1	98.5	16.5	1,216.2	-	0.0	436.2	139.6	370.4
MFIs excluding the Eurosystem											
2008	31,830.5	-	16,742.2	190.8	9,699.5	6,852.0	825.0	4,838.9	1,767.6	4,401.7	3,255.2
2009	31,144.9	-	16,470.9	144.1	10,044.8	6,282.0	732.6	4,908.5	1,921.2	4,097.7	3,013.9
2010 Q2	32,569.1	-	17,012.9	167.6	10,300.5	6,544.7	670.9	4,979.5	2,005.3	4,461.0	3,439.7
Q3	32,087.2	-	16,620.8	176.2	10,339.2	6,105.3	651.8	4,900.4	2,017.9	4,304.8	3,591.5
2010 July	32,092.5	-	16,786.1	179.5	10,303.0	6,303.6	659.5	4,927.8	2,010.0	4,350.4	3,358.8
Aug.	32,667.5	-	16,751.0	165.2	10,327.0	6,258.8	674.8	4,955.8	2,019.8	4,495.7	3,770.5
Sep.	32,087.2	-	16,620.8	176.2	10,339.2	6,105.3	651.8	4,900.4	2,017.9	4,304.8	3,591.5
Oct.	31,874.7	-	16,577.6	243.1	10,345.6	5,988.8	636.2	4,855.5	2,027.5	4,325.5	3,452.5
Nov. <sup>(p)</sup>	31,982.5	-	16,547.2	262.2	10,457.5	5,827.6	648.1	4,904.2	2,016.9	4,449.5	3,416.7

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 a maturity of up to two years and held by non-euro area residents are included in external liabilities.

## 2.2 Consolidated balance sheet of euro area MFIs <sup>1)</sup>

(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											
2008	24,121.3	11,764.3	988.9	10,775.5	2,974.7	1,564.9	1,409.8	784.8	5,231.4	220.3	3,146.0
2009	23,861.8	11,805.0	1,021.1	10,783.9	3,356.2	1,851.5	1,504.6	812.1	4,808.4	229.2	2,850.8
2010 Q2	25,244.0	12,077.0	1,086.7	10,990.3	3,515.2	1,999.4	1,515.8	783.1	5,242.8	230.0	3,395.8
Q3	25,183.7	12,074.3	1,087.5	10,986.9	3,562.0	2,005.6	1,556.4	797.7	5,031.2	228.7	3,489.9
2010 July	24,958.7	12,058.0	1,075.5	10,982.5	3,551.9	2,001.1	1,550.7	785.0	5,048.5	228.2	3,287.1
Aug.	25,599.2	12,063.7	1,083.1	10,980.6	3,554.1	2,001.0	1,553.2	796.0	5,235.1	228.1	3,722.1
Sep.	25,183.7	12,074.3	1,087.5	10,986.9	3,562.0	2,005.6	1,556.4	797.7	5,031.2	228.7	3,489.9
Oct.	25,140.4	12,129.2	1,167.0	10,962.1	3,627.7	2,097.0	1,530.7	804.7	4,978.2	229.4	3,371.2
Nov. <sup>(p)</sup>	25,466.2	12,292.9	1,222.5	11,070.4	3,610.1	2,044.3	1,565.8	815.8	5,144.7	230.5	3,372.2
Transactions											
2008	1,694.1	598.2	12.8	585.4	499.5	90.0	409.5	-56.4	-73.8	-3.0	730.8
2009	-644.9	20.2	34.4	-14.2	365.1	269.8	95.3	12.6	-465.4	7.8	-586.0
2010 Q2	510.6	135.9	35.9	100.0	51.9	69.8	-17.9	-2.0	-55.5	2.7	377.6
Q3	199.0	53.0	1.3	51.8	36.4	-0.2	36.7	10.0	4.5	-1.4	96.5
2010 July	-121.6	4.9	-11.0	15.9	29.4	-2.6	32.0	-3.2	-40.6	-1.8	-110.3
Aug.	530.6	-1.1	7.3	-8.4	-5.4	-7.6	2.1	12.7	91.9	-0.3	432.8
Sep.	-210.0	49.2	5.0	44.3	12.5	9.9	2.6	0.5	-46.7	0.7	-226.0
Oct.	-17.8	61.2	79.5	-18.3	69.8	94.5	-24.7	5.1	-33.7	0.7	-120.9
Nov. <sup>(p)</sup>	166.6	145.7	54.6	91.1	-1.5	-38.2	36.8	13.8	10.2	1.1	-2.7

### 2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/other euro area residents	Money market fund shares/units <sup>2)</sup>	Debt securities issued <sup>3)</sup>	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities over inter-MFI assets
Outstanding amounts										
2008	24,121.3	722.7	259.6	9,716.1	726.3	2,823.3	1,615.1	4,779.9	3,554.0	-75.8
2009	23,861.8	769.9	246.7	10,066.9	647.5	2,752.5	1,802.6	4,237.7	3,361.3	-23.3
2010 Q2	25,244.0	785.4	304.8	10,321.9	603.6	2,853.6	1,957.7	4,603.5	3,807.6	5.8
Q3	25,183.7	786.8	265.5	10,349.8	589.2	2,829.9	1,958.3	4,436.1	3,950.0	18.1
2010 July	24,958.7	793.9	282.2	10,315.0	594.7	2,837.1	1,945.8	4,487.6	3,714.8	-12.5
Aug.	25,599.2	787.9	262.1	10,335.6	610.1	2,847.7	1,982.1	4,631.5	4,129.2	13.0
Sep.	25,183.7	786.8	265.5	10,349.8	589.2	2,829.9	1,958.3	4,436.1	3,950.0	18.1
Oct.	25,140.4	789.0	343.8	10,358.2	574.7	2,811.9	1,969.4	4,456.3	3,810.4	26.7
Nov. <sup>(p)</sup>	25,466.2	790.2	360.6	10,473.9	586.5	2,850.7	2,003.0	4,589.1	3,787.1	25.1
Transactions										
2008	1,694.1	83.3	106.0	700.9	29.8	-32.7	138.5	91.7	604.7	-28.0
2009	-644.9	45.8	-4.4	289.4	-12.5	-56.4	143.2	-591.1	-505.6	46.6
2010 Q2	510.6	16.9	37.3	139.7	-28.8	-33.1	46.7	-45.2	354.2	22.8
Q3	199.0	1.3	-39.5	62.8	-14.6	19.8	20.3	24.8	113.7	10.4
2010 July	-121.6	8.4	-22.6	6.3	-8.9	10.7	17.0	-9.9	-104.4	-18.2
Aug.	530.6	-6.0	-20.2	18.7	15.3	-4.7	5.7	87.8	408.4	25.5
Sep.	-210.0	-1.2	3.4	37.8	-20.9	13.7	-2.4	-53.1	-190.3	3.1
Oct.	-17.8	2.2	78.1	7.2	-14.4	-11.3	5.6	48.4	-140.7	7.1
Nov. <sup>(p)</sup>	166.6	1.2	16.9	74.7	11.9	4.2	21.5	11.2	26.7	-1.6

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 a maturity of up to two years and held by non-euro area residents are included in external liabilities.

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

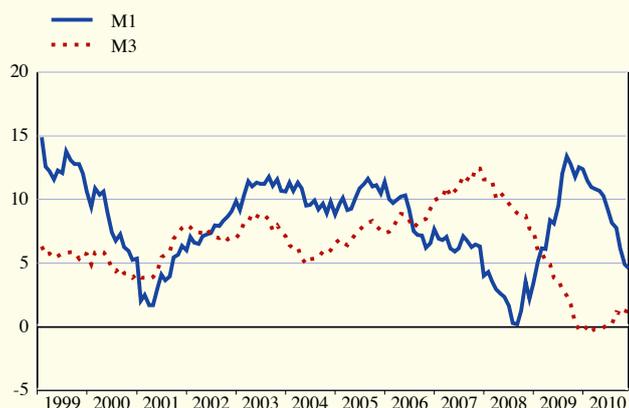
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

### 1. Monetary aggregates <sup>2)</sup> and counterparts

	M3				M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents			Net external assets <sup>3)</sup>	
	M2		M3-M2	Loans				Memo item: Loans adjusted for sales and securitisation <sup>4)</sup>				
	M1	M2-M1										
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts												
2008	3,980.6	4,040.7	8,021.4	1,371.5	9,392.9	-	6,281.8	2,575.5	12,969.6	10,779.9	-	431.8
2009	4,492.3	3,696.0	8,188.3	1,145.9	9,334.2	-	6,757.3	2,898.6	13,091.0	10,782.1	-	550.6
2010 Q2	4,659.4	3,641.8	8,301.2	1,128.6	9,429.7	-	7,143.8	3,062.4	13,250.9	10,962.8	-	645.2
Q3	4,684.7	3,696.0	8,380.7	1,120.0	9,500.7	-	7,170.7	3,100.5	13,350.5	10,975.2	-	600.1
2010 Aug.	4,736.0	3,671.9	8,407.9	1,115.1	9,522.9	-	7,208.1	3,095.4	13,387.8	11,015.6	-	607.5
Sep.	4,684.7	3,696.0	8,380.7	1,120.0	9,500.7	-	7,170.7	3,100.5	13,350.5	10,975.2	-	600.1
Oct.	4,688.3	3,715.7	8,404.0	1,065.7	9,469.7	-	7,179.8	3,263.0	13,316.0	10,969.9	-	505.3
Nov. <sup>(p)</sup>	4,683.5	3,718.5	8,402.0	1,129.2	9,531.2	-	7,316.6	3,267.3	13,440.0	11,063.6	-	531.2
Transactions												
2008	130.6	484.8	615.4	47.8	663.2	-	252.4	103.0	926.9	581.1	736.9	-166.4
2009	495.6	-368.3	127.3	-157.8	-30.5	-	421.5	308.3	84.3	-20.5	19.7	125.3
2010 Q2	75.3	-25.9	49.4	21.7	71.2	-	5.0	82.8	27.5	67.6	73.5	-16.0
Q3	35.4	66.6	102.0	-13.8	88.2	-	107.5	32.3	146.0	67.4	92.1	-21.0
2010 Aug.	44.6	31.2	75.9	11.2	87.0	-	24.3	19.3	79.2	49.3	54.3	4.8
Sep.	-44.6	31.1	-13.4	2.4	-11.1	-	27.8	11.0	-1.2	-2.4	2.4	7.6
Oct.	5.2	20.6	25.8	-58.1	-32.3	-	10.5	165.4	-29.0	1.2	9.0	-104.0
Nov. <sup>(p)</sup>	-10.9	-1.9	-12.8	63.6	50.8	-	59.6	18.0	111.2	76.4	91.7	-8.6
Growth rates												
2008	3.4	13.7	8.3	3.6	7.6	7.1	4.2	4.2	7.7	5.7	7.1	-166.4
2009	12.4	-9.1	1.6	-11.6	-0.3	-0.2	6.7	11.9	0.6	-0.2	0.2	125.3
2010 Q2	9.2	-7.0	1.4	-7.7	0.2	0.1	3.9	8.6	0.0	0.4	0.3	39.1
Q3	6.2	-2.8	2.0	-5.2	1.1	1.0	3.6	7.3	1.1	1.3	1.4	-4.8
2010 Aug.	7.8	-4.4	2.1	-5.0	1.2	0.8	3.8	7.6	1.2	1.3	1.4	-25.9
Sep.	6.2	-2.8	2.0	-5.2	1.1	1.0	3.6	7.3	1.1	1.3	1.4	-4.8
Oct.	4.9	-1.2	2.1	-7.6	0.9	1.3	3.7	12.0	1.2	1.5	1.7	-97.1
Nov. <sup>(p)</sup>	4.6	-0.4	2.3	-0.9	1.9	.	4.0	12.7	1.9	2.0	2.4	-92.0

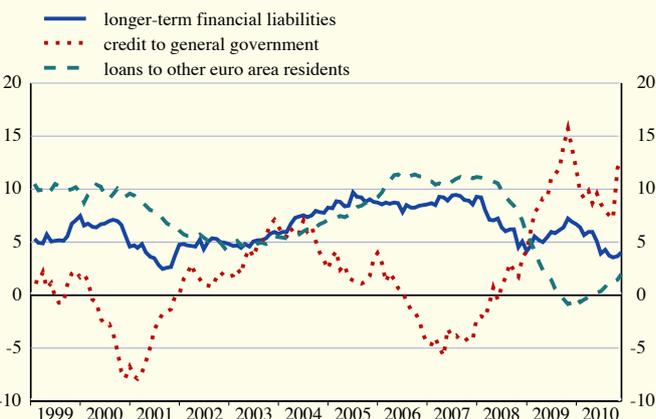
### C1 Monetary aggregates <sup>1)</sup>

(annual growth rates; seasonally adjusted)



### C2 Counterparts <sup>1)</sup>

(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.

Monthly and other shorter-term growth rates for selected items are available at: <http://www.ecb.europa.eu/stats/money/aggregates/aggr/html/index.en.html>

2) Monetary liabilities of MFIs and central government (post office, treasury, etc.) vis-à-vis non-MFI euro area residents excluding central government.

For definitions of M1, M2 and M3, see glossary.

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

4) Adjustment for the derecognition of loans on the MFI balance sheet on account of their sale or securitisation.

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

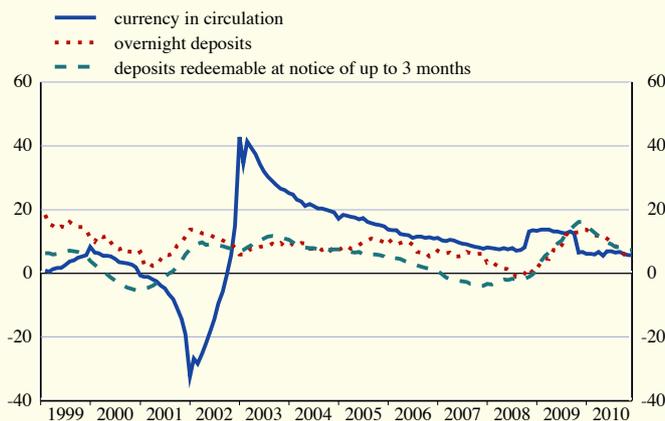
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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

	Currency in circulation	Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits redeemable at notice of up to 3 months	Repos	Money market fund shares/units	Debt securities with a maturity of up to 2 years	Debt securities with a maturity of over 2 years	Deposits redeemable at notice of over 3 months	Deposits with an agreed maturity of over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts											
2008	710.4	3,270.2	2,472.2	1,568.6	350.2	755.2	266.1	2,569.3	121.6	1,987.1	1,603.8
2009	755.1	3,737.2	1,890.6	1,805.4	340.2	673.8	131.9	2,633.0	131.9	2,203.0	1,789.4
2010 Q2	784.9	3,874.5	1,796.9	1,844.9	401.8	604.0	122.7	2,716.6	128.1	2,340.6	1,958.5
Q3	791.2	3,893.5	1,804.5	1,891.5	397.6	594.3	128.1	2,700.6	122.4	2,394.5	1,953.2
2010 Aug.	791.7	3,944.3	1,794.9	1,876.9	387.8	600.4	126.9	2,710.6	125.2	2,387.1	1,985.2
Sep.	791.2	3,893.5	1,804.5	1,891.5	397.6	594.3	128.1	2,700.6	122.4	2,394.5	1,953.2
Oct.	790.4	3,897.9	1,812.0	1,903.7	382.9	580.0	102.9	2,706.2	119.7	2,387.2	1,966.7
Nov. <sup>(p)</sup>	796.0	3,887.5	1,803.6	1,914.8	432.7	591.1	105.4	2,751.3	118.7	2,445.6	2,001.0
Transactions											
2008	83.6	47.0	464.3	20.5	47.0	32.9	-32.2	0.7	0.7	114.7	136.2
2009	43.4	452.2	-605.7	237.4	-10.1	-13.3	-134.3	77.9	8.9	193.4	141.3
2010 Q2	9.6	65.7	-42.5	16.6	60.0	-25.5	-12.8	-36.2	-1.9	-5.8	49.0
Q3	6.3	29.1	19.9	46.8	-3.9	-9.9	0.1	32.7	-2.4	62.8	14.3
2010 Aug.	9.5	35.1	12.1	19.1	-2.5	14.5	-0.8	1.4	0.3	14.2	8.4
Sep.	-0.5	-44.1	16.4	14.7	10.1	-6.2	-1.5	24.2	-1.7	15.9	-10.6
Oct.	-0.9	6.1	8.3	12.3	-18.9	-14.3	-24.9	12.1	-1.6	-8.0	8.1
Nov. <sup>(p)</sup>	5.6	-16.5	-12.9	11.0	49.6	11.3	2.8	10.1	-1.0	28.3	22.2
Growth rates											
2008	13.3	1.5	23.3	1.3	15.3	4.7	-10.7	0.0	0.5	6.1	9.3
2009	6.1	13.8	-24.3	15.1	-2.8	-1.9	-50.2	3.0	7.2	9.7	8.7
2010 Q2	6.9	9.6	-19.4	9.1	16.7	-13.6	-31.9	1.5	0.6	4.3	7.3
Q3	6.0	6.2	-12.1	7.9	21.3	-15.3	-16.0	1.4	-3.9	4.1	6.7
2010 Aug.	6.7	8.0	-15.0	8.2	24.0	-14.7	-19.4	0.5	-1.8	4.9	7.7
Sep.	6.0	6.2	-12.1	7.9	21.3	-15.3	-16.0	1.4	-3.9	4.1	6.7
Oct.	5.8	4.7	-8.8	7.3	22.9	-16.9	-27.6	1.9	-6.0	3.8	6.9
Nov. <sup>(p)</sup>	5.7	4.4	-7.5	7.3	36.6	-13.4	-23.6	1.8	-6.2	4.7	7.2

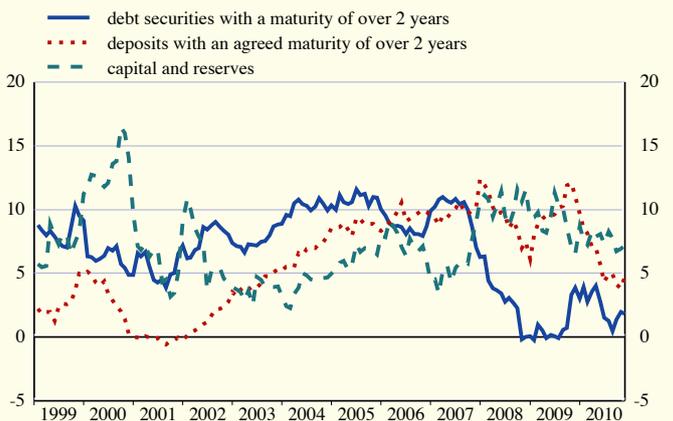
#### C3 Components of monetary aggregates <sup>1)</sup>

(annual growth rates; seasonally adjusted)



#### C4 Components of longer-term financial liabilities <sup>1)</sup>

(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 <sup>1), 2)</sup>

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

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

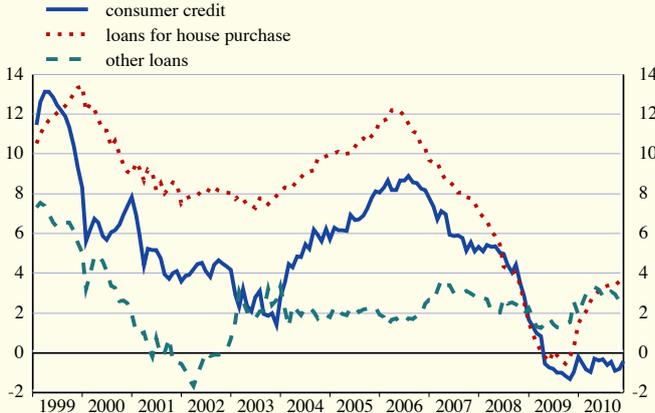
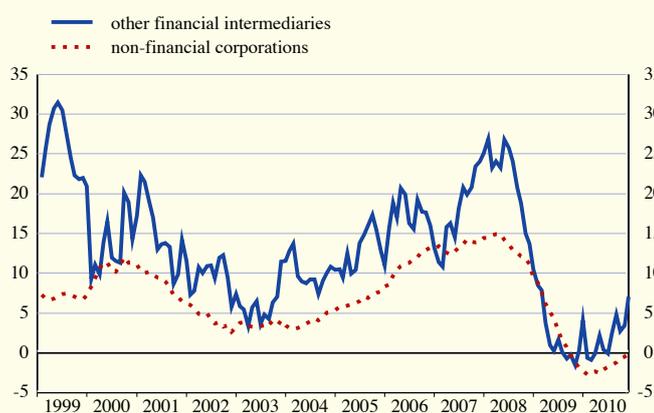
	Insurance corporations and pension funds	Other financial intermediaries <sup>3)</sup>	Non-financial corporations			Households <sup>4)</sup>				
	Total	Total	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Consumer credit	Loans for house purchase	Other loans
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2008	104.9	971.7	4,821.3	1,381.1	960.9	2,479.3	4,882.0	632.4	3,483.0	766.6
2009	90.0	1,058.5	4,684.9	1,185.4	936.8	2,562.7	4,948.7	631.4	3,543.3	774.1
2010 Q2	86.2	1,096.5	4,692.0	1,138.7	921.7	2,631.6	5,088.2	645.4	3,631.9	810.9
Q3	92.5	1,073.7	4,700.4	1,136.1	924.6	2,639.7	5,108.5	640.4	3,653.2	814.9
2010 Aug.	96.0	1,129.2	4,683.6	1,129.1	915.9	2,638.6	5,106.8	643.7	3,650.0	813.1
Sep.	92.5	1,073.7	4,700.4	1,136.1	924.6	2,639.7	5,108.5	640.4	3,653.2	814.9
Oct.	93.1	1,068.0	4,685.0	1,129.9	917.0	2,638.1	5,123.8	639.0	3,671.4	813.4
Nov. <sup>(p)</sup>	97.7	1,125.7	4,700.8	1,136.5	910.7	2,653.7	5,139.3	642.5	3,677.3	819.5
Transactions										
2008	-3.7	86.9	418.3	86.8	119.6	211.8	79.6	10.4	52.2	16.9
2009	-13.6	35.9	-107.5	-181.2	-19.0	92.8	64.7	-1.2	51.3	14.6
2010 Q2	-0.4	34.1	-2.4	-28.3	2.2	23.8	36.3	0.4	32.0	3.9
Q3	6.5	19.4	18.6	5.2	2.6	10.8	22.9	-2.6	20.9	4.6
2010 Aug.	4.6	15.0	16.7	5.8	1.7	9.2	13.0	1.4	7.8	3.8
Sep.	-3.3	-22.5	17.6	11.1	5.9	0.6	5.7	-1.8	6.0	1.5
Oct.	0.6	-2.6	-9.6	-4.3	-5.9	0.6	12.8	-0.8	14.8	-1.3
Nov. <sup>(p)</sup>	4.5	51.3	10.7	5.3	-4.6	9.9	9.9	2.8	1.0	6.0
Growth rates										
2008	-3.5	10.0	9.5	6.8	13.9	9.4	1.7	1.7	1.5	2.3
2009	-13.0	3.6	-2.2	-13.1	-2.0	3.7	1.3	-0.2	1.5	1.9
2010 Q2	-12.7	-0.3	-1.7	-9.9	-4.0	3.3	2.8	-0.3	3.3	2.8
Q3	0.0	2.8	-0.6	-6.4	-2.0	2.7	2.8	-0.9	3.4	2.9
2010 Aug.	6.4	4.8	-1.2	-8.2	-3.3	2.9	2.9	-0.5	3.4	3.1
Sep.	0.0	2.8	-0.6	-6.4	-2.0	2.7	2.8	-0.9	3.4	2.9
Oct.	5.2	3.6	-0.5	-5.6	-2.1	2.5	2.9	-0.8	3.6	2.6
Nov. <sup>(p)</sup>	14.2	7.1	-0.1	-4.3	-1.9	2.5	2.7	-0.4	3.4	2.3

### C5 Loans to other financial intermediaries and non-financial corporations <sup>2)</sup>

(annual growth rates; not seasonally adjusted)

### C6 Loans to households <sup>2)</sup>

(annual growth rates; not seasonally adjusted)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on the ESA 95.
- 2) Data refer to the changing composition of the euro area. For further information, see the General Notes.
- 3) Including investment funds.
- 4) Including non-profit institutions serving households.

**2.4 MFI loans: breakdown 1), 2)**

(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

**2. Loans to financial intermediaries and non-financial corporations**

	Insurance corporations and pension funds				Other financial intermediaries <sup>3)</sup>				Non-financial corporations			
	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	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
<b>Outstanding amounts</b>												
2009	80.3	57.4	7.0	15.9	1,051.6	592.9	185.8	272.9	4,691.3	1,181.3	937.2	2,572.8
2010 Q2	90.4	68.9	5.7	15.8	1,107.0	590.3	216.9	299.9	4,700.2	1,150.8	921.6	2,627.9
2010 Q3	93.6	73.4	5.8	14.5	1,086.9	585.7	201.2	299.9	4,690.2	1,133.5	922.4	2,634.4
2010 Sep.	93.6	73.4	5.8	14.5	1,086.9	585.7	201.2	299.9	4,690.2	1,133.5	922.4	2,634.4
2010 Oct.	94.3	73.5	5.8	15.0	1,062.6	559.9	199.9	302.8	4,675.1	1,124.4	916.3	2,634.4
2010 Nov. <sup>(p)</sup>	96.8	76.4	5.9	14.5	1,126.3	616.0	202.2	308.1	4,699.6	1,137.7	909.4	2,652.5
<b>Transactions</b>												
2009	-11.9	-11.8	0.9	-0.9	39.3	24.5	7.5	7.4	-106.8	-181.1	-18.8	93.1
2010 Q2	4.3	4.6	-0.2	-0.1	37.0	25.8	7.4	3.8	9.4	-12.9	0.9	21.5
2010 Q3	3.4	4.6	0.2	-1.4	22.0	5.6	2.4	14.0	0.2	-9.6	0.5	9.2
2010 Sep.	-2.4	-1.7	0.8	-1.6	13.0	10.3	4.9	-2.2	19.9	16.8	5.3	-2.2
2010 Oct.	0.7	0.1	0.0	0.6	-21.0	-23.4	-0.5	2.8	-9.3	-7.2	-4.4	2.3
2010 Nov. <sup>(p)</sup>	2.4	2.8	0.1	-0.5	57.3	52.3	1.5	3.5	19.4	12.1	-5.0	12.4
<b>Growth rates</b>												
2009	-13.0	-17.1	14.2	-4.7	4.1	4.3	4.4	3.1	-2.2	-13.2	-2.0	3.7
2010 Q2	-12.4	-13.9	-28.4	3.9	-0.1	-1.6	-2.8	5.3	-1.7	-9.9	-3.9	3.3
2010 Q3	0.3	3.9	-25.2	-3.5	2.7	1.6	-1.1	7.6	-0.6	-6.4	-2.0	2.7
2010 Sep.	0.3	3.9	-25.2	-3.5	2.7	1.6	-1.1	7.6	-0.6	-6.4	-2.0	2.7
2010 Oct.	5.3	11.4	-27.6	-3.6	3.5	2.1	-0.5	8.3	-0.5	-5.6	-2.1	2.5
2010 Nov. <sup>(p)</sup>	13.6	22.7	-24.5	-4.5	7.0	7.6	1.9	9.4	-0.1	-4.3	-1.9	2.5

**3. Loans to households<sup>4)</sup>**

	Total	Consumer credit				Loans for house purchase				Other loans			
	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	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
<b>Outstanding amounts</b>													
2009	4,960.1	633.4	135.9	195.1	302.4	3,551.7	15.0	60.8	3,475.9	775.0	146.8	87.7	540.5
2010 Q2	5,091.6	648.8	148.0	192.2	308.6	3,626.8	14.1	56.4	3,556.4	816.0	150.4	86.6	578.9
2010 Q3	5,115.3	642.3	143.9	188.4	310.0	3,657.4	14.7	58.8	3,583.9	815.6	145.3	87.0	583.3
2010 Sep.	5,115.3	642.3	143.9	188.4	310.0	3,657.4	14.7	58.8	3,583.9	815.6	145.3	87.0	583.3
2010 Oct.	5,129.2	641.5	143.8	188.0	309.7	3,675.3	14.6	59.0	3,601.6	812.4	142.5	86.2	583.7
2010 Nov. <sup>(p)</sup>	5,146.7	642.6	144.8	187.9	309.9	3,681.5	14.7	57.6	3,609.1	822.7	150.3	86.1	586.2
<b>Transactions</b>													
2009	65.2	-1.2	-1.4	-4.3	4.6	51.6	-2.6	-8.2	62.4	14.7	-7.3	-0.8	22.8
2010 Q2	49.1	5.9	1.7	-0.6	4.8	32.6	-0.7	-2.4	35.7	10.5	-4.3	-2.1	17.0
2010 Q3	26.2	-4.0	-3.4	-3.4	2.7	30.0	0.2	2.4	27.4	0.2	-4.9	-0.4	5.5
2010 Sep.	13.7	-0.4	-1.4	-2.3	3.3	10.3	-0.1	1.5	8.9	3.8	1.7	-0.2	2.3
2010 Oct.	11.4	-0.2	0.1	-0.4	0.1	14.5	-0.1	0.3	14.4	-2.9	-2.6	-0.7	0.4
2010 Nov. <sup>(p)</sup>	12.0	0.5	1.1	-0.6	-0.1	1.3	0.1	0.3	0.9	10.2	7.5	0.3	2.3
<b>Growth rates</b>													
2009	1.3	-0.2	-1.0	-2.2	1.5	1.5	-14.9	-12.0	1.8	1.9	-4.7	-0.9	4.4
2010 Q2	2.8	-0.3	-2.2	-2.1	1.7	3.3	-11.2	-11.6	3.7	2.8	-7.5	-2.6	6.7
2010 Q3	2.8	-0.9	-2.7	-3.7	1.8	3.4	-7.0	-5.1	3.6	3.0	-7.4	-2.9	6.8
2010 Sep.	2.8	-0.9	-2.7	-3.7	1.8	3.4	-7.0	-5.1	3.6	3.0	-7.4	-2.9	6.8
2010 Oct.	2.9	-0.8	-1.8	-3.8	1.6	3.6	-7.1	-4.2	3.8	2.6	-7.5	-3.6	6.4
2010 Nov. <sup>(p)</sup>	2.7	-0.4	-0.9	-4.0	2.1	3.4	-6.0	-4.0	3.6	2.3	-5.9	-3.2	5.5

Source: ECB.

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

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

3) Including investment funds.

4) Including non-profit institutions serving households.

## 2.4 MFI loans: breakdown <sup>1), 2)</sup>

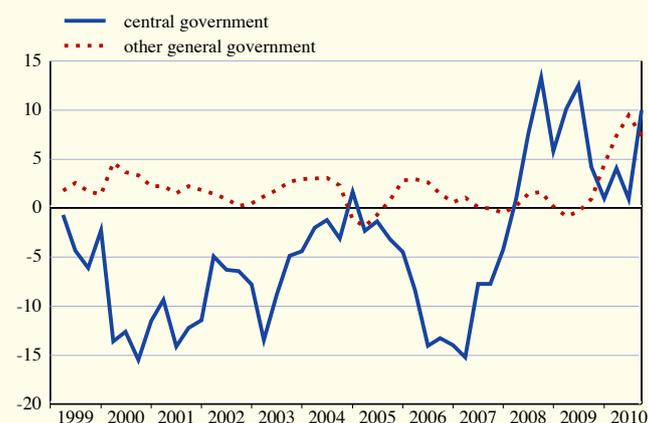
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2007	954.4	213.2	217.3	494.5	29.4	3,295.5	2,341.6	953.8	59.6	894.2
2008	968.3	227.0	209.8	509.3	22.2	3,242.4	2,278.8	963.6	57.5	906.1
2009 Q4	1,001.7	229.3	209.8	528.8	33.8	2,821.7	1,914.9	906.8	46.1	860.7
2010 Q1	1,032.6	242.3	209.0	539.0	42.2	2,949.9	1,985.1	964.8	46.8	918.0
Q2	1,068.0	250.2	225.0	547.9	44.8	3,074.8	2,074.6	1,000.2	50.3	949.8
Q3 <sup>(p)</sup>	1,068.9	257.1	223.2	544.2	44.5	2,950.6	1,995.6	955.1	51.8	903.2
Transactions										
2007	-7.9	-4.4	-13.0	5.9	3.6	540.1	381.3	158.9	0.3	158.7
2008	13.7	12.5	-8.1	16.5	-7.2	-59.8	-86.0	26.1	0.3	25.8
2009 Q4	10.4	-6.0	0.4	12.8	3.1	-3.8	11.4	-15.2	-1.4	-13.8
2010 Q1	30.4	12.6	-0.8	10.1	8.5	53.9	24.1	29.6	-0.6	30.2
Q2	36.7	9.2	15.9	9.0	2.6	-20.9	0.9	-22.7	-1.3	-21.4
Q3 <sup>(p)</sup>	1.5	7.7	-1.9	-3.8	-0.3	-11.2	-13.7	2.5	4.3	-1.8
Growth rates										
2007	-1.2	-4.2	-5.6	1.3	13.8	18.6	18.5	18.8	0.5	20.2
2008	1.4	5.8	-3.7	3.3	-24.4	-1.5	-3.6	2.8	0.5	3.0
2009 Q4	3.7	1.0	0.1	4.2	51.9	-11.7	-15.1	-4.1	-3.0	-4.2
2010 Q1	6.6	4.0	1.8	5.8	101.2	-3.2	-5.4	1.7	-4.7	2.1
Q2	7.4	1.0	9.1	7.0	56.8	-1.3	-1.7	-1.4	-5.4	-1.2
Q3 <sup>(p)</sup>	8.0	10.0	6.5	5.4	45.1	0.9	1.2	-0.6	1.4	-0.7

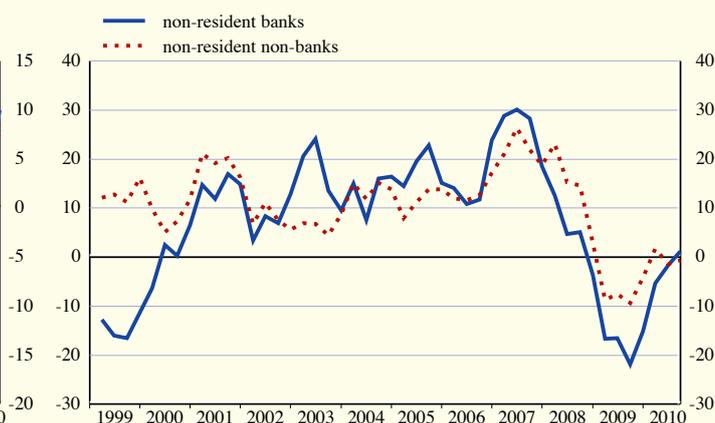
### C7 Loans to government <sup>2)</sup>

(annual growth rates; not seasonally adjusted)



### C8 Loans to non-euro area residents <sup>2)</sup>

(annual growth rates; not seasonally adjusted)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on the 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 similar to MFIs which are resident outside the euro area.

**2.5 Deposits held with MFIs: breakdown <sup>1), 2)</sup>**

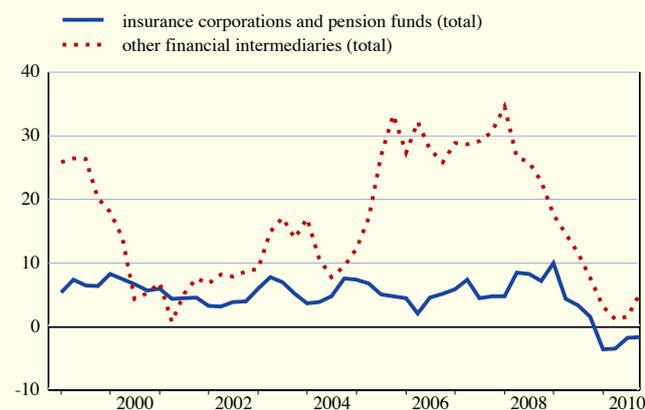
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

**1. Deposits by financial intermediaries**

	Insurance corporations and pension funds							Other financial intermediaries <sup>3)</sup>						
	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		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
<b>Outstanding amounts</b>														
2008	761.4	84.3	114.2	537.2	1.1	1.5	23.1	1,802.4	319.9	420.4	852.9	12.3	0.1	197.0
2009	738.6	84.1	86.9	543.8	2.2	1.4	20.2	1,872.5	313.1	335.1	957.5	15.9	0.0	250.9
2010 Q2	740.7	95.5	84.6	536.2	2.3	0.3	21.8	2,074.5	367.9	297.7	1,059.7	9.4	0.2	339.6
Q3	734.3	89.4	89.3	532.7	2.6	0.3	20.1	2,100.1	373.6	300.7	1,076.2	9.0	0.7	339.9
2010 Aug.	737.8	90.5	92.0	533.6	2.4	0.3	19.0	2,088.6	365.1	304.5	1,087.0	8.9	0.8	322.3
Sep.	734.3	89.4	89.3	532.7	2.6	0.3	20.1	2,100.1	373.6	300.7	1,076.2	9.0	0.7	339.9
Oct.	729.0	89.4	85.6	529.8	2.5	0.3	21.4	2,083.2	367.5	318.1	1,070.0	9.0	0.6	317.9
Nov. <sup>4)</sup>	719.1	89.4	79.5	527.6	2.5	0.3	19.9	2,210.4	385.0	316.3	1,132.8	8.6	0.5	367.2
<b>Transactions</b>														
2008	69.2	12.4	42.8	12.2	-0.3	0.1	2.2	268.8	4.4	71.8	142.3	-0.3	-0.3	51.0
2009	-26.9	-1.0	-30.4	6.3	1.1	-0.1	-2.8	56.8	6.8	-93.6	85.8	3.7	0.0	54.0
2010 Q2	0.9	4.7	-0.2	-7.2	-0.2	2.2	1.5	72.3	33.9	-21.5	-0.7	-8.0	0.1	68.6
Q3	-5.6	-5.8	5.0	-6.7	0.3	3.3	-1.7	48.6	9.5	10.3	28.3	-0.5	0.5	0.6
2010 Aug.	-1.8	-4.5	4.1	-2.9	0.0	1.1	0.4	14.3	4.0	3.3	5.3	-0.4	0.5	1.6
Sep.	-2.8	-0.8	-2.3	-2.0	0.2	1.1	1.1	26.5	11.0	-0.9	-1.5	0.1	0.0	17.9
Oct.	-5.4	0.0	-3.5	-4.3	-0.1	1.1	1.3	-19.1	-5.1	17.8	-5.7	0.0	-0.1	-26.1
Nov. <sup>4)</sup>	-10.5	-0.3	-6.4	-2.2	0.0	0.0	-1.5	92.4	15.1	-3.5	32.3	-0.4	-0.1	49.1
<b>Growth rates</b>														
2008	10.0	17.3	59.9	2.3	-23.4	-	10.5	17.6	1.4	21.0	20.0	-2.4	-	34.6
2009	-3.5	-1.1	-26.4	1.2	96.8	-	-12.3	3.1	2.0	-22.0	10.0	30.0	-	27.4
2010 Q2	-1.7	7.0	-7.8	-3.2	33.3	-	14.3	1.6	6.8	-16.6	-1.5	-36.4	-	33.0
Q3	-1.7	2.9	2.9	-4.4	36.0	-	4.6	5.2	17.4	-13.3	0.8	-41.0	-	34.1
2010 Aug.	-2.0	-0.6	4.2	-4.1	30.4	-	1.3	6.2	20.2	-15.3	1.7	-41.8	-	42.8
Sep.	-1.7	2.9	2.9	-4.4	36.0	-	4.6	5.2	17.4	-13.3	0.8	-41.0	-	34.1
Oct.	-2.7	-3.8	-1.2	-4.7	26.3	-	16.7	5.4	14.3	-8.8	1.3	-46.1	-	34.1
Nov. <sup>4)</sup>	-3.1	0.5	-2.9	-4.7	23.7	-	-7.9	9.6	16.3	-8.6	4.4	-49.6	-	52.2

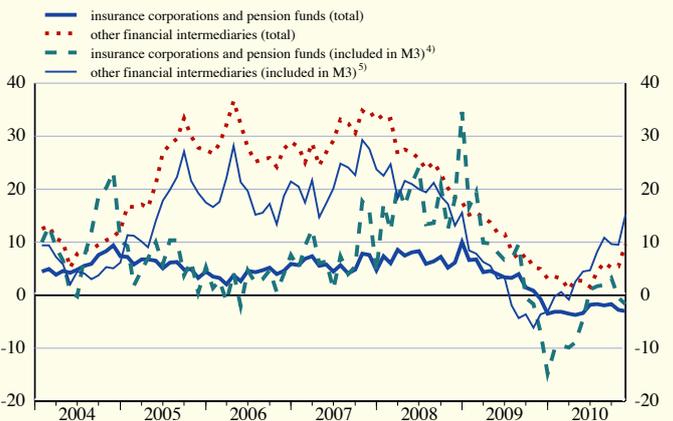
**C9 Total deposits by sector <sup>2)</sup>**

(annual growth rates)



**C10 Total deposits and deposits included in M3 by sector <sup>2)</sup>**

(annual growth rates)



Source: ECB.

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

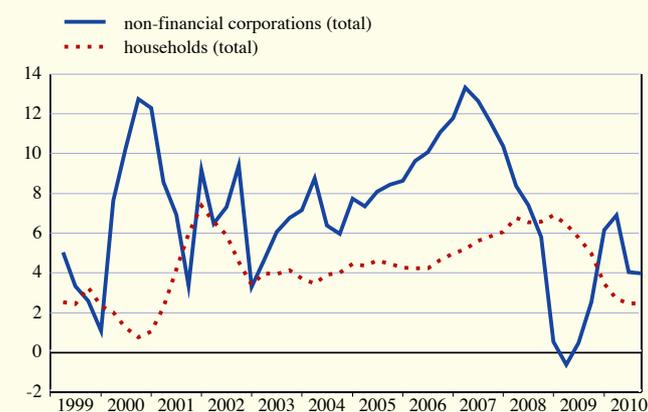
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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

	Non-financial corporations							Households <sup>3)</sup>								
	Total		Overnight		With an agreed maturity of:		Redeemable at notice of:	Repos	Total		Overnight		With an agreed maturity of:		Redeemable at notice of:	Repos
	1	2	3	4	5	6	7		8	9	10	11	12	13	14	
Outstanding amounts																
2008	1,502.6	883.3	502.0	64.4	27.9	1.3	23.7	5,379.2	1,814.5	1,358.2	519.0	1,490.2	113.6	83.7		
2009	1,603.1	1,001.1	434.5	80.7	68.7	1.7	16.3	5,601.8	2,157.0	996.5	607.1	1,680.2	123.7	37.3		
2010 Q2	1,581.4	1,002.4	410.5	82.2	71.7	2.1	12.5	5,658.9	2,228.4	906.3	644.0	1,732.9	116.9	30.5		
Q3	1,608.9	998.6	434.8	87.0	74.7	2.1	11.8	5,650.7	2,202.3	897.7	652.2	1,756.4	110.7	31.4		
2010 Aug.	1,600.1	995.5	431.3	84.4	74.9	2.1	11.9	5,658.7	2,208.8	901.3	650.5	1,753.2	113.0	31.9		
Sep.	1,608.9	998.6	434.8	87.0	74.7	2.1	11.8	5,650.7	2,202.3	897.7	652.2	1,756.4	110.7	31.4		
Oct.	1,621.3	996.6	450.1	87.1	74.2	2.0	11.3	5,673.1	2,218.4	898.6	655.3	1,760.6	109.4	30.9		
Nov. <sup>4)</sup>	1,627.7	998.5	449.6	87.0	76.7	2.0	14.0	5,659.2	2,201.9	898.3	656.1	1,762.7	110.1	30.0		
Transactions																
2008	8.0	-5.1	13.5	3.2	-3.4	-0.3	0.0	347.5	28.7	336.2	-43.8	28.1	1.7	-3.4		
2009	93.0	114.3	-70.1	15.1	40.8	0.4	-7.4	187.8	320.6	-371.5	85.9	190.5	8.6	-46.3		
2010 Q2	3.7	19.2	-17.1	-0.5	2.0	0.3	-0.1	49.1	62.9	-30.3	11.9	16.3	-6.0	-5.6		
Q3	34.7	0.3	27.2	5.0	2.9	0.0	-0.7	-4.9	-24.7	-6.9	8.3	23.7	-6.2	0.9		
2010 Aug.	18.8	4.7	11.3	0.4	2.2	0.0	0.3	-16.2	-30.1	0.7	3.4	11.1	-1.7	0.4		
Sep.	14.0	6.0	5.7	2.7	-0.3	0.0	-0.1	-5.5	-5.5	-2.3	1.8	3.3	-2.3	-0.5		
Oct.	13.1	-1.4	15.3	0.2	-0.5	0.0	-0.5	22.8	16.3	1.1	3.1	4.2	-1.3	-0.5		
Nov. <sup>4)</sup>	2.9	-0.6	-2.0	0.5	2.5	0.0	2.7	-15.9	-17.4	-1.3	0.8	2.1	0.7	-0.9		
Growth rates																
2008	0.5	-0.6	2.9	5.4	-11.0	-16.2	0.0	6.9	1.6	33.0	-7.8	1.9	1.5	-3.9		
2009	6.2	12.9	-13.9	23.1	146.6	28.3	-31.2	3.5	17.5	-27.1	16.5	12.8	7.5	-55.4		
2010 Q2	4.1	9.2	-11.2	14.5	50.5	42.9	-36.2	2.5	10.4	-24.5	20.1	8.3	-2.2	-40.1		
Q3	4.0	5.1	-2.4	12.0	33.7	38.8	-32.3	2.5	7.0	-18.2	16.3	7.6	-9.7	-27.2		
2010 Aug.	4.5	7.1	-5.1	11.2	39.7	43.1	-28.0	2.5	8.3	-20.6	17.7	7.7	-6.9	-33.7		
Sep.	4.0	5.1	-2.4	12.0	33.7	38.8	-32.3	2.5	7.0	-18.2	16.3	7.6	-9.7	-27.2		
Oct.	4.1	3.6	1.4	11.3	29.0	35.2	-25.3	2.7	6.1	-14.6	14.2	7.1	-12.6	-22.5		
Nov. <sup>4)</sup>	4.1	2.6	2.5	10.4	30.9	31.4	-5.8	2.4	4.5	-12.3	12.2	7.1	-12.6	-22.0		

### C11 Total deposits by sector <sup>2)</sup>

(annual growth rates)

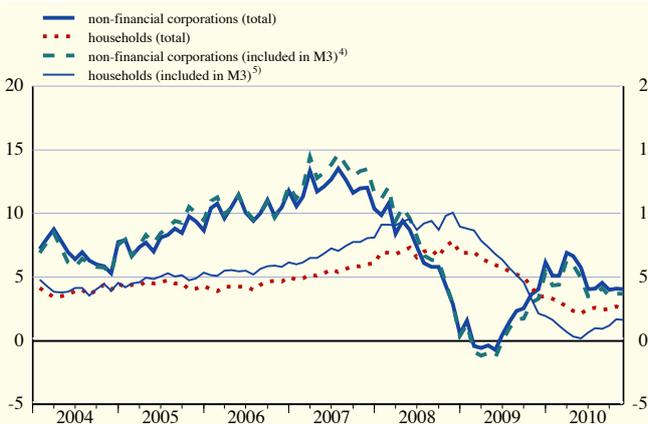


Source: ECB.

