

UROPEAN CENTRAL BANI

2010

# MONTHLY BULLETIN AUGUST



#### EUROSYSTEM







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In 2010 all ECB publications feature a motif taken from the €500 banknote.

# MONTHLY BULLETIN AUGUST 2010

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The cut-off date for the statistics included in this issue was 4 August 2010.

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

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## **ABBREVIATIONS**

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

#### **OTHERS**

BIS	Bank for International Settlements
b.o.p.	balance of payments
BPM5	IMF Balance of Payments Manual (5th edition)
CD	certificate of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
EER	effective exchange rate
EMI	European Monetary Institute
EMU	Economic and Monetary Union
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HWWI	Hamburg Institute of International Economics
ILO	International Labour 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 at its meeting on 5 August 2010 viewed the current key ECB interest rates as appropriate and therefore decided to leave them unchanged. Considering all the new information which has become available since its meeting on 8 July 2010, the Governing Council continues to expect price developments to remain moderate over the policy-relevant medium-term horizon, benefiting from low domestic price pressures. The available economic data and survey-based indicators suggest a strengthening in economic activity in the second quarter of 2010, and the available data for the third quarter are better than expected. Looking further ahead, and taking into account a number of temporary factors, the Governing Council continues to expect the euro area economy to grow at a moderate and still uneven pace, in an environment of uncertainty. The monetary analysis confirms that inflationary pressures over the medium term remain contained, as suggested by weak money and credit growth. 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 remains of the essence.

Monetary policy will do all that is needed to maintain price stability in the euro area over the medium term. This is the necessary and central contribution that monetary policy makes to fostering sustainable economic growth, job creation and financial stability. All the nonstandard measures taken during the period of acute financial market tensions, referred to as "enhanced credit support" and the Securities Markets Programme, are fully consistent with the Governing Council's mandate and, by construction, temporary in nature. The Governing Council remains firmly committed to price stability over the medium to longer term. The monetary policy stance and the overall provision of liquidity will be adjusted as appropriate. Accordingly, the Governing Council will continue to monitor all developments over the period ahead very closely.

Turning to the economic analysis, after a period of sharp decline, euro area economic activity has been expanding since mid-2009. Euro area real GDP increased, on a quarterly basis, by 0.2% in the first quarter of 2010. The available economic data and survey-based indicators suggest a strengthening in economic activity in the second quarter of 2010, and the available data for the third quarter are better than expected. Looking further ahead, and taking into account temporary effects, the Governing Council continues to expect real GDP to grow at a moderate and still uneven pace over time and across economies and sectors of the euro area. Ongoing growth at the global level and its impact on the demand for euro area exports, together with the accommodative monetary policy stance and the measures adopted to restore the functioning of the financial system, should continue to support the euro area economy. However, the recovery in activity is expected to be dampened by the process of balance sheet adjustment in various sectors and labour market prospects.

In the Governing Council's assessment, the risks to the economic outlook are broadly balanced in an environment of uncertainty. On the upside, the global economy and foreign trade may recover more strongly than is now projected, thereby further supporting euro area exports. On the downside, concerns remain relating to the emergence of renewed tensions in financial markets, renewed increases in oil and other commodity prices, and protectionist pressures, as well as the possibility of a disorderly correction of global imbalances.

With regard to price developments, euro area annual HICP inflation increased to 1.7% in July, according to Eurostat's flash estimate, from 1.4% in June, most likely owing to upward base effects in the energy and food components. In the next few months, annual HICP inflation rates are expected to display some further volatility around the current level. Looking further ahead, in 2011 inflation rates should remain moderate overall, benefiting from low domestic price pressures. 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 outlook for price developments are broadly balanced. Upside risks over the medium term relate, in particular, to the evolution of commodity prices. Furthermore, increases in indirect taxation and administered prices may be greater than currently expected, owing to the need for fiscal consolidation in the coming years. At the same time, risks to domestic price and cost developments are contained. Overall, the Governing Council will monitor closely the future evolution of all available price indicators.

Turning to the monetary analysis, the annual growth rate of M3 turned positive and was 0.2% in June 2010, after -0.1% in May. The annual growth rate of loans to the private sector increased slightly further but, at 0.3%, remained weak. Together, these data continue to support the assessment that the underlying pace of monetary expansion is moderate and that inflationary pressures over the medium term are contained. Shorter-term developments in M3 and some of its components and counterparts have remained volatile, and this volatility may well persist.

The previously strong impact of the interest rate constellation on monetary dynamics, while still affecting the pace of underlying money growth, appears to be gradually waning. This implies a gradual reduction in the effect on actual M3 growth arising from the downward impact of the steep yield curve and the associated allocation of funds into longer-term deposits and securities outside M3. At the same time, the annual growth rate of M1 has continued to moderate, although it remained strong at 9.2% in June 2010. In part, this reflects somewhat higher opportunity costs of holding overnight deposits relative to other short-term deposits.

The still weak annual growth rate of bank loans to the private sector continues to conceal countervailing developments, with increasingly positive growth in loans to households and stabilised negative annual growth in loans to non-financial corporations. A lagged response of loans to non-financial corporations to developments in economic activity is a normal feature of the business cycle.

The data up to June indicate that, after expanding for a few months earlier in the year, the size of banks' overall balance sheets has not increased further. The challenge remains for banks to expand the availability of credit to the non-financial sector when demand picks up. Where necessary, to address this challenge, banks should retain earnings, turn to the market to strengthen further their capital bases or take full advantage of government support measures for recapitalisation.

In this respect, the Governing Council welcomes the EU-wide stress-testing exercise, which was prepared and conducted by the Committee of European Banking Supervisors (CEBS) and national supervisory authorities, in close cooperation with the ECB. This stress-testing exercise was comprehensive and rigorous, and the results confirm the resilience of EU and euro area banking systems as a whole to severe economic and financial shocks. The stress test has also significantly enhanced transparency regarding the current financial conditions and risk exposures of the 91 institutions that participated in the exercise. Hence, the exercise represents an important step forward in restoring market confidence.

The Governing Council also welcomes the commitment made by national authorities with regard to the provision of support facilities for banks where private sector means are insufficient. Sound balance sheets, effective risk management and transparent, robust business models are key to strengthening banks' resilience to shocks and to ensuring adequate access to finance, thereby laying the foundations for sustainable growth, job creation and financial stability.

Monthly Bulletin August 2010 To sum up, the current key ECB interest rates remain appropriate. Considering all the new information which has become available since its meeting on 8 July 2010, the Governing Council continues to expect price developments to remain moderate over the policy-relevant medium-term horizon, benefiting from low domestic price pressures. The available economic data and survey-based indicators suggest a strengthening in economic activity in the second quarter of 2010, and the available data for the third quarter are better than expected. Looking further ahead, and taking into account a number of temporary factors, the Governing Council continues to expect the euro area economy to grow at a moderate and still uneven pace, in an environment of uncertainty. A cross-check of the outcome of the economic analysis with that of the monetary analysis confirms that inflationary pressures over the medium term remain contained, as suggested by weak money and credit growth. 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 remains of the essence.

Turning to fiscal policies, it is essential that budget plans for 2011 and beyond reflect a strong commitment to returning to sound public finances. Given the exceptional fiscal deterioration over the past two years, there is an urgent need to implement credible medium-term consolidation strategies aimed at restoring fiscal sustainability and creating room for budgetary manoeuvre. As a minimum, countries' budgetary targets must comply with the fiscal consolidation requirements foreseen under the respective excessive deficit procedures. More ambitious targets, as already adopted by a number of euro area countries, may become necessary where current plans fall short of meeting the main objective of halting and reversing the increase in the government debt ratio. Moreover, all countries must specify

credible fiscal adjustment measures, focusing on the expenditure side, while being prepared to implement additional measures, where needed, over the coming years.

In order to support the process of fiscal consolidation, to underpin the proper functioning of the euro area and to strengthen the prospects for higher sustainable growth, the pursuit of far-reaching structural reforms is essential. Major reforms are particularly needed in those countries that have experienced losses in competitiveness in the past or that are suffering from high fiscal and external deficits. Measures should ensure a wage bargaining process that allows wages to adjust flexibly to the unemployment situation and losses in competitiveness. Reforms to strengthen productivity growth would further support the adjustment process of these economies.

This issue of the Monthly Bulletin contains three articles. The first article reviews oil price developments and their impact on euro area inflation and economic activity. The second article discusses recent developments in global and euro area trade. The third article provides an overview of the new harmonised ECB statistics on euro area investment funds.

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### I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

The recovery in the global economy is continuing, albeit at an uneven pace. While several economies have recorded robust growth in the first half of 2010, supported by policy stimuli and the inventory cycle, there are some indications that the pace of expansion is moderating. Inflationary pressures have remained subdued overall in advanced economies, while they have picked up in dynamic emerging market regions. Risks to the global economic outlook are seen to be broadly balanced.

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

The recovery in the global economy is continuing, supported by policy stimuli and the inventory cycle, but the pattern of the global expansion remains uneven. The major advanced economies are still recording high spare capacity and only modest growth overall, while the upturn in emerging markets has been very strong. There are some indications, however, that the pace of expansion in fast-growing emerging economies is starting to moderate towards more sustainable levels.

Survey-based indicators suggest that the pace of the global economic expansion, while remaining robust, has continued to moderate somewhat. The overall global PMI output index continued to decline slightly, falling to 54.6 in July from 56.7 in the previous three-month period (see Chart 1). However, this figure is still well above the expansion/contraction threshold of 50 and exceeds the index's average level over the past ten years. The slower inflow of new orders compared with the previous three months also suggests that growth in economic activity may have peaked in the second quarter of the year. The slowdown in global growth is also likely to have repercussions on the outlook for global trade and thus euro area foreign demand in the second half of the year.

Global price developments have tended to mirror the uneven growth patterns, with inflationary pressures remaining subdued overall in advanced economies, but picking up in dynamic emerging market regions. In the OECD area, headline consumer price inflation fell to 1.5% in the year to June, compared with 2.0% in May (see Chart 2), mainly owing to energy-related base effects. Excluding

#### Chart | Global PMI output (diffusion index; seasonally adjusted; monthly data) PMI output: overall . . . . . PMI output: manufacturing PMI output: services 65 65 60 60 55 55 50 50 45 45 40 40 35 35 30 30 25 25 1999 2001 2003 2005 2007 2009 Source: Markit.



#### ECONOMIC AND MONETARY DEVELOPMENTS

The external environment of the euro area food and energy, consumer prices rose by 1.3% in June, unchanged from the previous month. The global PMI input price index is also signalling lower price pressures and showed some further moderation in July, declining to 53.3 from the peak of 60.9 recorded in April 2010. However, a reading above 50 is still consistent with increasing prices.

#### **UNITED STATES**

In the United States, real GDP growth lost some momentum in the second quarter of 2010. According to the advance estimate by the Bureau of Economic Analysis, real GDP increased by 2.4% in annualised terms in the second quarter of 2010, while growth in the first quarter was

revised upwards to 3.7% from 2.7%. While growth in private consumer spending has slowed down since the first quarter, private business investment has accelerated rapidly. GDP growth also partly reflected a positive contribution from inventories as well as government consumption and investment. On the other hand, growth was dampened by a large negative contribution from net trade, owing to a marked rebound in imports relative to exports.

As regards price developments, annual CPI inflation declined from 2.0% in May to 1.1% in June. A slowdown in annual energy price inflation in June accounted for the fall in headline CPI. Excluding food and energy, annual inflation remained at 0.9% in June, the lowest rate since 1966, reflecting the substantial slack in product and labour markets.

On 23 June 2010 the US Federal Open Market Committee (FOMC) decided to maintain its target range for the federal funds rate at 0% to 0.25%. The FOMC continues to hold the view that economic conditions, including low rates of resource utilisation, subdued inflationary trends and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period.

#### JAPAN

Japan's economy has shown further signs of a recovery, mainly on the back of robust net exports and, to a lesser extent, domestic demand. High growth in Asia has continued to boost exports, while fiscal stimuli have supported domestic demand. However, recent data releases point to some moderation. In particular, real exports increased year on year in June, but at a slower pace compared with May, partly as a result of



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.

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the appreciation of the yen. At the same time industrial production, while still showing a positive quarterly growth rate in the second quarter of 2010, slowed down in month-on-month terms in June.

As regards price developments, consumer prices declined in June, but deflation is moderating. CPI inflation stood at -0.7% year on year in June compared with -0.9% in May. Annual CPI inflation excluding food and energy was -1.5% in June compared with -1.6% in May. At its meeting on 10 August 2010, the Bank of Japan decided to leave its target for the uncollateralised overnight call rate unchanged at 0.1%.

#### **UNITED KINGDOM**

In the United Kingdom, recent indicators continue to suggest ongoing recovery. Real GDP increased by 1.1% quarter on quarter in the second quarter of 2010, after expanding by 0.3% in the first quarter (see Chart 3). The recovery in the second quarter was broadly based across the main economic sectors. House prices continued their upward trend in June, with the Halifax index rising by 6.3% in year-on-year terms, but in month-on-month terms, they have declined in recent months. Looking ahead, the gradual recovery is expected to continue, supported by lagged effects of the depreciation of the pound sterling, monetary stimuli and improvements in overall global economic conditions. However, growth of domestic demand is expected to remain restrained by tight credit conditions, household balance sheet adjustment and substantial fiscal tightening.

Annual CPI inflation decreased to 3.2% in June from 3.4% in May. It is expected that the lagged effects of the depreciation of the pound sterling and the impact of the VAT rate increase in January 2011 will exert upward pressure on consumer prices. On 5 August the Bank of England's Monetary Policy Committee voted to maintain the official Bank Rate paid on commercial bank reserves at 0.5%. The Committee also voted to maintain the stock of asset purchases financed by the issuance of central bank reserves at GBP 200 billion.

#### **OTHER EUROPEAN COUNTRIES**

In other non-euro area EU countries, economic activity also continued to improve in the first quarter of 2010. At the same time, inflationary developments show a mixed picture.

In Sweden, real GDP increased by 1.5% quarter on quarter in the first quarter of 2010, after growth of 0.5% in the fourth quarter of 2009. The labour market has recently shown some signs of stabilisation, providing further support to the economic recovery. In Denmark, output increased by 0.5% in the first quarter of 2010, up from 0.2% in the fourth quarter of 2009. The rebound in economic activity is expected to continue, although only gradually, supported by the fiscal stimulus package, low inflation and improving external conditions. In June 2010 annual HICP inflation moderated to 1.6% in Sweden and 1.7% in Denmark.

Among the largest central and eastern European EU countries, only Romania registered negative real GDP growth in the first quarter of 2010, at -0.3% quarter on quarter. At the same time, growth reached 0.9% in Hungary and 0.5% in the Czech Republic and Poland. Overall, with the exception of Romania, recent confidence indicators as well as industrial production and trade figures point to an improvement in activity. However, a number of factors – including rising unemployment and weak credit conditions (particularly in Hungary and Romania) – point to continued weakness in domestic demand. In June 2010 annual HICP inflation stood at 1.0% in the Czech Republic and 2.3% in Poland. By contrast, in Hungary and Romania, annual HICP inflation remained at higher levels, standing at 5.0% and 4.3% respectively.

#### **EMERGING ASIA**

According to the latest available evidence, economic activity in emerging Asia remained buoyant during the second quarter of 2010. Strong exports and domestic private demand were the main drivers of growth, while government spending declined in some economies. At the same time, there are signs that growth is slowing down slightly in a number of countries. After picking up during the first quarter of 2010, inflation largely stabilised across the region in the second quarter.