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

### C12 Total deposits and deposits included in M3 by sector <sup>2)</sup>

(annual growth rates)



**2.5 Deposits held with MFIs: breakdown <sup>1), 2)</sup>**

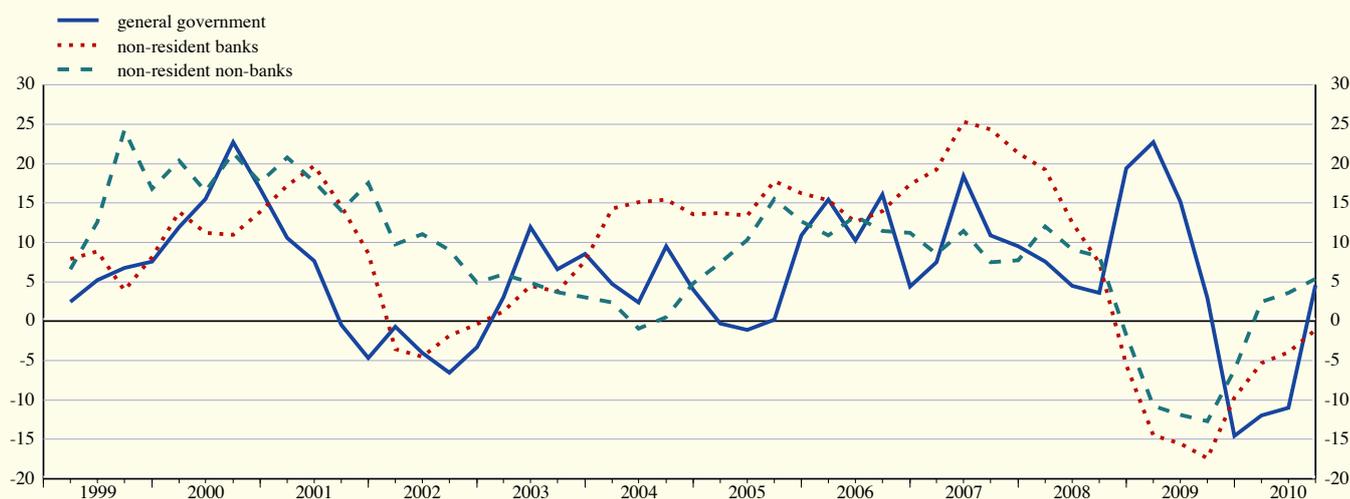
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

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

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks <sup>3)</sup>	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2007	373.5	126.8	58.8	107.7	80.2	3,859.7	2,952.0	907.7	143.1	764.6
2008	444.7	190.8	52.1	116.1	85.8	3,713.3	2,816.2	897.1	65.6	831.5
2009 Q4	372.9	144.1	43.4	114.3	71.1	3,368.7	2,532.7	836.0	56.7	779.3
2010 Q1	397.6	166.2	50.4	108.4	72.6	3,543.7	2,639.0	904.7	66.8	837.9
Q2	412.7	167.6	54.5	113.8	76.8	3,700.0	2,697.1	1,003.0	46.7	956.2
Q3 <sup>(p)</sup>	421.5	176.2	58.7	112.0	74.5	3,577.0	2,600.1	976.9	47.7	929.2
Transactions										
2008	72.7	63.4	-6.5	8.7	7.1	-183.3	-165.8	-17.5	-36.8	19.3
2009	-64.8	-38.1	-8.7	-2.5	-15.5	-331.2	-275.4	-55.8	-4.5	-51.3
2009 Q4	-30.1	-12.8	-7.7	-8.8	-0.9	-80.1	-55.9	-24.2	-2.7	-21.5
2010 Q1	24.6	22.1	7.0	-5.9	1.4	95.3	49.6	45.7	9.1	36.6
Q2	14.7	1.3	4.0	5.1	4.2	-9.6	-26.6	17.0	-2.3	19.3
Q3 <sup>(p)</sup>	9.3	8.5	4.3	-1.7	-1.8	14.1	4.9	8.9	3.0	5.9
Growth rates										
2007	9.5	-2.4	29.9	10.6	16.9	17.9	21.3	7.7	15.8	6.3
2008	19.4	49.9	-11.0	8.1	8.8	-4.4	-5.6	-1.7	-25.6	2.7
2009 Q4	-14.6	-19.9	-16.7	-2.1	-18.0	-8.8	-9.8	-6.2	-7.0	-6.2
2010 Q1	-12.0	-17.2	-0.1	-5.4	-13.3	-3.5	-5.3	2.4	12.0	1.7
Q2	-11.0	-20.6	11.5	-4.7	-6.0	-2.0	-4.0	3.6	7.0	3.3
Q3 <sup>(p)</sup>	4.6	12.3	14.9	-9.2	4.1	0.6	-1.1	5.4	14.2	4.9

**C13 Deposits by government and non-euro area residents <sup>2)</sup>**

(annual growth rates)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on the 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 similar to MFIs which are resident outside the euro area.

## 2.6 MFI holdings of securities: breakdown <sup>1), 2)</sup>

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

	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
<b>Outstanding amounts</b>												
2008	5,854.5	1,884.0	92.3	1,226.1	19.3	1,355.3	51.2	1,226.5	1,472.8	421.8	775.0	276.1
2009	6,207.7	1,971.1	109.1	1,467.2	16.0	1,457.8	39.4	1,147.1	1,515.3	434.6	800.5	280.2
2010 Q2	6,305.2	1,908.4	117.2	1,555.3	18.5	1,477.6	28.5	1,199.7	1,523.4	456.1	772.2	295.1
2010 Q3	6,223.2	1,863.9	105.5	1,548.4	17.7	1,516.6	30.2	1,141.0	1,534.7	458.3	785.8	290.6
2010 Aug.	6,314.5	1,890.1	117.1	1,549.3	17.5	1,516.8	26.6	1,197.0	1,529.7	457.3	784.4	288.0
Sep.	6,223.2	1,863.9	105.5	1,548.4	17.7	1,516.6	30.2	1,141.0	1,534.7	458.3	785.8	290.6
Oct.	6,205.5	1,834.3	108.4	1,633.3	14.9	1,493.9	27.2	1,093.5	1,547.6	459.4	792.5	295.7
Nov. <sup>(p)</sup>	6,191.2	1,836.6	115.7	1,576.2	17.1	1,528.7	27.5	1,089.5	1,552.1	445.2	804.0	302.9
<b>Transactions</b>												
2008	695.6	213.8	5.8	38.3	1.9	389.8	19.0	26.9	-85.2	22.4	-56.9	-50.8
2009	354.4	83.5	16.6	230.6	-3.2	103.3	-12.0	-64.4	43.2	29.1	11.8	2.3
2010 Q2	-95.9	-54.2	-6.9	18.6	-0.4	-4.5	-14.8	-33.8	15.9	10.7	-2.0	7.2
2010 Q3	-21.1	-46.4	-0.6	-13.4	0.0	31.5	5.2	2.6	9.6	2.1	9.5	-2.0
2010 Aug.	17.0	1.4	10.3	-11.8	-0.3	2.5	-0.4	15.4	14.6	3.7	12.1	-1.3
Sep.	-39.0	-23.7	-4.4	1.9	1.2	-2.7	5.2	-16.5	3.6	0.2	0.6	2.8
Oct.	-5.1	-29.2	4.1	87.1	-2.6	-22.1	-2.7	-39.9	6.5	1.3	5.1	0.1
Nov. <sup>(p)</sup>	-38.9	3.5	1.9	-47.8	1.5	37.9	-1.1	-34.8	21.5	1.5	13.7	6.3
<b>Growth rates</b>												
2008	13.4	12.8	8.0	3.2	9.9	39.9	57.3	2.2	-5.3	5.3	-6.8	-15.4
2009	6.0	4.4	17.6	18.7	-16.0	7.6	-23.2	-5.3	2.9	7.0	1.5	0.8
2010 Q2	-2.0	-4.8	-2.6	6.8	-23.0	-1.0	-49.7	-6.8	3.2	8.1	-0.8	7.2
2010 Q3	-2.6	-6.9	-2.5	3.5	-15.5	1.5	-39.5	-6.6	3.3	6.3	0.4	7.1
2010 Aug.	-2.1	-6.6	1.2	5.2	-18.5	1.6	-49.6	-5.8	3.1	6.3	1.2	3.3
Sep.	-2.6	-6.9	-2.5	3.5	-15.5	1.5	-39.5	-6.6	3.3	6.3	0.4	7.1
Oct.	-2.4	-7.3	1.2	8.3	-25.0	0.2	-40.4	-9.0	3.4	6.2	0.7	6.6
Nov. <sup>(p)</sup>	-2.8	-7.1	1.6	5.0	-9.4	2.6	-42.6	-11.1	3.8	5.9	0.8	9.1

## C14 MFI holdings of securities <sup>2)</sup>

(annual growth rates)



Source: ECB.

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

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

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

(EUR billions)

1. Write-offs/write-downs of loans to households <sup>3)</sup>

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	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
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	-4.6	-1.1	-1.5	-1.9	-2.7	0.0	-0.2	-2.5	-6.7	-1.2	-2.3	-3.2
2009	-7.5	-1.8	-2.3	-3.4	-4.0	-0.1	-0.2	-3.7	-7.4	-1.6	-1.3	-4.5
2010 Q1	-1.9	-1.1	-0.6	-0.2	-1.1	0.0	0.0	-1.1	-2.3	-0.5	-0.3	-1.4
Q2	-1.6	-0.4	-0.4	-0.8	-1.1	0.0	0.0	-1.0	-1.9	-0.3	-0.4	-1.3
Q3	-1.9	-0.5	-0.5	-0.9	-0.7	0.0	0.0	-0.7	-1.2	-0.1	-0.2	-0.8
2010 July	-0.4	-0.1	-0.1	-0.2	-0.2	0.0	0.0	-0.2	-0.5	-0.1	-0.2	-0.3
Aug.	-0.3	-0.1	-0.1	-0.1	-0.2	0.0	0.0	-0.2	-0.4	0.0	0.0	-0.3
Sep.	-1.2	-0.3	-0.4	-0.6	-0.3	0.0	0.0	-0.3	-0.3	0.0	-0.1	-0.2
Oct.	-0.4	-0.2	-0.1	-0.1	-0.7	0.0	0.0	-0.7	-0.7	-0.1	-0.1	-0.5
Nov. <sup>(p)</sup>	-0.3	-0.1	0.0	-0.1	-0.3	0.0	0.0	-0.3	-0.8	0.0	-0.2	-0.6

## 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 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2007	-12.5	-2.1	-5.4	-4.9	-5.1	-3.4	-1.7
2008	-17.8	-4.1	-9.1	-4.6	-6.6	-3.4	-3.2
2009	-35.4	-12.7	-12.5	-10.2	-6.9	-2.6	-4.2
2010 Q1	-11.4	-7.1	-4.0	-0.3	-1.0	-0.4	-0.6
Q2	-17.8	-5.5	-6.4	-6.0	-0.9	-0.4	-0.5
Q3	-10.3	-4.0	-2.8	-3.6	-0.4	-0.3	-0.2
2010 July	-3.5	-2.1	-0.4	-1.0	-0.2	-0.3	0.1
Aug.	-2.7	-0.9	-0.9	-1.0	0.0	0.0	0.0
Sep.	-4.1	-1.1	-1.4	-1.6	-0.2	0.1	-0.3
Oct.	-1.9	-0.4	-0.8	-0.6	-0.1	0.0	-0.2
Nov. <sup>(p)</sup>	-6.7	-2.4	-2.7	-1.7	-0.6	0.1	-0.7

## 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
2007	-14.2	-3.3	0.1	-0.3	-0.2	-3.2	-0.6	-6.7	27.6	3.8	11.7	12.1
2008	-60.4	-12.0	0.0	4.5	0.0	-19.0	-2.2	-31.7	-63.6	-9.2	-46.2	-8.2
2009	4.4	8.2	0.2	-0.8	-0.1	-0.8	0.8	-3.0	1.0	-5.9	3.4	3.5
2010 Q1	14.3	3.2	0.3	4.5	0.1	2.4	0.1	3.7	0.5	-1.0	-0.2	1.7
Q2	-12.4	-2.4	0.4	-8.9	0.5	-4.3	0.0	2.3	-14.6	-3.3	-7.3	-4.0
Q3	19.5	4.0	-0.1	6.5	0.3	5.7	-1.3	4.4	2.0	0.1	4.4	-2.4
2010 July	12.3	2.1	0.2	3.8	0.0	4.1	0.1	2.1	3.3	1.6	4.7	-3.0
Aug.	9.8	2.3	-0.4	5.8	0.5	1.1	-1.4	2.0	-2.7	-2.2	-1.2	0.7
Sep.	-2.6	-0.4	0.1	-3.0	-0.1	0.5	0.0	0.3	1.5	0.7	0.9	-0.2
Oct.	-2.0	-0.3	0.1	-2.2	0.0	-0.6	0.0	0.9	1.9	-0.6	2.4	0.1
Nov. <sup>(p)</sup>	-14.5	-1.6	-0.1	-9.3	-0.1	-3.2	0.1	-0.3	-2.6	-1.3	-2.2	1.0

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on the 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 <sup>1), 2)</sup>

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

### 1. Deposits

	MFIs <sup>3)</sup>							Non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	By euro area residents													
2007	6,083.9	92.0	8.0	4.8	0.4	1.2	1.0	9,063.4	95.8	4.2	2.2	0.4	0.1	0.5
2008	6,852.0	89.7	10.3	7.3	0.4	1.3	0.8	9,890.2	96.9	3.1	1.9	0.5	0.1	0.4
2009 Q4	6,282.0	92.9	7.1	4.4	0.3	1.2	0.7	10,188.9	97.0	3.0	1.9	0.2	0.1	0.4
2010 Q1	6,222.1	93.0	7.0	4.1	0.3	1.2	0.8	10,201.5	97.0	3.0	2.0	0.2	0.1	0.4
Q2	6,544.7	92.4	7.6	4.5	0.3	1.2	0.9	10,468.1	97.0	3.0	2.0	0.2	0.1	0.4
Q3 <sup>4)</sup>	6,105.3	92.5	7.5	4.5	0.3	1.2	0.8	10,515.4	97.1	2.9	1.9	0.2	0.1	0.4
	By non-euro area residents													
2007	2,952.0	47.0	53.0	33.5	2.9	2.4	11.0	907.7	50.1	49.9	32.9	1.6	1.8	9.9
2008	2,816.2	48.3	51.7	33.4	2.8	2.6	10.2	897.1	54.9	45.1	28.7	1.4	1.9	9.4
2009 Q4	2,532.7	49.2	50.8	34.2	1.8	2.2	9.6	836.0	53.5	46.5	31.4	1.1	1.7	7.5
2010 Q1	2,639.0	50.1	49.9	32.9	2.2	2.2	9.4	904.7	54.9	45.1	31.9	1.1	1.3	6.1
Q2	2,697.1	52.9	47.1	30.8	2.1	1.6	9.5	1,003.0	55.2	44.8	31.7	1.1	1.4	6.5
Q3 <sup>4)</sup>	2,600.1	51.4	48.6	32.4	2.3	1.6	9.2	976.9	57.0	43.0	30.5	1.2	1.3	5.8

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

	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				
			Total				
			USD	JPY	CHF	GBP	
1	2	3	4	5	6	7	
2007	4,925.0	81.5	18.5	9.2	1.7	1.8	3.4
2008	5,101.8	83.3	16.7	8.4	2.0	1.9	2.5
2009 Q4	5,168.3	83.3	16.7	8.8	1.6	1.9	2.5
2010 Q1	5,284.2	82.5	17.5	9.5	1.6	1.8	2.5
Q2	5,244.3	81.6	18.4	10.0	1.8	2.0	2.5
Q3 <sup>4)</sup>	5,143.1	82.3	17.7	9.4	1.7	2.0	2.4

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on the 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 similar 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 <sup>1), 2)</sup>

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

### 3. Loans

	MFIs <sup>3)</sup>							Non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
To euro area residents														
2007	5,792.5	-	-	-	-	-	11,102.4	96.2	3.8	1.8	0.2	1.0	0.6	
2008	6,307.7	-	-	-	-	-	11,743.1	95.9	4.1	2.1	0.3	1.1	0.4	
2009 Q4	5,917.5	-	-	-	-	-	11,784.9	96.2	3.8	1.9	0.2	1.0	0.4	
2010 Q1	5,916.7	-	-	-	-	-	11,832.5	96.1	3.9	2.0	0.2	1.0	0.4	
Q2	6,208.8	-	-	-	-	-	12,057.3	95.8	4.2	2.2	0.3	1.0	0.4	
Q3 <sup>(p)</sup>	5,841.6	-	-	-	-	-	12,054.9	96.0	4.0	2.0	0.2	1.1	0.4	
To non-euro area residents														
2007	2,341.6	48.2	51.8	28.8	2.3	2.4	12.7	953.8	40.8	59.2	41.3	1.2	3.7	8.3
2008	2,278.8	45.8	54.2	31.8	3.0	2.6	11.3	963.6	40.4	59.6	42.0	1.4	4.3	7.5
2009 Q4	1,914.9	45.8	54.2	29.4	2.7	2.9	12.6	906.8	40.0	60.0	42.1	1.2	3.7	8.0
2010 Q1	1,985.1	46.6	53.4	29.8	2.6	3.0	11.2	964.8	40.2	59.8	42.5	1.3	3.4	7.5
Q2	2,074.6	46.5	53.5	29.8	2.8	3.0	12.0	1,000.2	39.2	60.8	43.3	1.4	3.4	7.7
Q3 <sup>(p)</sup>	1,995.6	45.9	54.1	29.6	3.3	3.0	12.0	955.1	40.5	59.5	41.7	1.4	3.6	7.3

### 4. Holdings of securities other than shares

	Issued by MFIs <sup>3)</sup>							Issued by non-MFIs						
	All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies				All currencies (outstanding amount)	Euro <sup>4)</sup>	Non-euro currencies					
			Total						Total					
			USD	JPY	CHF	GBP			USD	JPY	CHF	GBP		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Issued by euro area residents														
2007	1,739.8	95.2	4.8	2.4	0.3	0.3	1.5	2,209.3	97.7	2.3	1.4	0.2	0.1	0.5
2008	1,976.3	95.3	4.7	2.6	0.4	0.2	1.2	2,651.8	97.3	2.7	1.7	0.3	0.1	0.4
2009 Q4	2,080.2	94.8	5.2	3.1	0.2	0.3	1.4	2,980.4	98.1	1.9	1.2	0.2	0.1	0.3
2010 Q1	2,092.7	94.6	5.4	3.2	0.2	0.3	1.4	3,033.9	98.1	1.9	1.2	0.2	0.1	0.3
Q2	2,025.6	94.2	5.8	3.5	0.2	0.3	1.5	3,079.9	98.5	1.5	0.8	0.2	0.1	0.4
Q3 <sup>(p)</sup>	1,969.3	94.6	5.4	3.0	0.2	0.3	1.6	3,112.9	98.5	1.5	0.9	0.2	0.1	0.4
Issued by non-euro area residents														
2007	582.0	53.9	46.1	27.3	0.7	0.4	14.4	651.6	35.8	64.2	39.3	4.5	0.8	12.6
2008	580.3	54.1	45.9	28.6	0.9	0.5	13.3	646.2	39.0	61.0	37.1	6.4	0.8	11.1
2009 Q4	546.6	55.8	44.2	26.3	0.4	0.5	14.8	600.5	34.9	65.1	38.5	4.2	0.9	15.2
2010 Q1	561.8	55.3	44.7	28.0	0.4	0.5	14.8	611.4	32.9	67.1	39.9	4.2	0.9	14.9
Q2	558.9	53.4	46.6	27.4	0.5	0.9	15.2	640.7	28.8	71.2	43.7	4.6	0.6	15.1
Q3 <sup>(p)</sup>	535.2	52.3	47.7	27.7	0.4	0.9	16.1	605.8	29.8	70.2	42.5	4.6	0.6	15.0

Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on the 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 similar to euro area MFIs.
- 4) Including items expressed in the national denominations of the euro.

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

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

### 1. Assets

	Total	Deposits and loan claims	Securities other than shares	Shares and other equity (excl. investment fund/money market fund shares)	Investment fund/money market fund shares	Non-financial assets	Other assets (incl. financial derivatives)
	1	2	3	4	5	6	7
Outstanding amounts							
2010 Apr.	5,902.5	367.0	2,235.4	1,822.6	793.8	239.8	443.9
May	5,864.4	378.6	2,265.0	1,751.4	785.9	240.9	442.6
June	5,845.6	384.7	2,271.0	1,718.7	791.7	243.4	435.9
July	5,933.4	382.0	2,288.0	1,753.5	797.7	247.7	464.5
Aug.	6,029.9	379.5	2,359.3	1,741.6	806.8	249.8	493.0
Sep.	6,078.7	376.0	2,336.0	1,793.0	823.0	245.7	505.0
Oct. <sup>(p)</sup>	6,147.0	375.3	2,332.1	1,835.1	832.2	246.8	525.5
Transactions							
2010 Q1	190.6	-3.7	69.2	34.9	31.1	21.1	38.1
Q2	6.3	26.4	6.4	-30.7	8.8	1.1	-5.8
Q3	131.3	-13.3	60.5	12.7	16.8	-1.0	55.6

### 2. Liabilities

	Total	Loans and deposits received	Investment fund shares issued				Other liabilities (incl. financial derivatives)
			Total	Held by euro area residents		Held by non-euro area residents	
				Investment funds			
	1	2	3	4	5	6	7
Outstanding amounts							
2010 Apr.	5,902.5	124.0	5,390.3	4,270.4	597.7	1,119.9	388.2
May	5,864.4	125.5	5,332.0	4,210.5	584.4	1,121.5	406.9
June	5,845.6	125.9	5,320.2	4,182.1	585.3	1,138.0	399.5
July	5,933.4	124.6	5,394.8	4,250.4	595.6	1,144.4	414.0
Aug.	6,029.9	125.4	5,463.4	4,290.5	602.4	1,172.9	441.2
Sep.	6,078.7	126.4	5,504.1	4,326.9	624.8	1,177.2	448.1
Oct. <sup>(p)</sup>	6,147.0	127.2	5,566.2	4,367.7	636.0	1,198.5	453.6
Transactions							
2010 Q1	190.6	5.2	141.6	92.7	26.0	48.9	43.9
Q2	6.3	10.2	26.0	3.1	1.0	22.9	-29.9
Q3	131.3	-5.1	72.8	33.3	21.4	39.5	63.7

### 3. Investment fund shares issued broken down by investment policy and type of fund

	Total	Funds by investment policy						Funds by type		Memo item: Money market funds
		Bond funds	Equity funds	Mixed funds	Real estate funds	Hedge funds	Other funds	Open-end funds	Closed-end funds	
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2010 Mar.	5,331.7	1,700.2	1,565.8	1,281.2	257.6	100.4	426.5	5,251.9	79.8	1,175.1
Apr.	5,390.3	1,725.4	1,579.9	1,293.8	258.2	102.5	430.4	5,309.3	81.0	1,182.8
May	5,332.0	1,741.3	1,510.3	1,289.3	256.8	107.5	426.7	5,248.9	83.1	1,190.4
June	5,320.2	1,750.3	1,486.8	1,291.4	253.3	107.4	431.0	5,236.3	83.9	1,167.0
July	5,394.8	1,766.8	1,521.3	1,307.9	258.6	104.4	435.8	5,310.9	83.9	1,142.7
Aug.	5,463.4	1,821.6	1,510.4	1,332.1	258.8	104.8	435.6	5,379.4	83.9	1,179.8
Sep.	5,504.1	1,809.3	1,552.7	1,343.0	259.6	101.2	438.4	5,419.8	84.3	1,136.9
Oct. <sup>(p)</sup>	5,566.2	1,814.0	1,597.0	1,358.3	260.0	100.2	436.7	5,482.2	84.0	1,124.7
Transactions										
2010 Apr.	33.6	15.1	2.3	11.7	2.3	-0.2	2.4	32.4	1.2	-2.3
May	-12.2	-1.1	-16.3	2.6	-1.7	1.6	2.8	-13.9	1.7	-16.5
June	4.5	1.5	-4.4	4.4	1.0	0.3	1.8	3.9	0.6	-29.7
July	25.4	15.2	4.5	5.5	0.6	-0.5	0.0	25.1	0.3	-5.6
Aug.	30.1	17.8	2.8	10.2	0.0	-1.3	0.7	30.4	-0.3	27.9
Sep.	17.2	11.6	0.2	7.3	0.2	-1.2	-1.0	17.0	0.3	-17.8
Oct. <sup>(p)</sup>	30.6	9.6	15.8	6.7	0.0	-1.2	-0.5	31.2	-0.6	-6.8

Source: ECB.

1) Other than money market funds (which are shown as a memo item in column 10 in Table 3 of this section). For further details, see the General Notes.

**2.10 Securities held by investment funds <sup>1)</sup> broken down by issuer of securities**

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

**1. Securities other than shares**

	Total	Euro area						Rest of the world			
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations	EU Member States outside the euro area	United States	Japan	
	1	2	3	4	5	6	7	8	9	10	11
<b>Outstanding amounts</b>											
2009 Q4	2,084.4	1,410.0	385.7	684.4	187.7	5.6	146.6	674.4	199.6	259.4	16.2
2010 Q1	2,215.7	1,461.0	392.9	706.2	199.5	5.9	156.4	754.7	217.8	292.1	15.6
Q2	2,271.0	1,446.8	382.9	713.6	193.0	6.0	151.3	824.2	230.2	325.2	16.6
Q3 <sup>(p)</sup>	2,336.0	1,476.4	384.7	727.2	194.4	6.4	163.7	859.6	241.4	333.3	16.7
<b>Transactions</b>											
2010 Q1	69.2	25.5	0.6	9.5	8.9	-0.1	6.5	43.7	11.0	17.6	-1.5
Q2	6.4	-25.1	-11.7	-5.1	-3.8	0.6	-5.1	31.5	6.6	13.0	-1.4
Q3 <sup>(p)</sup>	60.5	16.2	3.2	4.0	1.8	0.0	7.2	44.3	8.2	19.9	0.3

**2. Shares and other equity (other than investment fund and money market fund shares)**

	Total	Euro area						Rest of the world			
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations	EU Member States outside the euro area	United States	Japan	
	1	2	3	4	5	6	7	8	9	10	11
<b>Outstanding amounts</b>											
2009 Q4	1,681.3	728.1	97.8	-	35.6	23.7	570.9	953.2	138.2	291.4	65.6
2010 Q1	1,818.5	750.8	95.1	-	36.3	28.3	590.9	1,067.7	148.6	329.9	75.8
Q2	1,718.7	672.2	74.3	-	34.0	24.0	539.8	1,046.5	141.6	315.1	79.0
Q3 <sup>(p)</sup>	1,793.0	713.2	79.7	-	38.1	24.3	570.9	1,079.8	154.1	314.5	67.3
<b>Transactions</b>											
2010 Q1	34.9	11.1	0.1	-	0.0	1.8	9.2	23.8	0.5	4.9	0.9
Q2	-30.7	-23.9	-7.9	-	-1.0	-1.2	-13.8	-6.8	-1.8	-5.4	3.9
Q3 <sup>(p)</sup>	12.7	8.0	-0.9	-	1.7	0.3	7.0	4.6	1.9	-0.4	-8.8

**3. Investment fund/money market fund shares**

	Total	Euro area						Rest of the world			
		Total	MFIs <sup>2)</sup>	General government	Other financial intermediaries <sup>2)</sup>	Insurance corporations and pension funds	Non-financial corporations	EU Member States outside the euro area	United States	Japan	
	1	2	3	4	5	6	7	8	9	10	11
<b>Outstanding amounts</b>											
2009 Q4	715.4	612.8	74.4	-	538.4	-	-	102.6	15.9	23.3	0.3
2010 Q1	779.2	660.9	70.8	-	590.1	-	-	118.3	18.4	34.8	0.6
Q2	791.7	662.7	77.4	-	585.3	-	-	129.0	19.0	36.4	0.4
Q3 <sup>(p)</sup>	823.0	701.1	76.3	-	624.8	-	-	121.9	20.7	33.9	0.4
<b>Transactions</b>											
2010 Q1	31.1	21.3	-4.7	-	26.0	-	-	9.8	1.3	9.9	0.2
Q2	8.8	6.5	5.5	-	1.0	-	-	2.3	0.9	-0.9	-0.2
Q3 <sup>(p)</sup>	16.8	21.4	0.1	-	21.4	-	-	-4.6	0.9	-0.8	0.0

Source: ECB.

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

2) Investment fund shares (other than money market fund shares) are issued by other financial intermediaries. Money market fund shares are issued by MFIs.



## EURO AREA ACCOUNTS

### 3.1 Integrated economic and financial accounts by institutional sector

(EUR billions)

Uses	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
<b>2010 Q2</b>						
<b>External account</b>						
Exports of goods and services						512
<i>Trade balance</i> <sup>1)</sup>						-13
<b>Generation of income account</b>						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,131	114	715	55	247	
Other taxes less subsidies on production	25	5	14	3	4	
Consumption of fixed capital	352	96	197	12	47	
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	560	285	239	36	0	
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income						5
Compensation of employees						
Taxes less subsidies on production						
Property income	904	34	462	339	69	107
Interest	358	31	58	200	69	49
Other property income	545	2	404	139	0	58
<i>Net national income</i> <sup>1)</sup>	1,929	1,674	-5	44	215	
<b>Secondary distribution of income account</b>						
Net national income						
Current taxes on income, wealth, etc.	261	214	38	9	0	4
Social contributions	421	421				1
Social benefits other than social transfers in kind	452	2	17	33	401	1
Other current transfers	192	73	26	48	45	7
Net non-life insurance premiums	46	33	11	1	1	1
Non-life insurance claims	46			46		1
Other	100	40	16	1	44	5
<i>Net disposable income</i> <sup>1)</sup>	1,906	1,508	-57	50	406	
<b>Use of income account</b>						
Net disposable income						
Final consumption expenditure	1,832	1,327			505	
Individual consumption expenditure	1,636	1,327			309	
Collective consumption expenditure	196				196	
Adjustment for the change in the net equity of households in pension fund reserves	16	0	1	15	0	0
<i>Net saving/current external account</i> <sup>1)</sup>	74	196	-58	35	-99	25
<b>Capital account</b>						
Net saving/current external account						
Gross capital formation	451	144	239	11	57	
Gross fixed capital formation	459	142	249	11	57	
Changes in inventories and acquisitions less disposals of valuables	-8	2	-10	0	0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0	-2	6	0	-4	0
Capital transfers	40	9	2	4	26	5
Capital taxes	7	5	0	1		0
Other capital transfers	33	4	1	2	26	5
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	-23	151	-89	36	-120	23
Statistical discrepancy	0	-44	44	0	0	0

Sources: ECB and Eurostat.

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

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

(EUR billions)

Resources	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2010 Q2						
<b>External account</b>						
Imports of goods and services						499
<i>Trade balance</i>						
<b>Generation of income account</b>						
Gross value added (basic prices)	2,068	500	1,165	106	298	
Taxes less subsidies on products	228					
Gross domestic product (market prices) <sup>2)</sup>	2,296					
Compensation of employees						
Other taxes less subsidies on production						
Consumption of fixed capital						
<i>Net operating surplus and mixed income</i>						
<b>Allocation of primary income account</b>						
Net operating surplus and mixed income	560	285	239	36	0	
Compensation of employees	1,133	1,133				3
Taxes less subsidies on production	254				254	-1
Property income	886	290	218	347	30	125
Interest	343	53	33	249	8	64
Other property income	543	237	185	98	22	60
<i>Net national income</i>						
<b>Secondary distribution of income account</b>						
Net national income	1,929	1,674	-5	44	215	
Current taxes on income, wealth, etc.	264				264	1
Social contributions	421	1	18	49	353	1
Social benefits other than social transfers in kind	450	450				3
Other current transfers	168	92	11	47	19	30
Net non-life insurance premiums	46			46		1
Non-life insurance claims	45	36	8	1	0	1
Other	78	56	3	0	18	28
<i>Net disposable income</i>						
<b>Use of income account</b>						
Net disposable income	1,906	1,508	-57	50	406	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in the net equity of households in pension fund reserves	16	16				0
<i>Net saving/current external account</i>						
<b>Capital account</b>						
Net saving/current external account	74	196	-58	35	-99	25
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	352	96	197	12	47	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	42	10	18	4	11	3
Capital taxes	7				7	0
Other capital transfers	36	10	18	4	4	3
<i>Net lending (+)/net borrowing (-) (from capital account)</i>						
Statistical discrepancy						

Sources: ECB and Eurostat.

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

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

(EUR billions)

Assets	Euro area	Households	Non-financial corporations	MFIs	Other financial inter- mediaries	Insurance corporations and pension funds	General govern- ment	Rest of the world
2010 Q2								
<b>Opening balance sheet, financial assets</b>								
Total financial assets		18,400	16,871	32,611	13,683	6,703	3,410	15,939
Monetary gold and special drawing rights (SDRs)				340				
Currency and deposits	6,436	1,812	9,493	1,943	854	661	3,806	
Short-term debt securities	44	167	631	293	391	27	835	
Long-term debt securities	1,366	211	6,376	2,267	2,138	351	3,367	
Loans	72	3,177	12,759	3,542	455	452	1,808	
<i>of which: Long-term</i>	55	1,767	9,863	2,605	328	364	.	
Shares and other equity	4,351	7,568	2,067	5,409	2,399	1,303	5,488	
Quoted shares	777	1,373	497	1,884	435	286	.	
Unquoted shares and other equity	2,129	5,810	1,243	2,759	475	862	.	
Mutual fund shares	1,445	385	327	766	1,489	154	.	
Insurance technical reserves	5,639	146	2	0	211	3	184	
Other accounts receivable and financial derivatives	491	3,791	943	229	254	615	451	
<i>Net financial worth</i>								
<b>Financial account, transactions in financial assets</b>								
Total transactions in financial assets		151	90	736	121	49	119	105
Monetary gold and SDRs				0				0
Currency and deposits	69	14	615	73	4	60	-10	
Short-term debt securities	-3	-10	-9	2	4	-1	-15	
Long-term debt securities	3	6	-40	-45	33	9	83	
Loans	-1	50	107	70	3	44	23	
<i>of which: Long-term</i>	-1	6	98	2	1	30	.	
Shares and other equity	8	20	-24	15	6	10	18	
Quoted shares	3	1	-7	-3	-1	1	.	
Unquoted shares and other equity	20	36	-3	7	0	3	.	
Mutual fund shares	-15	-17	-13	11	7	5	.	
Insurance technical reserves	59	-1	0	0	1	0	-1	
Other accounts receivable and financial derivatives	16	11	87	6	-1	-3	6	
<i>Changes in net financial worth due to transactions</i>								
<b>Other changes account, financial assets</b>								
Total other changes in financial assets		-223	-103	401	124	-32	-24	218
Monetary gold and SDRs				68				
Currency and deposits	8	4	122	185	3	0	175	
Short-term debt securities	2	15	8	20	3	0	-6	
Long-term debt securities	-31	13	102	61	16	-5	87	
Loans	0	14	200	-59	0	0	-4	
<i>of which: Long-term</i>	0	3	137	-55	1	0	.	
Shares and other equity	-184	-235	-86	-92	-59	-25	-46	
Quoted shares	-70	-69	-50	-98	-25	-30	.	
Unquoted shares and other equity	-85	-169	-47	2	-9	9	.	
Mutual fund shares	-28	3	10	4	-25	-4	.	
Insurance technical reserves	-19	0	0	0	4	0	4	
Other accounts receivable and financial derivatives	1	86	-14	9	2	5	8	
<i>Other changes in net financial worth</i>								
<b>Closing balance sheet, financial assets</b>								
Total financial assets		18,327	16,858	33,747	13,928	6,720	3,505	16,263
Monetary gold and SDRs				408				
Currency and deposits	6,512	1,830	10,230	2,201	861	721	3,971	
Short-term debt securities	43	171	630	315	398	26	814	
Long-term debt securities	1,339	230	6,438	2,282	2,187	354	3,537	
Loans	71	3,240	13,066	3,553	459	496	1,828	
<i>of which: Long-term</i>	55	1,776	10,098	2,552	329	394	.	
Shares and other equity	4,175	7,353	1,956	5,332	2,345	1,288	5,460	
Quoted shares	709	1,306	440	1,784	409	257	.	
Unquoted shares and other equity	2,064	5,677	1,193	2,768	466	875	.	
Mutual fund shares	1,402	370	323	781	1,470	156	.	
Insurance technical reserves	5,678	146	2	0	216	3	188	
Other accounts receivable and financial derivatives	509	3,888	1,016	244	255	617	465	
<i>Net financial worth</i>								

Source: ECB.

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

(EUR billions)

Liabilities	Euro area	Households	Non-financial corporations	MFI's	Other financial intermediaries	Insurance corporations and pension funds	General government	Rest of the world
<b>2010 Q2</b>								
<b>Opening balance sheet, liabilities</b>								
Total liabilities		6,636	25,689	31,750	13,598	6,764	8,440	14,400
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			29	22,169	23	0	225	2,559
Short-term debt securities			317	724	70	11	993	273
Long-term debt securities			548	4,631	2,590	45	5,388	2,873
Loans		5,912	8,435		3,116	244	1,399	3,157
<i>of which: Long-term</i>		5,558	5,891		1,709	83	1,198	.
Shares and other equity		7	12,498	2,887	7,582	515	6	5,091
Quoted shares			3,590	544	202	179	0	.
Unquoted shares and other equity		7	8,907	1,168	2,253	335	6	.
Mutual fund shares				1,175	5,127			.
Insurance technical reserves		34	336	64	1	5,750	1	
Other accounts payable and financial derivatives		683	3,526	1,274	215	199	428	448
<i>Net financial worth <sup>1)</sup></i>	-1,199	11,764	-8,818	861	85	-61	-5,030	
<b>Financial account, transactions in liabilities</b>								
Total transactions in liabilities		44	135	681	128	61	240	82
Monetary gold and SDRs								
Currency and deposits			0	790	3	0	8	24
Short-term debt securities			1	-26	-1	1	0	-7
Long-term debt securities			6	-81	-24	1	131	14
Loans		47	36		106	4	73	31
<i>of which: Long-term</i>		48	32		22	1	47	.
Shares and other equity		0	39	-45	43	1	0	14
Quoted shares			11	0	0	0	0	.
Unquoted shares and other equity		0	28	4	10	1	0	.
Mutual fund shares				-48	33			.
Insurance technical reserves		0	1	0	0	58	0	
Other accounts payable and financial derivatives		-3	51	44	1	-4	28	6
<i>Changes in net financial worth due to transactions <sup>1)</sup></i>	-23	107	-45	54	-6	-13	-120	23
<b>Other changes account, liabilities</b>								
Total other changes in liabilities		15	-583	376	111	-44	-19	437
Monetary gold and SDRs								
Currency and deposits			0	382	0	0	0	114
Short-term debt securities			6	17	5	0	0	13
Long-term debt securities			-6	35	133	-1	-42	123
Loans		12	-7		70	-1	3	75
<i>of which: Long-term</i>		1	1		48	0	3	.
Shares and other equity		0	-598	-92	-97	-36	0	95
Quoted shares			-285	-98	-23	-28	0	.
Unquoted shares and other equity		0	-313	-34	-14	-7	0	.
Mutual fund shares				40	-60			.
Insurance technical reserves		0	0	0	0	-11	0	
Other accounts payable and financial derivatives		3	22	34	-1	4	20	17
<i>Other changes in net financial worth <sup>1)</sup></i>	287	-238	480	24	14	12	-5	-219
<b>Closing balance sheet, liabilities</b>								
Total liabilities		6,694	25,241	32,807	13,836	6,782	8,661	14,920
Monetary gold and SDRs								
Currency and deposits			30	23,341	26	0	232	2,697
Short-term debt securities			324	715	74	12	994	279
Long-term debt securities			548	4,585	2,700	45	5,477	3,010
Loans		5,971	8,464		3,292	248	1,476	3,264
<i>of which: Long-term</i>		5,607	5,924		1,779	84	1,248	.
Shares and other equity		7	11,939	2,750	7,528	480	6	5,200
Quoted shares			3,316	446	179	150	0	.
Unquoted shares and other equity		7	8,623	1,137	2,249	329	6	.
Mutual fund shares				1,167	5,100			.
Insurance technical reserves		34	337	64	1	5,797	1	
Other accounts payable and financial derivatives		683	3,599	1,352	215	200	475	471
<i>Net financial worth <sup>1)</sup></i>	-934	11,633	-8,382	940	92	-62	-5,155	

Source: ECB.

## 3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2006	2007	2008	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1	2009 Q3- 2010 Q2
<b>Generation of income account</b>								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	4,074	4,259	4,436	4,440	4,431	4,424	4,426	4,442
Other taxes less subsidies on production	128	136	133	124	118	113	108	101
Consumption of fixed capital	1,253	1,319	1,383	1,396	1,397	1,398	1,396	1,398
<i>Net operating surplus and mixed income</i> <sup>1)</sup>	2,192	2,345	2,331	2,186	2,144	2,130	2,156	2,200
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	3,031	3,627	3,887	3,488	3,210	2,966	2,835	2,758
Interest	1,653	2,079	2,320	2,043	1,821	1,622	1,509	1,446
Other property income	1,378	1,548	1,567	1,444	1,389	1,343	1,326	1,312
<i>Net national income</i> <sup>1)</sup>	7,328	7,727	7,797	7,600	7,540	7,518	7,552	7,633
<b>Secondary distribution of income account</b>								
Net national income								
Current taxes on income, wealth, etc.	1,029	1,113	1,123	1,068	1,038	1,013	1,012	1,019
Social contributions	1,541	1,598	1,667	1,673	1,675	1,676	1,681	1,688
Social benefits other than social transfers in kind	1,555	1,602	1,670	1,726	1,757	1,786	1,806	1,816
Other current transfers	723	753	787	785	782	783	789	792
Net non-life insurance premiums	180	184	188	186	184	182	182	182
Non-life insurance claims	180	184	189	187	184	182	182	182
Other	363	385	409	412	414	419	424	428
<i>Net disposable income</i> <sup>1)</sup>	7,236	7,634	7,692	7,494	7,431	7,409	7,439	7,519
<b>Use of income account</b>								
Net disposable income								
Final consumption expenditure	6,645	6,911	7,168	7,169	7,163	7,179	7,209	7,252
Individual consumption expenditure	5,957	6,198	6,420	6,399	6,385	6,394	6,426	6,467
Collective consumption expenditure	688	712	748	769	778	784	784	785
Adjustment for the change in the net equity of households in pension fund reserves	64	65	71	68	67	66	65	64
<i>Net saving</i> <sup>1)</sup>	592	723	524	325	268	231	229	267
<b>Capital account</b>								
Net saving								
Gross capital formation	1,880	2,027	2,038	1,867	1,786	1,714	1,696	1,728
Gross fixed capital formation	1,858	1,992	2,019	1,892	1,829	1,782	1,758	1,761
Changes in inventories and acquisitions less disposals of valuables	22	36	19	-25	-42	-68	-62	-34
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	0	-1	0	-1	-1	1	2	1
Capital transfers	170	151	150	167	175	184	191	184
Capital taxes	23	24	24	29	29	34	34	30
Other capital transfers	148	126	126	139	145	150	157	154
<i>Net lending (+)/net borrowing (-) (from capital account)</i> <sup>1)</sup>	-20	31	-121	-137	-111	-78	-63	-55

Sources: ECB and Eurostat.

1) For details of 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	2006	2007	2008	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1	2009 Q3- 2010 Q2
<b>Generation of income account</b>								
Gross value added (basic prices)	7,647	8,060	8,283	8,145	8,091	8,065	8,087	8,141
Taxes less subsidies on products	915	960	946	911	900	893	893	905
Gross domestic product (market prices) <sup>2)</sup>	8,562	9,020	9,228	9,056	8,991	8,958	8,980	9,046
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
<i>Net operating surplus and mixed income</i>								
<b>Allocation of primary income account</b>								
Net operating surplus and mixed income	2,192	2,345	2,331	2,186	2,144	2,130	2,156	2,200
Compensation of employees	4,082	4,267	4,443	4,446	4,438	4,430	4,432	4,449
Taxes less subsidies on production	1,055	1,104	1,085	1,042	1,028	1,023	1,019	1,022
Property income	3,031	3,638	3,825	3,414	3,140	2,901	2,781	2,721
Interest	1,624	2,040	2,263	1,978	1,754	1,553	1,443	1,391
Other property income	1,407	1,598	1,562	1,436	1,386	1,348	1,338	1,329
<i>Net national income</i>								
<b>Secondary distribution of income account</b>								
Net national income	7,328	7,727	7,797	7,600	7,540	7,518	7,552	7,633
Current taxes on income, wealth, etc.	1,033	1,120	1,130	1,074	1,043	1,019	1,017	1,024
Social contributions	1,540	1,598	1,667	1,672	1,674	1,675	1,680	1,688
Social benefits other than social transfers in kind	1,547	1,593	1,662	1,718	1,750	1,778	1,799	1,808
Other current transfers	635	662	682	680	677	676	678	681
Net non-life insurance premiums	180	184	189	187	184	182	182	182
Non-life insurance claims	177	182	185	183	181	179	179	179
Other	278	296	308	311	312	316	316	320
<i>Net disposable income</i>								
<b>Use of income account</b>								
Net disposable income	7,236	7,634	7,692	7,494	7,431	7,409	7,439	7,519
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in the net equity of households in pension fund reserves	64	65	71	68	67	66	65	64
<i>Net saving</i>								
<b>Capital account</b>								
Net saving	592	723	524	325	268	231	229	267
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,253	1,319	1,383	1,396	1,397	1,398	1,396	1,398
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	185	166	160	176	183	192	200	193
Capital taxes	23	24	24	29	29	34	34	30
Other capital transfers	162	141	136	147	154	158	166	163
<i>Net lending (+)/net borrowing (-) (from capital account)</i>								

Sources: ECB and Eurostat.

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

### 3.3 Households

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

	2006	2007	2008	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1	2009 Q3- 2010 Q2
<b>Income, saving and changes in net worth</b>								
Compensation of employees (+)	4,082	4,267	4,443	4,446	4,438	4,430	4,432	4,449
Gross operating surplus and mixed income (+)	1,420	1,493	1,539	1,514	1,498	1,489	1,491	1,498
Interest receivable (+)	264	310	347	305	273	245	228	219
Interest payable (-)	166	216	243	204	174	148	138	131
Other property income receivable (+)	749	808	820	776	754	740	731	723
Other property income payable (-)	10	10	10	10	10	10	10	10
Current taxes on income and wealth (-)	794	852	891	877	871	860	857	857
Net social contributions (-)	1,537	1,594	1,663	1,668	1,670	1,671	1,676	1,683
Net social benefits (+)	1,541	1,587	1,656	1,712	1,743	1,772	1,792	1,802
Net current transfers receivable (+)	67	71	71	74	77	80	81	82
<b>= Gross disposable income</b>	<b>5,617</b>	<b>5,865</b>	<b>6,069</b>	<b>6,069</b>	<b>6,059</b>	<b>6,066</b>	<b>6,075</b>	<b>6,090</b>
Final consumption expenditure (-)	4,910	5,105	5,272	5,225	5,196	5,195	5,220	5,251
Changes in net worth in pension funds (+)	64	64	71	68	66	65	65	63
<b>= Gross saving</b>	<b>771</b>	<b>825</b>	<b>869</b>	<b>912</b>	<b>929</b>	<b>937</b>	<b>920</b>	<b>903</b>
Consumption of fixed capital (-)	346	368	385	388	388	388	386	386
Net capital transfers receivable (+)	19	12	1	9	14	12	10	9
Other changes in net worth (+)	2,615	1,490	-2,110	-2,173	-1,634	-253	909	970
<b>= Changes in net worth</b>	<b>3,059</b>	<b>1,959</b>	<b>-1,625</b>	<b>-1,640</b>	<b>-1,080</b>	<b>308</b>	<b>1,453</b>	<b>1,496</b>
<b>Investment, financing and changes in net worth</b>								
Net acquisition of non-financial assets (+)	609	645	639	596	573	556	546	546
Consumption of fixed capital (-)	346	368	385	388	388	388	386	386
Main items of financial investment (+)								
Short-term assets	321	428	453	261	145	-36	-103	-89
Currency and deposits	285	350	439	323	245	106	64	63
Money market fund shares	1	39	-10	-19	-22	-50	-86	-86
Debt securities <sup>1)</sup>	35	38	24	-43	-78	-92	-81	-67
Long-term assets	298	133	42	208	362	531	585	555
Deposits	2	-35	-34	26	66	106	120	115
Debt securities	33	24	47	26	22	14	-23	-18
Shares and other equity	-27	-75	-108	-16	81	170	217	195
Quoted and unquoted shares and other equity	-5	-3	24	49	89	95	103	96
Mutual fund shares	-22	-72	-132	-65	-8	75	114	99
Life insurance and pension fund reserves	290	219	138	171	192	241	270	263
Main items of financing (-)								
Loans	412	372	215	130	103	111	131	136
<i>of which: From euro area MFIs</i>	350	283	82	10	-16	63	74	102
Other changes in assets (+)								
Non-financial assets	2,061	1,424	-626	-1,518	-1,638	-725	40	624
Financial assets	558	82	-1,505	-658	2	473	868	370
Shares and other equity	467	82	-1,275	-570	-129	251	504	126
Life insurance and pension fund reserves	60	9	-261	-114	53	180	271	177
Remaining net flows (+)	-30	-12	-29	-11	-32	8	33	12
<b>= Changes in net worth</b>	<b>3,059</b>	<b>1,959</b>	<b>-1,625</b>	<b>-1,640</b>	<b>-1,080</b>	<b>308</b>	<b>1,453</b>	<b>1,496</b>
<b>Balance sheet</b>								
Non-financial assets (+)	25,641	27,342	26,970	26,034	26,411	26,413	26,995	26,817
Financial assets (+)								
Short-term assets	4,814	5,269	5,806	5,863	5,799	5,762	5,717	5,760
Currency and deposits	4,463	4,852	5,323	5,426	5,394	5,462	5,434	5,498
Money market fund shares	255	293	324	315	313	244	233	214
Debt securities <sup>1)</sup>	96	125	158	121	92	56	50	49
Long-term assets	11,871	12,058	10,500	10,689	11,241	11,510	11,768	11,634
Deposits	1,020	952	888	896	928	973	1,002	1,015
Debt securities	1,226	1,245	1,300	1,283	1,341	1,352	1,360	1,333
Shares and other equity	4,998	5,006	3,581	3,624	3,923	4,033	4,119	3,961
Quoted and unquoted shares and other equity	3,565	3,627	2,596	2,593	2,830	2,861	2,906	2,773
Mutual fund shares	1,433	1,379	986	1,031	1,093	1,172	1,212	1,188
Life insurance and pension fund reserves	4,627	4,855	4,732	4,885	5,050	5,152	5,287	5,325
Remaining net assets (+)	246	226	204	211	194	205	191	210
Liabilities (-)								
Loans	5,231	5,595	5,806	5,841	5,862	5,906	5,912	5,971
<i>of which: From euro area MFIs</i>	4,560	4,831	4,906	4,904	4,921	4,961	4,947	5,105
<b>= Net worth</b>	<b>37,341</b>	<b>39,300</b>	<b>37,675</b>	<b>36,954</b>	<b>37,784</b>	<b>37,983</b>	<b>38,759</b>	<b>38,450</b>

Sources: ECB and Eurostat.

1) Securities issued by MFIs with a maturity of less than two years and securities issued 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)

	2006	2007	2008	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1	2009 Q3- 2010 Q2
<b>Income and saving</b>								
Gross value added (basic prices) (+)	4,376	4,645	4,760	4,613	4,555	4,524	4,535	4,574
Compensation of employees (-)	2,588	2,716	2,836	2,820	2,803	2,788	2,785	2,794
Other taxes less subsidies on production (-)	74	80	77	70	65	62	57	50
<b>= Gross operating surplus (+)</b>	<b>1,714</b>	<b>1,849</b>	<b>1,847</b>	<b>1,723</b>	<b>1,687</b>	<b>1,674</b>	<b>1,693</b>	<b>1,730</b>
Consumption of fixed capital (-)	703	738	774	781	781	782	781	781
<b>= Net operating surplus (+)</b>	<b>1,012</b>	<b>1,111</b>	<b>1,074</b>	<b>942</b>	<b>906</b>	<b>892</b>	<b>912</b>	<b>950</b>
Property income receivable (+)	504	597	595	526	503	476	470	468
Interest receivable	172	204	216	186	166	150	139	134
Other property income receivable	332	393	378	341	337	326	331	334
Interest and rents payable (-)	287	354	404	359	323	291	269	257
<b>= Net entrepreneurial income (+)</b>	<b>1,229</b>	<b>1,354</b>	<b>1,264</b>	<b>1,110</b>	<b>1,086</b>	<b>1,078</b>	<b>1,113</b>	<b>1,160</b>
Distributed income (-)	927	988	1,024	975	934	912	898	892
Taxes on income and wealth payable (-)	190	212	197	161	139	125	125	132
Social contributions receivable (+)	75	64	66	68	68	69	70	70
Social benefits payable (-)	61	62	65	66	66	67	67	67
Other net transfers (-)	66	56	59	59	61	62	63	63
<b>= Net saving</b>	<b>60</b>	<b>100</b>	<b>-14</b>	<b>-84</b>	<b>-45</b>	<b>-18</b>	<b>29</b>	<b>75</b>
<b>Investment, financing and saving</b>								
Net acquisition of non-financial assets (+)	311	373	336	191	131	79	76	117
Gross fixed capital formation (+)	989	1,075	1,092	1,001	959	931	920	930
Consumption of fixed capital (-)	703	738	774	781	781	782	781	781
Net acquisition of other non-financial assets (+)	24	36	17	-29	-46	-70	-63	-33
Main items of financial investment (+)								
Short-term assets	157	168	65	34	81	108	106	44
Currency and deposits	146	154	15	8	36	87	98	58
Money market fund shares	2	-19	30	35	41	40	5	-21
Debt securities <sup>1)</sup>	10	33	21	-10	4	-19	3	6
Long-term assets	504	782	731	605	438	236	233	330
Deposits	33	-4	35	62	39	23	5	14
Debt securities	-8	-27	-60	-2	-30	-16	-17	29
Shares and other equity	283	439	361	328	266	98	75	73
Other (mainly intercompany loans)	197	374	396	218	163	132	170	213
Remaining net assets (+)	76	126	-15	-117	-59	-45	49	-3
Main items of financing (-)								
Debt	685	900	748	405	263	127	173	164
of which: Loans from euro area MFIs	444	539	396	133	0	-111	-100	-86
of which: Debt securities	38	38	56	78	90	82	101	78
Shares and other equity	231	382	306	310	291	189	183	168
Quoted shares	32	54	8	58	73	67	66	46
Unquoted shares and other equity	198	328	299	252	217	122	118	122
Net capital transfers receivable (-)	72	68	74	77	78	79	77	78
<b>= Net saving</b>	<b>60</b>	<b>100</b>	<b>-14</b>	<b>-84</b>	<b>-45</b>	<b>-18</b>	<b>29</b>	<b>75</b>
<b>Financial balance sheet</b>								
Financial assets								
Short-term assets	1,674	1,826	1,905	1,921	1,970	2,010	1,988	1,982
Currency and deposits	1,367	1,507	1,537	1,549	1,577	1,631	1,601	1,611
Money market fund shares	183	159	185	215	222	206	198	181
Debt securities <sup>1)</sup>	124	161	183	158	171	172	189	191
Long-term assets	10,119	11,117	9,522	9,670	10,343	10,583	10,945	10,842
Deposits	143	171	203	214	215	210	210	219
Debt securities	281	252	198	160	148	179	188	210
Shares and other equity	7,498	8,141	6,170	6,295	6,946	7,123	7,370	7,173
Other (mainly intercompany loans)	2,198	2,553	2,951	3,001	3,033	3,072	3,177	3,240
Remaining net assets	314	358	422	440	418	422	440	465
Liabilities								
Debt	7,895	8,692	9,457	9,523	9,521	9,532	9,636	9,673
of which: Loans from euro area MFIs	3,957	4,478	4,870	4,831	4,766	4,710	4,712	4,728
of which: Debt securities	675	680	738	772	816	816	865	872
Shares and other equity	13,173	14,367	10,775	10,853	11,926	12,253	12,498	11,939
Quoted shares	4,541	5,038	2,920	2,917	3,362	3,508	3,590	3,316
Unquoted shares and other equity	8,632	9,330	7,855	7,936	8,564	8,745	8,907	8,623

Sources: ECB and Eurostat.

1) Securities issued by MFIs with a maturity of less than two years and securities issued 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)

	2006	2007	2008	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1	2009 Q3- 2010 Q2
<b>Financial account, financial transactions</b>								
<b>Main items of financial investment (+)</b>								
Short-term assets	63	66	113	54	47	31	17	29
Currency and deposits	11	6	57	12	-1	-33	-21	1
Money market fund shares	3	2	20	10	6	10	1	12
Debt securities <sup>1)</sup>	49	57	36	31	42	55	37	16
Long-term assets	308	165	73	103	137	206	272	273
Deposits	62	47	-3	15	29	18	1	-5
Debt securities	116	48	6	-8	-9	51	85	157
Loans	1	-15	39	30	27	15	13	13
Quoted shares	2	-1	2	-28	-99	-88	-83	-84
Unquoted shares and other equity	32	21	28	15	5	-5	1	5
Mutual fund shares	95	65	1	79	185	215	255	186
Remaining net assets (+)	15	-3	27	13	9	5	26	12
<b>Main items of financing (-)</b>								
Debt securities	6	3	12	10	10	1	0	5
Loans	47	-5	29	20	12	-25	-17	-12
Shares and other equity	11	2	9	6	5	3	3	4
Insurance technical reserves	318	243	139	168	201	272	318	299
Net equity of households in life insurance and pension fund reserves	301	227	117	160	194	259	304	290
Prepayments of insurance premiums and reserves for outstanding claims	17	15	22	7	6	13	14	9
<b>= Changes in net financial worth due to transactions</b>	5	-14	24	-35	-35	-8	11	18
<b>Other changes account</b>								
<b>Other changes in financial assets (+)</b>								
Shares and other equity	171	-2	-600	-274	-30	232	368	187
Other net assets	-50	-27	46	40	77	52	100	122
<b>Other changes in liabilities (-)</b>								
Shares and other equity	41	-32	-195	-123	-48	20	96	34
Insurance technical reserves	54	12	-260	-103	55	174	259	176
Net equity of households in life insurance and pension fund reserves	53	13	-257	-100	60	176	263	174
Prepayments of insurance premiums and reserves for outstanding claims	1	-1	-3	-3	-5	-2	-4	2
<b>= Other changes in net financial worth</b>	25	-9	-99	-8	41	90	114	100
<b>Financial balance sheet</b>								
<b>Financial assets (+)</b>								
Short-term assets	501	564	680	701	693	720	727	743
Currency and deposits	157	163	224	196	190	195	196	205
Money market fund shares	80	80	98	102	102	99	103	108
Debt securities <sup>1)</sup>	264	320	358	403	401	426	428	430
Long-term assets	5,171	5,311	4,797	4,945	5,167	5,297	5,511	5,507
Deposits	598	646	641	661	663	659	658	656
Debt securities	1,863	1,886	1,904	1,902	1,976	2,008	2,102	2,154
Loans	410	394	434	445	446	448	455	459
Quoted shares	742	718	417	436	412	420	435	409
Unquoted shares and other equity	475	513	435	428	459	466	475	466
Mutual fund shares	1,083	1,154	968	1,073	1,210	1,295	1,386	1,362
Remaining net assets (+)	204	189	252	245	251	244	266	271
<b>Liabilities (-)</b>								
Debt securities	36	29	47	45	49	53	56	58
Loans	237	229	260	261	251	233	244	248
Shares and other equity	688	658	471	443	497	495	515	480
Insurance technical reserves	5,016	5,270	5,150	5,321	5,492	5,595	5,750	5,797
Net equity of households in life insurance and pension fund reserves	4,310	4,550	4,411	4,571	4,741	4,845	4,992	5,035
Prepayments of insurance premiums and reserves for outstanding claims	706	720	739	751	751	750	758	762
<b>= Net financial wealth</b>	-101	-123	-198	-179	-179	-116	-61	-62

Source: ECB.

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



## FINANCIAL MARKETS

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

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

	Total in euro <sup>1)</sup>			By euro area residents								
	Outstanding amounts	Gross issues	Net issues	In euro			In all currencies					
				Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted <sup>2)</sup>	
1	2	3	4	5	6	7	8	9	10	11	12	
<b>Total</b>												
2009 Nov.	15,373.6	886.3	49.7	13,120.5	844.0	51.9	14,507.1	909.1	63.7	9.4	39.3	6.2
Dec.	15,898.1	938.3	-63.2	13,646.8	884.8	-61.4	15,277.6	969.4	-61.7	7.8	13.4	4.9
2010 Jan.	15,941.1	1,090.9	42.5	13,692.6	1,028.3	45.2	15,369.6	1,140.5	66.5	7.1	61.8	4.3
Feb.	15,978.8	860.0	37.9	13,732.0	811.1	39.6	15,417.6	900.3	33.6	5.9	-13.3	3.1
Mar.	16,123.6	1,027.8	143.8	13,834.8	923.5	101.9	15,532.0	1,031.2	108.6	5.5	93.7	2.6
Apr.	16,167.1	1,003.4	45.9	13,886.6	947.4	53.8	15,614.9	1,053.8	75.2	5.2	48.2	3.1
May	16,171.2	867.5	5.7	13,920.2	839.5	35.1	15,719.8	944.0	46.2	4.2	-18.5	2.3
June	16,160.7	1,049.4	12.5	13,900.3	983.9	3.3	15,703.1	1,081.3	-11.8	3.6	8.4	2.4
July	16,180.9	1,005.0	21.1	13,946.5	966.3	47.2	15,679.5	1,067.6	21.3	3.2	53.9	2.2
Aug.	16,247.6	845.1	67.0	14,010.5	804.8	64.3	15,787.8	912.0	80.8	3.6	142.2	4.3
Sep.	16,264.4	983.4	17.5	14,027.6	908.4	17.9	15,740.8	1,013.0	4.9	3.1	48.0	3.7
Oct.	.	.	.	14,068.3	842.3	42.3	15,784.4	948.6	56.4	3.2	28.4	3.4
Nov.	.	.	.	14,265.1	956.7	198.8	16,063.0	1,068.2	235.2	4.3	207.9	6.3
<b>Long-term</b>												
2009 Nov.	13,841.8	200.8	81.7	11,695.9	180.1	77.6	12,897.4	195.3	82.0	10.7	53.8	8.3
Dec.	14,350.6	169.6	-35.4	12,214.6	154.0	-25.5	13,639.8	166.1	-34.2	8.9	-15.1	6.0
2010 Jan.	14,391.6	309.5	42.0	12,249.4	278.0	35.6	13,716.8	315.9	54.9	8.6	106.2	6.3
Feb.	14,448.0	212.1	56.8	12,312.4	193.6	63.4	13,790.2	211.6	59.7	7.5	10.9	4.8
Mar.	14,581.5	310.3	132.7	12,421.0	250.1	107.8	13,907.5	281.5	113.1	7.2	108.1	4.8
Apr.	14,628.2	246.7	47.8	12,468.5	223.3	48.2	13,983.7	255.2	67.6	7.1	53.7	4.6
May	14,636.4	154.4	8.6	12,498.7	148.4	30.5	14,087.9	181.6	48.5	5.9	-15.9	3.5
June	14,644.9	272.6	33.1	12,507.8	245.4	33.9	14,105.6	265.3	25.9	5.0	8.0	4.0
July	14,677.5	259.4	33.8	12,542.3	240.0	35.6	14,081.6	267.4	16.9	4.8	59.8	3.3
Aug.	14,711.0	140.6	34.3	12,575.7	127.2	34.2	14,149.5	152.6	42.4	4.7	103.4	4.6
Sep.	14,713.1	266.7	2.9	12,589.2	228.0	14.2	14,105.9	258.4	4.9	4.1	37.6	3.6
Oct.	.	.	.	12,640.7	195.1	50.8	14,164.0	232.2	66.6	4.1	59.6	3.6
Nov.	.	.	.	12,797.7	318.6	158.9	14,393.2	357.0	189.8	4.8	158.4	6.2

### 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 details of the calculation of the growth rates, see the Technical Notes. The six-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 <sup>1)</sup>					
	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											
2008	13,444	5,269	2,195	701	4,939	340	1,192	817	83	106	163	24
2009	15,278	5,375	3,215	805	5,508	374	1,126	734	62	86	221	22
2009 Q4	15,278	5,375	3,215	805	5,508	374	949	620	54	73	182	20
2010 Q1	15,532	5,468	3,177	844	5,654	389	1,024	642	61	74	227	20
Q2	15,703	5,455	3,211	848	5,770	418	1,026	661	61	80	198	26
Q3	15,741	5,427	3,209	847	5,821	437	998	632	75	67	197	27
2010 Aug.	15,788	5,461	3,244	848	5,807	428	912	611	66	61	154	21
Sep.	15,741	5,427	3,209	847	5,821	437	1,013	629	61	71	222	30
Oct.	15,784	5,267	3,229	853	5,995	441	949	559	76	69	217	29
Nov.	16,063	5,299	3,315	863	6,139	447	1,068	548	150	66	279	26
	Short-term											
2008	1,627	822	92	122	567	25	975	722	35	97	102	19
2009	1,638	733	88	72	724	21	876	635	19	69	137	15
2009 Q4	1,638	733	88	72	724	21	750	542	19	60	116	13
2010 Q1	1,625	747	78	76	706	17	754	536	27	61	120	10
Q2	1,597	734	88	73	681	21	792	570	31	67	110	16
Q3	1,635	743	92	71	692	37	771	547	28	58	118	20
2010 Aug.	1,638	757	94	75	681	31	759	548	32	57	107	16
Sep.	1,635	743	92	71	692	37	755	526	24	54	128	22
Oct.	1,620	592	101	72	817	38	716	473	36	53	132	22
Nov.	1,670	611	104	73	842	40	711	472	32	53	138	16
	Long-term <sup>2)</sup>											
2008	11,816	4,447	2,103	579	4,371	315	217	95	48	8	61	4
2009	13,640	4,643	3,126	733	4,784	353	251	99	44	17	84	7
2009 Q4	13,640	4,643	3,126	733	4,784	353	199	79	35	13	66	7
2010 Q1	13,907	4,721	3,099	767	4,948	372	270	106	33	13	107	10
Q2	14,106	4,721	3,123	775	5,089	398	234	91	30	13	89	10
Q3	14,106	4,684	3,117	775	5,130	400	226	85	46	9	79	6
2010 Aug.	14,150	4,703	3,150	773	5,126	398	153	63	34	4	47	5
Sep.	14,106	4,684	3,117	775	5,130	400	258	103	37	17	94	8
Oct.	14,164	4,675	3,127	781	5,178	403	232	86	40	15	84	7
Nov.	14,393	4,688	3,211	791	5,297	406	357	76	118	12	141	9
	<i>of which: Long-term fixed rate</i>											
2008	7,710	2,305	760	440	3,955	250	120	49	9	7	53	3
2009	8,830	2,587	1,034	600	4,338	271	173	60	18	16	74	4
2009 Q4	8,830	2,587	1,034	600	4,338	271	132	46	10	12	59	5
2010 Q1	9,093	2,658	1,048	627	4,482	278	186	61	10	12	95	7
Q2	9,308	2,663	1,080	655	4,625	286	156	47	12	11	81	5
Q3	9,330	2,650	1,067	658	4,670	286	141	48	12	8	70	4
2010 Aug.	9,324	2,650	1,088	656	4,645	285	92	36	9	4	40	3
Sep.	9,330	2,650	1,067	658	4,670	286	179	63	13	13	84	5
Oct.	9,381	2,658	1,072	663	4,699	289	149	48	17	15	64	5
Nov.	9,522	2,679	1,106	673	4,773	290	182	48	20	11	96	6
	<i>of which: Long-term variable rate</i>											
2008	3,594	1,743	1,295	129	363	64	81	36	38	1	5	1
2009	4,372	1,769	2,025	123	374	81	62	28	25	1	6	2
2009 Q4	4,372	1,769	2,025	123	374	81	58	26	24	1	5	2
2010 Q1	4,360	1,774	1,981	130	382	93	70	38	20	1	7	3
Q2	4,341	1,770	1,968	110	383	110	65	37	16	1	5	6
Q3	4,343	1,755	1,981	109	386	112	73	29	33	1	6	3
2010 Aug.	4,377	1,771	1,993	108	394	111	48	20	23	0	3	2
Sep.	4,343	1,755	1,981	109	386	112	66	31	23	3	6	3
Oct.	4,350	1,740	1,985	109	402	113	74	33	21	0	17	2
Nov.	4,421	1,731	2,022	109	445	115	159	21	92	1	43	3

Source: ECB.

1) Monthly data on gross issues refer to transactions during the month. For the purposes of comparison, quarterly and annual data refer to the respective monthly averages.

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

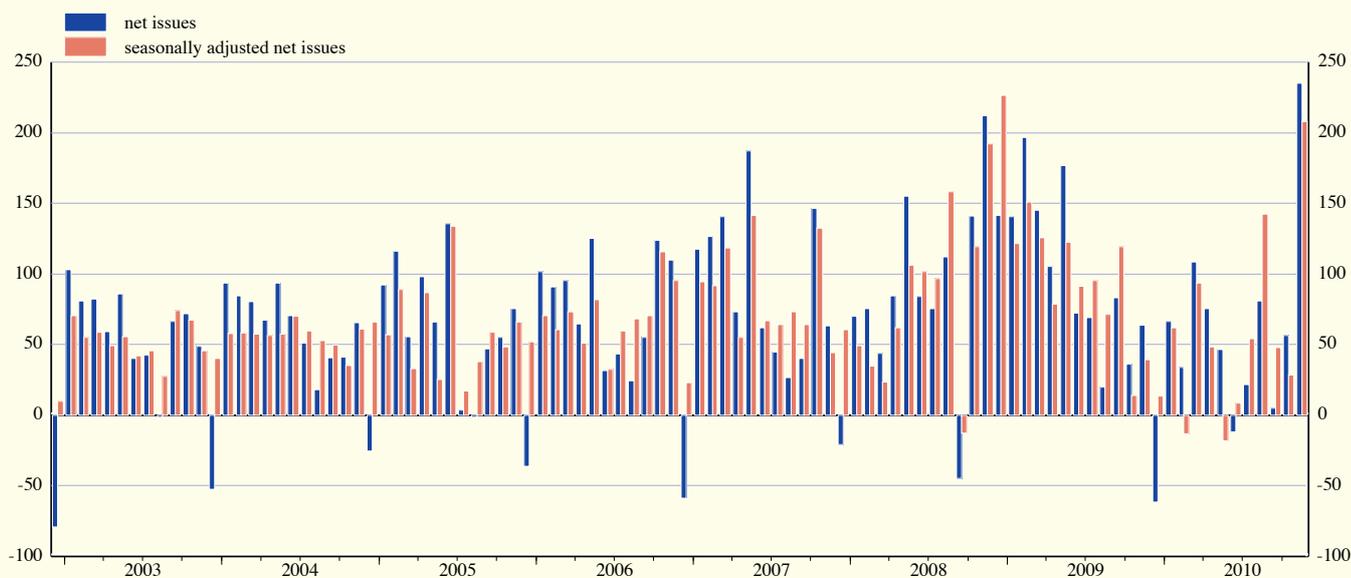
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

### 2. Net issues

	Non-seasonally adjusted <sup>1)</sup>						Seasonally adjusted <sup>1)</sup>					
	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											
2008	95.8	22.9	35.8	4.4	31.7	1.1	96.3	23.1	35.3	4.5	32.5	0.9
2009	87.2	10.3	19.3	8.6	46.2	2.8	86.9	10.2	18.9	8.3	46.7	2.9
2009 Q4	12.7	-21.6	13.1	4.1	11.9	5.2	22.2	-10.5	-13.7	6.9	36.8	2.7
2010 Q1	69.6	25.6	-16.8	11.3	46.4	3.1	47.4	7.4	0.9	10.1	24.6	4.5
Q2	36.5	-12.2	3.3	4.9	34.9	5.6	12.7	-14.6	-2.0	0.7	23.0	5.7
Q3	35.6	2.3	3.8	2.7	20.5	6.4	81.4	11.7	27.4	5.1	29.5	7.7
2010 Aug.	80.8	21.9	27.8	-1.7	30.6	2.1	142.2	31.3	55.6	4.8	46.7	3.8
Sep.	4.9	-7.8	-24.7	6.2	22.3	8.8	48.0	18.0	4.0	7.5	8.3	10.2
Oct.	56.4	-26.7	21.6	8.1	48.7	4.6	28.4	-37.6	-5.7	8.1	61.7	1.9
Nov.	235.2	10.6	78.0	4.0	137.8	4.9	207.9	9.0	71.0	3.8	121.1	3.0
	Long-term											
2008	65.3	15.9	32.7	2.8	13.4	0.5	64.8	16.1	32.1	2.8	13.3	0.5
2009	87.9	15.1	22.4	12.7	34.5	3.2	87.8	15.2	22.1	12.8	34.6	3.1
2009 Q4	37.5	-14.0	11.9	7.8	27.3	4.4	34.1	-1.9	-14.6	9.0	38.1	3.5
2010 Q1	75.9	22.3	-13.3	9.8	52.8	4.3	75.1	12.5	4.8	10.5	43.0	4.2
Q2	47.4	-7.1	0.0	6.0	43.9	4.6	15.3	-17.0	-4.9	2.0	30.8	4.4
Q3	21.4	-1.8	2.6	3.3	16.3	0.9	66.9	5.9	24.8	5.2	28.6	2.3
2010 Aug.	42.4	-3.4	19.2	0.5	24.5	1.5	103.4	-5.4	46.9	6.1	42.7	2.2
Sep.	4.9	4.4	-22.8	10.4	10.5	2.4	37.6	23.4	2.2	9.7	-2.7	5.0
Oct.	66.6	-5.0	12.2	6.8	49.0	3.6	59.6	-3.8	-10.6	8.2	64.3	1.6
Nov.	189.8	-6.4	75.7	3.8	113.9	2.8	158.4	-5.6	67.2	3.3	92.2	1.2

### CI6 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 data on net issues refer to transactions during the month. For the purposes of comparison, quarterly and annual data refer to the respective monthly averages.

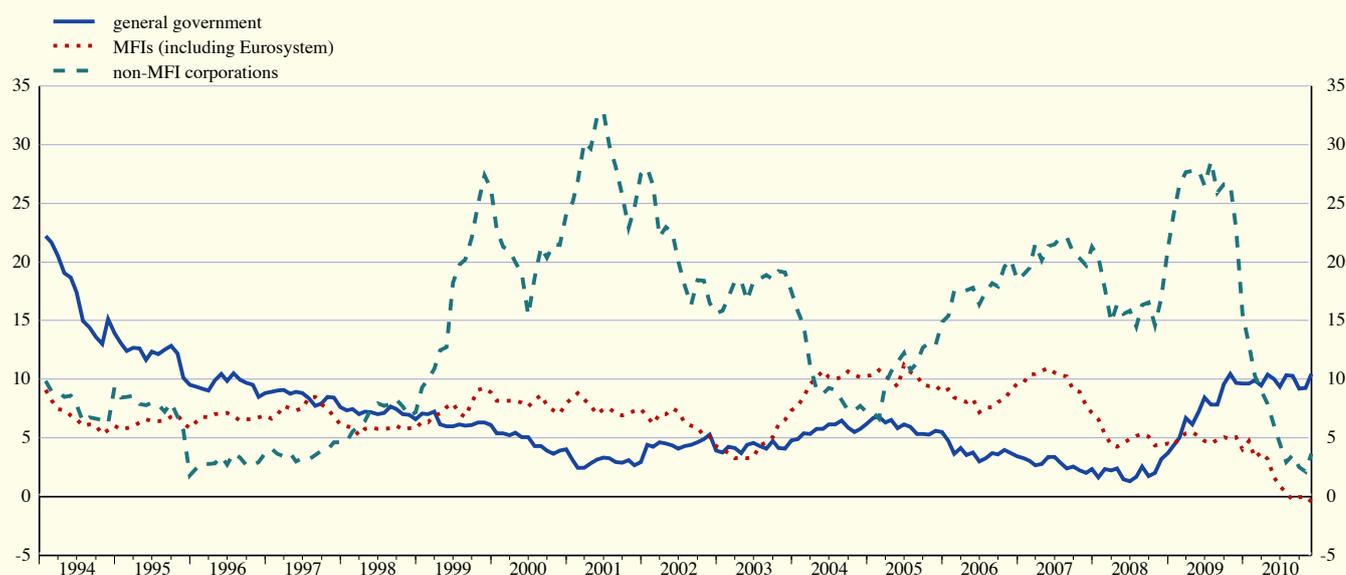
### 4.3 Growth rates of securities other than shares issued by euro area residents <sup>1)</sup>

(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												
2009 Nov.	9.4	2.5	18.7	16.8	12.1	10.8	6.2	-0.5	8.0	18.0	10.6	9.5
Dec.	7.8	2.3	10.4	14.7	11.2	10.0	4.9	-0.1	2.8	16.8	9.3	10.9
2010 Jan.	7.1	2.4	9.3	14.0	10.1	9.4	4.3	0.6	0.6	12.4	8.8	8.6
Feb.	5.9	0.7	6.2	15.0	9.7	11.0	3.1	-1.3	-2.1	15.5	8.1	11.5
Mar.	5.5	1.5	4.5	16.2	8.5	11.8	2.6	-0.4	-3.4	13.2	6.9	12.3
Apr.	5.2	1.3	3.5	16.2	8.4	11.2	3.1	2.2	-3.3	13.3	5.3	12.9
May	4.2	-0.2	2.4	14.9	8.0	10.4	2.3	0.0	-3.0	12.1	5.4	11.3
June	3.6	-0.4	1.3	12.4	7.2	13.7	2.4	-0.8	-0.2	8.1	5.2	16.7
July	3.2	-0.9	0.2	10.2	7.4	15.2	2.2	-2.4	-0.1	8.1	6.0	22.4
Aug.	3.6	-0.3	1.3	10.3	7.2	15.4	4.3	0.6	4.8	5.4	6.4	19.9
Sep.	3.1	-0.3	0.6	8.7	6.2	16.6	3.7	-0.3	4.8	4.1	5.6	21.1
Oct.	3.2	0.1	0.4	8.5	6.2	16.0	3.4	-2.0	4.1	4.0	7.1	19.0
Nov.	4.3	0.1	2.5	8.3	7.9	16.4	6.3	0.1	8.5	4.6	10.3	21.7
Long-term												
2009 Nov.	10.7	5.0	21.5	28.4	9.6	11.0	8.3	4.0	8.8	25.1	10.3	7.9
Dec.	8.9	4.0	12.6	26.3	9.5	12.0	6.0	2.4	3.4	21.8	8.9	11.2
2010 Jan.	8.6	4.8	10.2	23.3	9.5	11.6	6.3	3.6	0.9	16.9	10.4	11.1
Feb.	7.5	3.3	7.1	22.6	9.7	12.4	4.8	0.3	-1.7	19.6	10.7	11.8
Mar.	7.2	3.8	5.5	22.8	9.2	12.8	4.8	1.4	-3.0	17.3	10.6	13.8
Apr.	7.1	3.2	4.4	21.7	10.4	11.0	4.6	1.7	-2.7	16.0	9.7	12.7
May	5.9	1.6	2.9	18.6	10.1	8.9	3.5	-0.8	-2.8	12.4	9.9	9.9
June	5.0	0.9	1.6	16.0	9.1	12.9	4.0	-0.6	0.0	10.5	9.4	14.7
July	4.8	0.2	0.4	12.9	10.2	12.1	3.3	-3.0	0.1	9.0	10.1	13.1
Aug.	4.7	-0.3	1.1	13.1	10.2	11.8	4.6	-1.0	4.0	6.9	9.7	11.8
Sep.	4.1	0.0	0.4	11.4	8.9	12.3	3.6	-1.4	3.9	5.8	7.3	10.8
Oct.	4.1	0.0	0.1	10.7	9.1	11.4	3.6	-1.7	3.0	5.7	8.5	10.0
Nov.	4.8	-0.5	2.2	9.6	10.4	11.3	6.2	-0.1	7.6	6.9	10.8	12.9

### 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 details of the calculation of the growth rates, see the Technical Notes. The six-month growth rates have been annualised.

**4.3 Growth rates of securities other than shares issued by euro area residents <sup>1)</sup> (cont'd)**  
(percentage changes)

	Long-term fixed rate						Long-term variable rate					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			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												
2008	3.1	4.9	6.1	4.8	1.5	1.4	12.7	5.4	33.2	7.1	7.6	3.2
2009	9.5	7.1	18.1	25.1	8.1	4.3	12.0	1.8	35.7	-1.9	0.1	20.7
2009 Q4	12.2	9.1	20.8	35.4	10.3	6.8	7.4	-1.7	23.9	-4.0	2.0	26.4
2010 Q1	11.2	9.8	13.6	29.1	9.6	8.3	1.2	-3.8	5.8	-2.1	4.6	26.9
Q2	9.7	7.3	7.3	23.3	10.2	7.5	-1.0	-4.2	0.3	-0.4	5.5	23.4
Q3	7.6	3.1	3.4	16.4	10.1	7.2	-1.3	-3.6	-1.2	-1.8	4.8	28.5
2010 June	8.0	4.3	4.7	19.2	9.5	7.6	-1.5	-3.6	-1.2	-1.3	2.0	30.9
July	7.7	3.1	3.2	16.0	10.5	6.7	-1.4	-3.5	-1.8	-2.0	5.4	30.0
Aug.	7.5	2.6	3.6	16.5	10.3	7.1	-1.1	-3.9	-0.9	-2.1	6.6	27.0
Sep.	7.0	2.8	2.2	14.0	9.7	7.8	-1.0	-3.1	-0.8	-1.2	3.3	26.3
Oct.	6.9	2.9	3.1	13.0	9.4	7.0	-0.5	-3.1	-0.9	-1.1	8.7	25.4
Nov.	7.1	2.5	3.7	11.8	10.0	6.8	1.0	-3.8	0.9	-0.5	18.6	25.3
In euro												
2008	3.0	4.8	6.7	3.2	1.7	1.3	14.3	6.6	34.9	7.2	8.0	2.0
2009	10.1	9.0	21.5	23.3	8.2	3.7	14.3	3.9	38.2	-2.4	-0.4	21.8
2009 Q4	12.8	11.4	23.1	34.6	10.4	6.3	9.0	-0.2	25.4	-4.7	0.7	27.0
2010 Q1	11.4	10.8	15.0	29.6	9.7	8.0	1.6	-3.4	6.3	-2.4	3.2	26.9
Q2	9.9	7.4	8.3	23.8	10.2	7.2	-1.1	-3.9	-0.2	-0.6	4.1	23.4
Q3	7.9	2.7	4.5	16.8	10.3	7.2	-1.0	-2.9	-1.5	-2.5	4.1	28.6
2010 June	8.3	4.5	5.9	19.2	9.6	7.3	-1.8	-3.0	-2.4	-2.6	0.7	31.2
July	8.1	2.7	4.1	16.6	10.7	6.8	-1.1	-2.8	-1.9	-2.6	4.4	30.3
Aug.	7.9	2.1	4.7	16.8	10.5	7.3	-0.8	-3.1	-1.2	-2.7	6.2	27.1
Sep.	7.4	2.0	3.5	14.7	9.9	7.9	-0.6	-2.4	-0.7	-1.7	2.9	26.1
Oct.	7.1	1.9	4.3	13.5	9.5	7.2	-0.2	-2.5	-1.0	-1.6	8.6	26.2
Nov.	7.2	1.2	4.6	12.2	10.1	6.9	1.3	-2.8	0.2	-1.0	18.8	26.4

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



Source: ECB.

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

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

(EUR billions, unless otherwise indicated; market values)

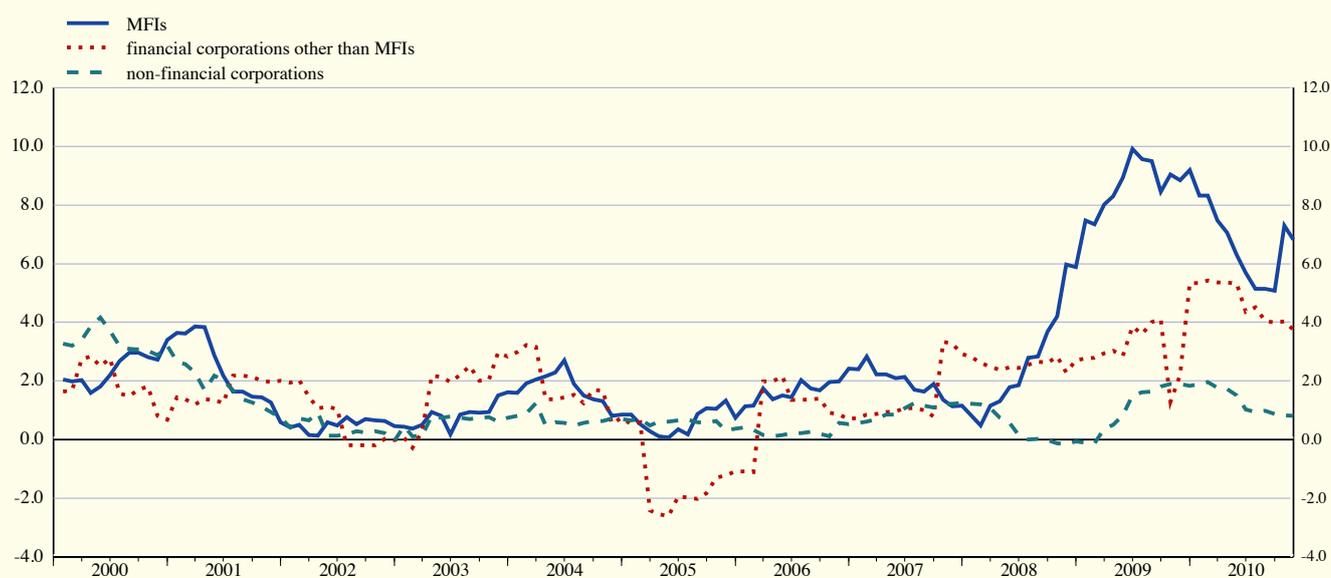
##### 1. Outstanding amounts and annual growth rates

(outstanding amounts as at end of period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index: Dec. 2001 = 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
2008 Nov.	3,501.5	105.2	0.9	392.1	6.0	265.4	2.3	2,843.9	-0.1
Dec.	3,509.5	105.4	1.0	375.0	5.9	282.5	2.7	2,852.1	-0.1
2009 Jan.	3,312.9	105.6	1.1	340.9	7.5	259.0	2.8	2,712.9	-0.1
Feb.	2,941.5	105.6	1.1	273.8	7.4	206.3	2.8	2,461.3	-0.1
Mar.	3,024.7	106.1	1.5	312.8	8.0	223.9	2.9	2,488.0	0.4
Apr.	3,457.7	106.2	1.6	410.4	8.3	274.6	3.0	2,772.7	0.5
May	3,604.0	106.5	1.9	448.8	8.9	283.3	2.9	2,871.9	0.8
June	3,556.1	107.3	2.7	445.3	9.9	279.4	3.9	2,831.4	1.5
July	3,841.4	107.5	2.7	505.7	9.6	301.1	3.6	3,034.6	1.6
Aug.	4,039.5	107.5	2.7	568.4	9.5	321.7	4.0	3,149.3	1.6
Sep.	4,208.3	107.6	2.8	588.4	8.5	352.2	4.1	3,267.7	1.8
Oct.	4,063.0	107.8	2.7	563.3	9.0	326.7	1.3	3,173.0	1.9
Nov.	4,077.6	108.1	2.7	563.8	8.8	318.4	2.2	3,195.3	1.9
Dec.	4,409.3	108.5	3.0	566.0	9.2	349.4	5.3	3,493.9	1.8
2010 Jan.	4,241.8	108.7	2.9	516.7	8.3	339.2	5.3	3,385.9	1.9
Feb.	4,160.3	108.7	3.0	499.3	8.3	337.8	5.4	3,323.3	2.0
Mar.	4,473.4	109.0	2.8	543.6	7.5	363.8	5.4	3,566.0	1.8
Apr.	4,408.1	109.0	2.7	508.4	7.1	344.2	5.4	3,555.5	1.7
May	4,092.5	109.1	2.4	445.9	6.3	321.3	5.3	3,325.3	1.5
June	4,054.9	109.3	1.9	446.6	5.7	314.3	4.4	3,294.0	1.0
July	4,255.7	109.4	1.7	519.9	5.1	336.8	4.5	3,399.0	0.9
Aug.	4,120.4	109.4	1.7	479.3	5.1	313.1	4.1	3,327.9	1.0
Sep.	4,344.4	109.4	1.7	487.0	5.1	325.4	4.0	3,531.9	0.9
Oct.	4,529.9	109.8	1.8	514.4	7.3	332.4	4.0	3,683.1	0.8
Nov.	4,408.3	110.0	1.7	437.8	6.8	311.3	3.8	3,659.2	0.8

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

(annual percentage changes)



Source: ECB.