In China, real GDP increased by 10.3% year on year in the second quarter compared with 11.9% in the first quarter, thus signalling some cooling down of the economy coupled with a diminishing risk of overheating. The gradual withdrawal, including through administrative measures, of the fiscal and monetary policy stimuli seems to have proven effective in curbing public expenditure in fixed-asset investment and avoiding the possible further accumulation of a property market bubble. External demand has recovered markedly, partly as a result of the gradual strengthening of demand in advanced economies. At the same time, imports have slowed down somewhat in a context of decelerating domestic investment, resulting in a widening trade surplus in June. Inflationary pressures persist, but are expected to remain contained on account of the emergence of some excess capacity in a cooling economy. CPI and PPI inflation declined to 2.9% and 6.4% in June respectively, in the context of a slowdown in credit and money supply.

#### LATIN AMERICA

In Latin America, the pace of economic activity has remained solid overall, while developments in inflation have been mixed. In Brazil, industrial production grew by 14.8% on an annual basis in May. In June consumer price inflation stood at 4.8%. In response to the rapid recovery in economic activity, the Banco Central do Brasil raised its key interest rate by 50 basis points to 10.75% on 21 July. In Argentina, an exceptional harvest coupled with the fiscal stimulus and positive spillover effects stemming from the rapid growth in Brazil have resulted in strong economic activity in recent months. Industrial production expanded by 10.2% on an annual basis in May. However, consumer price inflation has remained high, with an annual rate of 11.0% in June. Finally, industrial

production in Mexico grew by 8.6% in May, while inflationary pressures receded somewhat, with headline inflation dropping below 4% in the same month.

#### **I.2 COMMODITY MARKETS**

Oil prices increased during most of July, recovering from the decline at the start of the month. Brent crude oil prices stood at USD 81.9 per barrel on 4 August, which is 4.6% higher than at the beginning of the year (see Chart 4). Looking ahead, market participants are expecting higher oil prices in the medium term, with futures contracts for December 2012 trading at USD 89.1 per barrel.

Looking at fundamentals, oil demand remains high in non-OECD countries and is steadily recovering in OECD countries, in particular in



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the United States. The International Energy Agency expects global oil demand to rise by 1.6% in 2011, mainly driven by an increase in demand in non-OECD countries. On the supply side, oil production capacity remains ample and inventory levels continue to be high, partially dampening the demand-side pressures on oil prices.

The prices of non-energy commodities increased significantly in July. Food prices increased on the back of considerably higher wheat prices, and metal prices also recovered from the lows reached in early June owing, in particular, to higher prices for copper and lead. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was 17.6% higher towards the end of July than at the beginning of the year.

#### **1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT**

Recent data releases continue to suggest that some moderation in the growth momentum might be expected during the second half of the year as the support from the inventory cycle and the policy stimuli fades. Leading indicators suggest that growth in global economic activity may have peaked

in the second quarter. The OECD composite leading indicator for May 2010 points to continued but slower expansion in the OECD area. In more detail, it suggests a slowdown in the expansion in the United States, Japan and Russia and anticipates peaks in the United Kingdom, Canada and some major emerging economies. Confidence indicators for major economies have also been cooling recently, suggesting some headwinds for global economic expansion in the near future.

In an environment of uncertainty, the risks to global activity remain broadly balanced. On the upside, trade may recover more strongly than is now projected. On the downside, concerns remain relating to the emergence of renewed tensions in financial markets, renewed increases in oil and other commodity prices, and protectionist pressures, as well as the possibility of a disorderly correction of global imbalances.



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 marginally in June, but remained weak. The dampening impact of the steep yield curve on M3 growth is gradually diminishing. Against this background, the assessment of moderate underlying monetary expansion and contained inflationary pressures over the medium term still prevails. The subdued annual growth in MFI loans to the private sector continues to conceal moderately positive growth in loans to households and negative growth in loans to non-financial corporations, albeit at a stable level. Finally, the data up to June on MFIs' main assets show that the overall size of banks' balance sheets has stabilised.

#### THE BROAD MONETARY AGGREGATE M3

In June 2010 the annual growth rate of M3 turned slightly positive after four months of negative readings, standing at 0.2% (see Chart 6). June saw a strong month-on-month inflow, which was reflected in another increase in the annualised six-month growth rate. However, the volatility that has characterised shorter-term developments in M3 and some of its components and counterparts over recent quarters still persists. The increase in the annual growth rate of M3 was predominantly due to large positive flows for repurchase agreements resulting from the settling of transactions through central counterparties.

Overall, the developments in M3 continue to be explained, to some extent, by the impact of the interest rate constellation. As a result of the still steep yield curve, which implies a relatively high remuneration of non-monetary interest-bearing assets, there continued to be an incentive to allocate new funds outside of M3, but this effect is gradually waning. Therefore, while headline M3

growth is continuing to understate the pace of underlying monetary growth, it is doing so to a diminishing extent.

On the components side, the overall growth in M3 continued to conceal substantial differences between strong, but declining, annual growth in M1 and negative, but improving, growth in both other short-term deposits and marketable instruments. On the counterparts side, the annual growth of loans to the private sector remained weak, continuing to conceal differences between moderate positive growth in loans to households and negative growth in loans to non-financial corporations.

The data up to June on MFIs' main assets show that the size of banks' overall balance sheets has stabilised following the increases observed since the turn of the year. This reflects a monthly contraction in inter-MFI credit, which was offset by increases in claims on the Eurosystem, and in loans to the euro area private sector.



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#### MAIN COMPONENTS OF M3

In June 2010 the weak annual growth rate of M3 continued to conceal differences in the levels of growth of its various components. While these differences have tended to narrow over recent months, they remain large. Indeed, the annual growth rate of M1 remained strong, although it has gradually declined in recent quarters. At the same time, the annual growth rates of marketable instruments and short-term deposits other than overnight deposits continued to be substantially negative, although they have recovered somewhat recently.

The annual growth rate of M1 declined further to 9.2% in June, down from 10.3% in May. This development reflected moderate monthly inflows for both overnight deposits and currency in circulation. While monthly developments continued to be characterised by a high level of volatility, the moderation in the annual growth rate of M1 may reflect the fact that the opportunity costs of holding overnight deposits relative to other types of short-term deposit have been gradually increasing over recent months, as interest rates paid on other short-term deposits have been rising.

The annual growth rate of short-term deposits other than overnight deposits increased to -7.2% in June, up from -8.0% in May. This resulted from a subdued monthly outflow from deposits with an agreed maturity of up to two years (short-term time deposits), which was fully offset by an inflow of the same magnitude for deposits redeemable at notice of up to three months (short-term savings deposits). Overall, the less negative annual growth rate of short-term deposits other than overnight deposits suggests that the shifting of funds towards overnight deposits that has been occurring over the last year and a half seems to have declined.

The annual growth rate of marketable instruments increased to -7.3% in June, up from -9.8% in May. This less negative annual growth rate was the result of a strong monthly flow for repurchase agreements, while money market fund shares/units registered a further outflow. The monthly increase in repurchase agreements continued to reflect the settling of transactions through central counterparties.

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 – registered, at a sectoral level, an increase in the contribution from households for the first time since November 2008. The contribution from non-monetary financial intermediaries other than pension funds and insurance corporations (OFIs) remained stable, whereas that of non-financial corporations marked a renewed decrease. As a result, the contributions from each of these sectors to the annual growth rate of M3 deposits tended to converge in June, although the increase in holdings of non-financial corporations still represents the largest contribution to the annual growth of these instruments.

#### **MAIN COUNTERPARTS OF M3**

Regarding the counterparts of M3, the annual growth rate of total MFI credit to euro area residents decreased to 1.5% in June, from 1.7% in May, on account of declines in the annual growth rates of both credit to general government, which remained fairly strong, and credit to the private sector, which fell to zero (see Table 1).

The annual growth rate of loans to the private sector (the largest component of credit to the private sector) increased marginally, to stand at 0.3% in June, up from 0.2% in May, thus remaining weak. As in the previous two months, in June the impact of securitisation was negligible.



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

	Outstanding	Annual growth rates				growth rates		
	amount as a	2009	2009	2010	2010	2010	2010	
	percentage of M3 <sup>1)</sup>	Q3	Q4	Q1	Q2	May	June	
M1	49.5	12.2	12.3	11.3	10.3	10.3	9.2	
Currency in circulation	8.3	12.8	7.5	6.2	6.4	6.8	6.9	
Overnight deposits	41.1	12.1	13.3	12.4	11.1	11.0	9.7	
M2 - M1 (= other short-term deposits)	38.5	-3.1	-7.7	-8.2	-8.1	-8.0	-7.2	
Deposits with an agreed maturity								
of up to two years	19.0	-13.2	-22.1	-22.8	-21.6	-21.2	-19.5	
Deposits redeemable at notice								
of up to three months	19.5	12.9	15.8	13.3	10.2	9.7	8.7	
M2	88.0	4.5	2.2	1.7	1.4	1.5	1.4	
M3 - M2 (= marketable instruments)	12.0	-7.7	-11.4	-11.6	-9.6	-9.8	-7.3	
M3	100.0	2.7	0.3	-0.2	-0.1	-0.1	0.2	
Credit to euro area residents		3.7	3.1	1.9	1.7	1.7	1.5	
Credit to general government		12.0	14.2	9.9	9.0	9.4	8.1	
Loans to general government		2.6	3.1	3.8	6.6	7.7	6.9	
Credit to the private sector		2.1	0.9	0.3	0.2	0.1	0.0	
Loans to the private sector		0.4	-0.6	-0.4	0.1	0.2	0.3	
Loans to the private sector adjusted								
for sales and securitisation		1.6	0.3	-0.2	0.1	0.2	0.2	
Longer-term financial liabilities								
(excluding capital and reserves)		4.8	6.7	5.5	4.4	4.0	2.8	
a								

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

The annual growth of loans to the private sector continues to reflect conflicting developments across the various sub-sectors. The annual growth rate of loans to non-financial corporations remained in negative territory in June (at -1.9%), although slightly less negative than in May (see Table 2). In June a monthly outflow was recorded, mostly driven by short-term loans (loans with maturities of up to one year). The latter development may in part represent a correction after a significant inflow

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

	Outstanding amount	Annual growth rates					
	as a percentage	2009	2009	2010	2010	2010	2010
	of the total <sup>1)</sup>	Q3	Q4	Q1	Q2	May	June
Non-financial corporations	42.7	1.2	-1.4	-2.5	-2.2	-2.1	-1.9
Up to one year	24.3	-8.7	-11.9	-12.3	-10.8	-10.4	-10.1
Over one and up to five years	19.7	4.7	-0.2	-3.3	-4.6	-4.7	-4.6
Over five years	56.0	5.4	3.9	3.2	3.1	3.2	3.3
Households <sup>2)</sup>	46.5	-0.1	0.3	1.7	2.5	2.6	2.8
Consumer credit <sup>3)</sup>	12.5	-1.0	-1.0	-0.6	-0.7	-0.3	-1.6
Lending for house purchase 3)	71.5	-0.2	0.2	2.0	3.0	3.1	3.4
Other lending	16.0	1.3	1.9	2.4	3.0	2.9	3.4
Insurance corporations and pension funds	0.8	-6.1	-12.4	-9.3	-9.2	-7.8	-13.4
Other non-monetary financial intermediaries	10.0	0.0	0.2	0.2	0.8	0.5	-0.4

Source: ECB.

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

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.
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.



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recorded in May. Regarding loans to households, the annual growth rate continued to increase slightly (to 2.8% in June). The growth of loans to households continues to mainly reflect developments in lending for house purchase, while consumer credit growth contracted significantly.

Overall, developments in private sector loans still remain broadly consistent with business cycle regularities. These regularities suggest that, in terms of annual growth rates, real loans to households are broadly coincident with real GDP, while real loans to non-financial corporations tend to lag economic activity by about one year. Although no clear evidence has yet emerged of a turning point in real loans to non-financial corporations, deviations from historical averages are not unknown and can be explained by special factors. In the current situation, for example, special factors which may imply a somewhat delayed recovery in the annual growth rate of real loans to enterprises include the uneven recovery across countries and economic sectors and the ability of firms in some sectors to make increasing recourse to internally generated funds or to market-based funding, which has been strong over the last 12 months. For details of developments in euro area banks' credit standards and loan demand, see the box entitled "The results of the July 2010 bank lending survey for the euro area" at the end of this section. For an analysis of savings, investment and financing by institutional sector, see the box entitled "Integrated euro area accounts for the first quarter of 2010" in Section 2.6.

Among the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities (excluding capital and reserves) moderated further in June, having followed a broadly declining trend since October 2009. This decline reflected similar developments across sub-components. More precisely, the decline in the annual growth rate of longer-term deposits reflected the fact that the shifting of funds from M3 deposits to longer-term deposits – encouraged by the yield configuration – has subsided over recent months. Moreover, the annual growth rate of long-term MFI debt securities held by the money-holding sector declined further in June. This was the result of another sizeable negative monthly flow, the largest since October 2008, which may reflect the reduced attractiveness of market issuance under prevailing market conditions (for more details see the box entitled "The funding of euro area MFIs through the issuance of debt securities"). The annual growth rate of capital and reserves declined to 6.3% in June, down from 8.0% in May.

#### Box I

#### THE FUNDING OF EURO AREA MFIS THROUGH THE ISSUANCE OF DEBT SECURITIES

The recent tensions in the sovereign debt markets affected euro area MFIs' financing conditions and their access to wholesale funding in the second quarter of 2010. The impact was visible on bank bond spreads and bank credit default swap premia, which increased sharply in May and June 2010, but is also likely to have affected the debt issuance of euro area banks in recent months. Indeed, the MFI balance sheet data showed a net decline of debt securities issued by MFIs in both May and June 2010. This picture is confirmed by the latest results of the Eurosystem's bank lending survey (see Box 2), which point to a deterioration of wholesale funding access in the second quarter. Against this background, this box describes the most recent developments in euro area MFIs' issuance of debt securities.

#### Net debt security issuance

Tensions in markets for euro area sovereign debt implied direct spillover effects from higher sovereign yields to bank bond yields. Banks' exposures to sovereign debt, as well as the uncertainties surrounding those exposures, also seemed to increase counterparty risk and to affect banks' probability of default more generally. This was reflected, for example, in spreads on AA and A-rated bank bonds that rose by around 70-100 basis points between mid-April and mid-June 2010 relative to a composite euro area government bond index (see Chart A).<sup>1</sup> More recently, bank bond spreads have narrowed somewhat, reflecting, among other things, the publication of the EU-wide bank stress tests on 23 July 2010, but remained at elevated levels in comparison with the first quarter of 2010.

The sharp increase in MFIs' costs of issuing debt in the financial market in May and June 2010 may have deterred many euro area banks from renewing maturing debt, as reflected in negative net flows of debt securities issued by MFIs in these two months.<sup>2</sup> This development was also confirmed by debt securities issues statistics (for which data are available up to May 2010), which showed negative net issuance in the order of around  $\epsilon$ 25 billion by euro area MFIs in May 2010 (see Chart B). This compares with a long-term average of around  $\epsilon$ 22 billion in monthly net issuance by euro area MFIs. One reason for the generally subdued net issuance of debt securities by MFIs in recent months could be that the euro area banking sector is currently undergoing a

- 1 According to Iboxx; similarly, the Itraxx Senior Financials index of credit default swap spreads rose by around 100 basis points over the same period.
- 2 According to MFI balance sheet items statistics.

# Chart A Euro area corporate bond spreads for financial institutions



Chart B Net issuance of debt securities by euro area MFIs broken down by maturity

(monthly flows in EUR billions; not adjusted for seasonal and calendar effects)

long-term (above one year)



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Note: The benchmark is the EMU AAA government bond index calculated by Merrill Lynch.

Source: Thompson Financial Datastream

Source: ECB. Note: Last observation: May 2010.

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process of balance sheet adjustment and is, at the same time, facing rather weak demand for loans, which may have reduced the need for a financing of new activities. For some banks, the subdued net issuance activity in May and June may simply reflect a postponement of new debt issuance in the expectation of improved market conditions in the period ahead. At the same time, other (allegedly weaker) banks might have found the costs of entering the debt securities market prohibitively high throughout 2010.

#### Government guarantees in net debt security issuance

The existence of heterogeneity within the euro area banking sector as regards the capacity to tap market-based funding throughout 2010 is supported by the developments in the issuance of MFI debt securities backed by government guarantees. The use of government guarantees should facilitate issuance in the markets. In late 2008 and in the first half of 2009, the introduction of government support programmes, whereby banks issued debt securities covered by government guarantees, allowed banks to maintain their issuance despite the adverse market conditions for bank debt. In the first three months of 2010 the recourse of euro area banks to government support was low, as at least some banks were increasingly able to access market-based funding without government support (see Chart C). The deterioration in market conditions in April and May did not result in a marked increase in recourse to such government support, despite the fact that, in the first half of 2010, these programmes were still in place in most of the countries where they had been introduced. This suggests that the majority of euro area banks did not face such a large increase in funding pressure that they would be prepared to incur the cost entailed in issuing government-

#### Chart C Net issuance of debt securities by euro area MFIs covered by government guarantee programmes

(monthly flows in EUR billions; not adjusted for seasonal and calendar effects)



Source: ECB, ECB estimates.

guaranteed debt securities. At the same time, issuance of such securities, while low, has not disappeared altogether in recent months. Recourse to this type of funding has been concentrated on MFIs resident in a few euro area countries that have been at the epicentre of the sovereign debt market tensions and on a few other specific issuers. This points to the existence of a subset of euro area MFIs that are being confronted with very tight borrowing conditions when attempting to tap market-based debt funding without government backing. However, government guarantees also allow MFIs to pledge the debt securities as collateral in Eurosystem refinancing operations and thereby obtain funding.

#### Gross debt security issuance

Notwithstanding the subdued net issuance of government-guaranteed and non-government-guaranteed MFI debt securities, on a gross basis, the euro

Note: Last observation: May 2010 for total net issuance and issuance not covered by guarantees; June 2010 for net issuance covered by guarantees.

## Chart D Gross issuance of short-term debt securities by euro area MFIs

(monthly flows in EUR billions; not adjusted for seasonal and calendar effects)



Chart E Gross issuance of long-term debt securities by euro area MFIs

(monthly flows in EUR billions; not adjusted for seasonal and calendar effects)

long-term (over one year)



Note: Last observation: May 2010.

area banking sector as a whole remained capable of issuing substantial amounts of debt securities, also in recent months. Notably, the level of gross issuance of short-term debt securities (i.e. securities with an original maturity of up to one year) remained not only solid in May 2010, but also above the historical monthly average flow of gross issuance since 1999 (see Chart D). This suggests that, at the aggregate level, euro area banks remained capable of covering their short-term funding needs in the debt securities market, as is also reflected in the only modestly negative net issuance of short-term paper (see Chart B). Hence, the financial market tensions in May 2010 seem mainly to have dented banks' previous reliance on funding through longer-term debt securities (which possibly reflected the aim of taking advantage of low long-term interest rates). The gross issuance of longer-term debt securities contracted from a monthly level of around  $\notin$ 100-120 billion in the two preceding months to about  $\notin$ 60 billion in May (see Chart E).

#### Gross issuance and maturing issues of longer-term debt securities

Given the considerable volume of longer-term debt securities issued by euro area MFIs that will be maturing in the next few years, banks may be expected to increase their issuance at some time in the coming months in order to ensure their long-term financing. According to estimates based on data from Dealogic, a private data provider, euro area banks may face redemptions of outstanding longer-term debt issues in the order of approximately  $\in 1.3$  trillion in the next 14 quarters up to the fourth quarter of 2013 (see Chart F). This, however, is less than the approximately  $\in 1.9$  trillion which matured in the preceding 14 quarters (between the first quarter of 2007 and the second quarter of 2010). Over that period, euro area banks managed to issue around  $\in 1.7$  trillion. Hence, while the amount of maturing debt that banks need to refinance in the next  $2\frac{1}{2}$  years is substantial, it appears manageable on the basis of experience in the recent past and subject to a normalisation of funding conditions in the debt securities market.

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Note: Last observation: May 2010.

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#### Chart F Longer-term debt securities issued by euro area MFIs – gross issuance and maturing issues

(monthly flows in EUR billions; not adjusted for seasonal and calendar effects)



Sources: Dealogic and ECB calculations. Notes: "Maturing issues" on inverted scale. Dealogic debt securities data are less encompassing than the ECB's securities issuance statistics on which Charts B to E are based. The statistical methodology applied is also not directly comparable between the two datasets. Based on issues in the euro area by banks.

#### Chart 7 Counterparts of M3

(annual flows in 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. The need for a renewal of maturing debt securities issued could moreover be lower than in the past, to the extent that euro area banks may amend their business models the light of the financial crisis in by reducing their reliance on marketbased funding and increasingly taking recourse to deposit-based funding. Indeed, a reassessment of funding strategies may be particularly called for in the context of the persistently subdued level of (non-retained) securitisation activity, which (according to Dealogic data) is still hovering at a low level of less than one-third of the average monthly issuance since 2000. Meanwhile, despite the recent move towards consolidation of public finances in euro area countries, debt-issuing banks are likely to face more intense competition for funds from both sovereign issuers and non-financial private issuers, as the latter may increasingly want to access market funding in the wake of the crisis.

Finally, the annual inflow for MFIs' net external asset position was  $\epsilon$ 76 billion in June, down from  $\epsilon$ 105 billion in May (see Chart 7). As in the previous month, the positive annual flow for net external assets reflects negative annual flows both for external assets and for external liabilities, with the reduction in liabilities outweighing that in assets.

To sum up, the annual growth rates of M3 and of loans to the private sector both increased in June, but remain weak. The yield curve remains steep, but the dampening impact that this has on M3 growth is receding, albeit slowly. Thus, the assessment that the pace of underlying monetary expansion is moderate and that inflationary pressures over the medium term stemming from monetary developments are contained still prevails.

#### Box 2

#### THE RESULTS OF THE JULY 2010 BANK LENDING SURVEY FOR THE EURO AREA

This box describes the main results of the July 2010 bank lending survey (BLS) for the euro area, which was conducted by the Eurosystem between 14 June and 2 July 2010.<sup>1</sup> The survey results point to a discontinuation in the second quarter of 2010 of the downward trend in the net tightening of credit standards on loans to enterprises observed in previous quarters. Also in the second quarter of 2010, the net tightening of credit standards remained broadly unchanged both for consumer credit and other lending to households and for loans to households for house purchase.

#### Loans and credit lines to enterprises

**Credit standards:** In the second quarter of 2010, the net percentage<sup>2</sup> of banks reporting a tightening of credit standards on loans and credit lines to enterprises increased to 11% (see Chart A), thereby exceeding banks' expectations in the previous survey round (when it stood at 2%). The overall results for enterprises were consistent across firm size. The net percentage

1 The cut-off date of the survey was 2 July 2010. A comprehensive assessment of the results of the July 2010 bank lending survey for the euro area was published on 28 July 2010 on the ECB's website.

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



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

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of credit standards increased to 14% for loans to small and medium-sized enterprises (SMEs) (compared with 4% in the first quarter of 2010) and to 12% for loans to large firms (compared with 3% in the previous quarter).

Looking at the factors contributing to the net tightening of credit standards, in the second quarter of 2010 banks reported stronger contributions from bank-specific factors, possibly indicating renewed financial market tensions. In particular, this was reflected in the fact that banks' liquidity position contributed to a tightening of credit standards (6%, against -6% in the first quarter of 2010), after contributing to an easing in the preceding four quarters. A stronger positive contribution pertaining to banks' ability to access market financing was reported (9%, compared with 2% in the first quarter of 2010). While still contributing to a net tightening of credit standards, costs related to banks' capital positions became somewhat less pronounced than before (4%, against 6% in the first quarter of 2010). By contrast, competition (by banks, non-banks and market financing) generally tended to ease credit standards on loans to enterprises in the second quarter of 2010. At the same time, following the trend observed in previous quarters, there was a further decline in the contributions from business cycle-related factors to the net tightening of credit standards, such as the industry or firm-specific outlook (11%, compared with 21% in the first quarter of 2010) and expectations regarding general economic activity (6%, against 9% in the first quarter of 2010).

Developments were mixed with respect to price and non-price terms and conditions through which the net tightening of credit standards on loans to enterprises was achieved in the second quarter of 2010 (see Chart B). Thus, while margins, loan covenants and collateral demanded eased somewhat, there was a slightly more restrictive attitude towards the size of loans granted and the length of loan maturity. As in the previous quarter, margins on average loans to large firms eased slightly in the second quarter of 2010 (to -2%, from -1% in the first quarter of 2010), whereas the net tightening of margins remained broadly unchanged (at 8%) for loans to SMEs.



#### Chart B Changes in terms and conditions for approving loans or credit lines to enterprises

ECE

Looking ahead, banks expect a lower net tightening of credit standards in the third quarter of 2010 (at 5%; see Chart A).

Loan demand: Net demand for corporate loans<sup>3</sup>, while remaining negative, increased to -2% in the second quarter of 2010 from -13% in the first quarter of 2010 (see Chart C), thus continuing the gradual recovery in net loan demand from enterprises that started in the first quarter of 2009. The net demand for loans became less negative both for loans to SMEs (-3%, compared with -9% in the first quarter of 2010) and for loans to large firms (-10%, compared with -20% in the previous quarter), but remained weaker overall in the case of the latter. Notably, while net demand for short-term loans remained in negative territory (at -3%) in the second quarter of 2010, net demand for long-term loans turned positive (at 3%) for the first time since the first quarter of 2008. The most important reason for the improvement in net demand for loans by enterprises was a less negative contribution from factors such as fixed investment (-23%, after -32% in the first quarter of 2010) and mergers and acquisitions (at -7%, after -18% in the first quarter of 2010). Moreover, the negative contribution from substitute sources of financing, debt securities issuance in particular, became somewhat less pronounced in the second guarter. At the same time, the positive contribution from debt restructuring (i.e. enterprises altering the terms and conditions of their outstanding debt obligations) remained unchanged compared with the previous survey round, and the contribution from inventories and working capital further increased somewhat (to 7%, up from 3% in the previous quarter).

3 The net demand for loans is calculated as the percentage difference between those banks reporting that demand for loans has increased and those reporting that demand for loans has decreased.



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

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

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Looking ahead, banks expect increased demand for loans. On a net basis, 29% of the banks surveyed (up from 21%) expect loan demand from enterprises to increase in the third quarter of 2010, but to a larger extent from SMEs (33% of banks) than from large firms (19%). Furthermore, banks expect a rebound in net demand for short-term lending from -3% to 30% in the third quarter of 2010.

#### Loans to households for house purchase

**Credit standards:** In the second quarter of 2010, the net percentage of banks reporting a tightening of credit standards for loans to households for house purchase remained unchanged compared with the previous quarter at 10% (see Chart D). For the second consecutive quarter, banks' expectations from previous survey rounds underestimated the net tightening of credit standards. As in the case of loans to enterprises, factors related to cost of funds and balance sheet constraints contributed more strongly to the net tightening of credit standards for loans to households for house purchase (6% in the second quarter of 2010, compared with 1% in the first quarter). Likewise, banks reported a somewhat less pronounced contribution from risk-based factors, such as housing market prospects and the general economic outlook. Finally, as in previous survey rounds, competition between banks contributed to an easing of credit standards on housing loans.

Regarding terms and conditions for loans for house purchase, in the second quarter of 2010 margins on riskier loans (11%, compared with 16% in the first quarter of 2010), loan-to-value ratios (7%, against 11% in the first quarter) and collateral requirements (3%, against 4% in the first quarter) continued to be tightened by banks, although gradually less so compared with previous quarters. By contrast, banks tightened somewhat conditions related to the maturity of the loans (3%, against 1% in the first quarter) and also increased the margins on average loans (3%, against -3% in the first quarter).



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



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

Looking ahead, banks expect a lower degree of net tightening of credit standards for loans to households for house purchase in the third quarter of 2010 (3%).

**Loan demand:** Net demand for housing loans increased significantly in the second quarter of 2010 (24%, against -2% in the first quarter of 2010), broadly in line with expectations in the previous survey round (see Chart E). The increase in housing-related loan demand can be explained in particular by a more positive contribution from housing market prospects (9%, compared with 3% in the first quarter of 2010) and a less negative contribution from consumer confidence (-6%, against -13% in the previous quarter).

Banks expect net demand for loans for house purchase to fall to 5% in the third quarter of 2010 from 24% in the second quarter.

#### Consumer credit and other lending to households

**Credit standards:** The net percentage of banks reporting a tightening of credit standards for loans to households for consumer credit and other lending was positive in the second quarter of 2010 (12%; see Chart F). This was similar to the level observed in the previous quarter, but exceeded the expectations in the previous survey round. As with loans to households for house purchase, funding costs and banks' balance sheet positions contributed more strongly to the net tightening observed in the second quarter of 2010 (4%, against 1% in the first quarter). At the same time, a somewhat more benign outlook for credit risk was observed, notably through a less tightening contribution from consumer creditworthiness (12%, compared with 19% in the previous round).

Looking forward, banks still expect a net tightening, albeit somewhat less so, in the third quarter of 2010 (to 6%).



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Note: See notes to Chart A.

**Loan demand:** Net demand for consumer loans increased in the second quarter of 2010 to 1%, from -13% in the first quarter of 2010 (see Chart E), broadly in line with expectations. The main factors behind the increase in net demand related to spending on consumer durables and consumer confidence.

Looking ahead, banks expect a slightly negative net demand for consumer credit and other lending to households in the third quarter of 2010 (-6%).

#### Ad hoc questions on the impact of the financial turmoil

As in previous survey rounds, the July 2010 survey also contained a set of ad hoc questions aimed at assessing the extent to which the financial market tensions affected banks' credit standards for loans and credit lines to enterprises and loans to households in the euro area in the second quarter of 2010 and the extent to which they might still have an effect in the third quarter of 2010.

For the second quarter of 2010, possibly reflecting the renewed financial market tensions following concerns about sovereign risk, banks generally reported a deterioration in their access to wholesale funding across all segments, but more intensely as regards access to short-term money markets and the markets for debt securities issuance (see Chart G). On balance, in the second quarter of 2010 around 30-40% of the banks surveyed (excluding the banks that replied "not applicable") reported deteriorated access to money markets and around 40-50% of the banks reported deteriorated access to debt securities markets. In addition, true-sale securitisation of corporate loans and loans to households for house purchase also became somewhat more difficult in the second quarter of 2010. Between 20% and 30% of the banks for which this business is relevant (around 60% of the sample group) reported deteriorated access to securitisation of corporate loans and mortgage loans. Moreover, according to 37% of the banks for which this



Note: The net percentages are defined as the difference between the sum of the percentages for "deteriorated considerably" and "deteriorated somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably".

business is relevant (which is the case for 40% of the sample group), synthetic securitisation, i.e. the ability to transfer credit risk off balance sheet, deteriorated.

Over the next three months, on a net basis, around 10-20% of the banks surveyed continue to expect a further deterioration across all wholesale funding markets. In particular, 20% of the banks expect a further deterioration in their access to short-term money markets.

Regarding the impact of the financial turmoil on banks' costs related to their capital positions and on their lending policy, there was only a very slight change between the first and the second quarters of 2010. In the second quarter of 2010, about 40% of the reporting banks indicated "some impact" or "considerable impact" on both capital and lending, broadly in line with the responses in the previous survey round. In addition, in the second quarter of 2010, 34% reported that there was basically no impact on their capital stemming from the financial turmoil (against 38% in the first quarter of 2010).