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

4.4 Quoted shares issued by euro area residents

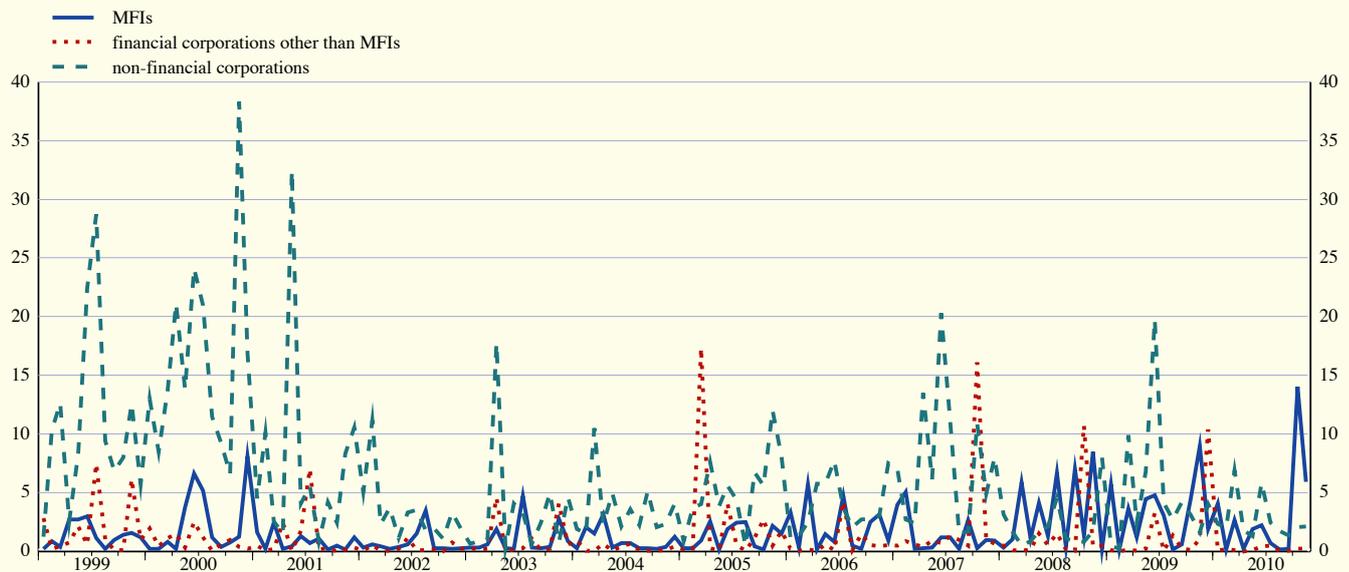
(EUR billions; market values)

2. Transactions during the month

	Total			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
2008 Nov.	10.6	2.9	7.7	8.4	0.5	8.0	0.5	2.1	-1.6	1.7	0.3	1.4
Dec.	8.5	2.6	6.0	0.0	0.0	0.0	0.5	0.0	0.4	8.0	2.5	5.5
2009 Jan.	6.3	0.5	5.8	5.7	0.0	5.7	0.1	0.0	0.0	0.5	0.4	0.1
Feb.	0.2	0.9	-0.7	0.0	0.0	0.0	0.0	0.1	-0.1	0.2	0.8	-0.6
Mar.	13.7	0.2	13.4	3.6	0.0	3.6	0.2	0.0	0.1	9.9	0.2	9.7
Apr.	3.7	0.3	3.4	1.2	0.0	1.2	0.1	0.0	0.0	2.4	0.3	2.1
May	11.4	0.3	11.1	4.4	0.0	4.4	0.2	0.0	0.1	6.8	0.3	6.5
June	27.8	2.0	25.8	4.8	0.0	4.8	3.3	0.3	3.0	19.7	1.8	18.0
July	7.2	0.2	7.0	3.0	0.0	3.0	0.0	0.0	0.0	4.1	0.2	4.0
Aug.	4.0	3.3	0.7	0.0	0.0	0.0	1.3	0.0	1.3	2.7	3.3	-0.6
Sep.	5.0	0.3	4.7	0.6	0.0	0.6	0.2	0.0	0.2	4.2	0.2	3.9
Oct.	7.7	0.3	7.4	4.5	0.0	4.5	0.1	0.0	0.1	3.1	0.2	2.8
Nov.	11.6	0.2	11.4	9.0	0.0	9.0	1.0	0.0	1.0	1.6	0.2	1.4
Dec.	16.2	0.2	16.1	1.9	0.0	1.9	10.4	0.1	10.3	4.0	0.1	3.9
2010 Jan.	6.4	0.0	6.4	4.1	0.0	4.1	0.1	0.0	0.1	2.3	0.0	2.3
Feb.	2.2	0.3	1.9	0.0	0.0	0.0	0.2	0.0	0.2	2.0	0.3	1.7
Mar.	9.6	0.2	9.4	2.6	0.0	2.6	0.1	0.0	0.1	6.9	0.2	6.7
Apr.	1.8	0.4	1.5	0.1	0.0	0.0	0.0	0.0	0.0	1.8	0.3	1.5
May	3.2	0.8	2.4	1.9	0.0	1.9	0.1	0.0	0.1	1.3	0.8	0.4
June	8.4	0.4	8.0	2.2	0.0	2.2	0.4	0.0	0.4	5.8	0.4	5.4
July	3.6	0.8	2.7	0.7	0.0	0.7	0.5	0.0	0.4	2.4	0.8	1.6
Aug.	1.7	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.2	0.6
Sep.	1.6	0.2	1.4	0.2	0.0	0.2	0.0	0.0	0.0	1.4	0.2	1.2
Oct.	16.3	1.1	15.2	14.0	0.0	14.0	0.2	0.0	0.2	2.0	1.1	1.0
Nov.	8.2	1.0	7.3	5.9	0.0	5.9	0.2	0.1	0.2	2.1	0.9	1.2

C20 Gross issues of quoted shares by sector of the issuer

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



Source: ECB.

## 4.5 MFI interest rates on euro-denominated deposits from and loans to euro area residents <sup>1)</sup>

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

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

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight <sup>2)</sup>	With an agreed maturity of:			Redeemable at notice of: <sup>2), 3)</sup>		Overnight <sup>2)</sup>	With an agreed maturity of:			
		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
2009 Dec.	0.45	1.67	2.31	2.40	1.53	2.45	0.47	0.77	2.00	2.54	0.64
2010 Jan.	0.43	1.74	2.33	2.52	1.47	2.23	0.45	0.72	1.95	2.46	0.53
Feb.	0.42	1.75	2.24	2.36	1.45	2.11	0.44	0.73	2.11	2.39	0.53
Mar.	0.42	1.90	2.38	2.24	1.45	2.05	0.44	0.79	2.73	2.35	0.50
Apr.	0.41	2.02	2.64	2.14	1.42	2.01	0.43	0.78	2.78	2.30	0.58
May	0.40	2.04	2.73	2.24	1.40	1.98	0.43	0.77	2.78	2.26	0.52
June	0.43	2.16	2.26	2.47	1.41	1.96	0.43	0.89	1.85	2.29	0.66
July	0.43	2.31	2.59	2.36	1.40	1.93	0.45	1.06	2.11	2.22	0.74
Aug.	0.43	2.21	2.54	2.35	1.50	1.91	0.45	1.01	2.01	2.22	0.70
Sep.	0.43	2.25	2.76	2.28	1.55	1.85	0.46	1.11	2.18	2.81	0.71
Oct.	0.44	2.35	2.75	2.80	1.54	1.82	0.50	1.18	2.36	2.53	0.94
Nov.	0.44	2.34	2.67	2.66	1.54	1.83	0.49	1.16	2.35	2.43	0.89

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

	Revolving loans and overdrafts, convenience and extended credit card debt <sup>2)</sup>	Consumer credit				Lending for house purchase					Other lending by initial rate fixation		
		By initial rate fixation			Annual percentage rate of charge <sup>4)</sup>	By initial rate fixation				Annual percentage rate of charge <sup>4)</sup>	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years				
	1	2	3	4	5	6	7	8	9	10	11	12	13
2009 Dec.	8.99	6.43	6.26	7.56	7.43	2.71	3.96	4.42	4.26	3.81	3.08	4.40	4.35
2010 Jan.	8.94	6.83	6.42	8.04	7.86	2.71	3.94	4.38	4.26	3.79	3.12	4.45	4.46
Feb.	9.01	6.72	6.25	7.98	7.78	2.68	3.83	4.32	4.18	3.74	3.16	4.48	4.74
Mar.	8.82	6.35	6.21	7.94	7.59	2.63	3.72	4.21	4.15	3.66	3.05	4.61	4.55
Apr.	8.77	6.78	6.12	7.92	7.67	2.62	3.71	4.18	4.12	3.68	3.06	4.32	4.53
May	8.77	6.69	6.14	7.84	7.62	2.58	3.64	4.14	4.01	3.58	3.09	4.45	4.50
June	8.80	5.18	6.14	7.74	7.11	2.56	3.59	4.06	3.90	3.54	3.00	4.22	4.27
July	8.74	5.48	6.22	7.77	7.32	2.66	3.60	3.94	3.84	3.64	3.15	4.29	4.27
Aug.	8.72	5.38	6.26	7.87	7.35	2.83	3.63	3.95	3.81	3.76	3.34	4.52	4.14
Sep.	8.74	5.52	6.18	7.87	7.31	2.75	3.57	3.84	3.74	3.62	3.32	4.35	4.07
Oct.	8.66	5.36	6.03	7.71	7.15	2.76	3.57	3.78	3.69	3.61	3.36	4.43	4.21
Nov.	8.61	5.40	6.08	7.68	7.17	2.81	3.55	3.77	3.71	3.66	3.57	4.38	4.19

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

	Revolving loans and overdrafts, convenience and extended credit card debt <sup>2)</sup>	Other loans of up to EUR 1 million by initial rate fixation			Other loans of 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
2009 Dec.	4.06	3.28	4.22	3.96	2.19	3.15	3.58
2010 Jan.	4.05	3.25	4.20	3.99	2.02	2.88	3.65
Feb.	4.03	3.25	4.22	4.05	1.94	2.90	3.61
Mar.	3.98	3.24	4.21	4.00	1.99	2.54	3.44
Apr.	3.98	3.19	4.17	3.90	2.00	2.72	3.45
May	3.97	3.25	4.12	3.86	1.96	2.84	3.41
June	3.70	3.25	4.11	3.80	2.17	2.86	3.37
July	3.70	3.27	4.27	3.95	2.26	2.85	3.19
Aug.	3.75	3.38	4.19	3.84	2.28	2.92	3.65
Sep.	3.80	3.34	4.13	3.78	2.26	2.72	3.51
Oct.	3.83	3.42	4.19	3.82	2.33	2.94	3.46
Nov.	3.85	3.55	4.31	3.84	2.42	3.04	3.57

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. Data as of June 2010 may not be fully comparable with those prior to that date owing to methodological changes arising from the implementation of Regulations ECB/2008/32 and ECB/2009/7 (amending Regulation ECB/2001/18).
- 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 when all participating Member States are combined.
- 4) The annual percentage rate of charge covers the total cost of a loan. The total cost comprises both an interest rate component and a component incorporating other (related) charges, such as the cost of inquiries, administration, preparation of documents and guarantees.

**4.5 MFI interest rates on euro-denominated deposits from and loans to euro area residents <sup>1)</sup>, \***  
(percentages per annum; outstanding amounts as at end of period, new business as period average, unless otherwise indicated)

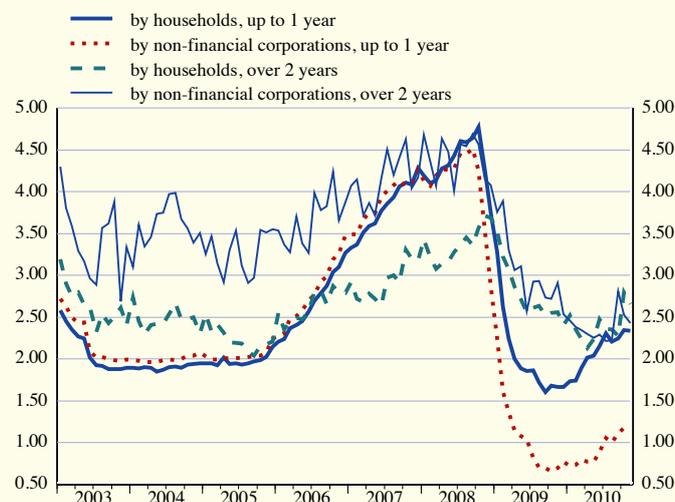
**4. Interest rates on deposits (outstanding amounts)**

	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight <sup>2)</sup>	With an agreed maturity of:		Redeemable at notice of: <sup>2)3)</sup>		Overnight <sup>2)</sup>	With an agreed maturity of:		
		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
2009 Dec.	0.45	2.36	2.91	1.53	2.45	0.47	1.56	3.30	1.21
2010 Jan.	0.43	2.19	2.80	1.47	2.23	0.45	1.45	3.23	1.20
Feb.	0.42	2.14	2.84	1.45	2.11	0.44	1.42	3.31	1.20
Mar.	0.42	2.12	2.74	1.45	2.05	0.44	1.38	3.26	1.16
Apr.	0.41	2.12	2.74	1.42	2.01	0.43	1.37	3.24	1.16
May	0.40	2.12	2.71	1.40	1.98	0.43	1.42	3.22	1.14
June	0.43	2.13	2.72	1.41	1.96	0.43	1.46	3.12	1.24
July	0.43	2.15	2.73	1.40	1.93	0.45	1.54	3.15	1.24
Aug.	0.43	2.17	2.72	1.50	1.91	0.45	1.57	3.12	1.25
Sep.	0.43	2.20	2.74	1.55	1.85	0.46	1.62	3.07	1.26
Oct.	0.44	2.22	2.70	1.54	1.82	0.50	1.68	3.07	1.29
Nov.	0.44	2.25	2.72	1.54	1.83	0.49	1.69	3.11	1.32

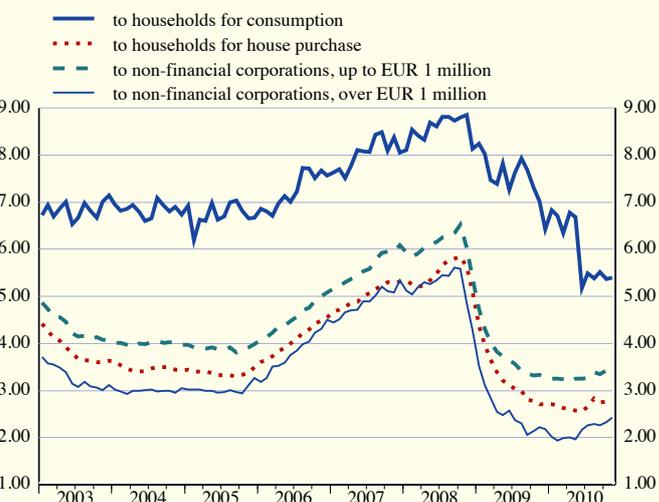
**5. Interest rates on loans (outstanding amounts)**

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase with a maturity of:			Consumer credit and other loans with a maturity of:			With a maturity of:		
	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
2009 Dec.	4.07	4.11	4.07	7.55	6.57	5.42	3.46	3.35	3.50
2010 Jan.	3.99	4.05	3.99	7.51	6.52	5.37	3.47	3.31	3.45
Feb.	4.03	4.11	4.03	7.49	6.61	5.43	3.45	3.33	3.43
Mar.	3.98	4.04	3.98	7.43	6.51	5.35	3.43	3.26	3.37
Apr.	3.89	4.01	3.92	7.38	6.50	5.29	3.42	3.21	3.33
May	3.87	3.97	3.89	7.40	6.45	5.29	3.40	3.20	3.31
June	3.79	3.96	3.84	7.61	6.48	5.21	3.29	3.22	3.30
July	3.73	3.93	3.82	7.70	6.50	5.19	3.34	3.25	3.33
Aug.	3.79	3.89	3.81	7.74	6.46	5.20	3.37	3.28	3.34
Sep.	3.83	3.88	3.83	7.83	6.46	5.21	3.42	3.29	3.38
Oct.	3.80	3.86	3.83	7.79	6.45	5.20	3.48	3.34	3.38
Nov.	3.77	3.85	3.84	7.68	6.45	5.22	3.50	3.39	3.41

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



**C22 New loans with a floating rate and up to 1 year's initial rate fixation**  
(percentages per annum excluding charges; period averages)



Source: ECB.

\* For the source of the data in the table and the related footnotes, please see page S42.

## 4.6 Money market interest rates

(percentages per annum; period averages)

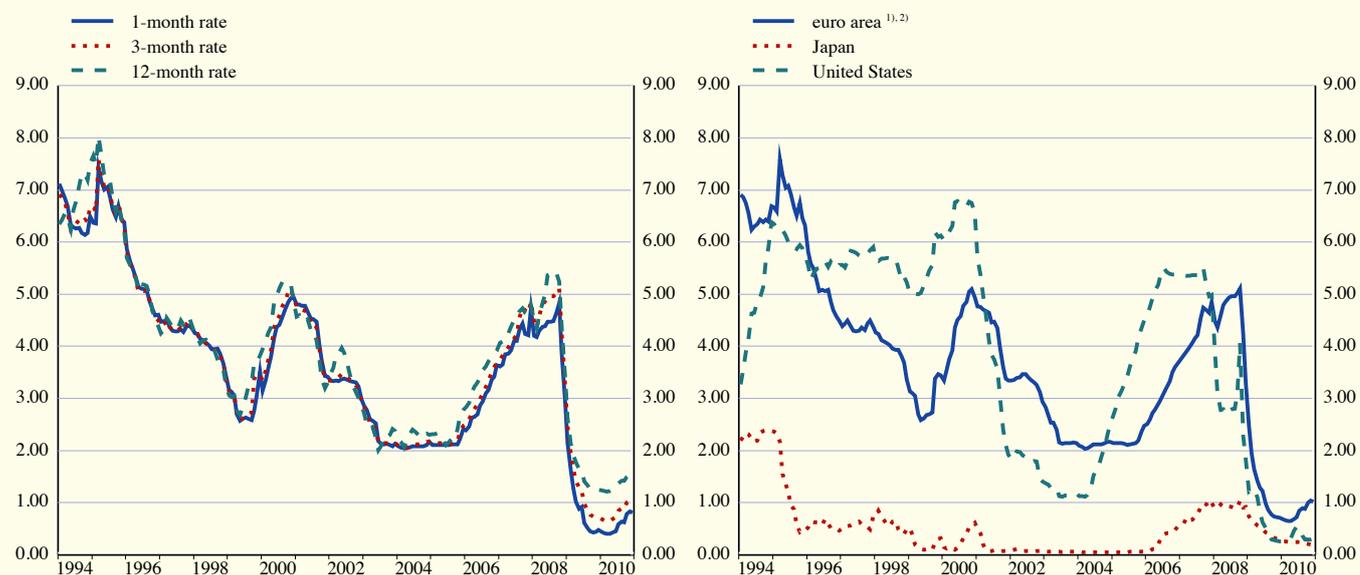
	Euro area <sup>1),2)</sup>					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2008	3.87	4.28	4.64	4.73	4.83	2.93	0.93
2009	0.71	0.89	1.22	1.43	1.61	0.69	0.47
2010	0.44	0.57	0.81	1.08	1.35	0.34	0.23
2009 Q4	0.36	0.45	0.72	1.00	1.24	0.27	0.31
2010 Q1	0.34	0.42	0.66	0.96	1.22	0.26	0.25
Q2	0.35	0.43	0.69	0.98	1.25	0.44	0.24
Q3	0.45	0.61	0.87	1.13	1.40	0.39	0.24
Q4	0.59	0.81	1.02	1.25	1.52	0.29	0.19
2009 Dec.	0.35	0.48	0.71	1.00	1.24	0.25	0.28
2010 Jan.	0.34	0.44	0.68	0.98	1.23	0.25	0.26
Feb.	0.34	0.42	0.66	0.96	1.23	0.25	0.25
Mar.	0.35	0.41	0.64	0.95	1.22	0.27	0.25
Apr.	0.35	0.40	0.64	0.96	1.23	0.31	0.24
May	0.34	0.42	0.69	0.98	1.25	0.46	0.24
June	0.35	0.45	0.73	1.01	1.28	0.54	0.24
July	0.48	0.58	0.85	1.10	1.37	0.51	0.24
Aug.	0.43	0.64	0.90	1.15	1.42	0.36	0.24
Sep.	0.45	0.62	0.88	1.14	1.42	0.29	0.22
Oct.	0.70	0.78	1.00	1.22	1.50	0.29	0.20
Nov.	0.59	0.83	1.04	1.27	1.54	0.29	0.19
Dec.	0.50	0.81	1.02	1.25	1.53	0.30	0.18

### C23 Euro area money market rates <sup>1), 2)</sup>

(monthly averages; percentages per annum)

### C24 3-month money market rates

(monthly averages; 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.

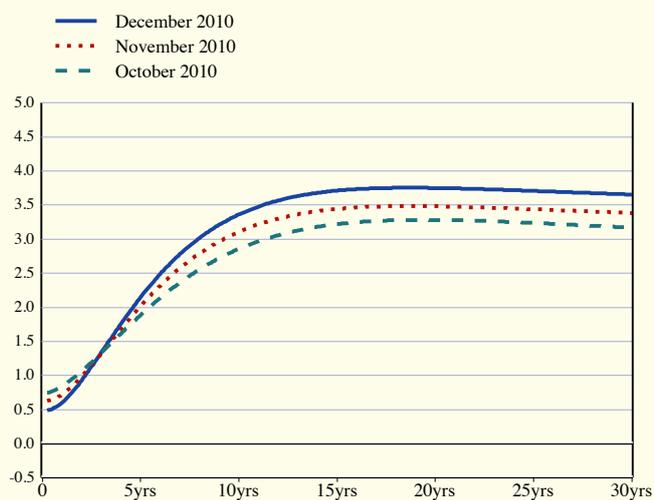
### 4.7 Euro area yield curves <sup>1)</sup>

(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
2008	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2009	0.38	0.81	1.38	2.64	3.20	3.76	3.38	2.38	1.41	2.44	4.27	5.20
2010	0.49	0.60	0.93	2.15	2.78	3.36	2.87	2.43	0.85	1.70	3.99	4.69
2009 Q4	0.38	0.81	1.38	2.64	3.20	3.76	3.38	2.38	1.41	2.44	4.27	5.20
2010 Q1	0.33	0.60	1.05	2.28	2.86	3.46	3.13	2.41	1.02	1.98	3.96	5.02
Q2	0.34	0.42	0.69	1.79	2.41	3.03	2.68	2.33	0.62	1.35	3.54	4.52
Q3	0.57	0.68	0.90	1.71	2.18	2.67	2.10	1.77	0.86	1.41	3.01	3.91
Q4	0.49	0.60	0.93	2.15	2.78	3.36	2.87	2.43	0.85	1.70	3.99	4.69
2009 Dec.	0.38	0.81	1.38	2.64	3.20	3.76	3.38	2.38	1.41	2.44	4.27	5.20
2010 Jan.	0.28	0.71	1.25	2.48	3.06	3.66	3.38	2.42	1.28	2.25	4.15	5.23
Feb.	0.30	0.54	1.02	2.29	2.88	3.49	3.19	2.46	0.98	2.01	3.99	5.08
Mar.	0.33	0.60	1.05	2.28	2.86	3.46	3.13	2.41	1.02	1.98	3.96	5.02
Apr.	0.32	0.60	1.01	2.18	2.78	3.40	3.07	2.39	1.00	1.85	3.89	4.94
May	0.21	0.28	0.57	1.75	2.39	3.00	2.78	2.43	0.47	1.28	3.58	4.46
June	0.34	0.42	0.69	1.79	2.41	3.03	2.68	2.33	0.62	1.35	3.54	4.52
July	0.45	0.59	0.87	1.88	2.44	3.01	2.56	2.14	0.82	1.51	3.45	4.43
Aug.	0.43	0.45	0.62	1.47	1.97	2.48	2.05	1.85	0.55	1.09	2.87	3.70
Sep.	0.57	0.68	0.90	1.71	2.18	2.67	2.10	1.77	0.86	1.41	3.01	3.91
Oct.	0.75	0.84	1.06	1.89	2.36	2.86	2.11	1.80	1.02	1.57	3.21	4.09
Nov.	0.63	0.72	0.99	2.02	2.58	3.11	2.48	2.12	0.92	1.62	3.62	4.35
Dec.	0.49	0.60	0.93	2.15	2.78	3.36	2.87	2.43	0.85	1.70	3.99	4.69

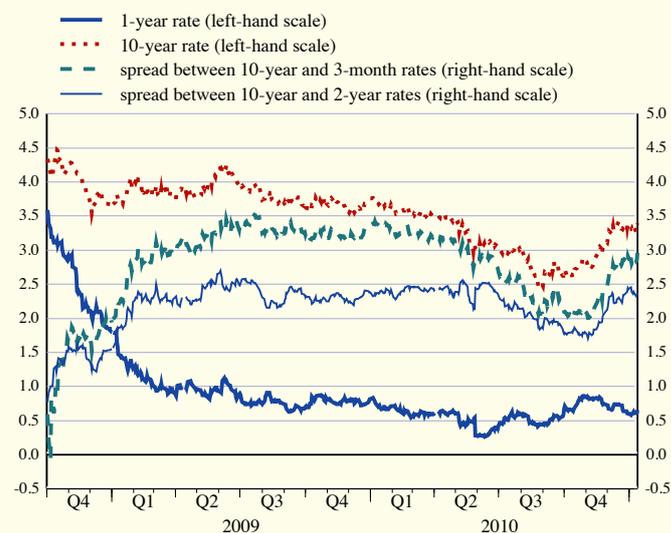
### C25 Euro area spot yield curves <sup>2)</sup>

(percentages per annum; end of period)



### C26 Euro area spot rates and spreads <sup>2)</sup>

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



Sources: ECB calculations based on underlying data provided by EuroMTS and ratings provided by Fitch Ratings.

- 1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
- 2) Data cover AAA-rated euro area central government bonds.

## 4.8 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices <sup>1)</sup>												United States	Japan
	Benchmark		Main industry indices										Standard & Poor's 500	Nikkei 225
	Broad index	50	Basic materials	Consumer services	Consumer goods	Oil and gas	Financials	Industrials	Technology	Utilities	Telecoms	Health care		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2008	313.7	3,319.5	480.4	169.3	290.7	380.9	265.0	350.9	282.5	502.0	431.5	411.5	1,220.7	12,151.6
2009	234.2	2,521.0	353.2	140.5	244.5	293.5	172.1	269.7	200.7	353.7	380.4	363.5	946.2	9,321.6
2010	265.5	2,779.3	463.1	166.2	323.4	307.2	182.8	337.6	224.1	344.9	389.6	408.4	1,140.0	10,006.5
2009 Q4	268.1	2,872.7	422.1	151.5	282.8	316.9	209.7	317.7	214.1	375.3	416.5	399.3	1,088.7	9,969.2
2010 Q1	268.0	2,849.0	445.0	159.3	294.9	320.0	195.5	326.7	229.9	372.4	398.8	426.3	1,123.6	10,511.2
Q2	261.1	2,735.7	446.3	163.7	312.9	305.0	178.8	334.3	229.1	349.6	372.2	412.0	1,134.6	10,345.9
Q3	259.5	2,715.9	445.8	165.2	323.0	294.5	181.6	327.0	210.7	325.9	387.6	391.4	1,096.2	9,356.0
Q4	273.4	2,817.8	513.8	176.1	361.3	309.9	175.7	361.9	227.0	333.0	399.2	405.0	1,204.6	9,842.4
2009 Dec.	270.1	2,907.6	447.0	155.0	290.9	321.1	204.3	321.0	211.0	380.5	419.8	412.4	1,110.4	10,169.0
2010 Jan.	273.5	2,922.7	449.4	158.9	295.7	329.8	204.6	331.6	223.1	384.1	407.4	425.5	1,123.6	10,661.6
Feb.	257.0	2,727.5	427.9	154.3	285.3	309.8	183.9	312.3	222.7	360.9	386.8	415.0	1,089.2	10,175.1
Mar.	272.6	2,890.5	456.0	164.0	302.4	320.3	197.7	335.0	242.2	372.2	401.9	436.8	1,152.0	10,671.5
Apr.	278.6	2,937.3	470.9	171.7	313.8	328.6	199.7	349.0	248.8	378.9	396.7	430.0	1,197.3	11,139.8
May	252.7	2,642.1	431.4	159.6	305.2	295.4	170.8	324.8	221.9	341.7	360.0	401.0	1,125.1	10,104.0
June	253.2	2,641.7	438.1	160.4	319.5	292.7	167.5	330.0	218.3	330.5	361.6	406.1	1,083.4	9,786.1
July	255.1	2,669.5	435.0	160.8	320.8	289.3	178.0	324.2	212.3	320.3	369.7	389.2	1,079.8	9,456.8
Aug.	258.9	2,712.2	441.5	163.2	315.6	296.0	183.7	324.9	206.8	328.5	392.2	383.1	1,087.3	9,268.2
Sep.	264.6	2,766.1	460.9	171.6	332.4	298.4	183.0	331.9	212.9	329.0	400.9	401.8	1,122.1	9,346.7
Oct.	271.3	2,817.7	489.1	175.1	346.1	304.9	183.2	346.0	223.7	331.4	410.5	405.4	1,171.6	9,455.1
Nov.	272.2	2,809.6	509.9	176.3	359.9	307.4	174.4	358.5	222.9	335.0	403.0	405.0	1,198.9	9,797.2
Dec.	276.5	2,825.6	540.1	176.8	376.5	316.7	170.0	379.7	234.1	332.6	385.3	404.6	1,241.5	10,254.5

## C27 Dow Jones EURO STOXX broad index, 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 <sup>1)</sup>

	Total					Total (s.a.; percentage change vis-à-vis previous period)						Memo item: Administered prices <sup>2)</sup>	
	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 <sup>3)</sup>	100.0	100.0	83.1	58.0	42.0	100.0	11.9	7.3	29.3	9.6	42.0	89.0	11.0
	1	2	3	4	5	6	7	8	9	10	11	12	13
2006	102.2	2.2	1.5	2.3	2.0	-	-	-	-	-	-	2.1	2.5
2007	104.4	2.1	2.0	1.9	2.5	-	-	-	-	-	-	2.1	2.3
2008	107.8	3.3	2.4	3.8	2.6	-	-	-	-	-	-	3.4	2.7
2009	108.1	0.3	1.3	-0.9	2.0	-	-	-	-	-	-	0.1	1.7
2009 Q3	108.0	-0.4	1.2	-1.9	1.8	0.2	0.3	-0.9	0.0	0.8	0.4	-0.6	1.2
Q4	108.6	0.4	1.0	-0.4	1.7	0.2	0.1	0.1	0.0	0.3	0.4	0.4	0.8
2010 Q1	108.6	1.1	0.9	0.9	1.5	0.5	0.0	0.7	0.1	3.0	0.3	1.2	0.4
Q2	110.0	1.5	0.8	1.7	1.2	0.6	0.3	0.7	0.2	3.9	0.3	1.5	1.4
Q3	109.9	1.7	1.0	1.9	1.4	0.4	0.5	0.7	0.2	0.0	0.5	1.7	2.1
2010 July	109.7	1.7	1.0	2.0	1.4	0.2	0.1	0.5	0.1	0.0	0.2	1.7	2.0
Aug.	109.9	1.6	1.0	1.7	1.4	0.1	0.2	0.3	0.0	-0.1	0.2	1.5	2.1
Sep.	110.1	1.8	1.0	2.1	1.4	0.1	0.0	0.2	0.1	0.3	0.1	1.7	2.1
Oct.	110.5	1.9	1.1	2.3	1.4	0.2	0.2	0.0	0.1	0.6	0.1	1.9	2.4
Nov.	110.6	1.9	1.1	2.3	1.3	0.2	0.2	0.4	0.2	0.8	0.0	1.8	2.4
Dec. <sup>4)</sup>	.	2.2	.	.	.	.	.	.	.	.	.	.	.

	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 <sup>3)</sup>	19.2	11.9	7.3	38.9	29.3	9.6	10.2	6.0	6.6	3.3	14.9	7.1
	14	15	16	17	18	19	20	21	22	23	24	25
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
2008	5.1	6.1	3.5	3.1	0.8	10.3	2.3	1.9	3.9	-2.2	3.2	2.5
2009	0.7	1.1	0.2	-1.7	0.6	-8.1	2.0	1.8	2.9	-1.0	2.1	2.1
2009 Q3	-0.1	0.6	-1.2	-2.8	0.5	-11.9	2.0	1.8	2.5	-0.6	1.8	2.1
Q4	-0.2	0.5	-1.5	-0.5	0.3	-3.2	1.9	1.7	2.5	-0.6	1.4	2.2
2010 Q1	0.0	0.6	-0.8	1.3	0.1	4.8	1.9	1.6	2.5	-0.5	1.1	1.6
Q2	0.7	0.8	0.7	2.2	0.3	8.1	1.8	1.5	2.3	-0.9	0.8	1.5
Q3	1.5	0.9	2.3	2.2	0.5	7.3	1.7	1.3	2.5	-0.8	1.1	1.5
2010 June	0.9	0.9	0.9	1.8	0.4	6.2	1.8	1.5	2.3	-1.1	1.0	1.5
July	1.3	0.9	1.9	2.4	0.5	8.1	1.7	1.3	2.7	-0.9	1.0	1.5
Aug.	1.5	1.0	2.4	1.8	0.4	6.1	1.7	1.3	2.5	-0.5	1.1	1.6
Sep.	1.6	1.0	2.5	2.3	0.6	7.7	1.7	1.3	2.4	-0.9	1.1	1.5
Oct.	1.7	1.2	2.4	2.6	0.7	8.5	1.6	1.3	1.9	-1.0	1.3	1.5
Nov.	1.8	1.3	2.7	2.6	0.8	7.9	1.7	1.3	2.0	-0.8	1.2	1.5

Sources: Eurostat and ECB calculations.

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

2) 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 Eurostat's website (<http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/introduction>) for a note explaining the methodology used in the compilation of this indicator.

3) Weighting used in 2010.

4) Estimate based on provisional national releases, which usually cover 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 and residential property prices

	Industrial producer prices excluding construction										Construction <sup>1)</sup>	Residential property prices <sup>2)</sup>
	Total (index: 2005 = 100)	Total		Industry excluding construction and energy						Energy		
		Manu- facturing	Total	Intermediate goods	Capital goods	Consumer goods						
						Total	Durable	Non-durable				
% of total <sup>3)</sup>	100.0	100.0	82.8	75.6	30.0	22.0	23.7	2.7	21.0	24.4		
	1	2	3	4	5	6	7	8	9	10	11	12
2006	105.1	5.1	3.5	2.7	4.6	1.6	1.4	1.4	1.4	13.5	4.7	6.6
2007	107.9	2.7	3.0	3.2	4.6	2.2	2.2	2.4	2.1	1.2	4.2	4.6
2008	114.4	6.1	4.8	3.4	3.9	2.1	3.9	2.8	4.1	14.2	3.9	1.3
2009	108.6	-5.1	-5.4	-2.9	-5.3	0.4	-2.1	1.2	-2.5	-11.8	0.1	-2.9
2009 Q3	108.0	-7.9	-7.4	-4.2	-7.5	-0.1	-2.7	1.0	-3.2	-18.3	-1.7	-3.9
Q4	108.4	-4.7	-3.0	-3.1	-5.0	-0.6	-2.5	0.4	-2.8	-9.5	-0.3	-1.5
2010 Q1	109.6	-0.1	1.7	-0.5	-0.4	-0.5	-0.5	0.3	-0.7	0.3	0.2	0.3
Q2	111.4	3.0	3.8	1.6	3.6	0.2	0.0	0.6	-0.1	7.2	2.4	1.8
Q3	112.2	4.0	3.7	2.3	4.8	0.7	0.6	1.1	0.5	8.8	2.5	2.5
2010 June	111.8	3.1	3.6	1.9	4.3	0.4	0.2	0.8	0.1	6.2	-	-
July	112.1	4.0	3.8	2.1	4.5	0.6	0.4	1.0	0.3	9.6	-	-
Aug.	112.2	3.6	3.3	2.3	4.7	0.7	0.5	1.1	0.4	7.4	-	-
Sep.	112.5	4.3	4.0	2.6	5.1	0.7	0.8	1.2	0.7	9.4	-	-
Oct.	112.9	4.4	4.1	2.9	5.5	0.8	1.2	1.3	1.2	8.8	-	-
Nov.	113.3	4.5	4.3	3.0	5.8	0.8	1.5	1.4	1.5	8.8	-	-

### 3. Commodity prices and gross domestic product deflators<sup>1)</sup>

	Oil prices <sup>4)</sup> (EUR per barrel)	Non-energy commodity prices						Total (s.a.; index: 2000 = 100)	GDP deflators					Exports <sup>7)</sup>	Imports <sup>7)</sup>	
		Import-weighted <sup>5)</sup>			Use-weighted <sup>6)</sup>				Total	Domestic demand						
		Total	Food	Non-food	Total	Food	Non-food			Total	Private consump- tion	Government consump- tion	Gross fixed capital formation			
% of total		100.0	35.0	65.0	100.0	45.0	55.0									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2006	52.9	27.7	5.8	37.9	24.5	6.0	38.3	113.7	1.9	2.4	2.2	2.0	2.9	2.6	3.8	
2007	52.8	7.8	14.3	5.5	5.3	9.3	2.9	116.4	2.4	2.3	2.3	1.7	2.7	1.6	1.3	
2008	65.9	2.0	18.4	-4.4	-1.7	9.7	-8.6	118.8	2.0	2.6	2.7	2.6	2.3	2.6	3.9	
2009	44.6	-18.5	-8.9	-23.1	-18.0	-11.4	-22.8	119.9	0.9	0.0	-0.2	2.1	-0.7	-3.2	-5.7	
2009 Q3	48.1	-18.5	-12.5	-21.4	-18.7	-15.1	-21.3	120.0	0.8	-0.7	-0.8	2.5	-1.6	-4.2	-8.2	
Q4	51.2	3.1	5.7	1.8	2.4	-1.0	5.0	120.0	0.3	0.0	0.2	1.5	-0.9	-2.3	-3.3	
2010 Q1	56.0	29.0	7.4	42.6	27.4	7.5	46.5	120.4	0.5	0.1	1.3	1.6	0.2	2.5	1.6	
Q2	62.6	48.2	12.5	70.2	41.7	14.0	67.3	120.8	0.9	1.0	2.0	1.9	1.5	5.0	5.5	
Q3	59.6	51.6	29.7	63.1	49.4	41.0	55.8	121.3	1.1	1.4	2.3	1.3	2.0	5.1	5.9	
2010 July	58.9	52.5	26.0	67.5	47.4	32.0	60.2	-	-	-	-	-	-	-	-	
Aug.	59.9	47.6	26.7	58.5	46.2	39.5	51.1	-	-	-	-	-	-	-	-	
Sep.	59.8	54.7	36.8	63.7	54.8	52.2	56.6	-	-	-	-	-	-	-	-	
Oct.	60.2	47.5	34.8	53.9	50.3	52.4	48.9	-	-	-	-	-	-	-	-	
Nov.	63.1	48.1	33.9	55.5	47.1	43.9	49.5	-	-	-	-	-	-	-	-	
Dec.	69.6	49.4	38.9	54.8	48.4	48.8	48.2	-	-	-	-	-	-	-	-	

Sources: Eurostat, ECB calculations based on Eurostat data (column 7 in Table 2 in Section 5.1 and columns 8-15 in Table 3 in Section 5.1), ECB calculations based on Thomson Financial Datastream data (column 1 in Table 3 in Section 5.1) and ECB calculations (column 12 in Table 2 in Section 5.1 and columns 2-7 in Table 3 in Section 5.1).

1) Input prices for residential buildings.

2) Experimental data based on non-harmonised national sources (see <http://www.ecb.europa.eu/stats/intro/html/experiment.en.html> for further details).

3) In 2005.

4) Brent Blend (for one-month forward delivery).

5) Refers to prices expressed in euro. Weighted according to the structure of euro area imports in the period 2004-06.

6) Refers to prices expressed in euro. Weighted according to euro area domestic demand (domestic production plus imports minus exports) in the period 2004-06. Experimental data (see <http://www.ecb.europa.eu/stats/intro/html/experiment.en.html> for details).

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

## 5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

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

(seasonally adjusted)

	Total (index: 2000 = 100)	Total	By economic activity					Public administration, education, health and other services
			Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	
	1	2	3	4	5	6	7	8
Unit labour costs <sup>1)</sup>								
2008	115.6	3.5	0.9	5.3	4.2	2.5	3.2	2.6
2009	120.1	3.9	-1.8	9.6	1.6	5.2	0.9	2.8
2009 Q4	119.9	1.4	-0.7	1.1	2.1	2.7	0.6	2.0
2010 Q1	119.8	-0.5	0.1	-6.5	2.1	-0.2	1.0	1.2
Q2	119.5	-0.6	0.8	-6.5	2.3	-1.0	1.3	1.7
Q3	119.4	-0.5	2.2	-4.2	1.9	-0.5	1.8	0.2
Compensation per employee								
2008	121.5	3.2	3.7	3.0	5.1	2.6	2.7	3.3
2009	123.4	1.5	2.6	0.4	2.3	1.7	1.4	2.5
2009 Q4	124.2	1.4	2.4	0.6	2.0	1.4	1.8	2.1
2010 Q1	124.5	1.5	1.5	2.6	0.1	1.6	2.1	1.1
Q2	125.4	1.9	2.1	4.0	1.3	1.4	1.3	1.5
Q3	125.7	1.5	1.7	3.5	1.6	1.8	1.6	0.2
Labour productivity per person employed <sup>2)</sup>								
2008	105.2	-0.3	2.7	-2.1	0.9	0.1	-0.5	0.7
2009	102.8	-2.3	4.4	-8.4	0.7	-3.4	0.5	-0.2
2009 Q4	103.6	0.0	3.1	-0.5	-0.1	-1.2	1.1	0.1
2010 Q1	103.9	2.1	1.4	9.7	-1.9	1.8	1.0	-0.2
Q2	104.9	2.5	1.3	11.2	-1.0	2.4	0.1	-0.1
Q3	105.3	2.1	-0.4	8.1	-0.3	2.3	-0.2	0.0
Compensation per hour worked								
2008	123.8	3.1	2.5	3.6	4.5	2.7	2.4	3.1
2009	127.8	3.2	4.0	4.6	4.4	2.7	2.6	2.9
2009 Q4	128.2	2.2	3.9	1.7	4.1	1.9	2.4	2.3
2010 Q1	128.4	0.9	4.4	0.2	0.1	1.0	1.7	0.6
Q2	129.0	1.1	3.1	0.1	1.6	1.1	0.9	1.2
Q3	129.1	0.7	1.5	0.2	2.5	1.3	1.1	-0.2
Hourly labour productivity <sup>2)</sup>								
2008	108.0	-0.2	2.9	-1.6	0.5	0.4	-0.8	0.4
2009	107.1	-0.8	4.9	-4.8	2.3	-2.4	1.9	0.1
2009 Q4	107.6	0.6	4.0	0.5	1.1	-0.9	1.9	0.2
2010 Q1	107.8	1.4	3.6	7.2	-2.4	1.0	0.8	-0.7
Q2	108.6	1.8	2.9	7.2	-1.3	1.8	-0.2	-0.5
Q3	108.8	1.3	1.3	4.5	-0.4	1.5	-0.6	-0.4

### 5. Labour cost indices<sup>3)</sup>

	Total (s.a.; index: 2008 = 100)	Total	By component		For selected economic activities			Memo item: Indicator of negotiated wages <sup>4)</sup>
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total <sup>5)</sup>	100.0	100.0	75.2	24.8	32.4	9.0	58.6	
	1	2	3	4	5	6	7	8
2008	100.0	3.4	3.7	2.8	3.6	4.7	3.2	3.3
2009	102.8	2.9	2.7	3.4	3.4	3.5	2.6	2.7
2009 Q4	103.5	2.0	1.7	2.6	1.2	3.3	2.3	2.2
2010 Q1	103.9	2.0	1.9	2.1	1.8	2.7	1.9	1.8
Q2	104.2	1.6	1.5	1.9	0.9	2.3	1.9	1.9
Q3	104.1	0.8	0.7	1.2	0.3	0.6	1.1	1.4

Sources: Eurostat, ECB calculations based on Eurostat data (Table 4 in Section 5.1) and ECB calculations (column 8 in Table 5 in Section 5.1).

- 1) Compensation (at current prices) per employee divided by value added (volumes) per person employed.
- 2) Value added (volumes) per labour input (persons employed and hours worked).
- 3) Hourly labour cost indices for the whole economy, excluding agriculture, public administration, education, health and services not classified elsewhere. Owing to differences in coverage, the estimates for the components may not be consistent with the total.
- 4) Experimental data (see <http://www.ecb.europa.eu/stats/intro/html/experiment.en.html> for further details).
- 5) In 2008.