#### 2.2 SECURITIES ISSUANCE

The annual growth rate of debt securities issuance continued to moderate, declining to 4.3% in May 2010. Data on sectoral issuance activity reveal that this moderation was broadly based across sectors but driven mainly by MFIs. At the same time, the annual growth rate of quoted shares issued continued to decline.



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

	Amount outstanding	Annual growth rates 1)					
	(EUR billions) 2010	2009	2009	2009	2010	2010	2010
Issuing sector	Мау	Q2	Q3	Q4	Q1	April	May
Debt securities	15,766	11.8	11.3	10.0	6.6	5.3	4.3
MFIs	5,484	5.8	4.0	2.9	1.6	1.3	-0.2
Non-monetary financial corporations	3,246	30.4	26.1	20.1	8.3	4.1	2.9
Non-financial corporations	885	10.2	13.4	15.8	14.0	15.5	14.5
General government	6,151	12.2	13.5	12.7	10.0	8.6	8.2
of which:							
Central government	5,748	12.4	13.8	12.9	9.9	8.5	8.0
Other general government	404	9.6	9.5	10.4	10.2	11.0	10.2
Quoted shares	4,110	1.9	2.7	2.8	2.9	2.7	2.4
MFIs	450	8.7	9.3	8.8	8.2	7.0	6.3
Non-monetary financial corporations	321	3.1	3.9	2.7	5.4	5.3	5.3
Non-financial corporations	3,340	0.8	1.6	1.9	1.9	1.7	1.5

Source: ECB

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

#### **DEBT SECURITIES**

The annual growth rate of debt securities issued by euro area residents continued to moderate, falling to 4.3% in May 2010, from 5.3% in the previous month (see Table 3). Weaker developments in May may partly be due to postponement of issuance in the context of difficult market conditions related to the sovereign debt crisis. The decline reflected, to a large extent, a deceleration in the annual growth rate of long-term debt securities issuance, which fell to 5.9%. Following the downward trend that started about a year ago, the annual growth of short-term debt securities issuance continued to decline,

reaching -7.8% in May 2010. The annualised and seasonally adjusted six-month growth rate of debt securities issued, which captures short-term trends better, returned to a downward path in May, primarily on account of a slower growth in issuance by MFIs (see Chart 8).

Over recent months, refinancing activity, notably at fixed rates, has remained buoyant in the long-term segment, to the detriment of short-term debt securities issuance. In the last few months, the annual growth rate of fixed rate long-term debt securities issuance has stabilised below 11%. At the same time, the annual growth rate of floating rate long-term debt securities issuance became negative.

From a sectoral perspective, the moderation in the pace of debt securities issuance recorded in recent months appears to have been broadly based, with the exception of the corporate sector where the growth of issuance has been hovering around historically high levels. In May, however, the annual growth rate of debt securities issued





by non-financial corporations in the euro area declined by 1 percentage point, although remaining robust at 14.5%. High volumes and the sustained pace of net issuance of fixed rate long-term debt securities since the end of 2008 suggest that corporations, especially large ones, have drawn resources from capital markets, taking advantage of still favourable market conditions and in view of relatively tight terms and conditions on bank loans.

Despite some signs of moderation, the annual growth rate of debt securities issued by the general government sector remained high in May, at 8.2%. This is in line with the persistently substantial funding needs of the public sector in the euro area, although there has been a sharp reduction in short-term government debt securities issuance in the last few months, where the annual growth has turned negative since April.

As far as the financial sector is concerned, the annual growth rate of debt securities issued by MFIs moved into negative territory in May, at -0.2%, after 1.3% in the previous month. The intensification of tensions related to sovereign risk seemed to have had negative effects on access to funding by euro area banks. The annual growth rate of long-term debt securities issued declined significantly, while the annual contraction in the volume of debt securities issued with short-term maturities became stronger. The annual growth rate of debt securities issued by non-monetary financial corporations declined to 2.9% in May, from 4.1% in the previous month, owing to a deceleration in long-term issuance growth.

#### **QUOTED SHARES**

The annual growth rate of quoted shares issued by euro area residents declined to 2.4% in May 2010 (see Chart 9). Moderating somewhat in comparison with the previous month, the annual growth rate of equity issuance by MFIs remained high at 6.3% in May. This reflects the efforts by banks to raise capital in order to strengthen their balance sheets. At the same time, the annual growth rate of quoted shares issued by non-financial

corporations declined to 1.5%. The slowdown in equity issuance reflected the considerable pick-up in the cost of equity financing.

#### 2.3 MONEY MARKET INTEREST RATES

Money market interest rates increased further across all maturities in July and early August 2010. The EONIA rate has become more volatile since the maturing of the one-year longer-term refinancing operation on 1 July 2010. In line with the gradual reduction in excess liquidity in the euro area, the average daily recourse to the deposit facility declined significantly during the seventh maintenance period of 2010, in comparison with the previous one, which had ended on 13 July.

In July and early August 2010, unsecured money market rates increased further across



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

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all maturities. On 4 August the one-month, three-month, six-month and twelve-month EURIBOR rates stood at 0.649%, 0.900%, 1.149% and 1.421% respectively – i.e. around 13, 10, 8 and 9 basis points higher respectively than the levels observed on 7 July. As a result, the spread between the twelve-month and the one-month EURIBOR – an indicator of the slope of the money market yield curve – decreased by 4 basis points in that period, standing at around 77 basis points on 4 August (see Chart 10).

Between 7 July and 4 August the money market rates derived from the three-month EONIA swap index increased by less than the corresponding unsecured rate. The three-month EONIA swap rate stood at 0.57% on 4 August, around 2 basis points higher than on 7 July. As a result, the spread between this money market rate and the corresponding unsecured EURIBOR rate increased to 33 basis points on 4 August, 8 basis points higher than on 7 July, thus remaining relatively wide in comparison with the levels prevailing prior to the onset of the financial market turmoil in August 2007.

The interest rates implied by the prices of three-month EURIBOR futures maturing in September and December 2010 and in March and June 2011 stood at 0.95%, 1.03%, 1.10% and 1.18% respectively on 4 August, representing decreases of around 3, 8, 7 and 6 basis points respectively from the rates on 7 July.

The EONIA has become more volatile since the maturing of the one-year longer-term refinancing operation on 1 July 2010. The EONIA rate increased during the first half of July and decreased thereafter, ranging between 0.36% and 0.56% (see Chart 11), with the exception of 13 July. This was the last day of the sixth maintenance period of 2010, when the EONIA rose to 0.75% as a result of the Eurosystem conducting a liquidity-absorbing fine-tuning operation by means of a variable rate tender procedure. The operation absorbed €200.9 billion, with a maximum rate of 1.00%, a marginal rate of 0.80% and a weighted average rate of 0.76%. On 4 August the EONIA stood at 0.365%.



## Chart II ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



In the main refinancing operations of 13, 20 and 27 July and 3 August, the ECB allotted  $\notin$ 195.7 billion,  $\notin$ 201.3 billion,  $\notin$ 190.0 billion and  $\notin$ 154.8 billion respectively. As regards its longer-term operations, the ECB allotted two LTROs in July, both as a fixed rate tender with full allotment: a one-month operation on 13 July (in which  $\notin$ 49.4 billion was allotted) and a three-month operation on 28 July (in which  $\notin$ 23.2 billion was allotted). In addition, the ECB conducted four one-week liquidity-absorbing operations as a variable rate tender with a maximum bid rate of 1.00% on 13, 20 and 27 July and 3 August. In the last of these operations, the ECB absorbed  $\notin$ 60.5 billion, which corresponds to the size of purchases under the Securities Markets Programme, taking into account transactions up until, and including, 30 July 2010 (see also Box 3).

In line with the gradual reduction of excess liquidity in the euro area, average daily recourse to the deposit facility declined to  $\notin$ 84.9 billion in the period from 14 July to 4 August. This was significantly lower than the  $\notin$ 230.4 billion observed in the previous maintenance period, which had ended on 13 July.

#### Box 3

#### COVERED BOND MARKET DEVELOPMENTS AND THE COVERED BOND PURCHASE PROGRAMME

On 7 May 2009 the Governing Council decided to initiate the covered bond purchase programme (CBPP), under which the Eurosystem purchased eligible covered bonds. The operational specifications of the CBPP were announced on 4 June 2009. The purchases started on 6 July 2009 and ended on 30 June 2010.

The CBPP was aimed at improving the funding conditions for financial institutions that issue covered bonds, as well as the secondary market liquidity of covered bonds, and at encouraging an easing of credit conditions, given that the process of deleveraging in the banking sector was predicted to continue for some time. These measures were also meant to improve the risk profile of institutions holding covered bonds and, thereby, to spur credit growth.

The announcement of the CBPP was followed by a rather swift tightening of the spreads between covered bond yields and swap rates, which accelerated with the start of the purchases themselves in the case of some markets (Chart A a)). As from 7 May 2009 activity on the secondary market shifted very quickly from the previously strongly one-sided selling interest to a one-sided buying interest. The primary market, which had remained more or less closed since mid-2008, also recovered quickly and saw strong issuance activity in the period between May and October 2009, with the exception of August, when new issuance activity is traditionally low because of the holidays.

In the fourth quarter of 2009 the earlier trend of rapidly tightening spreads came to an end. This induced many investors to engage in profit-taking. Moreover, since the spreads between the yields on many covered bonds and those on their respective sovereign benchmarks had also become relatively narrow (Chart A b)), some investors started undertaking so-called switching transactions, i.e. to move out of covered bonds into government bonds. As a result, the situation

<sup>1</sup> Further information is available in the ECB's press releases of 4 June 2009 and 30 June 2010, in the ECB's Decision of 2 July 2009 on the implementation of the covered bond purchase programme (ECB/2009/16) and in the monthly reports on the Eurosystem's covered bond purchase programme, published on the ECB's website from July 2009 to June 2010. See also the special feature on European covered bonds in the ECB's Financial Integration Report of April 2010.

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# Chart A Developments in selected covered bond market segments

(basis points)









with respect to buying and selling interests on the secondary market became more balanced, with more two-way flows. After the very high new issuance activity seen in September 2009, the primary market also calmed down somewhat in the fourth quarter, and issuance volumes returned to more normal levels.

In the first few months of 2010, developments in the covered bond market were dominated by spillover effects induced by tensions in euro area sovereign debt markets. Sharp moves in government bond yields also led to sharp changes in covered bond yields, which did not, as a rule, fall below their respective sovereign benchmarks. After a record high in January, activity on the primary market for covered bonds came to a standstill in several jurisdictions, except for a brief respite on account of sovereign risk concerns in March 2010.

After the start of the Securities Markets Programme on 10 May 2010, the covered bond market recovered somewhat. The spreads between covered bond yields and swap rates tightened in almost all jurisdictions, although this move towards tightening was later reversed in some cases. In several jurisdictions, primary market activity resumed.

As the above retrospective overview of market developments since the launch of the CBPP highlights, one of the important signs of the success of the CBPP is to be found in the noticeable re-activation of primary market activity for covered bonds. In the period under

review, a significantly broader spectrum of euro area credit institutions turned to the use of covered bonds as a funding instrument. This helped some jurisdictions to significantly increase the number of issuers and outstanding amounts, and thereby to deepen and broaden their covered bond markets. These developments contributed to improving the overall funding situation of both euro area and non-euro area financial institutions, in the case of the latter via positive spillover effects. Between the announcement of the CBPP on 7 May 2009 and its termination on 30 June 2010, 175 CBPP-eligible new covered bonds and 55 taps of already existing CBPP-eligible covered bonds were issued for an overall amount of around €184 billion. Over this period a new covered bond jurisdiction saw its first publicly placed covered bond, and 25 banks issued covered bonds for the first time.

The Eurosystem supported new issuance of covered bonds in two ways, namely by, first, directly participating in primary market transactions, albeit mainly for a small portion of the total amount issued, and, second, by buying covered bonds held by other investors in the secondary market who then had the opportunity to participate in primary market transactions. Both supporting mechanisms helped to stabilise covered bond spreads. The amounts purchased by the Eurosystem in the primary market generally corresponded to the primary market supply (Chart B). This response, however, was not mechanistic. For example, in September 2009 there was a very favourable market environment for primary market issuance of covered bonds, so Eurosystem support was not really needed. In that month, purchases by the Eurosystem in the primary market were therefore more limited than in other months that saw similar amounts issued. Overall, of the total nominal amount of  $\epsilon$ 60 billion purchased by the Eurosystem, 27% was purchased in the primary market.

In the secondary market, the Eurosystem allocated the CBPP purchases widely to the various segments of the covered bond markets, taking into account the outstanding amounts of covered bonds and the selling offers submitted by eligible counterparties to the Eurosystem's CBPP portfolio managers. The launch of the CBPP led to a narrowing of quoted bid-offer spreads in the covered bond market. However, the market depth and liquidity only improved significantly when, in late 2009, more balanced two-way flows emerged. Some of this improvement was reversed between February and May 2010, given spillover effects of tensions in euro area sovereign debt markets. Overall, the depth and liquidity of the secondary market for covered bonds have improved since May 2009. Of the total nominal amount of  $\in$ 60 billion, 73% was accounted for by purchases in the secondary market.

The securities held by the Eurosystem in its CBPP portfolio have been made available for lending to eligible counterparties against eligible collateral since March 2010. The amount of securities lent is not large, but it is not negligible either. Thus, the availability of CBPP securities for lending meets

# Chart B Jumbo covered bond issuance in the euro area and CBPP participation in primary market transactions

(EUR billions; percentages)

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45

40

35

30

25



Source: ECB calculations based on Bloomberg data. Note: CBPP-eligible securities with issue volumes of €500 million or more.



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some demand and contributes positively, albeit to a rather small extent, to a proper functioning of the covered bond market. In particular, the awareness of market participants that CBPP securities are available for lending against eligible collateral on demand probably contributes to expectations that the market will continue to function properly at the aggregate level.

The CBPP portfolio contains covered bonds with maturities of mainly between three and seven years. With regard to the maturity of the securities purchased, the Eurosystem likewise responded to the supply in markets: most new issuance and secondary market offers were in this maturity bucket (Chart C). As a result, the average modified duration of the portfolio was 4.12 as of June 2010, meaning that the average remaining maturity of the portfolio is around four years.

Overall, it can be concluded that the functioning of the covered bond market has improved significantly since the announcement of the CBPP in May 2009, although it suffered from the effects of tensions in the sovereign debt markets in the first few months of 2010.

#### 2.4 BOND MARKETS

Market sentiment continued to drive bond yields in global markets in the course of July. By 4 August AAA-rated long-term euro area government bond yields were slightly below their level in early June, but intra-euro area sovereign bond yield spreads, in particular for countries faced with market concerns about their fiscal soundness, narrowed significantly. In the United States, long-term government bond yields remained broadly unchanged over the period under review. Euro area long-term break-even inflation rates remained broadly unchanged in July.

Between end-June and 4 August 2010 the level of yields on AAA-rated ten-year government bonds in the euro area declined slightly to around 2.8%, while long-term government bond yields in the United States remained broadly unchanged at around 3.0% (see Chart 12). As a result, the ten-year nominal interest rate differential between US and euro area government bonds widened somewhat. Despite some swings in investors' risk appetite over the period under review, market participants' uncertainty about near-term developments in long-term bond yields, as measured by implied bond market volatility, has declined somewhat on both sides of the Atlantic since early July.

Ten-year US government bond yields remained broadly unchanged over the review period as a whole, but in the course of July reached the lowest levels recorded since the spring of 2009, as concerns about the strength and sustainability of the global economic recovery weighed on market sentiment. In particular, uncertainty about



Sources: Bloomberg and Reuters. Note: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity.
the magnitude of the expected slowdown in the US economy in the second half of the year affected market sentiment negatively. Against this background, releases during the period under review of mixed macroeconomic data for both the United States and some other economies throughout the world, followed by the confirmation of a growth slowdown in the second quarter of 2010, contributed to keeping long-term US bond yields below 3% for most of the review period, although investors' concerns about the sovereign risk of some euro area countries appeared to recede in the course of July, and the publication of the stress tests results for euro area banks improved global risk appetite.

Sentiment in the euro area sovereign bond markets, in particular, improved over the review period. In addition to the publication of details on euro area banks' exposures to various sovereign debt risks as part of the stress tests, successful debt auctions by some countries facing market concerns about their fiscal soundness had a positive effect on ten-year euro area sovereign bond yield spreads (vis-à-vis Germany). Moreover, in the course of July some AAA-rated long-term bond yields also rose in comparison with their levels in early June, which suggests some unwinding of the strong flight-to-safety flows into high-rated euro area sovereign bonds seen in May.

Yields on inflation-linked euro area government bonds with a five-year maturity remained broadly unchanged at around 0.5% in the course of July, while those with a ten-year maturity declined by around 10 basis points to stand at around 1.1% on 4 August (see Chart 13). Consequently, long-term implied forward real interest rates declined somewhat. At the same time, financial indicators of medium to long-term inflation expectations remained broadly unchanged in July (see Chart 14), and long-term implied forward break-even inflation rates (five years forward five years ahead) in the euro area fluctuated around 2.4%. Five and ten-year spot break-even

# inflation-linked bond yields



# inflation rates

(percentages per annum; five-day moving averages of daily data; asonally adjusted) five-year forward break-even inflation rate





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inflation rates were fairly stable over the review period and stood at 1.4% and 1.9% respectively on 4 August. Long-term forward inflation swap rates also remained broadly unchanged at around 2.2%, which again suggests that euro area inflation expectations remain firmly anchored.

Investors' expectations regarding the future path of short-term interest rates in the euro area appeared to remain broadly unchanged between the end of June and 4 August, as suggested by the minor change in the implied forward overnight interest rate curve for euro area government bonds (see Chart 15).

# 2.5 INTEREST RATES ON LOANS AND DEPOSITS

Most MFI lending rates declined in June 2010, reaching levels marking new, or standing close to, historical lows for both households and non-financial corporations, and across most maturities. The pass-through of past reductions in key ECB interest rates to bank customers is coming to an end.

In June 2010 the vast majority of short-term MFI interest rates on deposits increased for both households and non-financial corporations. Most short-term rates on loans to households declined, whereas those on loans to nonfinancial corporations developed along mixed lines (see Chart 16). More precisely, average rates on overdrafts extended to households rose to 9.0%, while short-term rates on loans to households for house purchase declined marginally (by 3 basis points to 2.5%), thus reaching a new historical low. The more volatile short-term rates on consumer credit declined sharply, to 5.2% (influenced by country-specific developments). In the case of non-financial corporations, banks' rates on overdrafts declined to 3.7%, while short-term rates on small loans (i.e. loans of less than €1 million) remained unchanged. Short-term lending rates on large loans (i.e. loans of more than €1 million) picked up to 2.2%. Since the EURIBOR increased by 4 basis points in June 2010, the



(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.

# Chart 16 Short-term MFI interest rates and a short-term market rate

(percentages per annum; rates on new business)

deposits from households redeemable at notice of up to three months deposits from households with an agreed maturity of up to one year overnight deposits from non-financial corporations loans to households for consumption 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 loans to non-financial corporations of over €1 million with a floating rate and an initial rate fixation of up to one year three-month money market rate 10 10 9 9 8 8 7 7 6 6 5 5 4 4 3 3 2 2 1 1 \*:: 0 0 2003 2004 2006 2009 2010 2005 2007 2008

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).



spreads between short-term MFI lending rates to households and the three-month money market rate narrowed, while the spread vis-à-vis interest rates on large loans to non-financial corporations widened (see Chart 17).

Taking a longer-term perspective, between September 2008 (i.e. immediately prior to the beginning of the cycle of monetary policy easing) and June 2010 short-term rates on both loans to households for house purchase and loans to non-financial corporations decreased by 325 basis points and 336 basis points respectively. This compares with a decline of 429 basis points in the three-month EURIBOR and indicates a considerable pass-through of market rate changes to bank lending rates.

As regards longer maturities, MFI interest rates on long-term deposits rose in June 2010, while most interest rates on longer-term loans to households and non-financial corporations fell (see Chart 18). More precisely, interest rates on loans to households for house purchase with an initial rate fixation of over five years and up to ten years declined by 6 basis points to 4.1%, while those on loans to households for house purchase with an initial rate fixation of over ten years decreased by 11 basis points to 3.9%. Average rates on small loans to non-financial corporations with an initial rate fixation of over five years declined slightly to stand at 4.1% and 3.8% respectively. The average rates on large loans increased by 8 basis points to 2.9% in the case of loans with an initial rate fixation period of over one year and up to five years, but declined by 8 basis points, to 3.3%, for loans with an initial period of rate fixation of over five years.

#### Chart 17 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 18 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).

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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 long-term government bond yields. By contrast, long-term rates on loans to households have not fallen by as much over the same period, reflecting a more incomplete and sluggish pass-through for households, but also increased credit risk concerns in some parts of the euro area. In the second quarter of 2010 longer-term interest rates continued to decline for both households and non-financial corporations, albeit to a much lesser extent than AAA-rated long-term government bond yields that fell considerably owing to flight-to-safety behaviour by investors.

Recent developments in loan-deposit margins on outstanding amounts signal improvements in the profitability of euro area banks. These margins have recovered in comparison with those recorded in the early part of 2009, thus contributing to the pick-up in euro area banks' profitability since the second half of 2009.

# 2.6 EQUITY MARKETS

Risk appetite in the global stock markets appeared to recover in the course of July. The publication of the results of the EU-wide stress tests for banks and related information on banks' sovereign debt exposures, revised proposals for financial regulation and the easing of market concerns about the sovereign debt situation in the euro area, as well as some positive corporate results for the second quarter of 2010, boosted gains in stock prices on both sides of the Atlantic. Investors' uncertainty about stock market developments, as measured by implied volatility, also declined over the period under review.

In the course of July major stock price indices in the euro area and the United States recovered some of the losses experienced since early May. By 4 August the Dow Jones EURO STOXX index had gained about 9% on its level at the end of June, with financials and, in particular, bank stocks leading the upward movement. Over the same period the Standard & Poor's 500 index was also around 9% higher (see Chart 19). Japanese stock prices, as measured by the Nikkei 225 index, rose by only 1%, as they were negatively affected by some disappointing economic data in July.

The publication of the results of the stress tests for euro area banks, the easing of market concerns about the sovereign debt situation in the euro area, and some positive macroeconomic data releases for the euro area economy and corporate results for the second quarter of 2010 appeared to have improved the market's risk appetite in July. For example, investors' uncertainty about near-term stock price movements, as measured

#### Chart 19 Stock price indices



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. by implied volatility extracted from options on stock price indices, declined and, although still relatively high, remained well below the peaks reached during the market turbulence in May.

In July the increases in US stock prices were supported by the improvement in risk appetite in the global markets and by the publication of some positive corporate earnings figures in the course of the July reporting season. However, concerns about the sustainability of the global economic recovery and about the outlook for corporate earnings in the second half of the year after the confirmation of the slowdown in US growth in the second quarter of 2010 contributed to keeping the gains limited. Increases in stock prices were spread broadly across sectors, with financial and non-financial stock prices showing a similar performance.

Major euro area stock price indices also recovered significantly in July. Euro area financials, in particular bank stock prices, benefited strongly from the publication of the results of the EU-wide stress tests and the details about the banks' exposures to sovereign debt in



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





several countries (see Box 4 below for details on the bank stress tests, in particular the reported capital shortfall), as well as from the modifications of the regulatory proposals put forward by the Basel Committee on Banking Supervision. Consequently, the performance of financial stocks, which showed double-digit advances in most countries, was better than that of the overall index in July, and was the main driver of the significant increase in the overall indices.

# Box 4

#### AN ASSESSMENT OF THE CAPITAL SHORTFALL REVEALED IN THE EU-WIDE STRESS-TESTING EXERCISE

The European Union has recently completed an EU-wide macro stress test, in which 91 banks participated. The results were published by the Committee of European Banking Supervisors (CEBS) on 23 July, together with a press release issued jointly with the ECB and the European Commission.<sup>1</sup> In the exercise, a 6% Tier 1 capital ratio was set as the threshold for assessing the magnitude of capital shortfalls of the participating banks. It is important to note that this 6% ratio is not a regulatory minimum capital requirement. Under the adverse macroeconomic scenario applied in the test, seven banks published Tier 1 capital ratios below the 6% threshold, 20 banks had Tier 1 ratios of between 6% and 7%, and 13 banks had Tier 1 ratios of between 7% and 8%. The other 51 banks had higher capital ratios, demonstrating the overall resilience of the

1 The press release is available at http://www.ecb.int/press/pr/date/2010/html/pr100723\_1.en.html.



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EU banking system to a relatively severe adverse scenario. The aggregate capital shortfall of the banks that participated in the exercise was  $\in 3.5$  billion, a figure which was somewhat lower than market participants had expected. This box sets this estimated capital shortfall in the context of the measures to bolster capital that had already been implemented prior to the stress test.

In assessing the size of the capital shortfall revealed by the EU-wide stress test, it must be borne in mind that this exercise was carried out at a rather late stage in the financial crisis, after a considerable amount of capital support had already been provided by EU governments to their banking systems. For instance, by end-2009, the starting point for the exercise, the EU banking sector had benefited from public capital support amounting to  $\notin 222$  billion (see the table). In addition, although the stress test took as a starting point the capital levels that prevailed at end-2009, in the estimation of the final capital shortfall figures the banks that participated in the exercise were allowed to count capital injections and increases that took place between end-2009 and 1 July 2010 as part of their Tier 1 capital. For the EU as a whole, such capital adjustments amounted to  $\notin 14.8$  billion. Of this total,  $\notin 11.3$  billion prevented banks from falling below the 6% Tier 1 capital ratio threshold (i.e. the amount of capital injected exceeded the amount needed to maintain the 6% Tier 1 capital ratio threshold by  $\notin 3.5$  billion). These capital adjustments included (i) capital injections by the Spanish Fund for Orderly Bank Restructuring (Fondo de Reestructuración Ordenada Bancaria – FROB) into several savings banks; (ii) the capital relief provided by the Spanish deposit guarantee fund for Caja Castilla-La Mancha; and (iii) the capital increase by Bank of Ireland.<sup>2</sup>

The capital injected into some euro area banking systems between end-2009 and 1 July 2010 had the effect of lowering the aggregate capital shortfall revealed by the EU-wide stress test under the adverse scenario. Taking full account of the measures to bolster capital that were implemented during this period, it is possible to compute a "gross capital shortfall", i.e. the shortfall that would have prevailed had the banks that participated in the exercise not been allowed to include these additional measures in their calculations. In total, this gross capital shortfall would have amounted to  $\in 14.9$  billion (which is the sum of  $\in 11.3$  billion of additional capital measures that counted against a shortfall and the  $\notin 3.5$  billion "net capital shortfall" revealed by the stress test).<sup>3</sup>

2 The Bank of Ireland raised €1.7 billion from private investors. It also converted €1.7 billion of the government's €3.5 billion preference shares into ordinary equity. This conversion is, however, neutral for the capital shortfall computation and is therefore not included here.

3 The figures used in this calculation do not add up owing to rounding.

#### Capital measures and shortfalls in the EU stress test

(EUR billions)					
	EU	Euro area	DE	ES	GR
A) Public capital injected before end-2009	222	146	54	12	3
B) Capital measures taken between end-2009 and 1 July 2010	14.8	14.81)	0.0	13.12)	0.0
C) Of which offset against the estimated capital shortfall <sup>3)</sup>	11.3	11.3	0.0	10.6	0.0
D) Net capital shortfall identified in the stress test	3.5	3.5	1.2	2.0	0.2
E) Gross capital shortfall (C+D)	14.9	14.9	1.2	12.6	0.2
F) Remaining public commitment	189	147	11	88	124)

Sources: CEBS, FROB and ECB calculations

1) The amount reported includes the sum of capital measures taken in Spain and the  $\in 1.7$  billion of capital that Bank of Ireland raised from private sources. 2) The amount reported includes (i) the  $\in 10.58$  billion of capital injected into Spanish banks by the FROB and (ii) the  $\in 2.48$  billion

2) The amount reported includes (1) the (10.58) billion of capital injected into Spanish banks by the FKOB and (ii) the (2.48) billion of capital relief provided by the Spanish deposit guarantee fund to Caja Castilla-La Mancha. 3) The amount includes the share of the capital measures that prevented a capital shortfall in the stress test, i.e. the share that brings the Tier 1 capital ratio to 6%.

Individual items may not add up to the total owing to rounding

4) The amount reported includes (i) the remainder of the old recapitalisation scheme ( $\in 1.8$  billion); and (ii) the new Financial Stability Fund ( $\in 10.0$  billion), which is currently being implemented.

Any capital shortfall should be judged against the financial resources available. In this respect, it is important to bear in mind that the commitments made by EU governments to support their banking sectors provide ample funds to address even sizeable capital shortfalls. In particular, EU governments have pledged a further  $\in$ 189 billion ( $\notin$ 147 billion of which has been pledged by euro area governments) that could be injected into banks if needed. Moreover, in all three countries where some banks "failed" the stress test, the remaining amounts pledged are sufficient to cover the capital shortfalls revealed by the exercise. For instance, in Germany, Spain and Greece, the pledged capital that remains after subtracting the sum already injected amounts to  $\notin$ 11 billion,  $\notin$ 88 billion and  $\notin$ 12 billion respectively. Furthermore, the banks perceived to have failed the stress test and the respective national authorities have swiftly communicated their intentions to implement further recapitalisation measures.

Overall, the corporate results for the second quarter of 2010 that were published in the period under review also contributed to the increases in stock prices. For companies listed in the Dow Jones EURO STOXX index, the year-on-year rate of growth in actual earnings improved further in July, with actual earnings per share rising by 2%, the first positive reading over the last 24 months, compared with a growth of -3% in June. Moreover, the earnings outlook remained sound: analysts' expectations with respect to the growth of earnings per share over the next 12 months remained at the robust level of 23% in July, whereas longer-term earnings growth was expected to be around 12%.

# Box 5

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#### INTEGRATED EURO AREA ACCOUNTS FOR THE FIRST QUARTER OF 2010

The integrated euro area accounts offer comprehensive and consistent information on the income, spending, financing and portfolio decisions of the institutional sectors of the euro area. The accounts up to the first quarter of 2010, released on 29 July 2010, show further signs of normalisation, with the household saving rate declining, risk appetite recovering and net worth rising. At the same time, the non-financial corporate sector showed a financial surplus, with the need for external financing limited by increased availability of internal funds. Patterns of disintermediation in favour of market instruments continued across sectors.

#### Euro area income and net lending/net borrowing

The pick-up in the growth rate of euro area nominal disposable income that started in the second quarter of 2009 continued in the first quarter of 2010 with a return to a positive yearly growth of 1% (see Chart A), benefiting non-financial corporations (NFCs) on the back of increasing operating surpluses. Moreover, the yearly decline in government disposable income moderated as the economy recovered slightly and fiscal consolidation packages unfolded, in particular through tax increases. By contrast, and in part reflecting the improvement in government income, household nominal income growth slowed.

1 Detailed data can be found on the ECB's website at http://sdw.ecb.europa.eu/browse.do?node=2019181.

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Against that background, euro area gross saving continued to decline as observed since the end of 2007. However, the pace of the yearly contraction in saving moderated significantly (to an annual rate of change of -1.7%), reflecting the increase in NFCs' operating surpluses and less rapid contractions in government saving. At the same time, the household saving rate fell for the third consecutive quarter to 14.6% (seasonally adjusted).