## 5.2 Output and demand

### 1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External balance <sup>1)</sup>		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Total	Exports <sup>1)</sup>	Imports <sup>1)</sup>
	1	2	3	4	5	6	7	8	9
<i>Current prices (EUR billions; seasonally adjusted)</i>									
2006	8,564.8	8,466.7	4,876.1	1,733.4	1,832.8	24.4	98.1	3,454.9	3,356.8
2007	9,021.7	8,886.9	5,074.9	1,803.2	1,969.5	39.2	134.8	3,735.1	3,600.3
2008	9,239.6	9,143.7	5,234.4	1,893.0	1,994.7	21.7	96.0	3,862.6	3,766.7
2009	8,952.2	8,836.1	5,168.7	1,979.1	1,756.6	-68.4	116.2	3,248.9	3,132.8
2009 Q3	2,241.3	2,206.0	1,290.0	499.1	434.1	-17.2	35.3	814.3	779.0
Q4	2,246.9	2,205.7	1,299.5	497.3	430.0	-21.0	41.2	837.9	796.6
2010 Q1	2,262.2	2,235.0	1,310.8	502.7	430.7	-9.2	27.2	873.9	846.7
Q2	2,293.1	2,270.4	1,324.3	505.5	443.1	-2.5	22.7	926.4	903.7
Q3	2,310.5	2,279.2	1,332.1	507.7	443.7	-4.3	31.3	952.7	921.4
<i>percentage of GDP</i>									
2009	100.0	98.7	57.7	22.1	19.6	-0.8	1.3	-	-
<i>Chain-linked volumes (prices for the previous year; seasonally adjusted <sup>3)</sup>)</i>									
<i>quarter-on-quarter percentage changes</i>									
2009 Q3	0.4	0.3	-0.2	0.5	-1.2	-	-	2.2	2.1
Q4	0.2	-0.1	0.3	-0.1	-1.2	-	-	2.0	1.2
2010 Q1	0.4	0.9	0.3	0.1	-0.4	-	-	2.6	4.2
Q2	1.0	0.9	0.2	0.1	2.0	-	-	4.4	4.3
Q3	0.3	0.2	0.1	0.4	-0.3	-	-	1.9	1.5
<i>annual percentage changes</i>									
2006	3.0	2.9	2.1	2.1	5.4	-	-	8.6	8.5
2007	2.8	2.6	1.7	2.3	4.7	-	-	6.3	5.8
2008	0.4	0.4	0.4	2.4	-0.8	-	-	1.0	0.8
2009	-4.1	-3.4	-1.1	2.4	-11.4	-	-	-13.2	-11.9
2009 Q3	-4.0	-3.3	-1.2	2.6	-12.0	-	-	-13.7	-12.3
Q4	-2.0	-2.8	-0.4	1.7	-9.6	-	-	-5.3	-7.1
2010 Q1	0.8	0.4	0.4	1.1	-5.0	-	-	5.7	4.8
Q2	2.0	2.1	0.6	0.6	-0.8	-	-	11.7	12.4
Q3	1.9	1.9	1.0	0.4	0.2	-	-	11.3	11.7
<i>contributions to quarter-on-quarter percentage changes in GDP; percentage points</i>									
2009 Q3	0.4	0.3	-0.1	0.1	-0.2	0.6	0.0	-	-
Q4	0.2	-0.1	0.2	0.0	-0.2	0.0	0.3	-	-
2010 Q1	0.4	0.9	0.2	0.0	-0.1	0.7	-0.5	-	-
Q2	1.0	0.9	0.1	0.0	0.4	0.4	0.1	-	-
Q3	0.3	0.2	0.1	0.1	-0.1	0.1	0.2	-	-
<i>contributions to annual percentage changes in GDP; percentage points</i>									
2006	3.0	2.9	1.2	0.4	1.1	0.2	0.2	-	-
2007	2.8	2.6	1.0	0.5	1.0	0.2	0.3	-	-
2008	0.4	0.4	0.3	0.5	-0.2	-0.2	0.1	-	-
2009	-4.1	-3.4	-0.6	0.5	-2.5	-0.8	-0.7	-	-
2009 Q3	-4.0	-3.2	-0.7	0.5	-2.6	-0.5	-0.8	-	-
Q4	-2.0	-2.8	-0.2	0.4	-2.0	-0.8	0.7	-	-
2010 Q1	0.8	0.5	0.3	0.2	-1.0	1.0	0.3	-	-
Q2	2.0	2.0	0.4	0.1	-0.2	1.7	-0.1	-	-
Q3	1.9	1.9	0.5	0.1	0.0	1.2	0.0	-	-

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: Section 3.1; Table 1 of Section 7.1; Table 3 of Section 7.2; or Tables 1 or 3 of Section 7.5.
- 2) Including acquisitions less disposals of valuables.
- 3) Annual data are not working day-adjusted.

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
<i>Current prices (EUR billions; seasonally adjusted)</i>								
2006	7,650.4	140.2	1,561.9	479.2	1,599.6	2,138.7	1,730.8	914.4
2007	8,062.9	152.2	1,650.8	511.6	1,673.9	2,273.2	1,801.1	958.8
2008	8,294.6	147.1	1,649.1	528.5	1,730.9	2,355.8	1,883.3	945.0
2009	8,060.1	132.1	1,436.1	507.4	1,666.0	2,361.7	1,956.9	892.2
2009 Q3	2,018.8	32.2	361.4	125.8	416.9	591.3	491.3	222.5
Q4	2,021.6	32.7	363.1	124.1	416.5	593.0	492.1	225.3
2010 Q1	2,036.6	34.4	369.4	122.1	419.2	594.2	497.2	225.6
Q2	2,058.9	35.0	377.6	124.0	424.3	597.6	500.5	234.1
Q3	2,069.1	35.7	378.8	123.9	427.6	602.7	500.4	241.4
<i>percentage of value added</i>								
2009	100.0	1.6	17.8	6.3	20.7	29.3	24.3	-
<i>Chain-linked volumes (prices for the previous year; seasonally adjusted <sup>1)</sup>)</i>								
<i>quarter-on-quarter percentage changes</i>								
2009 Q3	0.4	0.3	2.0	-1.8	0.0	0.2	0.2	0.6
Q4	0.1	-0.7	0.6	-1.7	0.0	0.1	0.3	1.0
2010 Q1	0.6	1.5	2.0	-1.6	0.5	0.4	0.3	-1.7
Q2	0.8	-0.7	2.0	0.8	0.8	0.7	0.2	2.5
Q3	0.3	-1.2	0.4	-0.7	0.2	0.5	0.3	0.6
<i>annual percentage changes</i>								
2006	3.0	-0.2	3.7	2.8	2.9	4.1	1.5	3.2
2007	3.1	1.4	3.2	2.4	3.6	4.0	1.7	0.8
2008	0.7	0.9	-2.2	-1.2	1.3	1.7	1.9	-1.3
2009	-4.2	2.1	-13.3	-5.9	-5.0	-1.6	1.1	-2.9
2009 Q3	-4.1	2.4	-12.9	-5.9	-5.1	-1.5	1.0	-2.8
Q4	-2.3	1.6	-6.8	-5.8	-3.3	-0.8	1.2	-0.1
2010 Q1	0.9	0.6	3.6	-6.6	0.4	0.9	1.3	0.1
Q2	1.9	0.5	6.8	-4.2	1.4	1.4	1.1	2.3
Q3	1.9	-1.0	5.2	-3.1	1.6	1.8	1.2	2.4
<i>contributions to quarter-on-quarter percentage changes in value added; percentage points</i>								
2009 Q3	0.4	0.0	0.4	-0.1	0.0	0.0	0.1	-
Q4	0.1	0.0	0.1	-0.1	0.0	0.0	0.1	-
2010 Q1	0.6	0.0	0.4	-0.1	0.1	0.1	0.1	-
Q2	0.8	0.0	0.4	0.0	0.2	0.2	0.1	-
Q3	0.3	0.0	0.1	0.0	0.1	0.2	0.1	-
<i>contributions to annual percentage changes in value added; percentage points</i>								
2006	3.0	0.0	0.7	0.2	0.6	1.1	0.3	-
2007	3.1	0.0	0.7	0.2	0.7	1.1	0.4	-
2008	0.7	0.0	-0.4	-0.1	0.3	0.5	0.4	-
2009	-4.2	0.0	-2.6	-0.4	-1.1	-0.4	0.3	-
2009 Q3	-4.1	0.0	-2.6	-0.4	-1.1	-0.4	0.2	-
Q4	-2.3	0.0	-1.3	-0.4	-0.7	-0.2	0.3	-
2010 Q1	0.9	0.0	0.6	-0.4	0.1	0.3	0.3	-
Q2	1.9	0.0	1.2	-0.3	0.3	0.4	0.3	-
Q3	1.9	0.0	0.9	-0.2	0.3	0.5	0.3	-

Sources: Eurostat and ECB calculations.

1) Annual data are not working day-adjusted.

## 5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

### 3. Industrial production

	Total		Industry excluding construction								Construction	
	% of total <sup>1)</sup>	Total (s.a.; index: 2005 = 100)	Total		Industry excluding construction and energy					Energy		
			Manu- facturing	Total	Interme- diate goods	Capital goods	Consumer goods			Total	Non-durable	
							Total	Durable	Non-durable			
1	2	3	4	5	6	7	8	9	10	11	12	
2007	3.2	108.2	3.7	4.2	4.3	3.8	6.6	2.4	1.3	2.5	-0.9	1.3
2008	-2.6	106.3	-1.8	-1.9	-2.0	-3.5	-0.2	-2.1	-5.7	-1.5	0.3	-5.5
2009	-13.8	90.5	-14.9	-15.9	-16.0	-19.2	-20.8	-5.0	-17.4	-3.0	-5.3	-8.3
2009 Q4	-7.4	92.2	-7.4	-8.0	-8.1	-6.7	-13.8	-2.7	-10.1	-1.5	-3.6	-6.1
2010 Q1	1.8	94.3	4.7	4.9	4.9	8.0	2.5	3.1	0.0	3.5	3.2	-10.0
Q2	6.1	96.6	9.0	9.2	9.3	13.9	8.9	3.7	4.9	3.5	5.4	-3.9
Q3	3.8	97.6	7.0	7.7	7.8	9.4	9.8	3.3	3.8	3.2	1.5	-8.0
2010 June	6.9	96.9	8.2	8.8	8.8	11.8	8.9	4.3	7.7	3.8	3.4	1.9
July	4.1	97.0	7.4	7.8	8.0	9.7	9.5	3.9	5.0	3.7	2.2	-7.8
Aug.	4.9	98.2	8.5	9.5	9.6	11.5	12.4	4.4	6.7	4.2	1.1	-8.8
Sep.	2.7	97.5	5.6	6.1	6.2	7.6	8.3	1.7	1.0	1.8	1.2	-7.7
Oct.	4.4	98.3	7.1	7.7	7.9	7.8	12.2	3.3	2.0	3.4	1.2	-5.9
Nov.	.	99.4	7.4	7.7	7.7	7.9	12.0	2.4	-0.1	2.7	4.9	.
<i>month-on-month percentage changes (s.a.)</i>												
2010 June	0.9	-	-0.1	-0.1	0.0	-0.4	0.4	0.1	-0.7	0.3	-1.7	2.0
July	-1.3	-	0.2	-0.1	0.2	0.0	0.4	0.1	-0.6	0.2	0.2	-3.6
Aug.	0.8	-	1.2	1.2	1.1	1.6	3.3	0.0	1.5	-0.1	-0.2	-0.3
Sep.	-0.5	-	-0.7	-1.0	-0.5	-0.9	-1.0	-0.8	-2.2	-0.5	-1.1	-1.6
Oct.	0.7	-	0.7	0.9	1.0	0.3	1.7	0.4	0.0	0.4	1.0	0.3
Nov.	.	-	1.2	0.9	0.2	1.6	1.4	0.0	0.1	0.0	1.5	.

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

	Industrial new orders		Industrial turnover		Retail sales (excluding automotive fuel)							New passenger car registrations	
	Manufacturing <sup>2)</sup> (current prices)		Manufacturing (current prices)		Current prices	Constant prices						Total (s.a.; thousands) <sup>3)</sup>	Total
	Total (s.a.; index: 2005 = 100)	Total	Total (s.a.; index: 2005 = 100)	Total	Total	Total (s.a.; index: 2005 = 100)	Total	Food, beverages, tobacco	Non-food				
									Textiles, clothing, footwear	Household equipment			
1	2	3	4	5	6	7	8	9	10	11	12	13	
% of total <sup>1)</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	43.0	57.0	10.1	14.3		
2007	119.8	8.6	114.9	6.5	2.6	104.3	1.8	0.0	3.1	4.1	3.1	968	-0.8
2008	113.0	-5.4	116.7	1.8	1.7	103.4	-0.8	-1.9	-0.1	-1.8	-1.9	896	-7.8
2009	87.5	-22.7	95.4	-18.5	-2.8	101.5	-1.9	-1.7	-2.0	-1.3	-4.0	926	3.4
2009 Q4	92.1	-2.7	97.4	-9.2	-1.6	101.8	-0.7	-0.5	-0.8	0.4	-1.1	963	17.9
2010 Q1	95.0	13.8	100.9	6.3	0.8	102.3	0.9	1.5	0.8	3.5	0.7	892	7.4
Q2	102.4	22.6	104.2	12.2	1.2	102.5	1.0	0.3	1.6	-0.3	2.9	822	-12.7
Q3	105.8	16.0	105.9	10.1	2.3	103.0	1.9	0.7	2.9	5.3	1.5	823	-17.0
2010 June	105.4	22.5	105.9	13.8	2.0	102.8	1.7	0.8	2.5	0.7	3.6	845	-13.1
July	103.7	12.2	104.9	7.5	2.2	102.9	1.6	2.2	1.5	4.7	0.8	782	-18.4
Aug.	109.1	24.7	107.5	14.9	2.2	103.1	1.9	-1.1	4.5	7.7	2.9	829	-20.5
Sep.	104.6	13.5	105.2	9.1	2.4	103.0	2.0	1.0	2.9	4.0	0.9	856	-12.8
Oct.	106.1	14.8	107.5	8.4	2.3	103.2	1.8	1.4	2.1	2.0	0.4	796	-14.9
Nov.	.	.	.	.	1.2	102.3	0.3	-0.1	0.6	.	.	871	-10.4
<i>month-on-month percentage changes (s.a.)</i>													
2010 July	-	-1.6	-	-1.0	0.1	-	0.1	0.6	-0.2	2.2	-1.1	-	-7.5
Aug.	-	5.2	-	2.5	0.2	-	0.2	-0.9	1.0	0.5	1.0	-	6.0
Sep.	-	-4.2	-	-2.1	-0.1	-	-0.1	0.4	-0.5	-1.2	-0.8	-	3.2
Oct.	-	1.4	-	2.2	0.3	-	0.2	0.4	0.0	0.1	-0.1	-	-7.0
Nov.	-	.	-	.	-0.8	-	-0.9	-0.9	-0.8	.	.	-	9.4

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

1) In 2005.

2) Includes manufacturing industries working mainly on the basis of orders, which represented 61.2% of total manufacturing in 2005.

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

**5.2 Output and demand**

 (percentage balances,<sup>1)</sup> unless otherwise indicated; seasonally adjusted)

**5. Business<sup>2)</sup> and Consumer Surveys**

	Economic sentiment indicator <sup>3)</sup> (long-term average = 100)	Manufacturing industry					Consumer confidence indicator				
		Industrial confidence indicator				Capacity utilisation <sup>4)</sup> (%)	Total <sup>5)</sup>	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total <sup>5)</sup>	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
2007	109.2	5	5	5	13	84.2	-5	-2	-4	5	-8
2008	93.5	-9	-15	11	-2	81.8	-18	-10	-25	24	-14
2009	80.8	-28	-56	14	-15	71.1	-25	-7	-26	56	-10
2010	100.8	-5	-25	1	11	.	-14	-5	-12	31	-8
2009 Q4	91.9	-19	-50	7	1	71.7	-17	-3	-11	48	-7
2010 Q1	96.6	-12	-41	2	7	73.9	-17	-4	-11	46	-7
Q2	99.3	-6	-28	0	9	76.3	-17	-6	-18	34	-9
Q3	102.2	-3	-19	0	10	77.4	-12	-6	-11	23	-8
Q4	105.0	2	-11	0	16	.	-10	-5	-9	21	-7
2010 July	101.1	-4	-21	0	9	77.2	-14	-7	-14	27	-9
Aug.	102.3	-3	-18	0	10	-	-11	-5	-9	23	-8
Sep.	103.2	-2	-16	0	12	-	-11	-5	-11	20	-8
Oct.	103.8	0	-13	1	14	77.6	-11	-6	-10	22	-6
Nov.	105.1	1	-12	0	15	-	-9	-5	-7	20	-6
Dec.	106.2	4	-7	0	18	-	-11	-6	-9	21	-8
	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
	Total <sup>5)</sup>	Order books	Employment expectations	Total <sup>5)</sup>	Present business situation	Volume of stocks	Expected business situation	Total <sup>5)</sup>	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2007	0	-7	7	1	5	15	13	20	16	19	24
2008	-13	-20	-6	-7	-6	17	2	2	-5	4	7
2009	-31	-40	-22	-15	-21	11	-15	-16	-22	-16	-9
2010	-27	-38	-16	-3	-4	8	2	5	3	5	8
2009 Q4	-28	-40	-16	-12	-19	10	-7	-4	-8	-8	3
2010 Q1	-27	-37	-17	-7	-9	8	-2	0	-4	-2	7
Q2	-28	-40	-16	-4	-5	8	0	4	1	4	8
Q3	-28	-40	-16	-3	-4	7	3	7	5	8	8
Q4	-26	-36	-16	1	1	8	9	9	9	9	10
2010 July	-29	-42	-16	-4	-6	7	1	7	5	9	6
Aug.	-29	-38	-19	-3	-5	7	1	7	6	8	8
Sep.	-26	-39	-13	-1	-3	6	6	8	5	8	10
Oct.	-25	-35	-15	-1	0	10	7	8	7	7	11
Nov.	-26	-36	-16	-2	-5	8	8	10	9	11	10
Dec.	-26	-36	-16	5	8	6	13	10	9	10	10

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

- 1) Difference between the percentages of respondents giving positive and negative replies.
- 2) From May 2010 onwards, data refer to the new version of the classification of economic activities in the European Union ("NACE Revision 2").
- 3) 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 for the economic sentiment indicator of above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period 1990 to 2008.
- 4) Data are collected in January, April, July and October each year. The quarterly figures shown are averages of two successive surveys. Annual data are derived from quarterly averages.
- 5) The confidence indicators are calculated as simple averages of the components shown; the assessments of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.

## 5.3 Labour markets <sup>1)</sup>

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

### 1. Employment in terms of persons employed

	Whole economy		By employment status		By economic activity					
	Total (millions)	Total	Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total <sup>2)</sup>	100.0	100.0	85.4	14.6	3.8	17.1	7.5	25.5	16.1	30.0
	1	2	3	4	5	6	7	8	9	10
2007	146.831	1.8	2.0	0.6	-1.7	0.3	3.6	1.9	4.3	1.3
2008	147.963	0.8	1.0	-0.4	-1.7	0.0	-2.1	1.2	2.1	1.2
2009	145.227	-1.8	-1.8	-2.2	-2.2	-5.3	-6.6	-1.7	-2.1	1.4
2009 Q4	144.454	-2.1	-2.1	-1.9	-1.5	-6.4	-5.7	-2.1	-1.9	1.1
2010 Q1	144.486	-1.2	-1.3	-0.5	-0.7	-5.5	-4.7	-1.4	-0.2	1.5
Q2	144.597	-0.6	-0.5	-0.9	-0.8	-4.0	-3.3	-1.0	1.3	1.3
Q3	144.549	-0.1	0.0	-1.0	-0.6	-2.7	-2.8	-0.6	2.0	1.2
	<i>quarter-on-quarter percentage changes</i>									
2009 Q4	-0.287	-0.2	-0.2	-0.1	0.6	-1.2	-0.5	-0.5	0.2	0.3
2010 Q1	0.031	0.0	0.0	0.3	0.0	-0.8	-1.0	-0.1	0.5	0.5
Q2	0.111	0.1	0.2	-0.7	-1.1	-0.3	-0.2	-0.1	1.0	0.2
Q3	-0.047	0.0	0.0	-0.4	-0.2	-0.4	-1.1	0.0	0.3	0.2

### 2. Employment in terms of hours worked

	Whole economy		By employment status		By economic activity					
	Total (millions)	Total	Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total <sup>2)</sup>	100.0	100.0	80.5	19.5	5.0	17.1	8.5	26.9	15.7	26.9
	1	2	3	4	5	6	7	8	9	10
2007	237,118.9	1.7	2.0	0.7	-2.4	0.6	3.6	1.9	4.4	1.0
2008	238,672.4	0.7	1.0	-0.7	-1.9	-0.5	-1.8	0.9	2.5	1.4
2009	230,835.9	-3.3	-3.4	-2.9	-2.6	-8.9	-8.0	-2.7	-3.4	1.1
2009 Q4	57,575.5	-2.7	-2.8	-2.0	-2.3	-7.2	-6.8	-2.4	-2.6	1.0
2010 Q1	57,644.9	-0.6	-0.7	-0.2	-2.9	-3.3	-4.3	-0.6	0.0	2.0
Q2	57,823.8	0.2	0.3	-0.3	-2.3	-0.4	-2.9	-0.4	1.6	1.7
Q3	57,902.9	0.6	0.8	0.0	-2.3	0.7	-2.8	0.1	2.4	1.6
	<i>quarter-on-quarter percentage changes</i>									
2009 Q4	35.9	0.1	0.1	0.1	-0.2	-0.3	-0.8	0.0	0.7	0.3
2010 Q1	69.4	0.1	0.1	0.2	-1.3	0.0	-0.9	0.0	0.2	0.8
Q2	178.9	0.3	0.4	-0.1	-0.2	0.6	0.0	0.1	0.9	0.2
Q3	79.1	0.1	0.2	-0.2	-0.8	0.4	-1.2	0.1	0.5	0.3

### 3. Hours worked per person employed

	Whole economy		By employment status		By economic activity					
	Total (thousands)	Total	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
	1	2	3	4	5	6	7	8	9	10
2007	1.615	-0.1	0.0	0.0	-0.8	0.3	0.0	0.0	0.1	-0.2
2008	1.613	-0.1	0.0	-0.4	-0.2	-0.5	0.4	-0.3	0.3	0.2
2009	1.589	-1.5	-1.6	-0.7	-0.4	-3.8	-1.6	-1.0	-1.3	-0.3
2009 Q4	0.399	-0.6	-0.8	0.0	-0.9	-0.9	-1.1	-0.3	-0.7	-0.1
2010 Q1	0.399	0.6	0.6	0.3	-2.2	2.3	0.5	0.8	0.2	0.5
Q2	0.400	0.8	0.8	0.6	-1.6	3.7	0.3	0.6	0.3	0.4
Q3	0.401	0.8	0.8	0.9	-1.7	3.5	0.0	0.7	0.4	0.4

Source: ECB calculations based on Eurostat data.

1) Data for employment are based on the ESA 95.

2) In 2009.

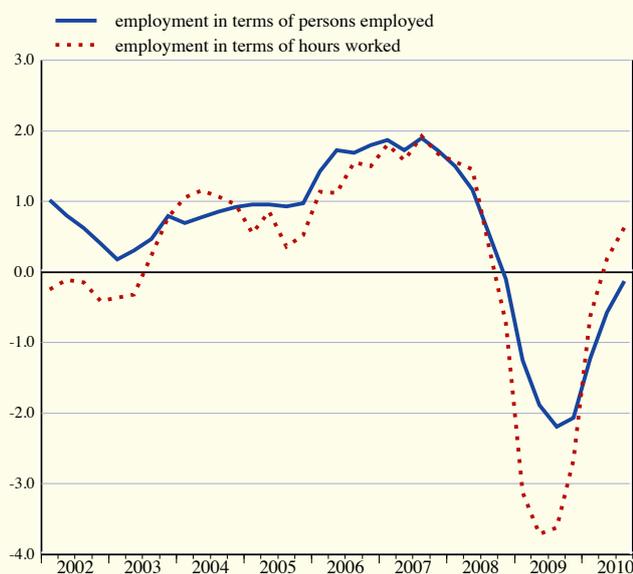
### 5.3 Labour markets

(seasonally adjusted, unless otherwise indicated)

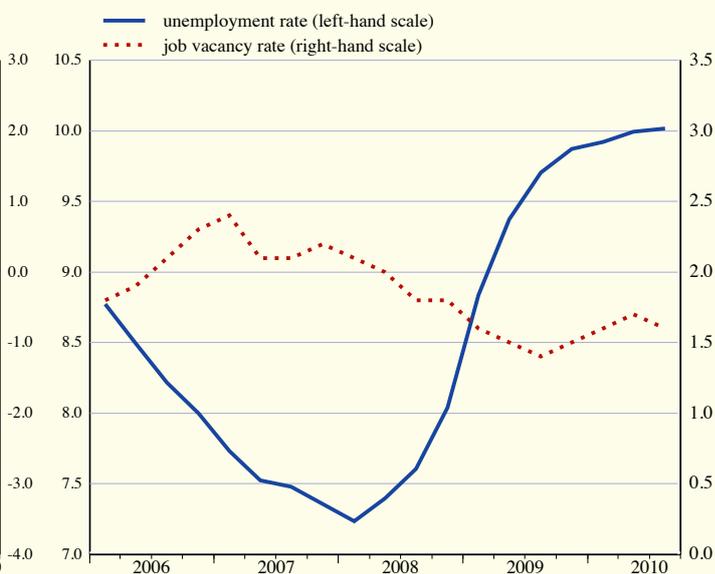
#### 4. Unemployment and job vacancies<sup>1)</sup>

	Unemployment										Job vacancy rate <sup>2)</sup>
	Total		By age <sup>3)</sup>				By gender <sup>4)</sup>				
	Millions	% of labour force	Adult		Youth		Male		Female		
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	
% of total <sup>5)</sup>										% of total posts	
	1	2	3	4	5	6	7	8	9	10	11
2006	12.901	8.4	10.070	7.4	2.831	16.5	6.398	7.5	6.503	9.5	2.0
2007	11.706	7.5	9.142	6.6	2.563	15.1	5.753	6.7	5.953	8.6	2.2
2008	11.906	7.6	9.269	6.6	2.636	15.5	6.001	6.9	5.904	8.4	1.9
2009	14.905	9.4	11.670	8.3	3.235	19.5	8.027	9.3	6.878	9.6	1.5
2009 Q3	15.313	9.7	11.990	8.5	3.323	20.1	8.283	9.6	7.029	9.8	1.4
Q4	15.568	9.9	12.293	8.7	3.275	20.1	8.465	9.8	7.102	9.9	1.5
2010 Q1	15.649	9.9	12.397	8.8	3.252	20.1	8.479	9.8	7.170	10.0	1.6
Q2	15.789	10.0	12.547	8.8	3.242	20.2	8.509	9.9	7.281	10.2	1.7
Q3	15.831	10.0	12.627	8.9	3.203	20.1	8.509	9.9	7.321	10.2	1.6
2010 June	15.780	10.0	12.576	8.9	3.205	20.0	8.501	9.9	7.280	10.1	-
July	15.816	10.0	12.631	8.9	3.185	20.0	8.485	9.8	7.332	10.2	-
Aug.	15.809	10.0	12.620	8.9	3.188	20.1	8.526	9.9	7.282	10.1	-
Sep.	15.867	10.0	12.630	8.9	3.237	20.3	8.517	9.9	7.350	10.2	-
Oct.	15.963	10.1	12.660	8.9	3.303	20.5	8.603	10.0	7.360	10.2	-
Nov.	15.924	10.1	12.588	8.9	3.336	20.7	8.582	9.9	7.342	10.2	-

#### C28 Employment - persons employed and hours worked (annual percentage changes)



#### C29 Unemployment and job vacancy<sup>2)</sup> rates



Source: Eurostat.

- 1) Data for unemployment refer to persons and follow ILO recommendations.
- 2) Industry, construction and services (excluding households as employers and extra-territorial organisations and bodies); non-seasonally adjusted.
- 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.
- 5) In 2009.



# GOVERNMENT FINANCE

## 6.1 Revenue, expenditure and deficit/surplus <sup>1)</sup> (as a percentage of GDP)

### 1. Euro area – revenue

	Current revenue											Capital revenue		Memo item: Fiscal burden <sup>2)</sup>
	Total	Direct taxes				Indirect taxes	Received by EU institutions	Social contributions			Sales	Capital taxes		
		Households	Corporations	Employers	Employees									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	45.7	45.4	12.2	9.4	2.8	13.5	0.5	15.6	8.1	4.7	2.1	0.2	0.3	41.6
2002	45.1	44.8	11.8	9.2	2.5	13.5	0.4	15.6	8.1	4.6	2.1	0.3	0.3	41.1
2003	45.0	44.3	11.4	9.0	2.3	13.5	0.4	15.7	8.2	4.6	2.1	0.6	0.5	41.1
2004	44.5	44.0	11.3	8.7	2.5	13.5	0.3	15.5	8.1	4.5	2.1	0.5	0.4	40.7
2005	44.8	44.3	11.5	8.7	2.7	13.7	0.3	15.4	8.1	4.5	2.2	0.5	0.3	40.9
2006	45.3	45.0	12.1	8.9	3.0	13.8	0.3	15.3	8.0	4.5	2.1	0.3	0.3	41.4
2007	45.4	45.1	12.4	9.1	3.2	13.8	0.3	15.1	8.0	4.4	2.1	0.3	0.3	41.5
2008	45.0	44.8	12.2	9.3	2.8	13.3	0.3	15.3	8.0	4.5	2.1	0.2	0.3	41.1
2009	44.6	44.2	11.4	9.3	1.9	13.1	0.3	15.7	8.2	4.5	2.3	0.3	0.4	40.5

### 2. Euro area – expenditure

	Current expenditure									Capital expenditure			Memo item: Primary expenditure <sup>3)</sup>	
	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments		Subsidies	Paid by EU institutions	Investment	Capital transfers	Paid by EU institutions		
						7	8							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2001	47.5	43.6	10.3	4.8	3.8	24.7	21.7	1.9	0.5	3.9	2.5	1.4	0.0	43.7
2002	47.7	43.9	10.4	4.9	3.5	25.1	22.2	1.9	0.5	3.8	2.4	1.4	0.1	44.2
2003	48.1	44.1	10.5	5.0	3.3	25.4	22.5	1.9	0.5	3.9	2.5	1.4	0.1	44.8
2004	47.5	43.5	10.4	5.0	3.1	25.1	22.3	1.7	0.5	3.9	2.5	1.5	0.1	44.4
2005	47.3	43.4	10.4	5.1	3.0	25.0	22.3	1.7	0.5	3.9	2.5	1.4	0.0	44.3
2006	46.7	42.9	10.2	5.0	2.9	24.8	22.0	1.7	0.5	3.8	2.5	1.4	0.0	43.8
2007	46.0	42.2	10.0	5.0	3.0	24.3	21.6	1.6	0.4	3.8	2.6	1.2	0.0	43.1
2008	47.0	43.2	10.1	5.1	3.0	24.9	22.0	1.6	0.4	3.8	2.6	1.3	0.0	44.0
2009	50.8	46.6	10.8	5.6	2.8	27.3	24.3	1.8	0.5	4.2	2.8	1.4	0.0	48.0

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

	Deficit (-)/surplus (+)					Primary deficit (-)/surplus (+)	Government consumption <sup>4)</sup>							
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Collective consumption	Individual consumption
2001	-1.9	-1.7	-0.4	-0.1	0.3	1.9	19.8	10.3	4.8	4.9	1.8	2.1	8.2	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	8.3	12.0
2003	-3.1	-2.4	-0.5	-0.2	0.0	0.2	20.5	10.5	5.0	5.2	1.9	2.1	8.3	12.2
2004	-3.0	-2.5	-0.4	-0.3	0.1	0.1	20.4	10.4	5.0	5.1	1.9	2.1	8.3	12.1
2005	-2.6	-2.2	-0.3	-0.2	0.2	0.4	20.4	10.4	5.1	5.1	1.9	2.2	8.2	12.3
2006	-1.4	-1.5	-0.1	-0.2	0.4	1.5	20.3	10.2	5.0	5.2	1.9	2.1	8.1	12.2
2007	-0.7	-1.2	0.0	-0.1	0.5	2.3	20.0	10.0	5.0	5.2	1.9	2.1	7.9	12.1
2008	-2.0	-2.1	-0.2	-0.2	0.4	1.0	20.5	10.1	5.1	5.3	1.9	2.1	8.1	12.4
2009	-6.3	-5.1	-0.5	-0.3	-0.4	-3.4	22.2	10.8	5.6	5.8	2.0	2.3	8.8	13.4

### 4. Euro area countries – deficit (-)/surplus (+) <sup>5)</sup>

	BE	DE	EE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2006	0.2	-1.6	2.4	2.9	-5.7	2.0	-2.3	-3.4	-1.2	1.4	-2.7	0.5	-1.5	-4.1	-1.3	-3.2	4.0
2007	-0.3	0.3	2.5	0.0	-6.4	1.9	-2.7	-1.5	3.4	3.7	-2.3	0.2	-0.4	-2.8	0.0	-1.8	5.2
2008	-1.3	0.1	-2.8	-7.3	-9.4	-4.2	-3.3	-2.7	0.9	3.0	-4.8	0.6	-0.5	-2.9	-1.8	-2.1	4.2
2009	-6.0	-3.0	-1.7	-14.4	-15.4	-11.1	-7.5	-5.3	-6.0	-0.7	-3.8	-5.4	-3.5	-9.3	-5.8	-7.9	-2.5

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

- 1) Data refer to the Euro 16. The concepts "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 <sup>1)</sup>

(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 <sup>2)</sup>				Other creditors <sup>3)</sup>
						Total	MFIs	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
2000	69.2	2.7	13.2	3.7	49.6	43.9	22.1	12.3	9.5	25.3
2001	68.2	2.8	12.4	4.0	48.9	42.1	20.7	11.0	10.4	26.1
2002	67.9	2.7	11.8	4.6	48.9	40.6	19.5	10.5	10.6	27.3
2003	69.1	2.1	12.4	5.0	49.6	39.8	19.7	11.0	9.1	29.2
2004	69.5	2.2	12.0	5.0	50.3	38.4	18.6	10.7	9.0	31.1
2005	70.3	2.4	12.1	4.7	51.1	36.5	17.4	11.1	8.0	33.8
2006	68.4	2.4	11.7	4.1	50.2	34.6	17.5	9.3	7.8	33.8
2007	66.1	2.2	11.1	4.2	48.7	32.7	16.9	8.6	7.3	33.4
2008	69.8	2.3	11.3	6.7	49.5	32.7	17.4	7.8	7.5	37.1
2009	79.2	2.4	12.3	8.6	55.9	36.8	20.2	8.9	7.7	42.4

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

	Total	Issued by: <sup>4)</sup>				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currencies	Other currencies
2000	69.2	58.1	5.8	4.8	0.4	6.5	62.7	6.2	13.4	27.8	28.0	67.4	1.8
2001	68.2	57.0	6.0	4.7	0.4	7.0	61.1	5.3	13.7	26.6	27.9	66.6	1.5
2002	67.9	56.6	6.2	4.7	0.4	7.6	60.3	5.2	15.5	25.3	27.2	66.7	1.3
2003	69.1	56.9	6.5	5.1	0.6	7.8	61.3	5.0	14.9	26.0	28.2	68.1	0.9
2004	69.5	57.3	6.6	5.1	0.4	7.8	61.6	4.6	14.8	26.2	28.5	68.6	0.9
2005	70.3	57.8	6.7	5.2	0.5	7.9	62.4	4.6	14.9	25.6	29.8	69.3	1.0
2006	68.4	56.1	6.5	5.3	0.5	7.4	61.0	4.4	14.4	24.1	29.9	67.9	0.6
2007	66.1	54.1	6.2	5.2	0.5	7.4	58.7	4.4	14.6	23.5	28.0	65.6	0.5
2008	69.8	57.5	6.6	5.2	0.4	10.2	59.6	4.5	17.8	23.3	28.6	68.9	0.9
2009	79.2	65.3	7.6	5.7	0.6	12.2	66.9	4.6	19.6	27.1	32.4	78.0	1.2

## 3. Euro area countries

	BE	DE	EE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2006	88.1	67.6	4.4	24.8	106.1	39.6	63.7	106.6	64.6	6.7	63.4	47.4	62.1	63.9	26.7	30.5	39.7
2007	84.2	64.9	3.7	25.0	105.0	36.1	63.8	103.6	58.3	6.7	61.7	45.3	59.3	62.7	23.4	29.6	35.2
2008	89.6	66.3	4.6	44.3	110.3	39.8	67.5	106.3	48.3	13.6	63.1	58.2	62.5	65.3	22.5	27.8	34.1
2009	96.2	73.4	7.2	65.5	126.8	53.2	78.1	116.0	58.0	14.5	68.6	60.8	67.5	76.1	35.4	35.4	43.8

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

- 1) Data refer to the Euro 16. 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.

### 6.3 Change in debt <sup>1)</sup> (as a percentage of GDP)

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

	Total	Source of change			Financial instruments				Holders			Other creditors <sup>6)</sup>
		Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>5)</sup>	MFI's	Other financial corporations	
	1	2	3	4	5	6	7	8	9	10	11	12
2001	1.9	1.9	-0.1	0.1	0.2	-0.2	0.5	1.5	0.0	-0.5	-0.8	1.9
2002	2.1	2.7	-0.5	-0.1	0.0	-0.2	0.7	1.6	0.0	-0.5	-0.1	2.1
2003	3.1	3.3	-0.2	0.0	-0.6	0.9	0.6	2.1	0.4	0.8	0.8	2.7
2004	3.1	3.2	-0.1	0.0	0.2	0.1	0.1	2.7	0.1	-0.3	0.1	3.0
2005	3.3	3.0	0.2	0.0	0.3	0.5	-0.1	2.6	-0.5	-0.6	0.8	3.8
2006	1.6	1.5	0.1	0.0	0.2	0.2	-0.4	1.5	-0.1	1.0	-1.2	1.7
2007	1.1	1.1	0.0	0.0	-0.1	0.0	0.3	1.0	-0.2	0.2	-0.3	1.3
2008	5.2	5.1	0.1	0.0	0.1	0.4	2.6	2.0	0.7	0.9	-0.5	4.5
2009	7.1	7.3	-0.2	0.0	0.1	0.6	1.6	4.8	3.0	2.2	0.8	4.1

#### 2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) <sup>7)</sup>	Deficit-debt adjustment <sup>8)</sup>											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other <sup>9)</sup>
				Total	Currency and deposits	Loans	Securities <sup>10)</sup>	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001	1.9	-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	-0.1	-0.4	0.1	-0.5	-0.1	-0.1	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	0.2	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.1
2005	3.3	-2.6	0.7	0.6	0.3	0.1	0.1	0.1	-0.3	0.2	0.2	0.0	0.0	-0.1
2006	1.6	-1.4	0.2	0.3	0.3	-0.1	0.3	-0.2	-0.4	0.1	0.1	0.0	0.0	-0.2
2007	1.1	-0.7	0.5	0.6	0.2	0.0	0.3	0.1	-0.2	0.2	0.0	0.0	0.0	-0.2
2008	5.2	-2.0	3.2	3.0	0.8	0.7	0.7	0.8	-0.1	0.5	0.1	0.0	0.0	0.1
2009	7.1	-6.3	0.9	1.0	0.3	0.0	0.3	0.4	-0.3	0.5	-0.2	0.0	0.0	0.0

Source: ECB.

- 1) Data refer to the Euro 16 and are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e.  $[\text{debt}(t) - \text{debt}(t-1)] \div \text{GDP}(t)$ .
- 2) The borrowing requirement is by definition equal to transactions in debt.
- 3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
- 4) Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 5) Holders resident in the country whose government has issued the debt.
- 6) Includes residents of euro area countries other than the country whose government has issued the debt.
- 7) Including proceeds from sales of UMTS licences.
- 8) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 9) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
- 10) Excluding financial derivatives.

**6.4 Quarterly revenue, expenditure and deficit/surplus <sup>1)</sup>**  
(as a percentage of GDP)

**1. Euro area – quarterly revenue**

	Total		Current revenue					Capital revenue		Memo item: Fiscal burden <sup>2)</sup>
	1	2	Direct taxes	Indirect taxes	Social contributions	Sales	Property income	8	Capital taxes	
2004 Q2	44.7	43.9	11.9	12.9	15.3	2.0	1.1	0.8	0.6	40.7
2004 Q3	42.8	42.3	10.7	12.8	15.3	1.9	0.7	0.5	0.3	39.1
2004 Q4	48.9	48.0	12.9	14.2	16.1	2.9	0.7	1.0	0.4	43.7
2005 Q1	42.0	41.5	10.0	13.0	15.2	1.7	0.6	0.5	0.3	38.5
2005 Q2	44.3	43.7	11.5	13.2	15.1	2.0	1.1	0.6	0.3	40.1
2005 Q3	43.5	42.8	11.1	13.0	15.2	1.9	0.7	0.7	0.3	39.6
2005 Q4	49.0	48.2	13.3	14.2	16.1	2.9	0.8	0.7	0.3	43.9
2006 Q1	42.4	42.0	10.3	13.3	15.1	1.7	0.8	0.4	0.3	38.9
2006 Q2	45.3	44.9	12.2	13.5	15.1	1.9	1.3	0.5	0.3	41.0
2006 Q3	43.8	43.3	11.6	13.0	15.1	2.0	0.8	0.5	0.3	40.0
2006 Q4	49.3	48.7	14.0	14.2	15.8	2.9	0.9	0.6	0.3	44.3
2007 Q1	42.1	41.8	10.2	13.5	14.7	1.7	0.9	0.4	0.3	38.7
2007 Q2	45.5	45.1	12.7	13.5	15.0	1.8	1.4	0.4	0.3	41.4
2007 Q3	43.6	43.2	12.2	12.8	14.8	1.9	0.8	0.5	0.3	40.0
2007 Q4	49.6	49.1	14.4	14.1	15.7	3.0	0.9	0.6	0.3	44.5
2008 Q1	42.3	42.0	10.7	12.9	14.8	1.7	1.1	0.3	0.2	38.6
2008 Q2	44.9	44.6	12.6	12.8	15.0	1.9	1.5	0.4	0.3	40.7
2008 Q3	43.3	42.9	11.9	12.5	15.0	1.9	0.8	0.3	0.3	39.7
2008 Q4	49.0	48.5	13.6	13.6	16.3	3.0	1.1	0.5	0.3	43.8
2009 Q1	42.0	41.9	10.2	12.5	15.4	1.8	1.1	0.2	0.2	38.4
2009 Q2	44.4	43.8	11.5	12.6	15.5	2.0	1.4	0.6	0.5	40.1
2009 Q3	42.7	42.3	11.0	12.3	15.5	2.0	0.7	0.3	0.3	39.1
2009 Q4	48.7	48.0	12.7	13.7	16.4	3.2	0.9	0.7	0.5	43.3
2010 Q1	41.6	41.4	10.0	12.3	15.4	1.8	0.9	0.2	0.2	38.0
2010 Q2	43.8	43.3	11.5	12.4	15.4	1.9	1.3	0.5	0.3	39.5

**2. Euro area – quarterly expenditure and deficit/surplus**

	Total		Current expenditure						Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
	1	2	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits		Investment	Capital transfers			
							7	8					
2004 Q2	46.6	43.2	10.3	4.8	3.3	24.7	21.4	1.3	3.4	2.3	1.1	-1.9	1.4
2004 Q3	46.0	42.6	9.9	4.7	3.1	24.8	21.4	1.3	3.4	2.4	1.0	-3.2	-0.1
2004 Q4	50.8	45.6	10.9	5.7	2.9	26.0	22.6	1.4	5.2	3.1	2.1	-1.9	1.0
2005 Q1	46.8	43.0	10.2	4.6	3.1	25.1	21.4	1.2	3.7	1.9	1.8	-4.8	-1.7
2005 Q2	46.1	42.8	10.2	4.9	3.2	24.5	21.3	1.1	3.4	2.3	1.1	-1.9	1.3
2005 Q3	45.7	42.3	9.9	4.8	3.0	24.6	21.3	1.2	3.4	2.5	1.0	-2.2	0.8
2005 Q4	50.5	45.7	11.1	5.8	2.7	26.0	22.5	1.3	4.8	3.1	1.7	-1.5	1.2
2006 Q1	45.3	42.1	10.0	4.6	3.0	24.6	21.1	1.2	3.1	1.9	1.2	-2.9	0.0
2006 Q2	45.5	42.2	10.2	4.9	3.1	24.0	21.0	1.1	3.2	2.3	0.9	-0.1	2.9
2006 Q3	45.3	41.9	9.8	4.7	2.9	24.5	21.1	1.2	3.4	2.4	1.0	-1.5	1.4
2006 Q4	50.3	45.0	10.7	5.8	2.7	25.8	22.2	1.4	5.3	3.2	2.2	-1.1	1.6
2007 Q1	44.2	41.1	9.8	4.5	2.9	23.9	20.4	1.2	3.2	2.0	1.2	-2.1	0.8
2007 Q2	44.6	41.4	9.9	4.8	3.2	23.5	20.5	1.1	3.2	2.3	0.8	0.9	4.1
2007 Q3	44.5	41.1	9.5	4.7	3.0	23.9	20.6	1.2	3.4	2.5	0.9	-0.9	2.1
2007 Q4	50.3	45.2	10.6	5.8	2.8	26.0	22.2	1.5	5.1	3.4	1.7	-0.7	2.1
2008 Q1	44.6	41.5	9.7	4.6	3.0	24.1	20.5	1.2	3.2	2.0	1.2	-2.4	0.6
2008 Q2	45.3	42.0	10.1	5.0	3.2	23.7	20.6	1.1	3.3	2.3	1.0	-0.4	2.8
2008 Q3	45.6	42.0	9.7	4.8	3.1	24.4	21.2	1.2	3.5	2.5	1.0	-2.3	0.8
2008 Q4	52.0	46.9	11.0	6.1	2.8	27.0	23.1	1.4	5.1	3.4	1.6	-3.0	-0.3
2009 Q1	48.5	45.0	10.6	5.3	2.9	26.3	22.4	1.3	3.4	2.2	1.2	-6.4	-3.6
2009 Q2	50.1	46.1	10.9	5.5	3.2	26.6	23.1	1.3	4.0	2.7	1.2	-5.8	-2.6
2009 Q3	49.4	45.5	10.4	5.3	2.8	27.1	23.4	1.4	3.9	2.7	1.1	-6.7	-3.9
2009 Q4	54.9	49.6	11.5	6.4	2.5	29.2	24.9	1.5	5.4	3.5	1.9	-6.3	-3.7
2010 Q1	49.6	46.0	10.5	5.1	2.8	27.5	23.3	1.4	3.6	2.1	1.5	-8.1	-5.2
2010 Q2	49.0	45.5	10.7	5.4	3.0	26.4	22.9	1.3	3.4	2.5	1.1	-5.2	-2.2

Sources: ECB calculations based on Eurostat and national data.