The annual growth rate of gross fixed capital formation continued to recover, albeit less rapidly than that of savings. These developments contributed to a further improvement in euro area net lending/net borrowing (to a deficit of 0.6% of GDP, on a four-quarter moving sum basis). From a sectoral point of view, this mainly reflects the NFC financial balance, which turned into a surplus, absorbing a slight decline in the household surplus and a further deterioration in the government deficit (see Chart B).

The mirror image of these developments can be seen in the external accounts, showing an improvement in the current account balance and a decrease in external net borrowing (mainly resulting in decreasing net inflows in debt securities). At the same time, the dampening of "gross" cross-border transactions that had characterised external developments since the end of 2008 started to recede, while a shift towards more risky equity instruments can be observed.

# Behaviour of institutional sectors

The year-on-year growth of nominal gross disposable income of households dropped to 0.6% (from 0.8% in the last quarter of 2009) on the back of a lower positive contribution from net social benefits and contributions from the government, together with increased taxation following the introduction of the first fiscal consolidation measures, while all other sources of income exhibited subdued growth similar to that seen in the previous quarter (see Chart C). The drop was more acute



in real terms as a result of the rebound in consumer prices which led the year-on-year growth rate of real gross disposable income to enter negative territory. Household consumption increased robustly to reach year-on-year growth of 1.6% (against -0.1% in the previous quarter), in spite of the lower income growth, indicating some renewed confidence in the context of slightly better labour prospects and an increase in financial wealth driven by equity market developments. This resulted in a further drop in the saving ratio. Household gross capital formation still decreased substantially, albeit somewhat more moderately than in the previous quarter (-7.4% year-on-year, compared with -11.9% previously), reflecting still weak housing markets and deleveraging pressures. This was also reflected in a still subdued uptake of loans (2.1% annual growth rate), although increasing compared with the previous quarter. As financial investment stabilised at an annual growth rate of 3.3%, net lending dropped slightly. At the same time, patterns of portfolio allocation continued to point to liquidity preference receding further, to a renewed search for yield, and to a return of risk appetite. In particular, purchases of equity, non-money market mutual funds and insurance liabilities expanded to the detriment of low-yielding deposits (see Chart D).

The gross operating surplus of non-financial corporations rebounded strongly in the first quarter owing to vigorous exports of goods and continued cost savings, exhibiting a record annual growth of 4.1% (from -3.5% in the previous quarter) which led to a sharp increase in savings as distributed dividends remained subdued (see Chart E). At the same time, the annual contraction in NFC fixed capital formation moderated further, and, as the pace of inventory reductions decreased abruptly, the yearly decline in capital formation slowed markedly, from -21% in the last quarter of 2009 to -2.6% in the first quarter of 2010. However, with saving higher than capital investment, the usual net borrowing position of NFCs turned into net lending on a four-quarter moving sum basis

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# Chart E NFCs' external financing by source of funds

(four-quarter moving sums; EUR billions)





of which, fixed capital formation

(four-quarter moving sums; EUR billions)



Sources: Eurostat and ECB

Note: For presentational purposes, some transactions in assets are netted here from financing, as they are predominantly internal to the sector (loans granted by NFCs, unquoted shares and other accounts receivable/payable).

(see Chart F). The resulting build-up of ample liquidity buffers could signal precautionary behaviour, in view of a still uncertain outlook for activity and bank financing, and of ongoing reductions of balance-sheet vulnerabilities. Corporate leverage ratios still remained at historically high levels – the debt-to-gross value added stabilised at 165% while the debt-to-equity (notional stock) ratio stabilised at 70%. In this context, the annual growth rate of financing by NFCs rebounded slightly to 1.1%, from 0.8% in the previous quarter, as the need for external financing was limited by the subdued real investment activities and the ongoing rise in available internal funds which typically precedes any recourse to external funds (the "pecking order" of corporate finance). Pronounced substitution effects are still observed, as market financing (debt securities and quoted shares) more than offset net redemptions of MFI loans.

In the first quarter of 2010 the euro area general government budget balance (net borrowing) deteriorated further to 6.6% of GDP (four-quarter moving sum), compared with 6.2% in the last quarter of 2009. This deterioration, for the ninth consecutive quarter since the end of 2007, mainly reflected broadly stable gross government investment (at 2.7% of GDP) and a further contraction in gross savings (net of capital transfers), which stood at -3.9% of GDP, down from -3.4% recorded in the previous quarter. Gross savings nevertheless showed a diminishing rate of decline – which points to a potential trough in the next quarter – on the back of the operation of automatic stabilisers in a moderately recovering economy, while the impact of most fiscal stimulus measures taken by euro area governments also declined. At the same time, this development was underpinned by tax increases in the context of the introduction of fiscal consolidation measures. The annual growth rate of government financial investment contracted rapidly to -0.7%, by far the lowest value since the beginning of the crisis (a peak of 15.8% was recorded in the second quarter

of 2009), as governments scaled down their interventions aimed at stabilising the financial sector. In addition, the cash build-up recorded in previous quarters started to be reduced. As a consequence, financing by issuance of loans and debt securities also slowed to 7.8%, down from 9.5% in the last quarter of 2009. The still high government debt securities issuance continued to be absorbed by MFIs and non-residents, as well as, increasingly, by resident institutional investors.

Gross entrepreneurial income of financial corporations returned to modest positive growth owing to an improvement in net interest received (partly related to carry-trade on government bonds and the steep yield curve). The contribution from the net operating surplus to income growth diminished (to 2.8% from 7.3% in the last quarter of 2009) owing to a moderation in bank spreads and weakness in traditional lending business. In addition, financial corporations have benefited from substantial holding gains in recent quarters (see Chart G) which reached an all-time high in terms of accumulated four-quarter flows of around  $\in$ 1,900 billion in a







context of diminishing long-term interest rates and the stock market recovery from the trough recorded in the first quarter of 2009. The annual growth rate of financial investment (netting out interbank deposits) increased to 2.7% from 2.2% in the last quarter of 2009. MFI deposits with non-residents were the main contributors to that development (although still showing a negative four-quarter moving sum), while the growth rate of acquisitions of debt securities by MFIs continued to decline. At the same time, holdings of debt securities by institutional investors (mostly of public debt) continued to rise, in particular holdings by insurance corporations and pension funds (ICPFs), whose acquisitions over the quarter reached a record volume of  $\notin$ 77 billion (compared with acquisitions by MFIs of  $\notin$ 75 billion). The ratio of equity to financial assets stabilised at 8.8% as the expansion in the balance sheet of the sector was compensated by increases in its equity value.

#### **Financial markets**

The considerable expansion of net transactions in debt securities that characterised developments one year ago further moderated, although strong NFC issuance continued to substitute for bank loans as has been the case since the end of 2008. The net buyer position of other financial intermediaries (OFIs) reflects large purchases by investment funds, while issuance by special-purpose vehicles (notably in the context of retained securitisations) slowed. In the same vein, ICPFs stepped up purchases, while households were large sellers. Issuance by MFIs continued to be limited and MFIs added moderately to their holdings of debt securities. The rest of the world remained a substantial net buyer, although on a smaller

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scale than in the previous quarter, reflecting the improvement in euro area net lending. At the same time, issues of quoted shares by NFCs remained robust in the context of an overall disintermediation trend away from bank financing. NFCs were net sellers of equity, and investment funds were prominent buyers. On the mutual funds market, issuance of non-money market mutual fund shares continued the strong acceleration shown in previous quarters on the back of household appetite for riskier and longer-term assets in place of monetary assets. On the loan market, the ongoing reduction in MFI loans to NFCs was accompanied by a moderate increase in loans to households.

# **Balance sheet dynamics**

In the first quarter of 2010 the annual change in households' net worth continued to be positive (after two years of decline), on the back of a stock market rally (see Chart H). The increase in market prices also boosted the balance sheets of banks, which have sizeable positions in equity and debt securities (see Chart G).



Sources: Eurostat and ECB.

Note: The data on non-financial assets are ECB estimates. 1) Mainly holding gains and losses on real estate and land.

 Mainly holding gains and losses on shares and other equity.
 This item comprises net saving, net capital transfers received, and the discrepancy between the non-financial and the financial accounts.



#### 3 PRICES AND COSTS

According to Eurostat's flash estimate, euro area annual HICP inflation increased to 1.7% in July, from 1.4% in June, most likely owing to upward base effects in the energy and food components. In the next few months annual HICP inflation rates are expected to display some further volatility around the current level. Looking further ahead, inflation rates should, overall, remain moderate in 2011, benefiting from low domestic price pressures. Risks to the outlook for price developments are broadly balanced.

# **3.1 CONSUMER PRICES**

According to Eurostat's flash estimate, the euro area annual HICP inflation rate stood at 1.7% in July 2010, up from 1.4% in June (see Table 4). Official estimates of the breakdown of HICP inflation in July are not yet available, but it would appear that the increase was related mostly to upward base effects in the energy and food components.

In June, the last month for which an official breakdown is available, the annual growth rate of overall HICP inflation fell somewhat, by 0.2 percentage point compared with May. This drop was attributable mainly to the strong fall in the annual rate of change in the energy component, which stood at 6.2% in June, down from 9.2% in the previous month, owing to a negative base effect and partly to negative month-on-month changes in the prices of oil-related items.<sup>1</sup>

The annual growth rate of total food prices (including alcohol and tobacco) continued to trend upwards, standing at 0.9% in June, which is 0.2 percentage point higher than in May. As for the sub-components, unprocessed food prices accelerated in June, mainly on account of fruit and vegetable prices. The year-on-year change in the prices of unprocessed food stood at 0.9% in June, up from 0.4% in the previous month, while that in processed food prices remained unchanged at 0.9%. Within processed food prices, the sub-components with the highest weight (bread and cereals; milk, cheese and eggs; sugar products; mineral water and fruit juices) still recorded negative annual growth rates in June. By contrast, tobacco prices continued to rise strongly in annual terms in the same month, by 5.4%, driven mainly by increases in excise duties and other indirect taxes.

1 For more details on the links between oil prices and inflation, see the article entitled "Oil prices: their determinants and impact on euro area inflation and the macroeconomy" in this issue of the Monthly Bulletin.

(annual percentage changes, unles	s otherwise indi	cated)						
	2008	2009	2010	2010	2010	2010	2010	2010
			Feb.	Mar.	Apr.	May	June	July
HICP and its components								
Overall index 1)	3.3	0.3	0.9	1.4	1.5	1.6	1.4	1.7
Energy	10.3	-8.1	3.3	7.2	9.1	9.2	6.2	
Unprocessed food	3.5	0.2	-1.2	-0.1	0.7	0.4	0.9	
Processed food	6.1	1.1	0.6	0.5	0.6	0.9	0.9	
Non-energy industrial goods	0.8	0.6	0.1	0.1	0.2	0.3	0.4	
Services	2.6	2.0	1.3	1.6	1.2	1.3	1.3	
Other price indicators								
Industrial producer prices	6.1	-5.1	-0.4	0.9	2.8	3.1	3.0	
Oil prices (EUR per barrel)	65.9	44.6	54.5	59.1	64.0	61.6	62.2	58.9
Non-energy commodity prices	2.0	-18.5	25.4	34.5	51.9	52.1	50.5	56.0

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 July 2010 refers to Eurostat's flash estimate.



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Excluding all food and energy items, which represent around 30% of the HICP basket, annual HICP inflation stood at 0.9% in June, up 0.1 percentage point from May. This pick-up was related mainly to a slight increase in non-energy industrial goods prices, while services prices remained stable. The year-on-year rate of change in non-energy industrial goods prices increased in June to 0.4%, from 0.3% in May. Among the items contributing most to this rise were garments, footwear and jewellery, the latter owing to a rally in the price of gold and other precious metals. This recent increase notwithstanding, about one-quarter of non-energy industrial good items still recorded negative year-on-year rates in June, which is a higher proportion than the average observed since 1999. The annual rate of inflation in services prices remained unchanged in June, standing at 1.3%, with no substantial changes in the dynamics of its major sub-components. Box 6 describes the extent to which the HICP rent component of services prices has been influenced by developments in euro area house prices.

#### Box 6

#### EURO AREA HOUSE PRICES AND THE RENT COMPONENT OF THE HICP

In the euro area, as in many other economies, expenditures on buying a house or flat are not incorporated directly into consumer price indices, but expenditures on rent generally are. Given the theoretical long-run relationship between developments in house prices and rents, changes in the prices of residential dwellings could have an indirect impact on consumer price inflation via changes in rents. In this context, it is possible that the recent sharp decline in house prices in some euro area countries may have exerted some downward pressure on rents which, in turn, may have had an impact on the euro area headline HICP through its rent component. The purpose of this box is to assess the scope of such an impact for the euro area. First, it

describes the relationship between developments in house prices and rents from a theoretical perspective. Second, it presents an empirical analysis of the co-movement of euro area house prices and the rent component of the HICP, highlighting, in particular, some of the limitations to the theoretical implications. Finally, the impact on the euro area headline HICP is evaluated and compared with the results for the US consumer price index (CPI).

#### The co-movement of house prices and rents from a theoretical perspective

Housing can be considered from an investment perspective, i.e. as a non-financial asset, or from a consumption perspective, i.e. as shelter consumed by an owner-occupier or a tenant. Both perspectives imply that there is a long-run relationship between house prices and rents, although with potentially different adjustment mechanisms in the short run. When considering residential property as an asset, rents can be viewed as a proxy for the corresponding dividend. This would imply, for example, that a higher present discounted value of future dividends, all else being equal, would translate into a higher price for the underlying asset. However, when considering housing as a service that is consumed by the owner-occupiers or tenants – under the assumption that owning and renting a property can be substituted for one another – the existence of temporary price misalignments, such as the overvaluation of purchase prices of residential dwellings, would imply a trade-off of buying for renting. This would have opposite effects on changes in house prices and changes in rents, resulting – under perfect market conditions – in a long-run equilibrium in the housing market. In practice, the forces driving house prices and rents, as well as their co-movement, are nevertheless subject to several limitations, which are discussed below in relation to the empirical evidence for the euro area.

#### Empirical evidence for the euro area

The empirical analysis of the co-movement of house prices and rents in the euro area is based on the ECB's euro area residential property price indicator<sup>1</sup> and the rent component of the euro area HICP. Annual rates of change in these series are presented in Chart A.<sup>2</sup> Having followed an upward trend for a protracted period of time, the annual rate of change in euro area residential property prices started to decelerate around 2005 and finally went into negative territory in 2009.<sup>3</sup> By contrast, rent growth in the euro area was much less volatile over the same period. Overall, the movements in euro area property prices have been more pronounced than those seen in the rent component of the HICP. From 1997 to 1999, the growth rates of the two series moved in opposite directions. Starting in 2000 changes in the growth of the rent component of the HICP appeared to have mirrored changes in the growth of residential property prices, albeit with a substantial lag and much smaller amplitude.

There are several factors that might explain the above-mentioned differences between developments in residential property prices and developments in rents, including rent regulation, fiscal policy measures related to housing, structural economic changes, financing conditions and statistical issues. In the euro area, there are various forms of rent regulation, such as rent indexation (to various price indices), caps on rent increases, long rental agreements with various clauses on adjusting rents and rent protection. The rent component of the HICP also includes social housing rents, which constitute

2 The semi-annual data of the rent component of the euro area HICP represent an average of the monthly observations.

<sup>3</sup> For more details, see the box entitled "Recent housing market developments in the euro area", Monthly Bulletin, ECB, May 2010.



<sup>1</sup> The ECB's euro area residential property price indicator is a semi-annual weighted average of country indicators. The series starts in 1996 and the latest available observation refers to the second half of 2009.

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a significant share of the rental market in some euro area countries. As a result, only a fraction of the rental payments covered by the HICP – typically those referring to new rental agreements for non-social housing – might be expected to directly adapt to market forces in general and to changes in house prices in particular.<sup>4</sup> This is a key reason for the muted and delayed response from the overall rent index.

The relationship between house prices and rents may also be weakened by supply constraints as well as by the limited scope for substituting buying and renting for one another, owing, for example to borrowing constraints, the size of the rental market, differences in the characteristics of rented and owner-occupied property and high transaction costs. When considering housing as an asset, other factors affecting the user cost of



housing could drive a wedge between rents and residential property prices. Such factors include mortgage interest rates, various forms of property taxes and subsidies, as well as expectations for future house price developments.<sup>5</sup> In view of the most recent boom and bust in the housing markets in the United States and some euro area countries, the latter factor could have played an important role in the decoupling of house prices and rents in the first part of the last decade.

Some of the above-mentioned factors may also explain the divergence between the annual rates of change in rents and house prices that was observed in several euro area countries during the late 1990s. As shown in the left-hand panel of Chart B, many euro area countries saw a decline in rent inflation between 1997 and 1999, while house prices were accelerating. The start of EMU during this period brought about important structural changes. First, in many countries, consumer price inflation fell, which could have had a downward impact on rent inflation through the indexation mechanism. As shown in the right-hand panel of Chart B, in many countries, the deceleration in inflation of the rent component of the HICP mirrored the deceleration in the headline HICP, even though it was stronger.<sup>6</sup> Second, falling nominal and real interest rates made it more economical for households to buy rather than to rent a property, possibly triggering a substitution effect that supported house prices and drove down growth in rents.<sup>7</sup>

In addition, it is important to realise that the limited co-movement observed between euro area house prices and the rent component of the HICP might also reflect some statistical issues. With regard to house prices, the data used in this box have been collected by euro area NCBs<sup>8</sup>

- 4 See also the Structural Issues Report entitled "Structural factors in the EU housing markets", ECB, 2003.
- 5 For more information, see the article entitled "Assessing house price developments in the euro area", *Monthly Bulletin*, ECB, February 2006 and "Housing finance in the euro area", *Occasional Paper Series*, No 101, ECB, March 2009. See also Hiebert, P. and Sydow, M., "What drives returns to euro area housing? Evidence from a dynamic dividend-discount model", *Working Paper Series*, No 1019, ECB, 2009.

7 See the above-mentioned Structural Issues Report for more details.

<sup>6</sup> Chart B should be interpreted with some caution as it depicts contemporaneous changes in one series against another, while changes in rents might be expected to react to changes in the headline HICP and house prices with a lag.

<sup>8</sup> EU statistical offices are currently working on a harmonised statistical approach for compiling residential property price indices. However, so far only a few countries have published results for this project.





Note: The changes refer to the annual rate of growth in 1999 minus the annual rate of growth in 1997 (or 1998 when earlier data are not available).

and are not harmonised in terms of statistical properties. An analysis of the pass-through of changes in house prices to changes in residential rents could be affected, in particular, by differences in the coverage of dwelling types across indices. Moreover, such an analysis may also be affected by the way in which individual price changes are combined to form an aggregate index and adjustments are made for compositional changes in the characteristics of dwellings whose prices are observed over time. For example, house price indices reflecting the prices of existing dwellings measure a different phenomenon than indices that cover the prices of new dwellings. The transmission of price changes in existing and new dwellings to the rent component of the HICP may have very different dynamics in terms of the size, channel and timing of the pass-through. Notably, in the euro area, whereas the indicators for many countries cover both new and existing dwellings, around one-third of the coverage of the euro area residential property price indicator refers to country indicators that only reflect changes in the prices of existing dwellings.

As for the rent component of the HICP, although it is more suitable for cross-country comparisons, statistical issues may still hamper the analysis of the pass-through. In particular, it is important that rent indices accurately reflect the balance between rental agreements for newly developed and existing properties and that they cover open market and social rents. As noted above, the prices of existing agreements may tend to be stickier than prices for new agreements and more often subject to price regulation. In some euro area countries, coverage of new rental agreements, in particular those for newly built units, is limited.

Another issue relates to the relative contribution of country developments to the euro area residential property price indicator on the one hand, and to the rent component of the euro area HICP on the other hand. The euro area residential property price indicator aggregates changes in national house prices by using GDP shares, while the estimates for the rent component of the euro area HICP reflect the relative size of the rental markets in each country.

# Impact on the overall consumer price indices in the euro area and the United States

To assess the impact of rent inflation on the overall HICP, the left-hand panel of Chart C compares the euro area annual HICP inflation rate of the all-items index with the index including all items



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apart from rents. The right-hand panel shows annual percentage changes in the US CPI all-items and all-items-less-shelter indices. While the differences between both series are negligible in the euro area, they are more significant in the United States. In particular, most recently, the US CPI all-items-less-shelter index has recorded higher growth rates than the CPI including all items. One important point to be stressed in this context is that the US CPI and the euro area HICP differ in terms of their coverage of housing costs. The former includes owner-occupiers' costs for shelter in the form of imputed rental payments, while the latter does not cover the shelter costs of owner-occupied housing.<sup>9</sup> Owners' equivalent rents constitute around 24% of the cost of living covered by the US CPI. By contrast, actual rents account for around 6% of the basket of both the US CPI and the euro area HICP.

In conclusion, while, in theory, house prices and rents may be expected to co-move in the long run, various institutional and economic factors are likely to affect the dynamics of this relationship. In the euro area, the response of the rent component of the HICP to developments in residential property prices is only muted. Consequently, the recent sharp movements in house prices have had an overall negligible impact on the euro area HICP when considered through the "rent" channel. By contrast, in the United States, the falls in the growth rates of rents have contributed significantly to lowering inflation in recent months.

9 With regard to the treatment of owner-occupied housing in the HICP, see also Box 2 in the article entitled "The Harmonised Index of Consumer Prices: concept, properties and experience to date", *Monthly Bulletin*, ECB, July 2005. The shelter index of the US CPI also includes lodging away from home and tenants' and household insurance, but the weight of these items is relatively low.

# **3.2 INDUSTRIAL PRODUCER PRICES**

In June the annual rate of change in industrial producer prices (excluding construction) remained broadly unchanged at 3.0%, after 3.1% in May (see Chart 22). The marginal decline was due to a lower annual rate of change in energy prices driven by a base effect, while industrial producer prices excluding energy and construction rose on account of the intermediate and consumer goods component.

Survey indicators in July also signalled the persistence of some upward price pressures, albeit to a lesser extent than in June. With regard to the Purchasing Managers' Index, the input price index



for the manufacturing sector weakened for the second consecutive month in July, partly on account of recent commodity price developments (see Chart 23). Nevertheless, its level is still much above the threshold level of 50, indicating rising input prices. The index for prices charged in the manufacturing sector declined only marginally in July. In the services sector, both the input and selling price indices remained broadly unchanged in the same month. The level of the selling price index is still below the 50 mark, indicating falling prices in that sector. Overall, the survey indicators still suggest that euro area firms are having difficulty passing on the higher input prices to consumers.

# 3.3 LABOUR COST INDICATORS

There are few new data on labour cost indicators since the previous issue of the Monthly Bulletin. In the first quarter of 2010 the gap between various labour cost indicators, in terms of the annual growth rate, continued to narrow (see Chart 24 and Table 5). The overall picture confirms subdued labour costs in early 2010.

(annual percentage changes unless	otherwise indica	ted)					
(	2008	2009	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1
Negotiated wages	3.3	2.7	3.2	2.8	2.4	2.2	1.8
Total hourly labour costs	3.5	2.7	3.1	3.3	2.6	1.7	2.1
Compensation per employee	3.1	1.5	1.8	1.4	1.5	1.3	1.5
Memo items:							
Labour productivity	-0.2	-2.3	-3.9	-3.1	-1.9	0.0	1.9
Unit labour costs	3.3	3.8	5.9	4.7	3.5	1.3	-0.5

Sources: Eurostat, national data and ECB calculations.



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The annual rate of growth in euro area negotiated wages declined to 1.8% in the first quarter of 2010, from 2.2% in the last quarter of 2009. This reduction was broadly based across countries and confirmed that growth in euro area negotiated wages remains on the downward path that it took at the beginning of 2009. Available information suggests that the relatively subdued negotiated wage growth observed in the first quarter of 2010 continued into the second quarter, in line with weak labour market conditions.

In the first quarter of 2010 annual hourly labour cost growth in the euro area increased slightly to 2.1%, from 1.7% in the fourth quarter of 2009. This rise can be viewed as a normalisation of the sharp decline recorded in the fourth quarter of 2009, when annual hourly labour cost growth fell by 0.9 percentage point. Even after the small acceleration recorded in the first quarter, the annual growth rate of hourly labour costs still remains at a level close to the lows observed

in 2005. The increase in annual hourly labour cost growth in the first quarter reflects primarily developments in the industrial sector, where the annual growth rate increased to 1.8%, which was 1.2 percentage points higher than in the previous quarter (see Chart 25).

The annual growth rate in compensation per employee rose slightly to 1.5% in the first quarter of 2010, from 1.3% in the last quarter of 2009. The sectoral breakdown showed a marked increase in the industrial sector, but a sharp decline in the construction sector. The fact that the annual growth





rate in negotiated wages in the first quarter was higher than that in compensation per employee indicates that the wage drift in the euro area is still negative.

The broadly stable growth of compensation per employee, combined with a further substantial gain in productivity, both measured on a per head basis, led to a further substantial slowdown in unit labour cost growth. In the first quarter of 2010 the annual growth rate of unit labour costs was negative (-0.5%), compared with the 1.3% increase recorded in the previous quarter, marking a significant decline from the peak of nearly 6% reached in the first quarter of 2009.

### 3.4 THE OUTLOOK FOR INFLATION

In the next few months the annual HICP inflation rate is expected to display some further volatility around the current level. Looking further ahead, inflation rates should, overall, remain moderate in 2011, benefiting from low domestic price pressures.

The latest ECB Survey of Professional Forecasters (SPF; see Box 7) shows that forecasters have not changed their outlook for inflation in 2010, 2011 and 2012, compared with the previous round.

Risks to the outlook for price developments are broadly balanced. Upside risks over the medium term relate, in particular, to the evolution of commodity prices. Furthermore, increases in indirect taxation and administered prices may be greater than currently expected, owing to the need for fiscal consolidation in the coming years. At the same time, risks to domestic price and cost developments are contained.

#### Box 7

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### **RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE THIRD QUARTER OF 2010**

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the third quarter of 2010. The survey was conducted between 14 and 19 July 2010. There were 55 responses from forecasters. The SPF collects information on expectations for euro area inflation, real GDP growth and unemployment from experts affiliated with financial or non-financial institutions that are based in the EU.<sup>1</sup>

#### Inflation expectations for 2010, 2011 and 2012

Compared with the previous SPF round, forecasters have not changed their outlook for inflation: expectations remained unchanged at 1.4% for 2010, 1.5% for 2011 and 1.7% for 2012 (see the table).<sup>2</sup>

The SPF inflation expectations for 2010 and 2011 are within the ranges reported in the June 2010 Eurosystem staff macroeconomic projections. Compared with the forecasts of the July 2010

- 1 Given the diversity of the panel of participants, aggregate SPF results can reflect a relatively heterogeneous set of subjective views and assumptions.
- 2 Additional data are available on the ECB's website at www.ecb.europa.eu/stats/prices/indic/forecast/html/index.en.html

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# Results of the SPF, Eurosystem staff macroeconomic projections, Consensus Economics and Euro Zone Barometer

(annual percentage changes, unless otherwise indicated)

	Survey horizon							
HICP inflation	2010	June 2011	2011	June 2012	2012	Longer-term <sup>2)</sup>		
SPF Q3 2010	1.4	1.4	1.5	1.7	1.7	2.0		
Previous SPF (Q2 2010)	1.4	-	1.5	-	1.7	1.9		
Eurosystem staff macroeconomic projections	1.4-1.6	-	1.0-2.2	-	-	-		
Consensus Economics (July 2010)	1.5	-	1.5	-	1.5	2.0		
Euro Zone Barometer (July 2010)	1.4	-	1.5	-	1.6	1.9		
Real GDP growth	2010	Q1 2011	2011	Q1 2012	2012	Longer-term <sup>2)</sup>		
SPF Q3 2010	1.1	1.4	1.4	1.4	1.6	1.8		
Previous SPF (Q2 2010)	1.1	-	1.5	-	-	1.8		
Eurosystem staff macroeconomic projections	0.7-1.3	-	0.2-2.2	-	-	-		
Consensus Economics (July 2010)	1.1	-	1.4	-	1.6	1.8		
Euro Zone Barometer (July 2010)	1.1	-	1.3	-	1.6	2.0		
Unemployment rate 1)	2010	May 2011	2011	May 2012	2012	Longer-term <sup>2)</sup>		
SPF Q3 2010	10.1	10.2	10.2	9.9	9.8	8.4		
Previous SPF (Q3 2010)	10.3	-	10.3	-	-	8.5		
Consensus Economics (July 2010)	10.1	-	10.2	-	-	-		
Euro Zone Barometer (July 2010)	10.2	-	10.2	-	10.0	8.8		

1) As a percentage of the labour force.

2) Longer-term inflation expectations refer to 2014 in the Euro Zone Barometer and to 2015 in the SPF for the third quarter of 2010 and Consensus Economics. Expectations for 2012 and the longer-term expectations for Consensus Economics are from the April 2010 release.

issues of Consensus Economics and the Euro Zone Barometer, the SPF inflation expectations are broadly similar for 2010 and 2011, and slightly higher for 2012.<sup>3</sup>

The SPF participants were also asked to assess the probability of inflation falling within specific intervals. Compared with the previous SPF round, the aggregate probability distribution for 2010 is now more concentrated in the range between 1.0% and 1.9%, as respondents now assign

3 Consensus Economics forecasts for 2012 were published in the April 2010 release.



Chart A Probability distribution for average annual inflation in 2010 and 2011 in the latest SPF rounds  $^{\rm D}$ 

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





an 81% probability to this interval. Within this range, the two intervals from 1.0% to 1.4% and from 1.5% to 1.9% have been assigned around the same probability. Respondents have assigned a probability of 11% to a lower inflation outcome (below 1.0%) and a probability of 8% to a higher inflation outcome (above 1.9%). The probability distribution for 2011 has remained broadly stable compared with the previous SPF round, with a slight increase in the probability of inflation outcomes being in the range from 1.0% to 1.9% (see Chart A). Based on the individual probability distributions, the balance of risks to these forecasts is assessed by respondents as being on the downside across all forecast horizons, and in particular for 2012. This is reflected in the fact that the majority of respondents provided a point forecast that is above the mean forecast from their probability distribution, implying that they assign a higher probability to outcomes below this point forecast than to those above it. Most respondents mention low wage growth owing to the high unemployment rate as the main downside risk to the inflation outlook. Many respondents commented that the main upside risks to the baseline scenario are: i) higher import prices owing to the depreciation of the euro; ii) rising raw materials and oil prices; and iii) increases in indirect taxes and administered prices as a result of fiscal consolidation plans.

#### Indicators of longer-term inflation expectations

Longer-term inflation expectations (for 2015) have been slightly revised upwards, on average, to 2.0% from 1.9% (for 2014) in the previous SPF round. The median of the point estimates, which is less affected by extreme values than the average point estimate, remained at 1.9%. The average point forecast is in line with the long-term inflation projections provided by Consensus Economics in April (at 2.0%) for 2015 and above those of the Euro Zone Barometer (at 1.9%) for 2014, which were published in July 2010.