- 1) The concepts "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, 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

(as a percentage of GDP)

### 1. Euro area – Maastricht debt by financial instrument<sup>1)</sup>

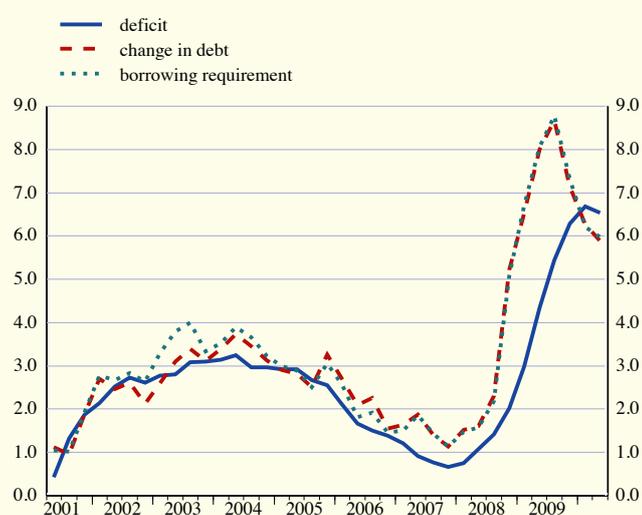
	Total 1	Financial instruments			
		Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2007 Q3	67.8	2.1	11.3	5.1	49.3
Q4	66.1	2.2	11.1	4.2	48.7
2008 Q1	67.1	2.1	11.4	5.0	48.6
Q2	67.5	2.1	11.5	4.9	49.0
Q3	67.7	2.1	11.4	5.5	48.7
Q4	69.8	2.3	11.3	6.7	49.5
2009 Q1	73.2	2.3	11.6	7.9	51.5
Q2	76.5	2.4	11.9	8.4	53.8
Q3	78.3	2.3	12.1	9.2	54.7
Q4	79.2	2.4	12.3	8.6	55.9
2010 Q1	81.0	2.4	12.5	8.4	57.6
Q2	82.4	2.4	13.2	8.0	58.8

### 2. Euro area – deficit-debt adjustment

	Change in debt 1	Deficit (-)/ surplus (+) 2	Deficit-debt adjustment							Memo item: Borrowing requirement 11	
			Total 3	Transactions in main financial assets held by general government				Valuation effects and other changes in volume 9	Other 10		
				Total 4	Currency and deposits 5	Loans 6	Securities 7				Shares and other equity 8
2007 Q3	-0.6	-0.9	-1.5	-1.4	-2.0	0.1	0.4	0.2	0.1	-0.2	-0.6
Q4	-3.3	-0.7	-4.0	-2.8	-2.1	0.0	-0.6	-0.2	0.0	-1.1	-3.3
2008 Q1	6.4	-2.4	4.0	3.1	1.9	-0.1	0.9	0.3	0.0	0.9	6.4
Q2	4.0	-0.4	3.6	3.9	1.9	0.3	1.3	0.5	0.1	-0.3	3.9
Q3	2.3	-2.3	0.0	-0.8	-1.6	0.0	0.3	0.5	0.4	0.4	1.8
Q4	8.2	-3.0	5.1	5.8	0.8	2.5	0.5	1.9	0.0	-0.7	8.2
2009 Q1	11.9	-6.4	5.4	6.7	5.2	-0.1	0.9	0.7	-1.3	0.0	13.1
Q2	9.9	-5.8	4.1	3.1	2.3	-0.6	0.2	1.2	0.6	0.5	9.3
Q3	4.8	-6.7	-1.9	-2.9	-3.2	0.7	0.0	-0.4	0.2	0.8	4.6
Q4	2.3	-6.3	-4.0	-2.5	-2.7	-0.1	0.1	0.2	-0.3	-1.2	2.5
2010 Q1	8.3	-8.1	0.2	0.8	0.8	-0.1	-0.3	0.3	-0.3	-0.3	8.6
Q2	8.3	-5.2	3.1	4.4	2.3	1.9	-0.2	0.4	0.0	-1.3	8.3

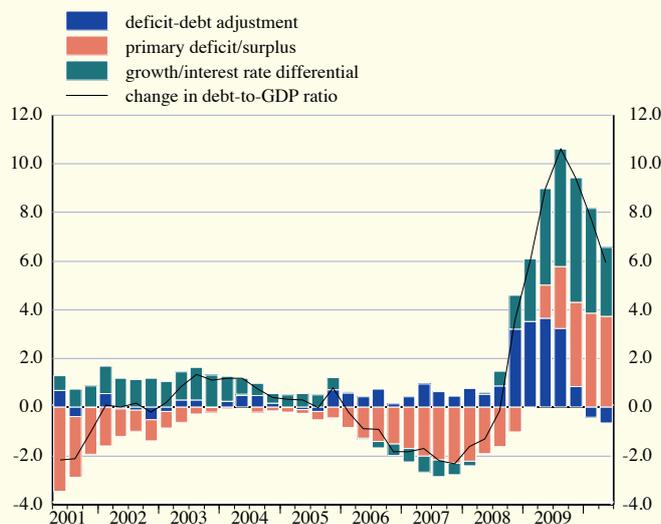
### C30 Deficit, borrowing requirement and change in debt

(four-quarter moving sum as a percentage of GDP)



### C31 Maastricht debt

(annual change in the debt-to-GDP ratio and underlying factors)



Sources: ECB calculations based on Eurostat and national data.

1) The stock data in quarter t are expressed as a percentage of the sum of GDP in t and the previous three quarters.



## EXTERNAL TRANSACTIONS AND POSITIONS

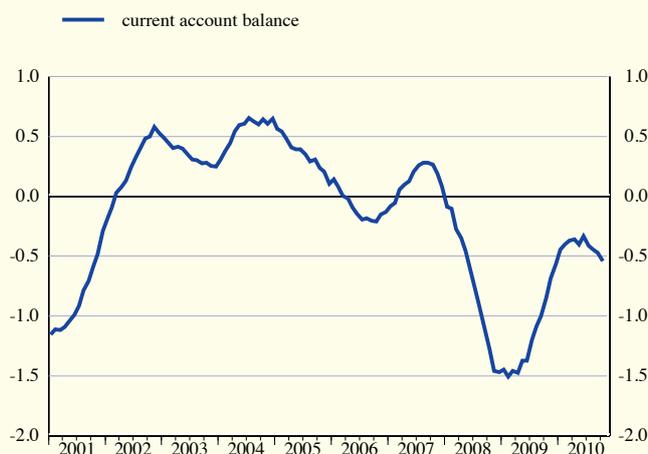
### 7.1 Summary balance of payments <sup>1)</sup>

(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
2007	10.7	45.6	46.9	6.3	-88.2	4.6	15.3	-2.6	-90.1	127.1	-66.9	32.3	-5.1	-12.6
2008	-133.9	-18.3	42.1	-58.3	-99.4	9.8	-124.2	116.8	-240.3	303.8	-75.0	131.7	-3.4	7.3
2009	-49.8	39.4	32.2	-28.7	-92.6	6.1	-43.7	31.0	-74.5	264.8	51.5	-215.4	4.6	12.6
2009 Q3	-0.4	13.9	11.9	-3.4	-22.7	1.2	0.8	-22.2	-25.7	57.3	2.0	-56.1	0.3	21.4
Q4	11.7	19.9	9.1	2.3	-19.6	1.0	12.7	-12.0	11.6	30.7	8.6	-62.9	0.0	-0.7
2010 Q1	-21.8	2.7	3.7	7.1	-35.3	2.5	-19.3	22.1	-40.3	16.6	3.9	46.5	-4.6	-2.8
Q2	-23.1	3.9	11.9	-18.1	-20.8	1.9	-21.3	46.5	-37.6	101.7	6.5	-25.1	1.0	-25.2
Q3	-15.7	7.0	10.1	-5.0	-27.8	1.3	-14.4	24.1	-21.2	10.3	1.7	38.1	-4.9	-9.7
2009 Oct.	0.5	8.4	3.1	2.1	-13.1	-0.3	0.3	4.4	7.3	6.7	1.7	-10.7	-0.7	-4.6
Nov.	-0.6	5.3	1.1	-0.9	-6.1	0.9	0.3	6.0	-4.8	-0.9	0.8	9.3	1.5	-6.3
Dec.	11.8	6.2	5.0	1.2	-0.5	0.4	12.2	-22.3	9.1	24.9	6.1	-61.6	-0.8	10.2
2010 Jan.	-13.6	-7.6	0.7	2.0	-8.6	1.5	-12.1	22.2	-5.0	26.9	3.9	-5.2	1.5	-10.1
Feb.	-7.2	4.3	1.2	3.6	-16.3	0.8	-6.4	-0.5	-3.3	-6.6	0.3	12.8	-3.6	6.9
Mar.	-1.0	6.0	1.8	1.5	-10.4	0.2	-0.8	0.4	-32.0	-3.6	-0.3	38.9	-2.5	0.4
Apr.	-6.4	1.1	2.9	-2.3	-8.2	-0.4	-6.8	16.5	-14.5	45.7	0.3	-15.0	-0.1	-9.7
May	-17.3	-1.2	3.9	-13.9	-6.1	1.8	-15.5	24.9	-12.1	63.0	-0.4	-25.5	-0.1	-9.3
June	0.6	3.9	5.0	-1.9	-6.5	0.4	1.1	5.1	-11.0	-7.0	6.5	15.4	1.1	-6.2
July	3.4	7.6	4.0	-0.7	-7.5	1.6	4.9	4.8	-0.6	-17.0	1.0	24.5	-3.1	-9.8
Aug.	-10.6	-4.3	2.7	0.3	-9.4	0.3	-10.3	10.4	-11.1	11.5	3.9	7.6	-1.6	-0.1
Sep.	-8.5	3.7	3.4	-4.7	-10.9	-0.5	-9.0	8.8	-9.6	15.7	-3.2	6.1	-0.2	0.1
Oct.	-2.3	6.7	1.7	0.8	-11.4	0.0	-2.2	-0.1	-10.3	14.0	-8.3	4.8	-0.2	2.3
<i>12-month cumulated transactions</i>														
2010 Oct.	-51.7	31.7	33.4	-14.9	-101.9	7.0	-44.7	76.2	-105.1	166.6	10.7	12.1	-8.1	-31.5
<i>12-month cumulated transactions as a percentage of GDP</i>														
2010 Oct.	-0.6	0.3	0.4	-0.2	-1.1	0.1	-0.5	0.8	-1.2	1.8	0.1	0.1	-0.1	-0.3

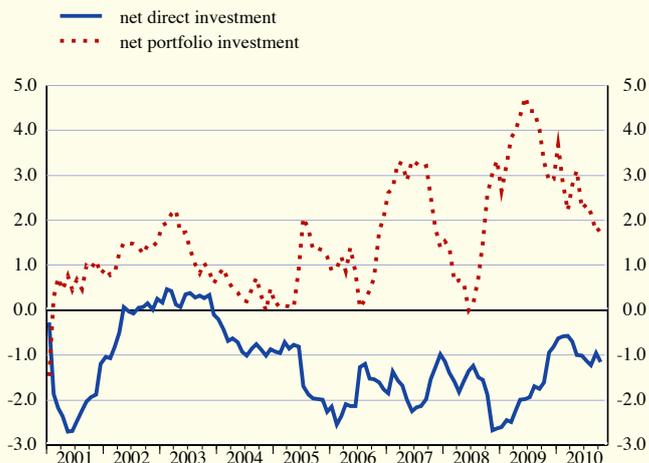
### C32 Euro area b.o.p.: current account

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



### C33 Euro area b.o.p.: direct and portfolio investment

(12-month cumulated transactions as a percentage of GDP)



Source: ECB.

1) The sign convention is explained in the General Notes.

## 7.2 Current and capital accounts

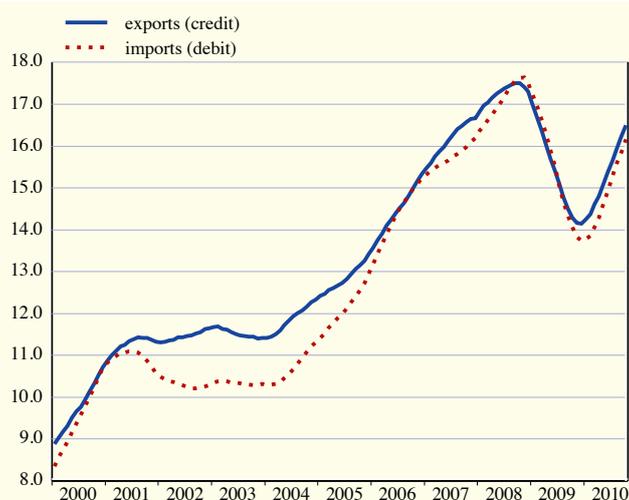
(EUR billions; transactions)

### 1. Summary current and capital accounts

	Current account											Capital account			
	Total			Goods		Services		Income		Current transfers			Credit	Debit	
	Credit	Debit	Net	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	
2007	2,707.8	2,697.2	10.7	1,518.8	1,473.2	494.2	447.2	604.0	597.7	90.9	6.4	179.0	20.7	25.6	21.0
2008	2,728.6	2,862.5	-133.9	1,580.9	1,599.2	513.0	470.9	546.0	604.3	88.6	6.8	188.1	21.6	24.4	14.7
2009	2,259.1	2,308.9	-49.8	1,291.3	1,251.9	469.0	436.8	405.8	434.6	93.0	6.0	185.6	22.4	19.6	13.5
2009 Q3	555.2	555.6	-0.4	322.6	308.8	124.3	112.4	93.3	96.7	15.0	1.6	37.7	5.7	3.8	2.7
Q4	599.2	587.5	11.7	348.6	328.7	120.8	111.7	97.8	95.5	32.0	1.5	51.6	5.8	6.0	5.0
2010 Q1	580.0	601.8	-21.8	348.6	345.9	111.0	107.3	99.2	92.0	21.3	1.4	56.6	5.2	5.3	2.8
Q2	637.8	660.9	-23.1	386.4	382.5	127.2	115.3	106.8	124.8	17.4	1.6	38.3	5.3	5.1	3.2
Q3	645.9	661.6	-15.7	402.0	395.0	133.4	123.3	96.2	101.2	14.3	.	42.1	.	4.4	3.0
2010 Aug.	201.7	212.3	-10.6	122.6	126.8	43.8	41.1	30.6	30.3	4.8	.	14.1	.	1.1	0.9
Sep.	221.1	229.5	-8.5	139.5	135.8	43.9	40.5	32.9	37.6	4.7	.	15.7	.	0.8	1.3
Oct.	220.2	222.5	-2.3	141.6	134.9	42.4	40.7	31.6	30.8	4.6	.	16.0	.	1.1	1.1
	Seasonally adjusted														
2010 Q1	608.1	610.1	-1.9	365.0	349.7	121.9	113.4	102.5	100.2	18.7	.	46.8	.	.	.
Q2	636.8	646.6	-9.8	387.5	380.8	127.4	117.4	102.0	103.1	20.0	.	45.3	.	.	.
Q3	639.1	660.5	-21.4	392.9	388.7	124.0	117.8	100.4	107.9	21.8	.	46.1	.	.	.
2010 Aug.	212.9	219.8	-6.9	131.0	130.8	41.0	39.2	33.2	34.5	7.7	.	15.3	.	.	.
Sep.	211.5	221.2	-9.7	130.2	128.1	41.3	39.2	33.0	38.4	7.0	.	15.5	.	.	.
Oct.	215.3	225.1	-9.8	132.7	134.6	41.7	40.0	33.2	35.5	7.8	.	15.0	.	.	.
	12-month cumulated transactions														
2010 Oct.	2,484.3	2,533.6	-49.3	1,503.9	1,473.3	494.2	461.1	400.9	415.4	85.3	.	183.8	.	.	.
	12-month cumulated transactions as a percentage of GDP														
2010 Oct.	27.3	27.8	-0.5	16.5	16.2	5.4	5.1	4.4	4.6	0.9	.	2.0	.	.	.

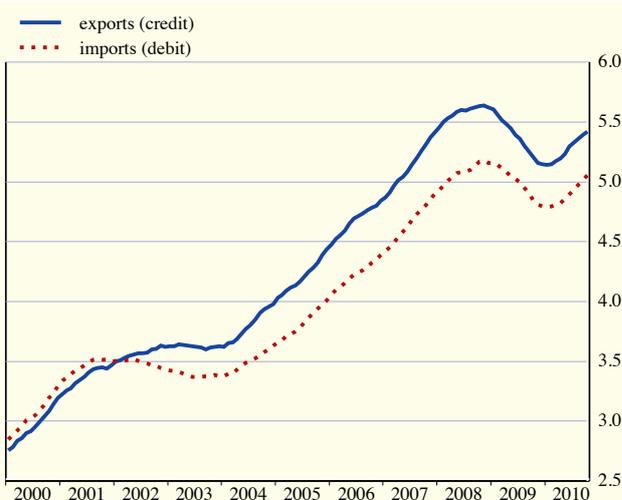
### C34 Euro area b.o.p.: goods

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



### C35 Euro area b.o.p.: services

(seasonally adjusted; 12-month cumulated transactions as a percentage of GDP)



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			Reinv. earnings	Reinv. earnings	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit		
			1	2											3	4
2007	18.8	11.2	585.2	586.4	212.4	71.3	137.2	42.8	28.6	26.8	45.3	113.8	118.7	110.6	180.3	197.9
2008	19.1	11.8	526.9	592.5	155.5	12.6	127.1	27.0	30.7	25.9	43.2	120.5	125.0	123.7	172.5	195.2
2009	19.2	12.9	386.7	421.7	133.9	8.5	100.5	17.4	20.3	22.3	27.3	76.7	102.3	129.0	102.9	93.2
2009 Q2	4.7	2.9	102.7	133.4	36.1	-2.3	29.7	0.8	5.5	7.4	8.5	37.1	25.2	33.1	27.5	26.1
Q3	4.7	3.8	88.6	92.9	30.1	6.2	24.2	5.7	4.4	4.6	6.4	13.3	25.7	32.1	21.9	18.7
Q4	5.1	3.9	92.8	91.7	35.4	0.0	24.5	0.6	5.3	5.1	6.0	13.9	24.5	30.0	21.6	18.2
2010 Q1	4.9	2.2	94.3	89.8	39.0	-1.4	25.0	3.4	4.5	4.3	6.0	12.0	25.0	32.3	19.8	16.2
Q2	4.8	2.7	102.0	122.1	41.6	-5.7	28.6	-3.3	4.7	5.0	9.8	38.5	26.1	33.3	19.7	16.6

### 3. Geographical breakdown

(cumulated transactions)

	Total	EU Member States outside the euro area						Brazil	Canada	China	India	Japan	Russia	Switzerland	United States	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
2009 Q3 to 2010 Q2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Credits																
<b>Current account</b>	2,372.2	814.3	45.8	72.0	393.2	245.2	58.2	41.4	31.1	101.1	33.1	49.0	76.3	176.2	317.6	732.1
Goods	1,406.2	458.6	28.2	46.1	193.6	190.5	0.2	23.2	16.7	82.9	24.6	31.4	54.9	88.9	164.2	460.7
Services	483.3	160.5	10.8	12.9	104.1	26.9	5.7	7.3	7.0	13.2	6.7	10.8	14.2	51.1	72.1	140.5
Income	397.1	133.7	6.1	11.8	83.9	24.4	7.6	10.4	6.6	4.8	1.7	6.5	6.8	28.8	76.4	121.3
Investment income	377.6	127.0	6.0	11.6	82.2	23.7	3.4	10.4	6.6	4.7	1.7	6.4	6.7	21.2	74.5	118.3
Current transfers	85.6	61.5	0.6	1.2	11.6	3.3	44.8	0.4	0.9	0.3	0.1	0.3	0.4	7.3	4.9	9.6
<b>Capital account</b>	20.3	17.0	0.0	0.0	0.9	0.3	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	2.3
Debits																
<b>Current account</b>	2,405.8	762.3	40.3	67.3	334.2	222.8	97.7	-	25.6	-	-	85.8	-	160.3	314.6	-
Goods	1,365.9	389.3	26.3	40.4	147.0	175.6	0.0	22.1	10.8	170.0	20.1	44.9	94.4	75.9	119.4	418.9
Services	446.8	133.2	7.3	10.2	83.0	32.4	0.2	5.5	5.8	10.8	4.7	8.1	8.4	42.6	93.3	134.4
Income	409.0	128.5	6.0	15.6	91.2	10.5	5.3	-	7.2	-	-	32.4	-	35.2	95.6	-
Investment income	396.5	120.7	5.9	15.5	89.3	4.7	5.3	-	7.1	-	-	32.3	-	34.6	94.5	-
Current transfers	184.2	111.3	0.7	1.1	13.0	4.3	92.1	1.5	1.8	2.8	0.7	0.4	0.6	6.6	6.3	52.2
<b>Capital account</b>	13.7	2.4	0.1	0.1	0.9	0.2	1.0	0.2	0.1	0.1	0.1	0.1	0.1	0.5	1.2	9.0
Net																
<b>Current account</b>	-33.6	52.1	5.5	4.7	59.0	22.4	-39.4	-	5.5	-	-	-36.8	-	15.9	2.9	-
Goods	40.3	69.3	1.9	5.7	46.6	15.0	0.2	1.1	5.8	-87.2	4.5	-13.5	-39.4	13.0	44.8	41.8
Services	36.5	27.2	3.5	2.7	21.1	-5.5	5.5	1.8	1.2	2.3	2.1	2.7	5.8	8.5	-21.2	6.1
Income	-12.0	5.2	0.2	-3.8	-7.3	14.0	2.2	-	-0.6	-	-	-25.9	-	-6.4	-19.2	-
Investment income	-18.8	6.3	0.2	-3.9	-7.1	18.9	-1.9	-	-0.5	-	-	-25.8	-	-13.3	-20.0	-
Current transfers	-98.5	-49.7	-0.1	0.1	-1.4	-1.0	-47.3	-1.1	-0.9	-2.6	-0.7	-0.1	-0.2	0.7	-1.5	-42.6
<b>Capital account</b>	6.6	14.6	-0.1	-0.1	0.0	0.1	14.7	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.8	-6.7

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 <sup>1)</sup>			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
<b>Outstanding amounts (international investment position)</b>														
2006	12,384.3	13,399.8	-1,015.5	144.7	156.5	-11.9	3,153.4	2,729.4	4,372.1	5,950.0	-20.8	4,553.8	4,720.4	325.8
2007	13,994.5	15,268.8	-1,274.3	155.2	169.3	-14.1	3,725.2	3,215.5	4,630.1	6,541.2	-28.9	5,321.0	5,512.2	347.2
2008	13,344.9	14,985.6	-1,640.7	144.3	162.1	-17.7	3,888.0	3,313.4	3,727.4	5,941.5	-29.8	5,385.1	5,730.6	374.2
2009	13,760.1	15,208.0	-1,447.8	153.6	169.8	-16.2	4,261.0	3,472.5	4,225.8	6,741.2	-45.4	4,856.4	4,994.2	462.4
2010 Q1	14,413.1	15,737.6	-1,324.6	160.5	175.2	-14.7	4,375.9	3,486.5	4,493.4	7,048.2	-39.0	5,084.1	5,202.9	498.7
Q2	14,932.8	16,055.1	-1,122.3	165.0	177.4	-12.4	4,525.2	3,520.8	4,614.0	7,138.5	-49.8	5,260.1	5,395.8	583.3
<b>Changes to outstanding amounts</b>														
2006	1,545.8	1,845.7	-299.9	18.1	21.6	-3.5	362.6	285.1	484.6	892.2	0.6	692.3	668.4	5.7
2007	1,610.2	1,869.0	-258.8	17.9	20.7	-2.9	571.8	486.1	258.0	591.2	-8.2	767.2	791.8	21.4
2008	-649.6	-283.2	-366.4	-7.0	-3.1	-4.0	162.9	98.0	-902.7	-599.6	-0.9	64.1	218.5	27.0
2009	415.2	222.3	192.9	4.6	2.5	2.2	372.9	159.1	498.4	799.6	-15.6	-528.7	-736.4	88.2
2010 Q1	653.0	529.7	123.3	29.6	24.0	5.6	114.9	14.0	267.6	307.0	6.4	227.8	208.7	36.3
Q2	519.7	317.5	202.2	22.6	13.8	8.8	149.4	34.3	120.6	90.3	-10.8	176.0	192.9	84.7
<b>Transactions</b>														
2006	1,728.6	1,719.1	9.4	20.2	20.1	0.1	417.6	257.4	519.8	708.5	0.6	789.3	753.2	1.3
2007	1,942.6	1,940.0	2.6	21.5	21.5	0.0	511.5	421.4	438.9	566.1	66.9	920.2	952.6	5.1
2008	407.8	524.7	-116.8	4.4	5.7	-1.3	333.7	93.4	-15.0	288.9	75.0	10.8	142.4	3.4
2009	-213.4	-182.3	-31.0	-2.4	-2.0	-0.3	288.3	213.8	78.6	343.4	-51.5	-524.2	-739.6	-4.6
2010 Q1	182.8	204.9	-22.1	8.3	9.3	-1.0	38.8	-1.5	61.0	77.6	-3.9	82.3	128.8	4.6
Q2	67.3	113.8	-46.5	2.9	4.9	-2.0	60.2	22.7	-16.3	85.4	-6.5	30.9	5.8	-1.0
Q3	97.0	121.1	-24.1	4.2	5.3	-1.0	28.3	7.0	59.3	69.6	-1.7	6.3	44.5	4.9
2010 June	-154.9	-149.8	-5.1	.	.	.	14.5	3.5	-5.9	-13.0	-6.5	-155.8	-140.3	-1.1
July	-13.5	-8.6	-4.8	.	.	.	8.4	7.9	21.3	4.4	-1.0	-45.3	-20.9	3.1
Aug.	115.3	125.7	-10.4	.	.	.	15.9	4.8	22.7	34.3	-3.9	79.1	86.6	1.6
Sep.	-4.8	4.0	-8.8	.	.	.	4.0	-5.6	15.3	31.0	3.2	-27.4	-21.3	0.2
Oct.	66.9	66.8	0.1	.	.	.	-17.3	-27.6	45.6	59.6	8.3	30.0	34.8	0.2
<b>Other changes</b>														
2006	-182.7	126.6	-309.3	-2.1	1.5	-3.6	-55.0	27.7	-35.2	183.7	0.0	-97.0	-84.8	4.4
2007	-332.4	-71.0	-261.4	-3.7	-0.8	-2.9	60.3	64.7	-180.9	25.1	-75.1	-153.0	-160.8	16.3
2008	-1,057.4	-807.8	-249.6	-11.4	-8.7	-2.7	-170.8	4.6	-887.8	-888.5	-75.8	53.3	76.0	23.7
2009	628.6	404.7	223.9	7.0	4.5	2.5	84.7	-54.7	419.8	456.2	35.9	-4.5	3.2	92.7
<b>Other changes due to exchange rate changes</b>														
2006	-343.3	-228.5	-114.8	-4.0	-2.7	-1.3	-72.1	-4.2	-151.6	-101.1	.	-105.7	-123.2	-13.9
2007	-521.9	-339.5	-182.4	-5.8	-3.8	-2.0	-104.1	-17.1	-217.4	-146.9	.	-186.7	-175.5	-13.7
2008	-39.4	55.1	-94.5	-0.4	0.6	-1.0	-20.1	-9.6	6.8	47.4	.	-35.4	17.3	9.2
2009	-45.8	-49.7	3.9	-0.5	-0.6	0.0	-4.8	1.7	-28.4	-27.5	.	-10.1	-23.9	-2.5
<b>Other changes due to price changes</b>														
2006	288.6	298.4	-9.8	3.4	3.5	-0.1	45.4	33.5	226.0	264.9	0.0	.	.	17.1
2007	78.7	113.4	-34.7	0.9	1.3	-0.4	45.2	5.8	77.3	107.6	-75.1	.	.	31.3
2008	-1,021.5	-1,018.4	-3.1	-11.0	-11.0	0.0	-154.5	-94.8	-812.8	-923.6	-75.8	.	.	21.5
2009	622.1	494.0	128.1	6.9	5.5	1.4	137.9	44.5	402.2	449.5	35.9	.	.	46.1
<b>Other changes due to other adjustments</b>														
2006	-128.1	56.7	-184.7	-1.5	0.7	-2.2	-28.3	-1.6	-109.6	19.8	.	8.7	38.4	1.2
2007	110.8	155.1	-44.3	1.2	1.7	-0.5	119.2	76.0	-40.8	64.4	.	33.7	14.7	-1.3
2008	3.5	155.5	-152.0	0.0	1.7	-1.6	3.8	109.0	-81.8	-12.3	.	88.7	58.8	-7.1
2009	52.3	-39.6	91.9	0.6	-0.4	1.0	-48.5	-100.9	46.0	34.3	.	5.6	27.0	49.2
<b>Growth rates of outstanding amounts</b>														
2006	16.1	14.8	-	.	.	.	15.0	10.5	13.6	13.7	.	20.5	18.7	0.3
2007	15.6	14.3	-	.	.	.	15.8	15.1	10.0	9.4	.	20.3	20.2	1.6
2008	2.9	3.4	-	.	.	.	9.1	2.9	-0.6	4.6	.	0.2	2.7	1.0
2009	-1.6	-1.2	-	.	.	.	7.4	6.6	2.0	5.8	.	-9.7	-12.8	-1.2
2010 Q1	1.1	1.1	-	.	.	.	5.7	5.5	4.6	6.2	.	-4.2	-7.0	1.3
Q2	2.2	2.2	-	.	.	.	5.2	3.6	3.4	5.3	.	-0.5	-2.3	0.7
Q3	2.8	3.0	-	.	.	.	4.1	2.6	3.2	4.4	.	1.8	1.6	1.6

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
<b>Outstanding amounts (international investment position)</b>														
2008	3,888.0	3,015.7	213.1	2,802.6	872.3	13.0	859.4	3,313.4	2,354.7	64.5	2,290.1	958.8	18.3	940.4
2009	4,261.0	3,290.8	227.5	3,063.3	970.2	14.4	955.8	3,472.5	2,526.0	76.3	2,449.7	946.6	17.8	928.8
2010 Q1	4,375.9	3,380.3	243.3	3,137.0	995.6	15.1	980.5	3,486.5	2,611.7	80.4	2,531.2	874.8	17.8	857.1
Q2	4,525.2	3,477.8	255.2	3,222.6	1,047.5	16.5	1,031.0	3,520.8	2,629.5	80.3	2,549.2	891.3	16.1	875.2
<b>Transactions</b>														
2007	511.5	388.8	18.9	369.8	122.8	-0.1	122.9	421.4	314.6	5.3	309.3	106.8	1.4	105.4
2008	333.7	214.3	20.4	193.9	119.4	-0.3	119.7	93.4	70.0	-1.2	71.2	23.4	1.6	21.8
2009	288.3	215.7	15.4	200.3	72.6	3.4	69.2	213.8	214.9	7.4	207.5	-1.1	-0.6	-0.5
2010 Q1	38.8	8.8	6.1	2.7	30.0	0.2	29.7	-1.5	60.7	1.5	59.2	-62.2	-0.2	-62.0
Q2	60.2	17.4	-0.7	18.0	42.9	0.5	42.4	22.7	11.7	2.2	9.5	11.0	-2.4	13.4
Q3	28.3	27.0	1.2	25.8	1.3	0.3	1.0	7.0	-1.9	1.5	-3.4	8.9	-0.3	9.2
2010 June	14.5	-1.9	0.1	-2.0	16.4	0.0	16.5	3.5	2.4	0.9	1.5	1.1	-2.2	3.3
July	8.4	7.8	0.3	7.5	0.6	0.2	0.4	7.9	6.8	1.0	5.7	1.1	-0.8	1.9
Aug.	15.9	20.7	0.5	20.2	-4.8	-0.1	-4.8	4.8	4.6	0.1	4.5	0.2	0.8	-0.6
Sep.	4.0	-1.5	0.4	-1.9	5.5	0.1	5.4	-5.6	-13.3	0.4	-13.7	7.6	-0.3	8.0
Oct.	-17.3	-35.4	-1.8	-33.6	18.0	0.1	17.9	-27.6	-35.9	0.2	-36.1	8.3	2.3	6.0
<b>Growth rates</b>														
2008	9.1	7.3	9.1	7.2	15.9	-1.0	16.2	2.9	2.9	-1.7	3.1	2.9	9.2	2.8
2009	7.4	7.1	7.3	7.1	8.3	26.3	8.1	6.6	9.3	11.3	9.2	-0.1	-3.2	-0.1
2010 Q1	5.7	5.9	5.3	6.0	5.1	20.1	4.8	5.5	10.3	11.7	10.3	-6.7	-4.9	-6.8
Q2	5.2	3.9	1.9	4.1	9.3	19.0	9.1	3.6	7.3	12.6	7.2	-5.9	-19.3	-5.6
Q3	4.1	3.3	2.8	3.4	6.9	18.9	6.7	2.6	5.7	10.9	5.6	-5.5	-16.1	-5.3

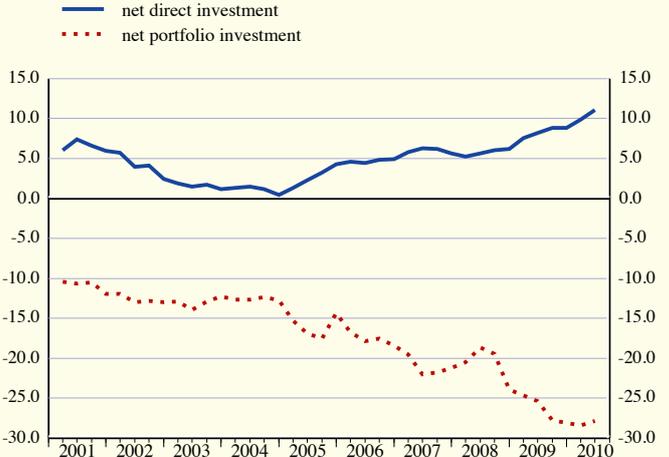
**C36 Euro area international investment position**

(outstanding amounts at end of period; as a percentage of GDP)



**C37 Euro area direct and portfolio investment position**

(outstanding amounts at end of period; as a percentage of GDP)



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									
	1	2	3	4	5	6	Bonds and notes			Money market instruments						
							7	8	9	10	11	12	13	14	15	16
			Euro-system	General government		Euro-system	General government		Euro-system	General government		Euro-system	General government			
Outstanding amounts (international investment position)																
2008	3,727.4	1,128.6	68.4	3.0	1,060.1	27.1	2,164.2	965.0	20.0	1,199.2	18.4	434.6	358.0	61.6	76.6	1.3
2009	4,225.8	1,488.5	76.2	3.4	1,412.3	34.4	2,339.3	917.5	17.0	1,421.8	36.4	398.0	327.2	44.9	70.8	2.0
2010 Q1	4,493.4	1,641.9	90.7	3.6	1,551.2	39.1	2,439.3	934.8	17.3	1,504.5	36.4	412.3	342.0	41.0	70.3	0.6
Q2	4,614.0	1,648.2	80.4	3.5	1,567.8	43.6	2,538.5	931.2	16.9	1,607.3	45.9	427.3	336.4	43.6	90.9	0.3
Transactions																
2007	438.9	62.5	26.7	0.0	35.7	8.2	293.2	148.0	4.9	145.2	3.3	83.3	63.4	26.3	19.8	0.8
2008	-15.0	-106.5	-36.0	0.6	-70.5	-0.2	81.2	40.9	3.2	40.3	2.6	10.3	35.1	15.1	-24.8	0.4
2009	78.6	45.5	-3.6	-0.2	49.1	1.5	24.7	-99.9	-3.4	124.7	17.6	8.4	11.7	-12.7	-3.3	1.0
2010 Q1	61.0	36.4	9.5	0.0	26.8	1.0	46.5	3.2	0.2	43.3	-1.6	-21.9	-19.1	-6.1	-2.8	-1.5
Q2	-16.3	-7.9	-5.9	-0.2	-2.0	2.7	-2.5	-36.4	-0.7	33.8	0.6	-5.9	-17.1	-2.6	11.2	-0.3
Q3	59.3	8.9	-0.9	0.0	9.8	.	4.3	-36.9	1.2	41.2	.	46.1	47.1	6.2	-0.9	.
2010 June	-5.9	3.0	-2.6	0.0	5.6	.	0.0	-9.4	-2.7	9.4	.	-9.0	-7.8	-6.1	-1.2	.
July	21.3	-1.7	-4.0	0.0	2.3	.	-2.7	-14.1	-0.4	11.4	.	25.8	13.8	-3.6	12.0	.
Aug.	22.7	-0.1	-2.2	0.0	2.1	.	13.8	-1.5	0.8	15.3	.	9.0	24.2	4.9	-15.2	.
Sep.	15.3	10.7	5.3	0.0	5.4	.	-6.8	-21.4	0.7	14.6	.	11.4	9.1	4.9	2.3	.
Oct.	45.6	13.3	0.8	0.0	12.5	.	24.5	-46.2	-0.5	70.7	.	7.9	1.6	-3.0	6.3	.
Growth rates																
2008	-0.6	-6.4	-27.8	24.6	-4.8	-0.4	3.6	4.2	20.3	3.1	15.7	2.8	12.0	41.9	-27.7	71.1
2009	2.0	3.3	-5.6	-7.2	3.8	5.4	1.0	-10.2	-17.1	10.2	95.3	1.4	2.6	-22.0	-4.5	73.1
2010 Q1	4.6	9.2	19.1	-7.0	8.7	7.0	4.4	-5.5	-5.1	12.0	-10.5	-9.3	-9.1	-32.1	-10.5	-67.0
Q2	3.4	8.3	11.3	-10.9	8.1	12.3	4.3	-6.1	-10.0	11.5	-8.6	-14.8	-17.5	-34.3	-2.2	-81.5
Q3	3.2	5.1	3.8	-12.1	5.2	.	2.9	-9.2	0.4	11.0	.	-1.8	-3.7	-4.6	8.4	.

### 4. Portfolio investment liabilities

	Total		Equity				Debt instruments									
	1	2	3	4	5	6	Bonds and notes			Money market instruments						
							7	8	9	10	11	12				
													Total	MFIs	Non-MFIs	Total
							General government					General government				
Outstanding amounts (international investment position)																
2008	5,941.5	2,186.0	616.9	1,569.1	3,373.3	1,198.2	2,175.1	1,428.2	382.3	62.0	320.3	271.7				
2009	6,741.2	2,752.2	686.6	2,065.6	3,461.6	1,132.1	2,329.5	1,478.0	527.3	67.8	459.5	425.0				
2010 Q1	7,048.2	2,829.3	665.4	2,163.9	3,683.2	1,160.2	2,522.9	1,617.8	535.8	99.0	436.8	395.8				
Q2	7,138.5	2,781.1	682.3	2,098.8	3,857.3	1,176.8	2,680.6	1,748.3	500.1	79.7	420.4	380.8				
Transactions																
2007	566.1	164.4	34.0	130.4	341.1	154.4	186.7	126.5	60.5	52.1	8.4	20.8				
2008	288.9	-101.1	84.4	-185.6	209.2	7.3	202.0	185.6	180.7	-33.4	214.1	191.4				
2009	343.4	82.7	3.6	79.0	141.8	6.0	135.8	98.0	119.0	-14.9	133.8	157.5				
2010 Q1	77.6	0.3	-16.7	17.0	70.4	14.7	55.7	82.0	6.9	37.0	-30.1	-21.3				
Q2	85.4	3.8	2.0	1.7	90.4	-7.0	97.4	103.6	-8.8	-9.4	0.6	-6.8				
Q3	69.6	36.2	16.9	19.3	-20.1	8.8	-28.9	.	53.6	15.7	37.8	.				
2010 June	-13.0	22.5	13.9	8.5	-0.7	-11.6	10.8	.	-34.7	-14.8	-19.9	.				
July	4.4	4.9	5.3	-0.3	-37.2	-7.8	-29.5	.	36.7	13.9	22.8	.				
Aug.	34.3	25.4	17.0	8.5	-8.5	13.0	-21.5	.	17.3	-4.6	21.9	.				
Sep.	31.0	5.8	-5.4	11.2	25.6	3.6	22.0	.	-0.4	6.4	-6.9	.				
Oct.	59.6	42.2	6.9	35.3	12.6	9.9	2.7	.	4.8	0.9	3.9	.				
Growth rates																
2008	4.6	-4.2	14.9	-8.6	7.0	0.7	11.0	16.8	75.6	-24.9	207.5	255.5				
2009	5.8	3.6	0.6	4.7	4.2	0.5	6.2	6.9	31.2	-32.0	41.6	58.2				
2010 Q1	6.2	6.1	-2.3	9.4	4.2	2.9	4.8	9.9	25.5	75.5	15.2	23.3				
Q2	5.3	4.5	-2.1	7.0	5.1	1.9	6.5	12.4	13.5	73.0	4.6	9.1				
Q3	4.4	2.7	-0.8	3.9	4.4	1.7	5.7	.	14.4	135.5	2.5	.				

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	Eurosysteem			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		Trade credits	Loans/currency and deposits	Currency and deposits		
									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)															
2008	5,385.1	28.8	27.7	1.0	3,273.5	3,214.3	59.2	90.7	12.3	42.6	8.8	1,992.1	188.5	1,610.1	432.1
2009	4,856.4	29.7	29.4	0.3	2,837.3	2,806.8	30.5	109.0	8.4	63.6	11.3	1,880.4	192.0	1,504.1	398.5
2010 Q1	5,084.1	24.1	23.8	0.3	2,971.9	2,938.2	33.7	106.6	8.4	59.6	7.8	1,981.4	196.5	1,576.6	413.2
Q2	5,260.1	24.3	24.0	0.3	3,079.5	3,045.1	34.3	114.4	8.6	65.7	13.0	2,041.9	209.3	1,622.9	439.8
Transactions															
2007	920.2	22.0	22.0	0.0	538.1	530.9	7.2	-7.8	-1.4	-7.4	-5.5	367.9	14.0	340.8	64.7
2008	10.8	-9.3	-9.3	0.0	-42.1	-58.7	16.6	-5.7	-1.1	-6.0	-4.8	67.9	0.2	62.1	-61.7
2009	-524.2	-0.3	-0.3	0.0	-421.6	-401.2	-20.5	10.9	-0.4	9.5	1.3	-113.2	-1.4	-115.6	-55.7
2010 Q1	82.3	-7.0	-7.0	0.0	55.7	52.6	3.2	-6.9	-0.1	-7.7	-3.7	40.5	1.7	26.5	1.3
Q2	30.9	-3.4	-3.4	0.0	2.4	-5.0	7.4	5.7	0.0	5.5	5.2	26.1	9.4	18.8	6.6
Q3	6.3	1.6	.	.	-17.0	.	.	5.0	.	.	-2.0	16.7	.	.	16.1
2010 June	-155.8	-0.6	.	.	-140.3	.	.	0.4	.	.	0.2	-15.3	.	.	-13.5
July	-45.3	2.0	.	.	-51.0	.	.	6.3	.	.	-1.5	-2.7	.	.	-0.4
Aug.	79.1	-0.9	.	.	71.6	.	.	0.6	.	.	1.0	7.9	.	.	16.3
Sep.	-27.4	0.5	.	.	-37.6	.	.	-1.8	.	.	-1.5	11.5	.	.	0.3
Oct.	30.0	-2.1	.	.	14.5	.	.	26.1	.	.	-0.6	-8.4	.	.	6.2
Growth rates															
2008	0.2	-26.0	-26.7	5.0	-1.3	-1.8	23.5	-6.1	-8.9	-12.3	-35.2	3.7	0.1	4.2	-14.0
2009	-9.7	-1.8	-2.7	0.2	-12.8	-12.4	-36.9	11.4	-3.4	19.5	12.9	-5.7	-0.8	-7.3	-13.3
2010 Q1	-4.2	-2.5	-2.5	1.6	-4.0	-3.6	-27.8	-2.6	-3.8	-7.8	-62.2	-4.6	1.9	-6.9	-14.7
Q2	-0.5	-36.7	-37.0	-2.5	-1.0	-1.2	17.7	6.5	-3.9	10.4	-13.6	0.5	5.5	-0.6	-8.2
Q3	1.8	-13.2	.	.	1.2	.	.	9.6	.	.	5.1	2.4	.	.	-2.3

#### 6. Other investment liabilities

	Total	Eurosysteem			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)															
2008	5,730.6	497.5	497.2	0.3	3,756.8	3,702.9	53.9	62.0	0.0	58.0	4.0	1,414.3	177.8	1,058.0	178.5
2009	4,994.2	267.2	266.8	0.3	3,392.6	3,354.1	38.5	71.1	0.0	67.1	4.0	1,263.3	175.0	909.9	178.5
2010 Q1	5,202.9	267.1	266.4	0.8	3,578.2	3,534.8	43.4	77.5	0.0	72.9	4.6	1,280.1	177.4	911.3	191.4
Q2	5,395.8	275.6	274.9	0.7	3,718.2	3,669.2	49.0	86.3	0.0	81.1	5.1	1,315.7	186.8	946.9	182.0
Transactions															
2007	952.6	90.4	90.4	0.0	621.3	616.6	4.6	-0.9	0.0	-2.0	1.1	241.8	10.0	232.9	-1.0
2008	142.4	282.3	282.2	0.1	-174.9	-186.1	11.2	9.4	0.0	10.8	-1.4	25.6	9.5	16.1	-0.1
2009	-739.6	-232.5	-232.6	0.2	-353.5	-342.1	-11.3	11.4	0.0	11.6	-0.1	-165.1	-2.3	-147.9	-14.9
2010 Q1	128.8	-5.3	-5.7	0.4	104.1	99.2	4.9	4.5	0.0	4.9	-0.4	25.5	-0.4	17.0	8.9
Q2	5.8	-0.3	-0.3	0.0	-12.8	-14.1	1.3	8.8	0.0	7.8	1.0	10.0	8.0	2.9	-0.9
Q3	44.5	-2.6	.	.	2.6	.	.	5.1	.	.	.	39.4	.	.	.
2010 June	-140.3	-12.1	.	.	-140.8	.	.	0.2	.	.	.	12.3	.	.	.
July	-20.9	-1.1	.	.	-32.7	.	.	1.0	.	.	.	11.9	.	.	.
Aug.	86.6	-2.3	.	.	73.0	.	.	0.7	.	.	.	15.2	.	.	.
Sep.	-21.3	0.8	.	.	-37.7	.	.	3.4	.	.	.	12.2	.	.	.
Oct.	34.8	0.5	.	.	38.8	.	.	6.9	.	.	.	-11.4	.	.	.
Growth rates															
2008	2.7	132.9	133.0	20.8	-4.4	-4.7	17.9	18.1	-17.8	23.0	-24.7	1.9	5.6	1.6	-0.7
2009	-12.8	-46.5	-46.6	42.3	-9.4	-9.2	-20.3	18.3	-148.2	19.7	-3.9	-11.5	-1.3	-13.8	-7.9
2010 Q1	-7.0	-37.0	-37.1	81.0	-3.7	-3.6	-8.2	-3.7	-141.7	-4.4	11.8	-7.1	0.1	-9.2	-2.0
Q2	-2.3	-19.5	-19.6	106.2	-1.9	-2.1	20.1	11.8	-143.4	11.5	13.6	0.1	4.1	-0.1	-2.8
Q3	1.6	-7.6	.	.	0.3	.	.	17.7	.	.	.	6.5	.	.	.

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 <sup>1)</sup>

	Reserve assets													Memo items			
	Total	Monetary gold		SDR holdings	Reserve position in the IMF	Foreign exchange							Other claims	Other foreign currency assets	Pre-determined short-term net drains on foreign currency	SDR allocations	
		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	17	
Outstanding amounts (international investment position)																	
2007	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	44.3	-38.5	5.3
2008	374.2	217.0	349.207	4.7	7.3	145.1	7.6	8.1	129.5	0.6	111.3	17.6	0.0	0.0	262.8	-245.7	5.5
2009	462.4	266.1	347.180	50.8	10.5	134.9	11.7	8.1	115.2	0.5	92.0	22.7	-0.1	0.0	32.1	-24.2	51.2
2010 Q1	498.7	287.3	347.176	52.7	12.4	146.3	9.9	10.6	126.1	0.6	99.6	26.0	-0.3	0.0	28.8	-23.0	53.0
Q2	583.3	351.9	347.156	56.3	16.3	158.8	9.2	13.0	136.8	0.6	110.8	25.5	-0.2	0.0	32.7	-24.2	56.7
2010 Oct.	555.6	337.2	346.994	53.0	15.1	150.3	5.9	19.0	125.0	-	-	-	0.3	0.0	25.9	-23.7	53.4
Nov.	597.5	369.3	346.991	54.8	15.2	158.1	6.0	20.2	132.2	-	-	-	-0.3	0.0	25.9	-24.0	55.2
Transactions																	
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	-	-	-
2008	3.4	-2.7	-	-0.1	3.8	2.4	5.0	-15.7	11.8	0.1	15.8	-4.1	1.3	0.0	-	-	-
2009	-4.6	-2.0	-	0.5	3.4	-6.4	3.1	-1.2	-9.5	0.0	-14.1	4.6	1.2	0.0	-	-	-
2010 Q1	4.6	0.0	-	-0.2	1.8	3.1	-2.5	2.0	3.6	0.0	1.9	1.7	-0.1	0.0	-	-	-
Q2	-1.0	0.0	-	0.1	3.0	-4.0	-2.0	1.3	-3.2	0.0	0.0	-3.1	-0.1	0.0	-	-	-
Q3	4.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth rates																	
2006	0.3	-2.4	-	11.6	-49.0	7.7	-48.4	12.7	13.4	0.0	29.2	-15.3	-	-	-	-	-
2007	1.6	-1.7	-	7.3	-18.3	6.3	14.9	6.4	5.7	1.1	18.6	-27.6	-	-	-	-	-
2008	1.0	-1.3	-	-2.5	105.4	1.7	67.7	-68.9	10.8	28.0	17.9	-20.6	-	-	-	-	-
2010 Q1	1.3	-0.5	-	-3.8	51.8	1.8	-14.0	148.1	-1.6	1.0	-5.3	15.7	-	-	-	-	-
Q2	0.7	-0.1	-	8.1	34.9	-0.7	-28.0	56.1	-1.7	-6.1	-3.6	8.2	-	-	-	-	-
Q3	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### 8. Gross external debt

	Total	By instrument					By sector (excluding direct investment)				
		Loans, currency and deposits	Money market instruments	Bonds and notes	Trade credits	Other debt liabilities	Direct investment: inter-company lending	General government	Eurosystem	MFIs (excluding Eurosystem)	Other sectors
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amounts (international investment position)											
2006	8,683.9	4,425.5	217.5	2,697.9	144.1	150.8	1,048.0	1,115.2	116.3	4,586.8	1,817.5
2007	9,997.1	5,150.5	242.0	2,997.1	172.3	189.4	1,245.8	1,238.2	215.4	5,222.1	2,075.7
2008	10,924.1	5,316.1	382.3	3,373.3	177.8	236.7	1,437.9	1,762.0	497.5	5,017.0	2,209.7
2009 Q4	10,422.5	4,597.9	527.3	3,461.6	175.0	221.3	1,439.3	1,974.1	267.2	4,592.6	2,149.3
2010 Q1	10,808.7	4,785.3	535.8	3,683.2	177.4	240.2	1,386.9	2,091.1	267.1	4,837.4	2,226.2
Q2	11,181.2	4,972.1	500.1	3,857.3	186.8	236.9	1,427.9	2,215.3	275.6	4,974.7	2,287.7
Outstanding amounts as a percentage of GDP											
2006	101.4	51.7	2.5	31.5	1.7	1.8	12.2	13.0	1.4	53.6	21.2
2007	110.8	57.1	2.7	33.2	1.9	2.1	13.8	13.7	2.4	57.9	23.0
2008	118.2	57.5	4.1	36.5	1.9	2.6	15.6	19.1	5.4	54.3	23.9
2009 Q4	116.4	51.4	5.9	38.7	2.0	2.5	16.1	22.1	3.0	51.3	24.0
2010 Q1	120.4	53.3	6.0	41.0	2.0	2.7	15.4	23.3	3.0	53.9	24.8
Q2	123.6	55.0	5.5	42.7	2.1	2.6	15.8	24.5	3.0	55.0	25.3

Source: ECB.

1) Data refer to the changing composition of the euro area, in line with the approach adopted for the reserve assets of the Eurosystem. For further information, see the General Notes.

### 7.3 Financial account

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

#### 9. Geographical breakdown

	Total	EU Member States outside the euro area						Canada	China	Japan	Switzer-land	United States	Offshore financial centres	Interna-tional organisa-tions	Other countries
	1	Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions	8	9	10	11	12	13	14	15
<b>2009</b>	Outstanding amounts (international investment position)														
<b>Direct investment</b>	788.4	120.6	2.5	-13.0	-125.4	256.8	-0.3	45.7	44.2	-28.9	129.8	-42.0	77.7	-0.3	441.6
Abroad	4,261.0	1,427.8	34.5	123.7	988.9	280.7	0.0	119.6	48.3	77.7	423.5	784.3	540.9	0.0	838.9
Equity/reinvested earnings	3,290.8	1,073.9	29.1	79.8	735.3	229.7	0.0	95.2	39.1	58.9	349.5	559.7	484.7	0.0	629.9
Other capital	970.2	353.9	5.3	43.9	253.6	51.0	0.0	24.4	9.1	18.8	74.1	224.6	56.2	0.0	209.1
In the euro area	3,472.5	1,307.2	32.0	136.7	1,114.3	23.9	0.3	73.9	4.1	106.6	293.7	826.3	463.2	0.4	397.3
Equity/reinvested earnings	2,526.0	1,073.2	22.6	120.9	922.4	7.1	0.3	60.9	1.1	85.5	200.9	613.2	245.2	0.2	245.8
Other capital	946.6	234.0	9.4	15.8	191.9	16.8	0.1	13.0	3.0	21.1	92.8	213.1	218.0	0.2	151.4
<b>Portfolio investment assets</b>	4,225.8	1,424.6	79.0	156.4	1,000.8	89.3	99.2	95.4	47.5	181.9	107.0	1,349.1	434.1	29.3	556.8
Equity	1,488.5	296.9	8.8	28.8	245.2	13.4	0.6	28.6	45.3	85.7	92.4	468.9	193.3	1.5	275.8
Debt instruments	2,737.3	1,127.7	70.2	127.6	755.5	75.9	98.5	66.8	2.2	96.2	14.6	880.1	240.8	27.8	281.1
Bonds and notes	2,339.3	979.0	62.9	108.0	635.5	74.2	98.4	63.3	1.5	38.1	10.6	739.5	225.5	27.2	254.7
Money market instruments	398.0	148.7	7.3	19.6	120.0	1.7	0.1	3.5	0.7	58.1	4.0	140.7	15.4	0.6	26.3
<b>Other investment</b>	-137.9	-104.4	50.0	11.4	-96.8	89.8	-159.0	0.2	-8.7	17.0	-118.6	-106.5	-3.8	14.1	172.8
Assets	4,856.4	2,247.1	108.6	84.7	1,847.0	190.5	16.3	26.8	31.5	95.0	238.7	687.1	599.3	61.3	869.6
General government	109.0	23.1	0.1	5.4	6.8	0.2	10.4	0.0	3.1	0.2	0.2	3.5	1.9	27.3	49.7
MFIs	2,867.0	1,540.4	90.9	50.5	1,240.1	156.3	2.6	15.2	9.3	64.4	125.5	352.9	329.8	20.4	409.3
Other sectors	1,880.4	683.6	17.5	28.8	600.1	34.0	3.3	11.5	19.1	30.4	113.1	330.8	267.6	13.6	410.6
Liabilities	4,994.2	2,351.5	58.6	73.3	1,943.8	100.7	175.2	26.5	40.3	78.0	357.2	793.6	603.1	47.1	696.8
General government	71.1	28.8	0.1	0.4	4.4	0.1	23.9	0.1	0.1	0.5	0.2	22.1	0.3	16.9	2.2
MFIs	3,659.8	1,746.1	47.2	39.7	1,486.2	76.5	96.6	19.4	19.1	45.6	270.3	500.1	498.5	27.6	533.1
Other sectors	1,263.3	576.5	11.2	33.2	453.2	24.1	54.8	7.1	21.2	32.0	86.7	271.3	104.3	2.6	161.6
<b>2009 Q3 to 2010 Q2</b>	Cumulated transactions														
<b>Direct investment</b>	92.0	3.0	0.4	-2.0	-9.5	14.1	0.0	3.3	4.6	-0.1	15.8	44.5	7.7	-0.2	13.4
Abroad	213.0	48.6	2.5	5.2	25.6	15.3	0.0	9.3	4.0	-1.4	29.9	54.5	14.3	0.0	53.9
Equity/reinvested earnings	125.4	28.1	1.5	3.7	10.0	12.9	0.0	9.4	0.4	-1.4	8.6	44.8	2.5	0.0	32.9
Other capital	87.6	20.4	1.0	1.5	15.5	2.4	0.0	-0.1	3.5	-0.1	21.2	9.7	11.8	0.0	21.0
In the euro area	121.1	45.5	2.1	7.2	35.1	1.2	0.0	6.1	-0.6	-1.3	14.1	10.0	6.6	0.2	40.5
Equity/reinvested earnings	176.8	34.7	1.4	11.9	25.2	-3.7	0.0	5.9	0.2	2.6	13.3	42.7	54.8	0.2	22.4
Other capital	-55.7	10.8	0.7	-4.7	10.0	4.9	0.0	0.1	-0.8	-3.9	0.7	-32.6	-48.2	0.0	18.1
<b>Portfolio investment assets</b>	135.4	49.0	8.7	15.5	-4.4	13.5	15.7	-4.3	6.4	-20.2	5.0	5.6	-7.2	-3.5	104.6
Equity	105.2	20.9	1.6	3.2	15.0	0.8	0.2	1.6	6.3	7.1	5.3	21.9	6.6	0.1	35.5
Debt instruments	30.2	28.1	7.2	12.3	-19.4	12.6	15.5	-5.9	0.0	-27.3	-0.3	-16.3	-13.8	-3.6	69.1
Bonds and notes	95.8	60.4	5.6	15.6	11.8	11.8	15.6	-2.9	-0.1	-11.7	0.8	-5.8	-4.3	-3.1	62.5
Money market instruments	-65.6	-32.3	1.5	-3.3	-31.2	0.8	-0.1	-2.9	0.2	-15.6	-1.1	-10.5	-9.5	-0.5	6.6
<b>Other investment</b>	97.6	-46.9	-11.3	-9.2	-4.4	-17.4	-4.5	3.4	14.7	-11.5	44.0	90.9	55.6	-11.3	-41.3
Assets	-23.2	-7.5	-5.2	2.3	0.9	-7.0	1.6	-1.5	6.0	-8.9	-30.6	-12.8	36.6	-3.2	-1.3
General government	6.8	5.6	-0.2	5.3	0.5	0.0	0.0	0.0	-0.1	0.0	-0.1	-0.1	0.0	0.7	0.8
MFIs	-41.5	2.6	-7.2	-6.0	20.8	-5.8	0.7	-0.5	3.1	-10.8	-7.3	-14.7	2.8	-3.9	-12.7
Other sectors	11.5	-15.7	2.2	3.0	-20.5	-1.3	0.8	-1.0	3.0	2.0	-23.3	2.1	33.8	0.0	10.6
Liabilities	-120.8	39.4	6.1	11.4	5.3	10.4	6.1	-4.9	-8.7	2.7	-74.7	-103.6	-19.0	8.1	40.0
General government	9.1	5.8	0.1	0.0	3.9	0.0	1.9	0.1	0.0	-0.1	0.1	-2.2	0.0	5.4	-0.1
MFIs	-131.0	51.4	6.5	8.9	29.6	7.8	-1.4	-0.9	-10.2	1.7	-79.1	-108.4	-21.8	2.5	33.9
Other sectors	1.1	-17.9	-0.5	2.6	-28.2	2.6	5.7	-4.1	1.6	1.1	4.3	7.0	2.9	0.1	6.1

Source: ECB.

## 7.4 Monetary presentation of the balance of payments <sup>1)</sup>

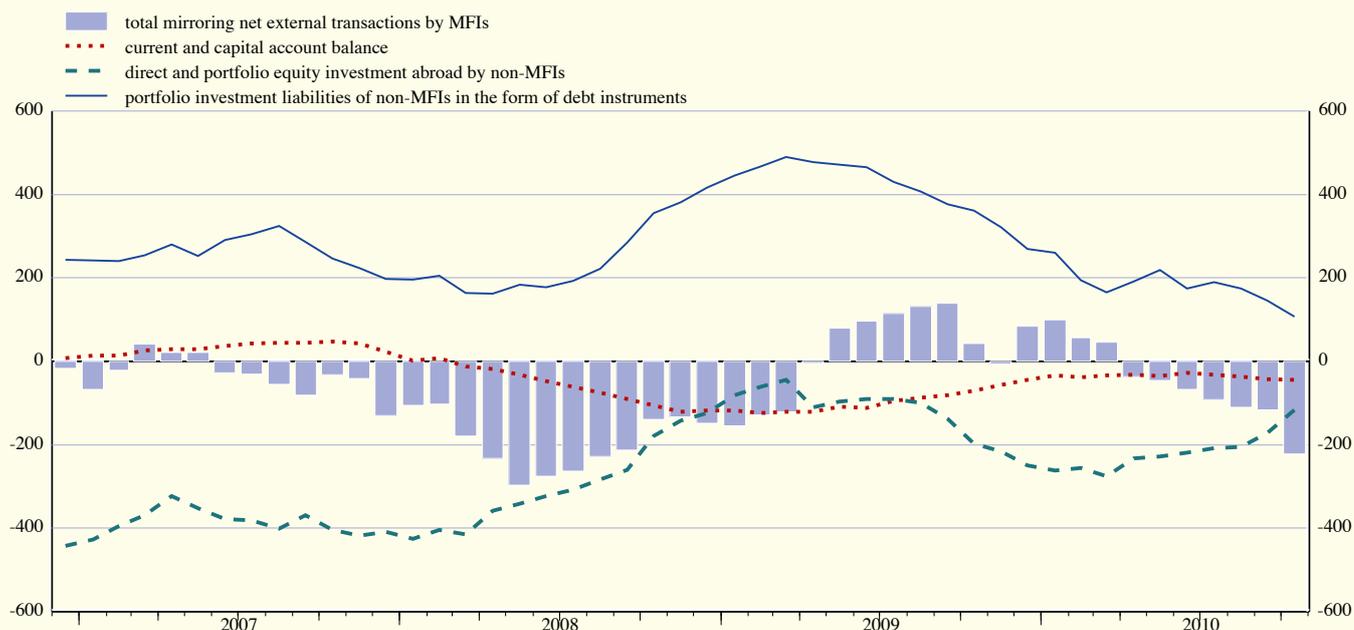
(EUR billions; transactions)

### B.o.p. items mirroring net transactions by MFIs

	Total	Current and capital account balance	Transactions by non-MFIs								Financial derivatives	Errors and omissions
			Direct investment		Portfolio investment				Other investment			
			By resident units abroad	By non-resident units in euro area	Assets		Liabilities		Assets	Liabilities		
					Equity	Debt instruments	Equity	Debt instruments				
			1	2	3	4	5	6	7	8		
2007	-130.1	22.3	-494.4	413.7	-36.6	-165.1	131.1	197.5	-360.3	240.8	-67.2	-11.9
2008	-148.2	-117.1	-314.1	92.7	70.4	-15.0	-185.8	416.7	-62.9	35.5	-74.9	6.3
2009	84.8	-43.7	-269.5	207.0	-49.1	-121.4	79.0	269.6	102.3	-153.6	51.5	12.6
2009 Q3	6.8	0.8	-66.7	39.0	-38.0	-30.5	62.2	38.4	19.1	-40.7	2.0	21.4
Q4	42.1	12.7	-46.7	56.9	-34.9	-35.6	38.8	13.0	28.1	2.0	8.6	-0.7
2010 Q1	-81.8	-19.3	-32.5	-2.8	-26.8	-40.5	17.0	25.6	-33.6	30.0	3.9	-2.8
Q2	-33.8	-21.3	-60.4	22.9	2.0	-45.0	1.7	98.0	-31.8	18.9	6.5	-25.2
Q3	-42.4	-14.4	-26.8	5.9	-9.8	-40.3	19.3	8.9	-21.7	44.5	1.7	-9.7
2009 Oct.	13.7	0.3	-15.3	23.5	-13.3	-6.8	-22.3	44.3	-26.6	32.9	1.7	-4.6
Nov.	-10.6	0.3	-14.9	12.3	-7.6	-15.0	0.9	10.0	4.5	4.3	0.8	-6.3
Dec.	39.0	12.2	-16.4	21.1	-14.1	-13.8	60.2	-41.3	50.1	-35.2	6.1	10.2
2010 Jan.	-28.3	-12.1	-6.4	3.4	-11.5	-11.1	-3.0	29.7	-9.1	-2.0	3.9	-10.1
Feb.	-11.9	-6.4	3.7	-7.3	-1.3	-5.2	17.9	-11.1	-13.9	4.5	0.3	6.9
Mar.	-41.6	-0.8	-29.8	1.2	-14.0	-24.2	2.2	6.9	-10.7	27.5	-0.3	0.4
Apr.	-44.4	-6.8	-17.3	1.9	-3.5	-14.4	-5.6	44.5	-18.0	-15.8	0.3	-9.7
May	5.7	-15.5	-28.7	16.1	11.1	-22.4	-1.2	62.6	-28.7	22.1	-0.4	-9.3
June	5.0	1.1	-14.4	4.9	-5.6	-8.2	8.5	-9.1	14.9	12.5	6.5	-6.2
July	-27.4	4.9	-7.9	7.6	-2.3	-23.3	-0.3	-6.7	-3.6	13.0	1.0	-9.8
Aug.	-3.8	-10.3	-15.4	3.9	-2.1	0.0	8.5	0.4	-8.4	15.9	3.9	-0.1
Sep.	-11.2	-9.0	-3.5	-5.7	-5.4	-16.9	11.2	15.2	-9.7	15.6	-3.2	0.1
Oct.	-92.5	-2.2	15.6	-30.2	-12.5	-77.0	35.3	6.6	-17.7	-4.5	-8.3	2.3
<i>12-month cumulated transactions</i>												
2010 Oct.	-222.1	-44.7	-135.5	29.2	-68.9	-231.6	134.5	107.8	-50.1	57.9	10.7	-31.5

### C38 Main b.o.p. items mirroring developments in MFI net external transactions <sup>1)</sup>

(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.

## 7.5 Trade in goods

### 1. Values and volumes by product group <sup>1)</sup>

(seasonally adjusted, unless otherwise indicated)

	Total (n.s.a.)		Exports (f.o.b.)				Imports (c.i.f.)						
	Exports	Imports	Total			Memo item: Manufacturing	Total			Memo items:			
			Intermediate	Capital	Consumption		Intermediate	Capital	Consumption	Manufacturing	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)													
2008	3.9	8.2	1,561.6	771.1	338.0	413.9	1,303.8	1,610.1	1,019.1	232.9	333.9	1,021.7	293.6
2009	-18.1	-22.1	1,276.6	627.0	264.2	354.8	1,062.5	1,259.4	727.5	193.6	315.4	838.5	175.1
2009 Q4	-9.3	-14.4	328.1	163.6	66.9	91.9	273.6	321.6	189.5	48.5	78.6	212.6	49.3
2010 Q1	12.9	9.6	354.8	176.2	68.9	98.8	292.7	351.1	209.6	52.3	82.0	232.7	53.1
Q2	22.3	27.4	377.6	188.2	75.7	103.6	315.7	382.0	232.5	55.9	85.0	252.2	59.8
Q3	22.7	26.4	394.7	196.8	79.8	107.5	329.1	394.5	240.1	59.2	87.8	261.4	59.1
2010 May	22.8	29.8	124.2	61.4	25.1	34.2	104.0	127.1	77.2	18.1	28.6	83.3	20.5
June	26.6	32.2	131.3	65.4	27.0	35.8	110.7	132.8	81.2	20.3	29.1	88.4	20.0
July	17.3	25.8	131.0	65.0	26.2	35.7	109.1	131.0	79.5	20.1	28.9	86.8	20.3
Aug.	29.9	32.9	131.6	65.7	26.5	35.6	109.4	133.3	81.4	20.1	29.6	88.2	20.6
Sep.	22.4	21.6	132.2	66.1	27.1	36.2	110.6	130.1	79.1	19.1	29.3	86.4	18.2
Oct.	20.2	20.7	132.0	.	.	.	110.4	128.5	.	.	.	85.3	.
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2008	1.4	0.1	143.4	136.8	154.3	147.0	142.3	126.9	119.3	140.4	144.5	133.3	108.1
2009	-16.6	-14.5	119.4	115.0	119.2	127.5	115.9	108.9	99.8	114.9	136.0	110.5	97.8
2009 Q4	-6.7	-7.7	123.1	120.3	121.3	132.7	120.2	111.1	102.2	117.8	139.1	114.7	95.7
2010 Q1	11.5	4.6	130.2	126.3	124.3	138.8	126.3	116.2	107.2	123.0	140.7	121.8	94.9
Q2	16.2	14.1	135.0	130.9	134.8	141.4	133.3	119.3	110.7	127.1	140.7	126.7	95.5
Q3	15.7	12.4	139.1	134.7	142.1	144.0	137.0	120.2	111.6	130.8	141.0	128.0	95.0
2010 Apr.	12.4	8.4	132.5	129.4	127.2	139.9	129.4	116.4	107.8	121.3	137.5	122.9	93.0
May	16.9	16.0	133.3	128.3	134.2	140.1	131.9	119.6	110.3	124.7	143.6	126.6	97.6
June	19.3	18.0	139.0	134.9	143.1	144.3	138.7	122.1	114.0	135.4	141.1	130.6	95.9
July	10.5	10.5	138.0	133.6	140.2	141.6	135.6	119.4	110.7	132.5	138.6	127.0	97.5
Aug.	22.9	19.3	139.7	134.7	141.5	145.3	137.3	121.8	113.1	134.3	142.6	130.1	99.3
Sep.	15.2	8.4	139.6	135.7	144.5	145.2	138.0	119.5	111.1	125.7	141.7	126.8	88.2

### 2. Prices <sup>2)</sup>

(annual percentage changes, unless otherwise indicated)

	Industrial producer export prices (f.o.b.) <sup>3)</sup>							Industrial import prices (c.i.f.)						
	Total (index: 2005 = 100)	Total				Memo item: Manufacturing	Total (index: 2005 = 100)	Total				Memo item: Manufacturing		
		Intermediate goods	Capital goods	Consumer goods	Energy			Intermediate goods	Capital goods	Consumer goods	Energy			
% of total	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	100.0	100.0	33.1	44.5	17.9	4.5	99.2	100.0	100.0	28.4	27.9	22.1	21.6	81.1
2008	104.1	1.9	1.7	-0.4	2.3	23.8	1.7	110.8	5.5	-0.4	-4.6	2.3	28.6	-0.2
2009	101.5	-2.6	-3.8	0.6	0.5	-23.7	-2.5	99.2	-10.4	-5.7	-1.3	0.3	-28.3	-4.0
2010 Q1	103.3	1.6	-0.1	-0.2	0.7	35.6	1.7	104.3	5.3	2.1	-2.4	-0.8	27.2	0.4
Q2	105.9	4.3	5.2	0.9	2.4	30.9	4.3	109.7	11.2	10.8	0.0	2.7	33.1	5.6
Q3	106.1	4.6	6.4	1.6	2.9	19.6	4.5	110.2	11.1	12.2	1.9	4.8	25.9	6.7
2010 June	106.5	4.6	6.4	1.5	3.1	20.9	4.5	110.7	11.1	12.8	1.6	4.4	25.5	7.0
July	106.1	4.6	6.4	1.4	2.9	23.2	4.5	110.1	11.8	12.4	2.0	4.1	29.3	6.7
Aug.	106.1	4.2	6.2	1.6	2.7	14.4	4.1	110.3	10.1	11.7	1.8	4.8	21.5	6.3
Sep.	106.2	4.9	6.6	1.9	3.0	21.7	4.7	110.2	11.4	12.6	1.9	5.4	27.2	7.1
Oct.	105.8	4.7	6.6	1.7	2.8	19.0	4.6	109.6	10.1	11.8	0.9	5.4	21.6	6.3
Nov.	106.2	4.8	6.7	2.0	2.8	18.6	4.7	111.0	11.0	13.5	0.5	6.6	23.6	7.1

Source: Eurostat.

- Product groups as classified in the Broad Economic Categories. Unlike the product groups shown in Table 2, intermediate and consumption product groups include agricultural and energy products.
- Product groups as classified in the Main Industrial Groupings. Unlike the product groups shown in Table 1, intermediate and consumer goods do not include energy products, and agricultural goods are not covered. Manufacturing has a different composition compared with the data shown in columns 7 and 12 of Table 1. Data shown are price indices which follow the pure price change for a basket of products and are not simple ratios of the value and volume data shown in Table 1, which are affected by changes in the composition and quality of traded goods. These indices differ from the GDP deflators for imports and exports (shown in Table 3 in Section 5.1), mainly because those deflators include all goods and services and cover cross-border trade within the euro area.
- Industrial producer export prices refer to direct transactions between domestic producers and non-domestic customers. Contrary to the data shown for values and volumes in Table 1, exports from wholesalers and re-exports are not covered.

## 7.5 Trade in goods

(EUR billions, unless otherwise indicated; seasonally adjusted)

### 3. Geographical breakdown

	Total	EU Member States 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
<b>Exports (f.o.b.)</b>															
2008	1,561.6	35.1	53.9	220.4	233.7	78.5	86.7	42.7	186.5	309.5	65.7	33.7	100.1	68.2	146.1
2009	1,276.6	27.1	40.8	175.2	176.3	49.4	78.8	34.7	152.7	283.6	68.8	28.8	91.8	54.2	112.1
2009 Q2	311.2	6.6	9.8	42.9	42.4	12.3	19.1	8.4	38.5	70.2	17.0	7.1	22.8	12.5	25.8
Q3	320.7	6.7	10.4	44.3	44.5	12.0	19.6	9.3	36.8	71.8	17.8	7.2	22.7	14.3	28.1
Q4	328.1	6.6	10.7	44.9	45.9	12.4	19.7	9.2	38.0	74.7	18.8	7.3	23.0	14.3	28.5
2010 Q1	354.8	7.0	11.7	46.7	48.4	13.5	21.4	10.7	41.1	81.6	22.3	8.1	24.9	16.8	31.1
Q2	377.6	7.4	12.9	47.9	51.7	15.6	22.9	11.4	45.3	87.9	23.4	8.7	25.6	18.6	30.5
Q3	394.7	7.6	13.1	50.2	54.4	17.2	23.8	12.0	47.9	91.3	23.6	8.9	26.6	18.8	31.8
2010 May	124.2	2.5	4.2	15.7	17.2	5.1	7.5	3.6	15.0	28.9	7.8	2.9	8.4	6.3	9.9
June	131.3	2.5	4.6	16.4	18.0	5.4	7.9	4.1	15.5	30.9	8.1	3.0	8.6	6.6	10.7
July	131.0	2.5	4.4	16.4	17.7	5.6	7.9	4.0	15.9	30.6	7.9	3.0	8.7	6.2	10.9
Aug.	131.6	2.5	4.3	16.8	18.3	5.9	7.9	3.8	16.0	29.9	7.7	3.0	8.9	6.3	10.9
Sep.	132.2	2.6	4.4	16.9	18.4	5.8	7.9	4.2	15.9	30.9	8.0	3.0	8.9	6.3	10.0
Oct.	132.0	.	.	.	.	5.8	8.2	4.3	15.5	30.9	8.2	3.0	8.9	6.2	.
<i>Percentage share of total exports</i>															
2009	100.0	2.1	3.2	13.7	13.8	3.9	6.2	2.7	12.0	22.2	5.4	2.3	7.2	4.2	8.8
<b>Imports (c.i.f.)</b>															
2008	1,610.1	30.7	52.1	164.7	184.9	122.0	70.2	32.4	136.0	479.8	184.5	57.4	141.1	81.7	114.4
2009	1,259.4	26.9	37.5	127.0	161.8	81.6	65.2	26.2	115.4	376.8	158.0	43.8	94.0	59.4	87.6
2009 Q2	304.3	6.5	8.9	30.9	39.0	18.1	16.2	6.3	30.0	92.3	39.3	10.5	22.8	14.3	19.1
Q3	312.2	6.8	9.6	31.6	41.1	21.9	16.1	6.6	25.8	92.3	38.3	10.9	22.5	14.8	23.1
Q4	321.6	6.7	9.6	32.6	42.7	23.7	16.1	6.8	27.9	94.5	39.1	10.8	24.4	15.5	20.9
2010 Q1	351.1	6.6	10.4	35.1	45.2	24.5	17.1	7.4	29.3	109.8	45.9	11.7	27.0	16.5	22.2
Q2	382.0	6.8	11.7	36.3	48.8	27.3	19.5	7.5	32.7	124.0	53.4	12.9	29.3	18.1	19.8
Q3	394.5	7.0	12.1	37.5	50.4	26.5	19.1	7.5	31.5	127.6	55.8	13.1	28.8	19.7	26.7
2010 May	127.1	2.3	3.8	12.2	16.6	9.7	6.9	2.4	10.2	40.8	17.8	4.2	9.6	6.0	6.6
June	132.8	2.4	4.2	12.4	16.8	8.8	6.7	2.6	12.4	43.8	18.9	4.5	9.8	6.3	6.6
July	131.0	2.3	4.1	12.5	16.4	9.1	6.5	2.5	10.4	42.5	18.4	4.4	9.5	6.5	8.8
Aug.	133.3	2.3	4.1	12.9	16.9	8.9	6.4	2.5	10.5	43.2	18.9	4.3	10.0	6.6	9.1
Sep.	130.1	2.4	3.9	12.0	17.0	8.5	6.1	2.5	10.7	41.9	18.5	4.4	9.4	6.6	8.9
Oct.	128.5	.	.	.	.	9.0	6.0	2.6	10.8	40.7	17.3	4.3	8.7	6.7	.
<i>Percentage share of total imports</i>															
2009	100.0	2.1	3.0	10.1	12.8	6.5	5.2	2.1	9.2	29.9	12.5	3.5	7.5	4.7	6.9
<b>Balance</b>															
2008	-48.6	4.4	1.8	55.7	48.9	-43.6	16.5	10.4	50.5	-170.3	-118.8	-23.7	-41.0	-13.6	31.7
2009	17.2	0.2	3.3	48.2	14.5	-32.2	13.5	8.4	37.3	-93.1	-89.1	-15.0	-2.2	-5.2	24.4
2009 Q2	6.9	0.1	0.9	12.0	3.4	-5.9	3.0	2.1	8.5	-22.1	-22.4	-3.5	0.0	-1.8	6.7
Q3	8.5	-0.1	0.8	12.7	3.4	-9.8	3.5	2.7	11.1	-20.5	-20.5	-3.7	0.2	-0.5	5.0
Q4	6.5	-0.1	1.1	12.3	3.1	-11.3	3.6	2.5	10.1	-19.8	-20.3	-3.4	-1.5	-1.2	7.7
2010 Q1	3.8	0.4	1.3	11.5	3.1	-11.0	4.3	3.4	11.7	-28.1	-23.6	-3.6	-2.1	0.3	8.9
Q2	-4.4	0.6	1.2	11.5	2.9	-11.6	3.3	3.9	12.6	-36.1	-30.1	-4.2	-3.8	0.4	10.7
Q3	0.2	0.6	1.0	12.7	3.9	-9.3	4.7	4.5	16.3	-36.3	-32.2	-4.1	-2.2	-0.8	5.1
2010 May	-2.9	0.1	0.4	3.5	0.6	-4.5	0.6	1.1	4.9	-11.9	-10.0	-1.3	-1.2	0.3	3.3
June	-1.5	0.1	0.4	4.0	1.2	-3.5	1.2	1.5	3.2	-12.8	-10.8	-1.5	-1.2	0.3	4.1
July	-0.1	0.3	0.3	3.9	1.3	-3.5	1.4	1.6	5.6	-12.0	-10.5	-1.4	-0.7	-0.3	2.1
Aug.	-1.7	0.2	0.2	4.0	1.3	-3.1	1.6	1.3	5.5	-13.3	-11.2	-1.3	-1.0	-0.3	1.8
Sep.	2.0	0.2	0.5	4.8	1.3	-2.8	1.8	1.6	5.2	-11.1	-10.5	-1.4	-0.4	-0.3	1.2
Oct.	3.6	.	.	.	.	-3.2	2.2	1.7	4.7	-9.8	-9.1	-1.3	0.2	-0.5	.

Source: Eurostat.



## EXCHANGE RATES

### 8.1 Effective exchange rates <sup>1)</sup>

(period averages; index: 1999 Q1=100)

	EER-21						EER-41	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2008	110.5	110.1	107.8	105.4	114.8	104.4	118.0	107.2
2009	111.7	110.6	105.0	106.3	120.6	106.3	120.6	108.0
2010	104.6	103.0	98.9	.	.	.	112.3	99.3
2009 Q4	113.8	112.2	106.6	107.8	121.4	108.4	122.5	109.0
2010 Q1	108.7	107.0	102.3	102.7	114.4	102.9	116.9	103.4
Q2	103.1	101.8	97.5	97.6	108.8	97.6	110.4	97.8
Q3	102.3	100.9	96.9	96.8	106.9	96.3	109.8	97.2
Q4	104.4	102.5	98.8	.	.	.	112.1	98.7
2009 Dec.	113.0	111.2	105.4	-	-	-	121.7	108.0
2010 Jan.	110.8	108.9	104.1	-	-	-	119.1	105.5
Feb.	108.0	106.1	101.7	-	-	-	116.2	102.7
Mar.	107.4	105.7	101.1	-	-	-	115.2	102.0
Apr.	106.1	104.5	100.2	-	-	-	113.5	100.5
May	102.8	101.4	97.1	-	-	-	109.9	97.4
June	100.7	99.4	95.3	-	-	-	107.7	95.5
July	102.5	101.1	97.0	-	-	-	109.9	97.5
Aug.	102.1	100.6	96.7	-	-	-	109.5	97.0
Sep.	102.5	100.8	97.2	-	-	-	110.0	97.2
Oct.	106.1	104.2	100.5	-	-	-	113.8	100.3
Nov.	104.8	102.8	99.1	-	-	-	112.4	99.0
Dec.	102.6	100.6	96.9	-	-	-	110.1	96.8
	<i>Percentage change versus previous month</i>							
2010 Dec.	-2.0	-2.1	-2.2	-	-	-	-2.1	-2.2
	<i>Percentage change versus previous year</i>							
2010 Dec.	-9.2	-9.6	-8.1	-	-	-	-9.5	-10.4

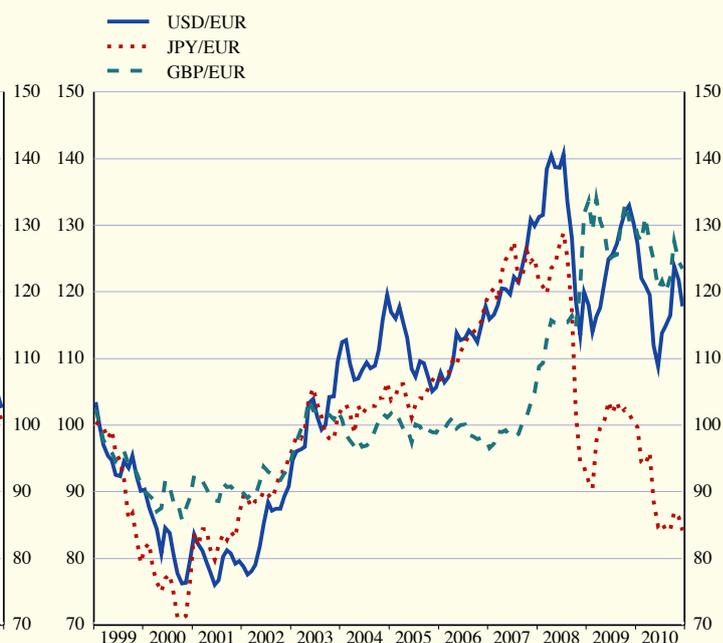
### C39 Effective exchange rates

(monthly averages; index: 1999 Q1=100)



### C40 Bilateral exchange rates

(monthly averages; index: 1999 Q1=100)



Source: ECB.

1) For a definition of the trading partner groups and other information, please refer to the General Notes.

## 8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Danish kroner 1	Swedish krona 2	Pound sterling 3	US dollar 4	Japanese yen 5	Swiss franc 6	South Korean won 7	Hong Kong dollar 8	Singapore dollar 9	Canadian dollar 10	Norwegian kroner 11	Australian dollar 12
2008	7.4560	9.6152	0.79628	1.4708	152.45	1.5874	1,606.09	11.4541	2.0762	1.5594	8.2237	1.7416
2009	7.4462	10.6191	0.89094	1.3948	130.34	1.5100	1,772.90	10.8114	2.0241	1.5850	8.7278	1.7727
2010	7.4473	9.5373	0.85784	1.3257	116.24	1.3803	1,531.82	10.2994	1.8055	1.3651	8.0043	1.4423
2010 Q2	7.4416	9.6313	0.85239	1.2708	117.15	1.4086	1,481.01	9.8857	1.7674	1.3054	7.9093	1.4403
Q3	7.4498	9.3804	0.83305	1.2910	110.68	1.3321	1,526.12	10.0324	1.7503	1.3416	7.9561	1.4289
Q4	7.4547	9.2139	0.85944	1.3583	112.10	1.3225	1,538.70	10.5441	1.7693	1.3757	8.0499	1.3747
2010 June	7.4409	9.5723	0.82771	1.2209	110.99	1.3767	1,483.22	9.5091	1.7081	1.2674	7.9062	1.4315
July	7.4522	9.4954	0.83566	1.2770	111.73	1.3460	1,538.85	9.9308	1.7588	1.3322	8.0201	1.4586
Aug.	7.4495	9.4216	0.82363	1.2894	110.04	1.3413	1,522.39	10.0193	1.7482	1.3411	7.9325	1.4337
Sep.	7.4476	9.2241	0.83987	1.3067	110.26	1.3089	1,517.10	10.1470	1.7439	1.3515	7.9156	1.3943
Oct.	7.4567	9.2794	0.87638	1.3898	113.67	1.3452	1,560.30	10.7835	1.8116	1.4152	8.1110	1.4164
Nov.	7.4547	9.3166	0.85510	1.3661	112.69	1.3442	1,544.16	10.5941	1.7739	1.3831	8.1463	1.3813
Dec.	7.4528	9.0559	0.84813	1.3220	110.11	1.2811	1,513.74	10.2776	1.7262	1.3327	7.9020	1.3304
<i>Percentage change versus previous month</i>												
2010 Dec.	0.0	-2.8	-0.8	-3.2	-2.3	-4.7	-2.0	-3.0	-2.7	-3.6	-3.0	-3.7
<i>Percentage change versus previous year</i>												
2010 Dec.	0.1	-13.0	-5.7	-9.5	-16.1	-14.7	-11.1	-9.3	-15.3	-13.4	-6.0	-17.8
	Czech koruna 13	Estonian kroon 14	Latvian lats 15	Lithuanian litas 16	Hungarian forint 17	Polish zloty 18	Bulgarian lev 19	New Roma- nian leu 20	Croatian kuna 21	New Turkish lira 22		
2008	24.946	15.6466	0.7027	3.4528	251.51	3.5121	1.9558	3.6826	7.2239	1.9064		
2009	26.435	15.6466	0.7057	3.4528	280.33	4.3276	1.9558	4.2399	7.3400	2.1631		
2010	25.284	15.6466	0.7087	3.4528	275.48	3.9947	1.9558	4.2122	7.2891	1.9965		
2010 Q2	25.591	15.6466	0.7078	3.4528	274.85	4.0171	1.9558	4.1854	7.2477	1.9560		
Q3	24.928	15.6466	0.7089	3.4528	282.44	4.0087	1.9558	4.2553	7.2532	1.9560		
Q4	24.789	15.6466	0.7095	3.4528	275.77	3.9666	1.9558	4.2888	7.3683	1.9897		
2010 June	25.780	15.6466	0.7082	3.4528	281.49	4.1055	1.9558	4.2434	7.2225	1.9274		
July	25.328	15.6466	0.7090	3.4528	283.75	4.0814	1.9558	4.2608	7.2198	1.9669		
Aug.	24.806	15.6466	0.7085	3.4528	281.45	3.9899	1.9558	4.2396	7.2525	1.9484		
Sep.	24.651	15.6466	0.7091	3.4528	282.10	3.9548	1.9558	4.2655	7.2874	1.9528		
Oct.	24.531	15.6466	0.7094	3.4528	274.01	3.9496	1.9558	4.2787	7.3277	1.9800		
Nov.	24.633	15.6466	0.7094	3.4528	275.51	3.9520	1.9558	4.2940	7.3830	1.9717		
Dec.	25.174	15.6466	0.7096	3.4528	277.62	3.9962	1.9558	4.2929	7.3913	2.0159		
<i>Percentage change versus previous month</i>												
2010 Dec.	2.2	0.0	0.0	0.0	0.8	1.1	0.0	0.0	0.1	2.2		
<i>Percentage change versus previous year</i>												
2010 Dec.	-3.5	0.0	0.3	0.0	1.6	-3.6	0.0	1.5	1.4	-8.4		
	Brazilian real <sup>1)</sup> 23	Chinese yuan renminbi 24	Icelandic krona <sup>2)</sup> 25	Indian rupee <sup>3)</sup> 26	Indonesian rupiah 27	Malaysian ringgit 28	Mexican peso <sup>1)</sup> 29	New Zealand dollar 30	Philippine peso 31	Russian rouble 32	South African rand 33	Thai baht 34
2008	2.6737	10.2236	143.83	63.6143	14,165.16	4.8893	16.2911	2.0770	65.172	36.4207	12.0590	48.475
2009	2.7674	9.5277	-	67.3611	14,443.74	4.9079	18.7989	2.2121	66.338	44.1376	11.6737	47.804
2010	2.3314	8.9712	-	60.5878	12,041.70	4.2668	16.7373	1.8377	59.739	40.2629	9.6984	42.014
2010 Q2	2.2762	8.6717	-	57.9879	11,581.24	4.1172	15.9583	1.8145	57.848	38.5027	9.5974	41.152
Q3	2.2589	8.7388	-	59.9818	11,612.07	4.0716	16.5210	1.7979	58.363	39.5260	9.4593	40.825
Q4	2.3037	9.0405	-	60.9153	12,178.16	4.2304	16.8206	1.7915	59.240	41.7192	9.3785	40.728
2010 June	2.2057	8.3245	-	56.8582	11,169.39	3.9853	15.5346	1.7667	56.594	38.1507	9.3398	39.635
July	2.2600	8.6538	-	59.8100	11,546.78	4.0924	16.3699	1.7925	59.072	39.1317	9.6351	41.273
Aug.	2.2691	8.7520	-	60.0584	11,573.26	4.0654	16.4571	1.8059	58.245	39.1898	9.4192	40.937
Sep.	2.2476	8.8104	-	60.0771	11,716.16	4.0570	16.7361	1.7955	57.772	40.2564	9.3236	40.264
Oct.	2.3378	9.2665	-	61.7399	12,407.16	4.3092	17.2845	1.8498	60.285	42.1471	9.6165	41.636
Nov.	2.3391	9.0895	-	61.4539	12,224.00	4.2588	16.8386	1.7703	59.485	42.3360	9.5320	40.826
Dec.	2.2387	8.7873	-	59.6472	11,925.21	4.1313	16.3797	1.7587	58.050	40.7385	9.0143	39.805
<i>Percentage change versus previous month</i>												
2010 Dec.	-4.3	-3.3	-	-2.9	-2.4	-3.0	-2.7	-0.7	-2.4	-3.8	-5.4	-2.5
<i>Percentage change versus previous year</i>												
2010 Dec.	-12.4	-11.9	-	-12.4	-13.8	-17.1	-12.8	-13.7	-14.3	-7.2	-17.5	-18.0

Source: ECB.

1) For these currencies the ECB computes and publishes euro reference exchange rates as from 1 January 2008. Previous data are indicative.

2) The most recent rate for the Icelandic krona refers to 3 December 2008.

3) For this currency the ECB computes and publishes euro reference exchange rates as from 1 January 2009. Previous data are indicative.



## DEVELOPMENTS OUTSIDE THE EURO AREA

### 9.1 Economic and financial developments in other EU Member States

(annual percentage changes, unless otherwise indicated)

	Bulgaria	Czech Republic	Denmark	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10
<b>HICP</b>										
2009	2.5	0.6	1.1	3.3	4.2	4.0	4.0	5.6	1.9	2.2
2010	3.0	1.2	2.2	-1.2	1.2	.	.	6.1	.	.
2010 Q3	3.3	1.6	2.3	-0.3	1.8	3.6	2.1	7.5	1.3	3.1
2010 Q4	4.0	2.0	2.5	1.7	2.9	.	.	7.8	.	.
2010 Oct.	3.6	1.8	2.4	0.9	2.6	4.3	2.6	7.9	1.6	3.2
2010 Nov.	4.0	1.9	2.5	1.7	2.5	4.0	2.6	7.7	1.7	3.3
2010 Dec.	4.4	2.3	2.8	2.4	3.6	.	.	7.9	.	.
<b>General government deficit (-)/surplus (+) as a percentage of GDP</b>										
2007	1.1	-0.7	4.8	-0.3	-1.0	-5.0	-1.9	-2.6	3.6	-2.7
2008	1.7	-2.7	3.4	-4.2	-3.3	-3.7	-3.7	-5.7	2.2	-5.0
2009	-4.7	-5.8	-2.7	-10.2	-9.2	-4.4	-7.2	-8.6	-0.9	-11.4
<b>General government gross debt as a percentage of GDP</b>										
2007	17.2	29.0	27.4	9.0	16.9	66.1	45.0	12.6	40.0	44.5
2008	13.7	30.0	34.2	19.7	15.6	72.3	47.1	13.4	38.2	52.1
2009	14.7	35.3	41.4	36.7	29.5	78.4	50.9	23.9	41.9	68.2
<b>Long-term government bond yield as a percentage per annum; period average</b>										
2010 July	6.05	3.97	2.72	10.00	5.15	7.39	5.84	7.18	2.70	2.97
2010 Aug.	5.99	3.56	2.45	10.00	5.15	7.07	5.62	7.15	2.45	2.68
2010 Sep.	5.90	3.34	2.40	9.97	5.15	7.04	5.49	7.14	2.53	2.84
2010 Oct.	5.82	3.43	2.46	9.24	5.15	6.87	5.53	7.02	2.64	2.80
2010 Nov.	5.74	3.59	2.65	8.99	5.15	7.38	5.82	7.04	2.86	3.03
2010 Dec.	5.76	3.89	3.01	7.55	5.15	7.92	5.98	7.09	3.21	3.34
<b>3-month interest rate as a percentage per annum; period average</b>										
2010 July	4.09	1.23	1.13	1.74	1.70	6.17	3.84	6.92	0.87	0.74
2010 Aug.	4.04	1.24	1.14	1.28	1.70	5.82	3.82	6.46	0.99	0.73
2010 Sep.	3.94	1.22	1.15	1.19	1.65	6.41	3.82	6.48	1.16	0.73
2010 Oct.	3.99	1.20	1.19	1.22	1.61	5.90	3.83	6.44	1.37	0.74
2010 Nov.	3.99	1.22	1.24	0.95	1.59	5.87	3.86	6.35	1.59	0.74
2010 Dec.	3.93	1.22	1.21	0.83	1.56	6.17	3.92	6.00	1.86	0.75
<b>Real GDP</b>										
2008	6.2	2.5	-1.1	-4.2	2.9	0.8	5.1	7.3	-0.6	-0.1
2009	-4.9	-4.1	-5.2	-18.0	-14.7	-6.7	1.7	-7.1	-5.3	-4.9
2010 Q1	-4.0	1.0	-0.9	-5.1	-0.6	-1.1	3.1	-2.6	2.8	-0.3
2010 Q2	0.5	2.3	2.8	-2.6	-0.3	0.6	3.8	-0.5	4.5	1.6
2010 Q3	1.0	2.8	3.4	2.5	0.8	2.2	4.7	-2.5	6.8	2.7
<b>Current and capital account balance as a percentage of GDP</b>										
2008	-22.3	0.2	2.7	-11.6	-11.3	-6.3	-3.7	-11.1	8.6	-1.3
2009	-8.6	0.1	3.5	11.0	7.6	0.8	-0.5	-3.6	7.4	-1.5
2010 Q1	-6.7	2.4	2.9	12.0	3.9	4.5	0.2	-6.7	7.8	-2.8
2010 Q2	-4.3	-2.4	5.1	7.3	7.8	4.0	-0.9	-7.8	6.5	-1.1
2010 Q3	14.6	-6.8	7.0	3.2	0.6	3.7	-2.7	-1.4	6.2	-2.7
<b>Gross external debt as a percentage of GDP</b>										
2008	104.7	50.0	177.8	129.2	71.3	122.3	57.0	56.0	204.4	441.4
2009	107.9	50.8	189.8	156.3	87.2	141.2	59.6	69.1	205.0	416.6
2010 Q1	106.2	49.0	201.5	162.4	91.1	143.9	57.8	71.7	206.2	436.7
2010 Q2	107.3	52.4	202.1	164.9	89.7	153.8	60.6	77.0	216.6	428.2
2010 Q3	103.5	.	.	162.6	88.8	142.8	.	.	202.2	429.3
<b>Unit labour costs</b>										
2008	12.5	5.1	6.7	22.0	10.4	4.8	7.5	22.9	3.1	2.3
2009	12.8	3.5	4.7	-7.0	-2.8	1.9	1.6	7.2	4.8	5.7
2010 Q1	7.7	-2.2	0.3	-18.8	-10.8	0.2	7.4	-	-0.6	4.4
2010 Q2	0.4	-0.9	-2.4	-15.2	-10.0	-2.8	5.9	-	-1.8	0.5
2010 Q3	-1.2	1.6	-2.4	-6.8	-7.7	-0.1	4.8	-	-2.8	.
<b>Standardised unemployment rate as a percentage of labour force (s.a.)</b>										
2008	5.6	4.4	3.4	7.5	5.9	7.8	7.2	5.8	6.2	5.7
2009	6.9	6.7	6.0	17.1	13.7	10.0	8.2	6.9	8.3	7.6
2010 Q2	9.9	7.3	7.5	19.4	18.2	11.3	9.6	7.1	8.5	7.8
2010 Q3	10.1	7.1	7.4	18.2	18.3	11.0	9.6	7.3	8.3	7.7
2010 Sep.	10.1	7.1	7.6	18.2	18.3	11.0	9.7	7.3	8.2	7.8
2010 Oct.	10.1	7.2	7.8	.	.	11.2	9.8	.	8.1	.
2010 Nov.	10.2	7.3	8.0	.	.	11.3	9.8	.	7.8	.

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

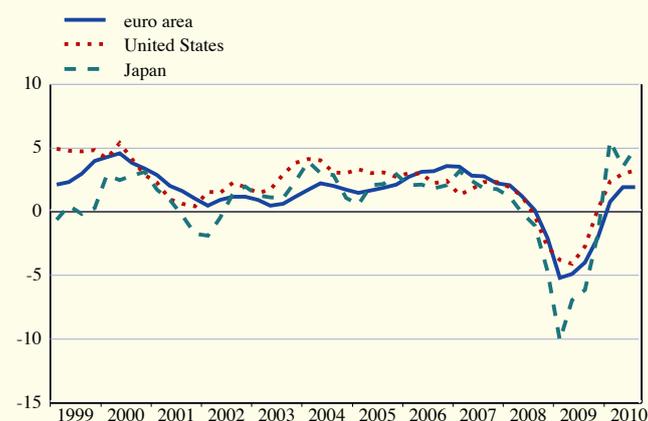
## 9.2 Economic and financial developments in the United States and Japan

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs <sup>1)</sup>	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money <sup>2)</sup>	3-month interbank deposit rate <sup>3)</sup>	10-year zero coupon government bond yield; <sup>3)</sup> end of period	Exchange rate <sup>4)</sup> as national currency per euro	Fiscal deficit (-)/surplus (+) as a % of GDP	Gross public debt <sup>5)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
2007	2.9	2.4	1.9	3.2	4.6	6.3	5.30	4.81	1.3705	-2.9	48.4
2008	3.8	2.2	0.0	-4.4	5.8	7.1	2.93	2.70	1.4708	-6.3	56.7
2009	-0.4	-1.6	-2.6	-10.9	9.3	7.9	0.69	4.17	1.3948	-11.3	68.6
2010	.	.	.	.	.	.	0.34	3.57	1.3257	.	.
2009 Q4	1.4	-3.4	0.2	-3.7	10.0	5.1	0.27	4.17	1.4779	-11.1	68.6
2010 Q1	2.4	-2.9	2.4	3.9	9.7	1.9	0.26	4.01	1.3829	-10.7	71.7
Q2	1.8	-1.9	3.0	8.8	9.7	1.6	0.44	3.13	1.2708	-11.1	73.3
Q3	1.2	-1.1	3.2	7.2	9.6	2.5	0.39	2.69	1.2910	-10.4	75.3
Q4	.	.	.	.	.	.	0.29	3.57	1.3583	.	.
2010 Aug.	1.1	-	-	6.9	9.6	2.7	0.36	2.58	1.2894	-	-
Sep.	1.1	-	-	6.4	9.6	3.0	0.29	2.69	1.3067	-	-
Oct.	1.2	-	-	6.6	9.6	3.2	0.29	2.82	1.3898	-	-
Nov.	1.1	-	-	6.0	9.8	3.3	0.29	3.12	1.3661	-	-
Dec.	.	-	-	.	.	.	0.30	3.57	1.3220	-	-
Japan											
2007	0.1	-2.3	2.3	2.8	3.8	1.6	0.79	1.70	161.25	-2.4	156.3
2008	1.4	1.7	-1.2	-3.4	4.0	2.1	0.93	1.21	152.45	-2.1	162.2
2009	-1.4	0.4	-6.3	-21.9	5.1	2.7	0.47	1.42	130.34	.	.
2010	.	.	.	.	.	2.8	0.23	1.18	116.24	.	.
2009 Q4	-2.0	-3.6	-1.8	-4.2	5.2	3.3	0.31	1.42	132.69	.	.
2010 Q1	-1.2	-3.7	5.5	27.6	4.9	2.8	0.25	1.48	125.48	.	.
Q2	-0.9	-1.2	3.5	21.0	5.2	3.0	0.24	1.18	117.15	.	.
Q3	-0.8	.	5.0	13.6	5.1	2.8	0.24	1.03	110.68	.	.
Q4	.	.	.	.	.	2.6	0.19	1.18	112.10	.	.
2010 Aug.	-0.9	-	-	15.1	5.1	2.8	0.24	1.06	110.04	-	-
Sep.	-0.6	-	-	11.6	5.0	2.8	0.22	1.03	110.26	-	-
Oct.	0.2	-	-	4.3	5.1	2.8	0.20	1.01	113.67	-	-
Nov.	0.1	-	-	5.9	5.1	2.6	0.19	1.27	112.69	-	-
Dec.	.	-	-	.	.	2.4	0.18	1.18	110.11	-	-

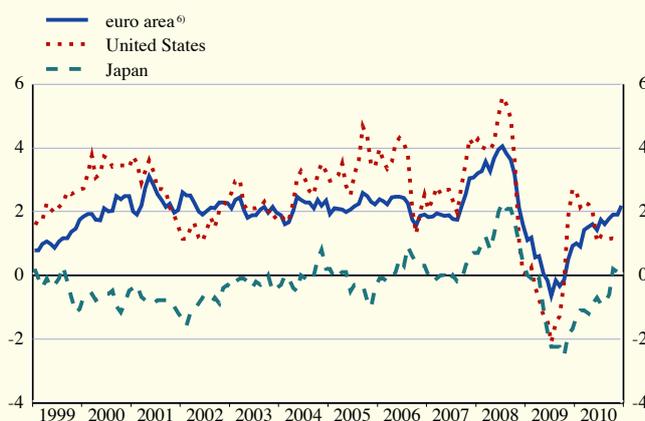
### C41 Real gross domestic product

(annual percentage changes; quarterly data)



### C42 Consumer price indices

(annual percentage changes; monthly data)



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) Period averages; M2 for the United States, M2+CDs for Japan.
- 3) Percentages per annum. For further information on the three-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.



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## TECHNICAL NOTES

### 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:

$$b) \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

### 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 can 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 (for the non-seasonally adjusted series) is currently set as December 2006 = 100. Time series for the index of adjusted outstanding amounts are available on the ECB's website ([www.ecb.europa.eu](http://www.ecb.europa.eu)) in the "Monetary and financial statistics" 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  $t$  – can be calculated using either of the following two formulae:

$$f) a_t = \left[ \prod_{i=0}^{11} \left( 1 + \frac{F_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$g) a_t = \left( \frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index for December 2002 by the index for December 2001.

Growth rates for intra-annual periods can be derived by adapting formula g). For example, the month-on-month growth rate  $a_t^M$  can be calculated as:

$$h) \quad a_t^M = \left( \frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as  $(a_{t+1} + a_t + a_{t-1})/3$ , where  $a_t$  is defined as in f) or g) above.

#### CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If  $F_t^Q$  and  $L_{t-3}$  are defined as above, the index  $I_t$  of adjusted outstanding amounts for the quarter ending in month  $t$  is defined as:

$$i) \quad I_t = I_{t-3} \times \left( 1 + \frac{F_t^Q}{L_{t-3}} \right)$$

The annual growth rate in the four quarters ending in month  $t$  (i.e.  $a_t$ ) can be calculated using formula g).

#### SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS<sup>1</sup>

The approach used is based on multiplicative decomposition using X-12-ARIMA.<sup>2</sup> The seasonal adjustment may include a day-of-the-week adjustment, and for some series it is carried out indirectly by means of a linear combination of components. This is the case for M3, which is derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.<sup>3</sup> The resulting estimates of 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.

#### SECTIONS 3.1 TO 3.5

#### EQUALITY OF USES AND RESOURCES

In Section 3.1 the data conform to a basic accounting identity. For non-financial transactions, total uses equal total resources for each transaction category. This accounting identity is also reflected in the financial account – 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 Sections 3.1, 3.2 and 3.3 are computed as follows.

The trade balance equals euro area imports minus exports vis-à-vis the rest of the world for goods and services.

1 For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Monetary and financial statistics” sub-section of the “Statistics” section of the ECB’s website ([www.ecb.europa.eu](http://www.ecb.europa.eu)).

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 of 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 defined only 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 the net equity of households in pension fund reserves (resources minus uses) minus final consumption expenditure (uses). For the rest of the world, the 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 net financial worth (wealth) due to transactions). For the household and non-financial corporation sectors, there is a statistical discrepancy between the balancing items computed from the capital account and the financial account.

Changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities, whereas other changes in net financial worth (wealth) are calculated as (total) other changes in financial assets minus (total) other changes in liabilities.

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).

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) and other changes in non-financial assets.

The net worth (wealth) of households is calculated as the sum of the non-financial assets and net financial worth (wealth) of households.

## SECTIONS 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 can 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 month  $t$ , the index  $I_t$  of notional stocks in month  $t$  is defined as:

$$j) \quad I_t = I_{t-1} \times \left( 1 + \frac{N_t}{L_{t-1}} \right)$$

As a base, the index is set equal to 100 in December 2001. The growth rate  $a_t$  for month  $t$ ,

corresponding to the change in the 12 months ending in month  $t$ , can be calculated using either of the following two formulae:

$$k) \quad a_t = \left[ \prod_{i=0}^{11} \left( 1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$l) \quad a_t = \left( \frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an “N” is used instead of an “F”. This is to show that the method used to obtain “net issues” for securities issues statistics differs from that used to calculate equivalent “transactions” for the monetary aggregates.

The average growth rate for the quarter ending in month  $t$  is calculated as:

$$m) \quad \left( \frac{0.5I_t + \sum_{i=1}^2 I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^2 I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where  $I_t$  is the index of notional stocks as at month  $t$ . Likewise, for the year ending in month  $t$ , the average growth rate is calculated as:

$$n) \quad \left( \frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values, and the calculations are based on financial transactions, which exclude reclassifications, revaluations and 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<sup>4</sup>

The approach used is based on multiplicative decomposition using X-12-ARIMA. The seasonal adjustment of total securities issues 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 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.

As in formulae k) and l), the growth rate  $a_t$  for month  $t$ , corresponding to the change in the six months ending in month  $t$ , can be calculated using either of the following two formulae:

$$o) \quad a_t = \left[ \prod_{i=0}^5 \left( 1 + \frac{N_{t-i}^M}{L_{t-1-i}} \right) - 1 \right] \times 100$$

$$p) \quad a_t = \left( \frac{I_t}{I_{t-6}} - 1 \right) \times 100$$

### TABLE I IN SECTION 5.1

## SEASONAL ADJUSTMENT OF THE HICP<sup>4</sup>

The approach used is based on multiplicative decomposition using 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

<sup>4</sup> For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Monetary and financial statistics” sub-section of the “Statistics” section of the ECB’s website ([www.ecb.europa.eu](http://www.ecb.europa.eu)).

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.

## TABLE 2 IN SECTION 7.1

### SEASONAL ADJUSTMENT OF THE BALANCE OF PAYMENTS CURRENT ACCOUNT

The approach used is based on multiplicative decomposition, using X-12-ARIMA or TRAMO-SEATS depending on the item. The raw data for goods, services, income and current transfers are pre-adjusted in order to take into account significant working day effects. The working day adjustment for goods and services takes account of national public holidays. The seasonal adjustment of 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 biannual intervals or as required.

## 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](http://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 in the “Data services” sub-section include subscriptions to different datasets and a repository of compressed Comma Separated Value (CSV) files. For further information, please contact us at: [statistics@ecb.europa.eu](mailto:statistics@ecb.europa.eu).

In general, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the Governing Council of the ECB’s first meeting of the month. For this issue, the cut-off date was 12 January 2011.

Unless otherwise indicated, all data series including observations for 2011 relate to the “Euro 17” (i.e. the euro area including Estonia) for the whole time series. For interest rates, monetary statistics, the HICP and reserve assets (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), euro area statistical series take into account the changing composition of the euro area.

The composition of the euro area has changed a number of times over the years. When the euro was introduced in 1999, the euro area comprised the following 11 countries (the Euro 11): Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Greece then joined in 2001, forming the Euro 12. Slovenia joined in 2007, forming the Euro 13; Cyprus and Malta joined in 2008, forming the Euro 15; and Slovakia joined in 2009, forming the Euro 16. Finally, Estonia joined in 2011, bringing the number of euro area countries to 17.

### EURO AREA SERIES WITH A FIXED COMPOSITION

Aggregated statistical series for fixed compositions of the euro area relate to a given fixed composition for the whole time series, regardless of the composition at the time to which the statistics relate. For example, aggregated series are calculated for the Euro 17 (i.e. aggregating the data of all 17 countries currently in the euro area) for all years, despite the fact that the euro area has only had this composition since 1 January 2011. Unless otherwise indicated, the ECB’s Monthly Bulletin provides statistical series for the current composition.

### EURO AREA SERIES WITH A CHANGING COMPOSITION

Aggregated statistical series with a changing composition take into account the composition of the euro area at the time to which the statistics relate. For example, euro area statistical series with a changing composition aggregate the data of the Euro 11 for the period up to the end of 2000, the Euro 12 for the period from 2001 to the end of 2006, and so on. With this approach, each individual statistical series covers all of the various compositions of the euro area.

For the HICP, as well as monetary aggregates and their counterparts, annual rates of change are compiled from chain-linked indices, with joining countries’ series linked to the euro area series in the December index. Thus, if a country joins the euro area in January of a given year, annual rates of change relate to the previous composition of the euro area up to and including December of the previous year, and the enlarged composition of the euro area thereafter. Percentage changes are calculated on the basis of a chain-linked index, taking account of the changing composition of the euro area. Absolute changes for monetary aggregates and their counterparts (transactions) refer to

the composition of the euro area at the time to which the statistics relate.

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, pre-1999 data<sup>1</sup> 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, Latvia, Lithuania, Hungary, Poland, Romania, 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 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 wording “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. Maintenance periods for minimum reserve requirements start every month on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting for which the monthly assessment of the monetary policy stance is scheduled. They end on the day preceding the corresponding settlement day in the following month. Annual/quarterly observations refer to averages for the last reserve maintenance period of the year/quarter.

Table 1 in Section 1.4 shows the components of the reserve base of credit institutions subject to reserve requirements. Liabilities vis-à-vis other credit institutions subject to the ESCB’s minimum reserve system, the ECB and participating national central banks are excluded from the reserve base. When a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years which are held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. The percentage used to calculate the reserve base was 10% until November 1999 and has been 30% since that date.

Table 2 in Section 1.4 contains average data for completed maintenance periods. First, the reserve requirement of each individual

<sup>1</sup> Data on monetary statistics in Sections 2.1 to 2.8 are available for periods prior to January 1999 on the ECB’s website (<http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html>) and in the SDW (<http://sdw.ecb.europa.eu/browse.do?node=2018811>).

credit institution is calculated by applying the reserve ratios for the corresponding categories of liability 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). Current account holdings (column 2) are the aggregate average daily current account holdings of credit institutions, including those that serve to fulfil reserve requirements. Excess reserves (column 3) are the average current account holdings over the maintenance period in excess of the required reserves. 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 requirements. 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 euro area credit institutions' current account holdings with the Eurosystem in euro. All amounts are derived from the consolidated financial statement of the Eurosystem. Other liquidity-absorbing operations (column 7) exclude the issuance of debt certificates initiated by NCBs in Stage Two of EMU. Net other factors (column 10) represent the netted remaining items in the consolidated financial statement of the Eurosystem. 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). Base money (column 12) is calculated as the sum of the deposit facility (column 6), banknotes in circulation (column 8) and 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 sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. MFIs comprise 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 credit 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 of MFIs in the euro area. Owing to a small amount of 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 in 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 analysis, broken down by sector, type and original maturity, of loans granted by MFIs other than the Eurosystem

(i.e. the banking system) resident in the euro area. Section 2.5 provides analysis, broken down 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, broken down by type of issuer.

Sections 2.2 to 2.6 include data on 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 based on those transactions in the form of annual percentage changes. Section 2.8 shows a quarterly currency breakdown of selected MFI balance sheet items.

Details of sector definitions are set out in the third edition of the “Monetary financial institutions and markets statistics sector manual – Guidance for the statistical classification of customers” (ECB, March 2007). The publication “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 statistical information has been collected and compiled on the basis of various ECB regulations concerning the balance sheet of the monetary financial institution sector. Since July 2010 this has been carried out on the basis of Regulation ECB/2008/32<sup>2</sup>.

In line with this Regulation, the balance sheet item “money market paper” has been merged with the item “debt securities” on both the assets and liabilities sides of the MFI balance sheet.

Section 2.9 shows outstanding amounts and transactions on the balance sheet of euro area investment funds (other than money market funds, which are included in the MFI balance sheet statistics). An investment fund is a collective investment undertaking that invests capital raised from the public in financial and/

or non-financial assets. A complete list of euro area investment funds is published on the ECB’s website. The balance sheet is aggregated, so investment funds’ assets include their holdings of shares/units issued by other investment funds. Shares/units issued by investment funds are also broken down by investment policy (i.e. into bond funds, equity funds, mixed funds, real estate funds, hedge funds and other funds) and by type (i.e. into open-end funds and closed-end funds). Section 2.10 provides further details on the main types of asset held by euro area investment funds. This Section contains a geographical breakdown of the issuers of securities held by investment funds, as well as breaking issuers down by economic sector where they are resident in the euro area.

Further information on these investment fund statistics can be found in the “Manual on investment fund statistics”. Since December 2008 harmonised statistical information has been collected and compiled on the basis of Regulation ECB/2007/8 concerning statistics on the assets and liabilities of investment funds.

## 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. Non-seasonally adjusted data at 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.

In short, the sequence of accounts (transactions) comprises: (1) the generation of income account, which shows how production activity translates

<sup>2</sup> OJ L 15, 20.01.2009, p.14.

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 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 sectoral coverage of the financial account and the financial balance sheets is more detailed for the financial corporation sector, which is broken down 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 “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,

as well as outstanding amounts in the financial and non-financial balance sheet accounts, presenting data in a more analytical manner. Sector-specific transactions and balancing items are arranged in a way that more clearly depicts the financing and investment decisions of households, while respecting the accounting identities 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, as well as outstanding amounts for the financial balance sheet accounts, presenting data in a more analytical manner.

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 those EU Member States that had adopted the euro at the time to which the statistics relate (i.e. a changing composition), with the exception of statistics on securities issues (Sections 4.1 to 4.4), which relate to the Euro 16 for the whole time series (i.e. a fixed composition).

Statistics on securities other than shares and statistics on 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 from and loans to 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: (i) securities other than shares, excluding financial derivatives; and (ii) quoted shares. The former are presented

in Sections 4.1, 4.2 and 4.3, while the latter 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 (i) a longer maturity, (ii) optional maturity dates, the latest of which is more than one year away, or (iii) 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 issue. Variable rate issues comprise all issues where the coupon is periodically refixed with reference to an independent interest rate or index. 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, broken down by original maturity, residency of the issuer and currency. It presents outstanding amounts, gross issues and net issues of securities other than shares, broken down into: (i) issues denominated in euro and issues in all currencies; (ii) issues by euro area residents and total issues; and (iii) total and long-term maturities. 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 six-month annualised seasonally adjusted growth rates for total and long-term debt securities. Seasonally adjusted data are derived from the 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 correspond 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 the data on debt securities issued 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 of Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows seasonally adjusted and non-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.

Columns 1, 4, 6 and 8 in Table 1 of Section 4.4 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).

Columns 3, 5, 7 and 9 in Table 1 of Section 4.4 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 issuer’s 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. These MFI interest rate statistics replaced the ten transitional statistical series on euro area retail interest rates that had been published in the Monthly Bulletin as of 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 prior to January 1999, monthly, quarterly and yearly values are period averages. Overnight deposits are represented by end-of-period interbank deposit bid rates up to and including December 1998 and period averages for the euro overnight index average (EONIA) thereafter. As of January 1999, euro area interest rates on one, three, six and twelve-month deposits are euro interbank offered rates (EURIBOR); prior to that date, they are London interbank offered rates (LIBOR) where available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Section 4.7 shows end-of-period rates estimated from nominal spot yield curves based on

AAA-rated euro-denominated bonds issued by euro area central governments. The yield curves are estimated using the Svensson model<sup>3</sup>. Spreads between the ten-year rates and the three-month and two-year rates are also released. Additional yield curves (daily releases, including charts and tables) and the corresponding methodological information are available at: <http://www.ecb.europa.eu/stats/money/yc/html/index.en.html>. Daily data can 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 labour costs indices, GDP and expenditure components, value added by economic activity, industrial production, retail sales passenger car registrations and employment in terms of hours worked are working day-adjusted.

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 into 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.

<sup>3</sup> Svensson, L. E., "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051, 1994.

Industrial producer prices (Table 2 in Section 5.1), industrial production, industrial new orders, industrial turnover and retail sales (Section 5.2) are covered by Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics<sup>4</sup>. Since January 2009 the revised classification of economic activities (NACE Revision 2), as covered by Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90, as well as certain EC Regulations on specific statistical domains,<sup>5</sup> has been applied in the production of short-term statistics. The breakdown by end-use of product for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE Revision 2, sections B to E) into Main Industrial Groupings (MIGs) as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007<sup>6</sup>. Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial production reflects the value added of the industries concerned.

The two non-energy commodity price indices shown in Table 3 in Section 5.1 are compiled with the same commodity coverage, but using two different weighting schemes: one based on the respective commodity imports of the euro area (columns 2-4), and the other (columns 5-7) based on estimated euro area domestic demand, or “use”, taking into account information on imports, exports and the domestic production of each commodity (ignoring, for the sake of simplicity, inventories, which are assumed to be relatively stable over the observed period). The import-weighted commodity price index is appropriate for analysing external developments, while the use-weighted index is suitable for the specific purpose of analysing international commodity price pressures on euro area inflation. The use-weighted commodity price indices are experimental data. For more details as regards the compilation of the ECB commodity price

indices, see Box 1 in the December 2008 issue of the Monthly Bulletin.

The labour cost indices (Table 5 in Section 5.1) measure the changes in labour costs per hour worked in industry (including construction) and market services. Their methodology is laid down in Regulation (EC) No 450/2003 of the European Parliament and of the Council of 27 February 2003 concerning the labour cost index<sup>7</sup> and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003<sup>8</sup>. A breakdown of the labour cost indices 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 3 in Section 5.1) and employment statistics (Tables 1, 2 and 3 in Section 5.3) are derived from 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

4 OJ L 162, 5.6.1998, p. 1.

5 OJ L 393, 30.12.2006, p. 1.

6 OJ L 155, 15.6.2007, p. 3.

7 OJ L 69, 13.3.2003, p. 1.

8 OJ L 169, 8.7.2003, p. 37.

vehicles and motorcycles), except automotive fuel. New passenger car registrations cover registrations of both private and commercial passenger cars.

Qualitative business and consumer survey data (Table 5 in Section 5.2) draw on the European Commission Business and Consumer Surveys.

Unemployment rates (Table 4 in Section 5.3) conform to International Labour Organization guidelines. They refer to persons actively seeking work as a share of the labour force, using harmonised criteria and definitions. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Section 5.3.

## GOVERNMENT FINANCE

Sections 6.1 to 6.5 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The annual euro area aggregates in Sections 6.1 to 6.3 are compiled by the ECB 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<sup>9</sup> 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 within 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 Council Regulation (EC) No 479/2009 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002 on quarterly non-financial accounts for general government<sup>10</sup>. Section 6.5 presents quarterly figures on gross consolidated government debt, the deficit-debt adjustment and the government borrowing requirement. These figures are compiled using data provided by the Member States under Regulation (EC) No 501/2004 and Regulation (EC) No 222/2004 and data provided by the NCBs.

## EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments and international investment position (i.i.p.) statistics (Sections 7.1 to 7.4) are generally in line with the IMF Balance of Payments Manual (fifth edition, October 1993), the ECB Guideline of 16 July 2004 on the statistical reporting requirements of the ECB (ECB/2004/15)<sup>11</sup> and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)<sup>12</sup>. Additional information regarding 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 reports of the Task Force on Portfolio Investment Collection Systems (June 2002),

<sup>9</sup> OJ L 172, 12.7.2000, p. 3.

<sup>10</sup> OJ L 179, 9.7.2002, p. 1.

<sup>11</sup> OJ L 354, 30.11.2004, p. 34.

<sup>12</sup> OJ L 159, 20.6.2007, p. 48.

the Task Force on Portfolio Investment Income (August 2003) and the Task Force on Foreign Direct Investment (March 2004), all of which can be downloaded from the ECB's website. In addition, a report by the ECB/European Commission (Eurostat) Task Force on Quality looking at balance of payments and international investment position statistics (June 2004) is available on the website of the Committee on Monetary, Financial and Balance of Payments Statistics ([www.cmfb.org](http://www.cmfb.org)). The annual quality report on the euro area b.o.p./i.i.p., which is based on the Task Force's recommendations and follows the basic principles of the ECB Statistics Quality Framework published in April 2008, is available on the ECB's website.

The tables in Sections 7.1 and 7.4 follow the sign convention in the IMF Balance of Payments Manual – i.e. surpluses in the current account and 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, as of the February 2008 issue of the Monthly Bulletin, the tables in Section 7.3 have been restructured in order to allow the data on the 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.

Table 1 in Section 7.2 also contains seasonally adjusted data for the current account. Where appropriate, the adjustment also covers working day, leap year and/or Easter-related effects. Table 3 in Section 7.2 and Table 9 in Section 7.3 present a breakdown of the euro area b.o.p. and

i.i.p. vis-à-vis major partner countries, both individually and 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, with the exception of the ECB, are considered to be outside the euro area for statistical purposes, regardless of their physical location) and, for some purposes, offshore centres and international organisations. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives or international reserves. In addition, separate data are not provided for investment income payable to Brazil, mainland China, India or 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, regarding 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 i.i.p. changes other than transactions, using 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 for the Eurosystem’s international reserves and related assets and liabilities are shown in Table 7 of Section 7.3. These figures are not fully comparable with those in 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. By definition, the assets included in the Eurosystem’s international reserves take account of the changing composition of the euro area. Before countries join the euro area, the assets of their national central banks are included in portfolio investment (in the case of securities) or other investment (in the case of other assets). 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 27 September 2009. 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.

The euro area’s gross external debt statistics in Table 8 of Section 7.3 represent outstanding actual (rather than contingent) liabilities vis-à-vis non-euro area residents that require the payment of principal and/or interest by the debtor at one or more points in the future. Table 8 shows a breakdown of gross external debt by instrument and institutional sector.

Section 7.4 contains a monetary presentation of the euro area balance of payments, showing the transactions by non-MFIs that mirror the net external transactions by MFIs. Included in the transactions by non-MFIs are b.o.p. transactions for which a sectoral breakdown is not available. These concern the current and capital accounts (column 2) and financial derivatives (column 11). An up-to-date 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. 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 contained in the 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 3 in Section 7.5) shows major trading partners both individually and 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 imported goods in external trade data.

Industrial import prices and industrial producer export prices (or industrial output prices for

the non-domestic market) shown in Table 2 in Section 7.5 were introduced by Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98, which is the principal legal basis for short-term statistics. The industrial import price index covers industrial products imported from outside the euro area under sections B to E of the Statistical Classification of Products by Activity in the European Economic Community (CPA) and all institutional import sectors except households, governments and non-profit institutions. It reflects the cost, insurance and freight price excluding import duties and taxes, and refers to actual transactions in euro recorded at the point when ownership of the goods is transferred. The industrial producer export prices cover all industrial products exported directly by euro area producers to the extra-euro area market under sections B to E of NACE Revision 2. Exports from wholesalers and re-exports are not covered. The indices reflect the free on board price expressed in euro and calculated at the euro area frontier, including any indirect taxes except VAT and other deductible taxes. Industrial import prices and industrial producer export prices are available by Main Industrial Grouping as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007. For more details, see Box 11 in the December 2008 issue of the Monthly Bulletin.

## EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate indices for the euro, which are calculated by the ECB on the basis of weighted averages of the euro's bilateral exchange rates against the currencies of the selected trading partners of the euro area. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with those trading partners in the periods 1995-1997, 1998-2000, 2001-2003 and 2004-2006, and are calculated to account for third-market effects. The EER indices are obtained by chain-linking the indicators based on each of these four sets

of trade weights at the end of each three-year period. The base period of the resulting EER index is the first quarter of 1999. The EER-21 group of trading partners is composed of the 11 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-41 group comprises the EER-21 plus 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 and unit labour costs, both for the manufacturing sector and for the total economy.

For more detailed information on the calculation of the EERs, see Box 5, entitled "International trade developments and revision of the effective exchange rates of the euro", in the January 2010 issue of the Monthly Bulletin, the relevant methodological note and ECB 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 data relating to the euro area. As a result, data on current and capital accounts and gross external debt include special-purpose vehicles. 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<sup>1</sup>



### 15 JANUARY 2009

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 50 basis points to 2.00%, starting from the operations to be settled on 21 January 2009. In addition, it decides that the interest rates on the marginal lending and the deposit facility will be 3.00% and 1.00% respectively, with effect from 21 January 2009, in line with the decision of 18 December 2008.

### 5 FEBRUARY 2009

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 2.00%, 3.00% and 1.00% respectively.

### 5 MARCH 2009

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 50 basis points to 1.50%, starting from the operations to be settled on 11 March 2009. In addition, it decides that the interest rates on the marginal lending and the deposit facility will be 2.50% and 0.50% respectively, with effect from 11 March 2009.

Moreover, the Governing Council decides to continue the fixed rate tender procedure with full allotment for all main refinancing operations, special-term refinancing operations and supplementary and regular longer-term refinancing operations for as long as needed, and in any case beyond the end of 2009. In addition, the Governing Council decides to continue with the current frequency and maturity profile of supplementary longer-term refinancing operations and special-term refinancing operations for as long as needed, and in any case beyond the end of 2009.

### 2 APRIL 2009

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.25%, starting from the operations to be settled on 8 April 2009. In addition, it decides that the interest rates on the marginal lending and the deposit facility will be 2.25% and 0.25% respectively, with effect from 8 April 2009.

### 7 MAY 2009

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.00%, starting from the operation to be settled on 13 May 2009. In addition, it decides to decrease the interest rate on the marginal lending facility by 50 basis points to 1.75% with effect from 13 May 2009, and to leave the interest rate on the deposit facility unchanged at 0.25%. In addition, the Governing Council of the ECB decides to proceed with its enhanced credit support approach. In particular, it decides that the Eurosystem will conduct liquidity-providing longer-term refinancing operations with a maturity of one year as fixed rate tender procedure with full allotment. In addition, it decides in principle that the Eurosystem will purchase euro-denominated covered bonds issued in the euro area.

### 4 JUNE 2009

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. In addition, the Governing Council of the ECB decides upon the technical modalities related to the purchase of euro-denominated covered bonds issued in the euro area decided on 7 May 2009.

<sup>1</sup> The chronology of monetary policy measures taken by the Eurosystem between 1999 and 2008 can be found in the ECB's Annual Report for the respective years.

**2 JULY, 6 AUGUST, 3 SEPTEMBER, 8 OCTOBER  
AND 5 NOVEMBER 2009**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

**3 DECEMBER 2009**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 13 April 2010.

**14 JANUARY AND 4 FEBRUARY 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

**4 MARCH 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 12 October 2010, including a return to variable rate tender procedures in the regular three-month longer-term refinancing operations, starting with the operation to be allotted on 28 April 2010.

**8 APRIL AND 6 MAY 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

**10 MAY 2010**

The Governing Council of the ECB decides on several measures to address severe tensions in financial markets. In particular, it decides to conduct interventions in the euro area public and private debt securities markets (Securities Markets Programme) and to adopt a fixed rate tender procedure with full allotment in the regular three-month longer-term refinancing operations in May and June 2010.

**10 JUNE 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. In addition, it decides to adopt a fixed rate tender procedure with full allotment in the regular three-month longer-term refinancing operations to be allotted during the third quarter of 2010.

**8 JULY AND 5 AUGUST 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

**2 SEPTEMBER 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing

operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 11 January 2011, notably the adoption of a fixed rate tender procedure with full allotment in the three-month longer-term refinancing operations.

#### **7 OCTOBER AND 4 NOVEMBER 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

#### **2 DECEMBER 2010**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. It also decides on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 12 April 2011, notably to continue its fixed rate tender procedures with full allotment.

#### **13 JANUARY 2011**

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.





## PUBLICATIONS PRODUCED BY THE EUROPEAN CENTRAL BANK

The ECB produces a number of publications which provide information about its core activities: monetary policy, statistics, payment and securities settlement systems, financial stability and supervision, international and European cooperation, and legal matters. These include the following:

### STATUTORY PUBLICATIONS

- Annual Report
- Convergence Report
- Monthly Bulletin

### RESEARCH PAPERS

- Legal Working Paper Series
- Occasional Paper Series
- Research Bulletin
- Working Paper Series

### OTHER/TASK-RELATED PUBLICATIONS

- Enhancing monetary analysis
- Financial integration in Europe
- Financial Stability Review
- Statistics Pocket Book
- The European Central Bank: history, role and functions
- The international role of the euro
- The implementation of monetary policy in the euro area (“General Documentation”)
- The monetary policy of the ECB
- The payment system

The ECB also publishes brochures and information materials on a variety of topics, such as the euro banknotes and coins, as well as seminar and conference proceedings.

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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](http://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 the general government.

**Break-even inflation rate:** the spread between the yield on a nominal bond and that on an inflation-linked bond of the same (or as similar as possible) maturity.

**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.

**Capital accounts:** part of the system of national (or euro area) accounts consisting of the change in net worth that is due to net saving, net capital transfers and net acquisitions of non-financial assets.

**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 or per hour worked:** 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 or by the total number of employees' hours worked.

**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. the 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.

**Collateral:** assets pledged or transferred in some form as a guarantee for the repayment of loans, as well as assets sold under repurchase agreements. Collateral used in Eurosystem reverse transactions must fulfil certain eligibility criteria.

**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 taken out by households, as well as the loans, debt securities and pension fund reserves (resulting from employers' direct pension commitments on behalf of their employees) of non-financial corporations, valued at market prices at the end of the period.

**Debt (general government):** the gross debt (currency and deposits, loans and debt securities) 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 126(2) of the Treaty on the Functioning of the European Union 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 126(2) of the Treaty on the Functioning of the European Union 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 generalised, persistent and self-reinforcing decline in a broad set of prices that results from a drop in aggregate demand and becomes entrenched in expectations.

**Deposit facility:** a standing facility of the Eurosystem enabling eligible counterparties to make, on their own initiative, overnight deposits with the NCB in their respective jurisdiction. Deposits are remunerated at a pre-specified rate that normally provides a floor for overnight market interest rates.

**Disinflation:** a process of decelerating inflation that may lead to negative inflation rates of a temporary nature.

**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 EER

indices of the euro are calculated against different groups of trading partners: the EER-20 comprises the 10 non-euro area EU Member States and 10 trading partners outside the EU, and the EER-40 encompasses the EER-20 and 20 additional countries. The weights used reflect the share of each partner country in the euro area's trade in manufactured goods 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.

**Enhanced credit support:** the non-standard measures taken by the ECB/Eurosystem during the financial crisis with a view to supporting financing conditions and credit flows above and beyond what could be achieved through reductions in key ECB interest rates alone.

**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, e.g. 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 what is known as a prime bank is willing to lend funds (denominated in euro) to another prime bank. The EURIBOR is computed daily, based on the rates of a sample of selected banks, for 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 on the Functioning of the European Union.

**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 whose currency is 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 transactions between residents and non-residents in direct investment, portfolio investment, other investment, financial derivatives and reserve assets.

**Financial accounts:** part of the system of national (or euro area) accounts showing the financial positions (stocks or balance sheets), financial transactions and other changes of the different institutional sectors of an economy by type of financial asset.

**Financial vehicle corporation (FVC):** an entity whose principal activity is to carry out securitisation transactions. An FVC typically issues marketable securities that are offered for sale to the general public, or sold in the form of private placements. In some cases, an FVC simply holds the securitised assets and issues the securities through another entity, often an FVC itself.

**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.

**Fixed rate full-allotment tender procedure:** a tender procedure in which the interest rate is pre-specified by the central bank (fixed rate) and in which counterparties bid the amount of money they want to transact at that rate, knowing in advance that all their bids will be satisfied (full allotment).

**General government:** a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

**Gross domestic product (GDP):** the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

**Gross external debt:** the outstanding amount of an economy's actual (i.e. non-contingent) current liabilities that require payment of principal and/or interest to non-residents at some point in the future.

**Harmonised Index of Consumer Prices (HICP):** a measure of the development 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.

**Insurance corporations and pension funds:** a sector defined in the ESA 95 as comprising all financial corporations and quasi-corporations that are engaged primarily in financial intermediation as the consequence of the pooling of risks.

**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 payment 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 and the reserve positions in the IMF which are held by the Eurosystem.

**Investment funds (except money market funds):** financial institutions that pool capital raised from the public and invest it in financial and non-financial assets. See also MFIs.

**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 recently taken 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 rates at the main refinancing operations, on the marginal lending facility and 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 (volume) divided by either total employment or total hours worked.

**Liquidity-absorbing operation:** an operation through which the Eurosystem absorbs liquidity in order to reduce excess liquidity, or to create a shortage of liquidity. Such operations can be conducted by issuing debt certificates or fixed-term deposits.

**Longer-term refinancing operation (LTRO):** an open market operation with a maturity of more than one week that is executed by the Eurosystem in the form of a reverse transaction. The regular monthly operations have a maturity of three months. During the financial market turmoil that started in August 2007, supplementary operations with maturities ranging from one maintenance period to one year were conducted, the frequency of which varied.

**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 (MRO):** 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 enabling eligible counterparties, on their own initiative, to receive overnight credit from the NCB in their jurisdiction at a pre-specified rate in the form of a reverse transaction. The rate on loans extended within the scope of the marginal lending facility normally provides an upper bound for overnight market interest rates.

**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, i.e. funds that invest in short-term and low-risk instruments usually with a maturity of one year or less.

**Minimum bid rate:** the lower limit to the interest rates at which counterparties may submit bids in the variable tenders.

**Open market operation:** a financial market operation executed on the initiative of the central bank. These operations include reverse transactions, outright transactions as well as the issuance of fixed-term deposits or debt certificates or foreign exchange swaps. The open market operations can be liquidity providing or liquidity absorbing.

**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:** as defined by the Governing Council, 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 that is deemed to be compatible with price stability over the medium term.

**Reserve requirement:** the requirement for institutions to hold minimum reserves with the central bank over a maintenance period. Compliance with the requirement is determined on the basis of the average of the daily balances in the reserve accounts over the maintenance period.

**Reverse transaction:** an operation whereby the NCB buys or sells assets under a repurchase agreement or conducts credit operations against collateral.

**Securitisation:** a transaction or scheme whereby an asset or a pool of cash flow-producing assets, often consisting of loans (mortgages, consumer loans, etc.), is transferred from an originator (usually a credit institution) to a financial vehicle corporation (FVC). The FVC effectively converts these assets into marketable securities by issuing debt instruments with principal and interest serviced through the cash flows produced by the asset pool.

**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 (volume) 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.

**Volatility:** the degree of fluctuation in a given variable.

**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 sufficiently homogenous debt securities with 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.

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