The slight upward movement in longer-term inflation expectations is combined with a greater disagreement among forecasters in their longer-term inflation expectations, as measured by the standard deviation of their point forecasts. Nevertheless, the majority of respondents provided a point forecast for longer-term inflation expectations in the range from 1.8% to 2.0% (see Chart B).

At the same time, aggregate uncertainty surrounding these inflation expectations, as measured by the standard deviation of the aggregate probability distribution, remained at a level similar to that in the previous SPF round.<sup>4</sup> Finally, the probability of longer-term inflation standing at 2% or above remained broadly stable at 44%, after 43% in the previous SPF round.

Measures of inflation expectations derived from financial markets have remained broadly unchanged. However, they have generally been higher than SPF forecasts because they incorporate not only the level of expected inflation, but also an additional premium, to compensate bond investors for inflation risks. They have also been more volatile than survey-based measures, not only owing to the volatility of said inflation risk premium, but also to the fluctuation in bond market liquidity conditions since the middle of 2008 (see Chart C).<sup>5</sup> The volatility observed in these measures should thus be treated with some caution and should not be mechanically interpreted as reflecting revisions in market participants' long-term inflation expectations.<sup>6</sup>

<sup>4</sup> For a discussion regarding uncertainty measures, see the box entitled "Measuring perceptions of macroeconomic uncertainty", *Monthly Bulletin*, ECB, January 2010.

<sup>5</sup> See also the article entitled "Measures of inflation expectations in the euro area", Monthly Bulletin, ECB, July 2006.

<sup>6</sup> For further discussion on the impact of the financial market crisis on market-based measures of inflation expectations, see the box entitled "Recent increases in real yields and their implications for the analysis of inflation expectations", *Monthly Bulletin*, ECB, November 2008. Recent developments in financial market indicators of inflation expectations are discussed in Section 2.4 of the Monthly Bulletin.

Prices and costs



# **Real GDP growth expectations**

On average, the SPF respondents' expectations for real GDP growth are unchanged at 1.1% for 2010, but have been revised slightly downwards to 1.4% for 2011, from 1.5% in the previous round. In 2012 respondents expect euro area real GDP to grow by 1.6%.

The SPF growth expectations for 2010 and 2011 are within the ranges reported in the June 2010 Eurosystem staff macroeconomic projections for the euro area and broadly in line with the latest Consensus Economics and Euro Zone Barometer forecasts for 2010 and 2011.

The aggregate probability distribution for 2010 is now more concentrated in the range between 1.0% and 1.4% than in the previous SPF round, as respondents now assign a 46% probability to this interval. With regard to 2011, forecasters now assign the highest probability (33%) to the interval between 1.0% and 1.4% (see Chart D).

The level of uncertainty surrounding one-year-ahead and two-year-ahead real GDP forecasts has not changed from the previous SPF round. The balance of risks to the average point forecast of real GDP growth is assessed to be on downside across all forecast horizons, and in particular for 2012. Several respondents commented that the adoption of fiscal consolidation plans, weaker private consumption and public investment, and heightened financial tensions, in particular tight credit standards, are expected to be downside risks to growth. They also perceived the positive effects of the depreciation of the euro to be the main upside risk to the growth scenario.



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

Longer-term growth expectations (for 2015) stand at 1.8%, unchanged from the previous SPF round. The SPF assessment is in line with that of the April issue of Consensus Economics (1.8% for 2015) and below that of the July issue of the Euro Zone Barometer (2.0% for 2014). Looking at the individual probability distributions, respondents assess the balance of risks to longer-term growth to be clearly on the downside.

#### Expectations for the euro area unemployment rate

Unemployment rate expectations have been revised downwards by 0.2 percentage point for 2010 and by 0.1 percentage point for 2011, to 10.1% and 10.2% respectively. For 2012, they now stand at 9.8%. The balance of risks to short and medium-term expectations is assessed to be on the upside. Longer-term unemployment rate expectations (for 2015) have been revised slightly downwards, by 0.1 percentage point, to 8.4%, and the balance of risks to the longer-term outlook is again assessed to be on the upside.

#### Other variables and conditioning assumptions

According to other information provided by the respondents, they generally expect: i) oil prices to increase from USD 77 in the third quarter of 2010 to around USD 87 in 2012; ii) wage growth to be at 1.4% in 2010, rising to 1.5% in 2011, 1.9% in 2012 and 2.4% by 2014; iii) the euro to weaken against the US dollar, to stand on average at USD 1.23 in 2011 and USD 1.26 in 2012; iv) the ECB policy rate to remain stable at around 1.0% until the first quarter of 2011 and then increase to around 2.1%, on average, during 2012.



Output, demand and the labour market

# **4 OUTPUT, DEMAND AND THE LABOUR MARKET**

Economic activity in the euro area has been expanding since the middle of 2009. Recent economic data and information from business surveys point to a strengthening in activity in the second quarter of 2010, and the available data for the third quarter are better than expected. Looking further ahead, euro area real GDP is expected to grow at a moderate and still uneven pace over time and across economies and sectors of the euro area. Ongoing growth at the global level, and its impact on the demand for euro area exports, together with the accommodative monetary policy stance and the measures adopted to restore the functioning of the financial system, should continue to support the euro area economy. At the same time, the process of balance sheet adjustment and labour market prospects are expected to dampen the pace of the recovery. The risks to the economic outlook remain broadly balanced, in an environment of uncertainty.

# 4.1 REAL GDP AND DEMAND COMPONENTS

Euro area real GDP rose by 0.2% in the first quarter of 2010, according to Eurostat's second estimate, compared with an increase of 0.1% in the previous quarter (see Chart 26). Available indicators point to a strengthening of the recovery in the second quarter.

In the first quarter of 2010 the positive contribution to real GDP growth from inventories, of 1.0 percentage point, more than offset negative contributions from other components of domestic demand and net trade.

Regarding the components of domestic demand, private consumption declined slightly in the first quarter of 2010, after increasing moderately in the fourth quarter of 2009. Available indicators suggest that consumer spending remained subdued in the second quarter of 2010. The





quarterly growth rate of retail sales declined by 0.2% in the same quarter (see Chart 27). If new passenger car registrations are included, the decline is even sharper, at -0.9%, owing to a drop in car registrations as the impact of car scrappage schemes faded. All in all, the latest consumption indicators point towards subdued private consumption in the second quarter. As regards the third quarter of the year, only very limited information is available. Surveys with a bearing on consumption provide mixed signals. The European Commission's indicators for retail sales also increased in July, reaching a level not seen since May 2008. Survey indicators for retail sales also increased in July. Meanwhile, the indicator for major purchases from the same survey, which has a stronger correlation with consumption growth than overall consumer confidence, decreased in the same month.

Gross fixed capital formation fell by 1.2%, quarter on quarter, in the first quarter of 2010, after a similar decline in the previous quarter. This decline was largely determined by the construction component, which fell more sharply than in the previous quarter, partly owing to the effects of adverse weather conditions. Non-construction investment also declined, but at a much slower rate.

Available indicators suggest that investment in the euro area is likely to have increased beyond the first quarter. Construction production fell in May. Nevertheless, in April and May, it stood on average 1.1% above its level in the first quarter of 2010 when it declined by 4.1%. The effects of the unusually severe weather conditions in the first quarter seem to have been reversed in the second quarter. Industrial production of capital goods, an indicator of future nonconstruction investment, rose further in April and May. Manufacturing confidence continued to provide positive signals in July. In addition, according to the European Commission's surveys, capacity utilisation increased in July compared with April. Limits on production owing to insufficient demand continued to decline notably over that period, while supplyside limits stemming from a lack of equipment or space and the shortage of labour have risen somewhat. Overall, investment is likely to be relatively strong in the second quarter as a result of the reversal of the effects of adverse weather conditions in the first quarter. Beyond that, it is expected to remain rather subdued overall.

# Chart 27 Retail sales and confidence in the retail trade and household sectors



working day-adjusted. Excludes fuel. 2) Percentage balances; seasonally and mean-adjusted.

As regards trade developments, both imports and exports increased sharply in the first quarter of 2010, with a somewhat stronger increase in imports leading to a negative net trade contribution to GDP growth. The high rates of growth in trade can be seen as a correction of the severe contraction in 2008 and the first half of 2009.<sup>1</sup> Recent data and surveys indicate that euro area trade has continued to grow strongly beyond the first quarter of 2010, albeit at a somewhat slower rate.

Inventories made a sizeable positive contribution to GDP growth in the first quarter of 2010. Looking ahead, surveys and anecdotal evidence suggest that restocking should slow. The contribution to GDP growth in the second quarter, however, remains highly uncertain, as it depends on how quickly demand has picked up and the extent to which firms have revised their expectations regarding economic activity. In addition, there is some statistical uncertainty linked to the way inventories are estimated.

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

Real value added increased by 0.5%, quarter on quarter, in the first quarter of 2010, following an increase of 0.1% in the fourth quarter of 2009. This rise reflects stronger growth in industry (excluding construction) and, to a lesser extent, in services. Meanwhile, the downturn in construction production continued in the first quarter of 2010.





Output, demand and the labour market



As regards developments in the second quarter of 2010, industrial production (excluding construction) increased in April and May (see Chart 28), with the result that, in these two months, it was on average 2.5% above its level in the first quarter of 2010, after a quarter-on-quarter increase of the same amount in the first quarter. Industrial new orders (excluding heavy transport equipment) also rose in April and May, bringing the average level of the two months to well above the level observed in the first quarter of the year and also pointing to stronger growth in the second quarter than in the first.

Information from surveys points towards expanding economic activity in the second quarter of 2010 and in July. The Purchasing Managers' Index (PMI) for the manufacturing sector increased further, to above 56, in July, pointing to accelerating activity in the sector (see Chart 29). As regards the services sector, the PMI index for business activity also rose strongly in July, confirming that activity has continued to expand in that sector, too, although at a more moderate pace than in the manufacturing sector. Other business surveys, such as the European Commission's business surveys, are in line with the PMI, suggesting that sentiment regarding the economy has improved. Confidence rose in all sectors in July.

#### LABOUR MARKET

Conditions in the euro area labour markets have stabilised over recent months. In the first quarter of 2010 euro area employment remained unchanged, on a quarterly basis, a noticeable improvement on the sharp declines observed previously.

#### Table 6 Employment growth

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

	Annual ra	ates		Qu			
	2008	2009	2009	2009	2009	2009	2010
			Q1	Q2	Q3	Q4	Q1
Whole economy	0.7	-1.9	-0.8	-0.5	-0.5	-0.2	0.0
of which:							
Agriculture and fishing	-1.8	-2.2	-0.6	-0.7	-1.2	0.3	0.1
Industry	-0.7	-5.6	-1.8	-1.6	-1.7	-0.9	-1.1
Excluding construction	0.0	-5.1	-1.7	-1.7	-1.7	-1.1	-0.9
Construction	-2.3	-6.7	-2.2	-1.3	-1.7	-0.4	-1.5
Services	1.4	-0.6	-0.5	-0.1	-0.1	0.0	0.4
Trade and transport	1.2	-1.8	-0.8	-0.5	-0.3	-0.6	0.0
Finance and business	2.3	-2.2	-1.2	-0.7	-0.5	0.2	0.5
Public administration 1)	1.1	1.3	0.1	0.4	0.3	0.2	0.5

Sources: Eurostat and ECB calculations

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1) Also includes education, health and other services.

At the sectoral level, employment in industrial production (excluding construction) fell, albeit at a slower pace than in the fourth quarter of 2009 (see Table 6 and Chart 30). The unusually severe weather conditions in the first quarter of 2010 led to a decline in employment in the construction sector which is expected to be reversed in the second quarter. Employment in the services sector increased in the first quarter of 2010 for the first time since the second quarter of 2008, with increases in the finance and business, and public administration sub-sectors, but zero growth in the trade and transport sub-sector. Eurostat data on quarterly hours worked in the euro area show only a minor reduction in the first quarter of 2010, compared with stronger reductions in previous quarters.



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

Output, demand and the labour market



Together with the recovery in euro area output growth, the job losses seen in recent quarters have contributed to an inflection in the decline in productivity. In year-on-year terms, aggregate euro area productivity (measured as output per employee) increased further in the first quarter of 2010, to 1.9%, year on year, after flat growth in the fourth quarter of 2009 (see Chart 31). To a large extent, this increase stems from industry (excluding construction). Productivity rose more gradually in the services sector.

The euro area unemployment rate remained unchanged at 10.0% for the fifth consecutive month in June, meaning that the quarterly rate for the second quarter of 2010 was also 10.0%, marginally up from 9.9% in the first quarter (see Chart 32). Survey indicators improved in the second quarter of 2010, with a further rise in July compared with June, suggesting a stabilisation in euro area unemployment in the months ahead. This is also in line with a downward revision of the unemployment figures expected for 2010 according to the Survey of Professional Forecasters (see Box 7 in Section 3).

# 4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

In the second quarter of 2010 euro area real GDP growth is expected to have strengthened, largely on account of temporary effects. Available data for the third quarter are better than expected. Looking ahead, GDP is expected to grow at a moderate and still uneven pace over time and across economies and sectors of the euro area. Ongoing growth at the global level, and its impact on the demand for euro area exports, together with the accommodative monetary policy stance and the measures adopted to restore the functioning of the financial system, should continue to support the euro area economy. At the same time, the process of balance sheet adjustment and labour market prospects are expected to have a dampening effect on economic growth.



The risks to the economic outlook continue to be viewed as broadly balanced, in an environment of uncertainty. On the upside, both the global economy and foreign trade may recover more strongly than is now projected, thereby supporting euro area exports. On the downside, concerns remain with respect to renewed tensions in financial markets. In addition, renewed increases in oil and other commodity prices, and the intensification of protectionist pressures, as well as the possibility of a disorderly correction of global imbalances, may weigh on the downside.



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# 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

# **5.1 EXCHANGE RATES**

Over the three months to 4 August 2010 the euro depreciated in nominal effective terms by 2.2%, moving well below its average level in 2009. The weakening of the euro was broad based.

#### **EFFECTIVE EXCHANGE RATE OF THE EURO**

On 4 August 2010 the nominal effective exchange rate of the euro – as measured against the currencies of 21 of the euro area's most important trading partners – was 2.2% lower than at the end of April and 7.4% below its average level in 2009 (see Chart 33). The depreciation of the euro was broad based and accompanied by an increase in the implied volatility of the bilateral exchange rates of the euro vis-à-vis other major currencies.

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

In the three-month period to 4 August 2010 the euro weakened against the US dollar, standing below the average for 2009 (see Chart 34). On 4 August the euro traded at USD 1.32, 0.8% lower than at the end of April and around 5% below its 2009 average. This rather moderate depreciation was the result of a sharp depreciation in May, which was largely offset by a strong appreciation notably in July. The renewed tensions in the financial markets in early May, which accounted for the downward pressures on the euro in May, were followed by more positive than expected macroeconomic news for the euro area, reversing the trend of the bilateral exchange rate of the euro against the US dollar.



Source: ECB.

Source: ECB. 1) An upward movement of the index represents an appreciation of the euro against the currencies of 21 of the most important trading partners of the euro area (including all non-euro area EU Member States). 2) Contributions to EER-21 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 remaining six trading partners of the auro area in the EER 21 index. Changes are calculated using the currencing overall trade weights in the EER 21 index. partners of the euro area in the EER-21 index. Changes are calculated using the corresponding overall trade weights in the EER-21 index.



Sources: Bloomberg and ECB.

#### Chart 35 Patterns in exchange rates in ERM II

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



Source: ECB. Notes: A positive (negative) deviation from the central rate against the euro implies that the currency is on the weak (strong) side of the band. In the case of the Danish krone, the fluctuation band is  $\pm 2.25\%$ ; for all other currencies, the standard fluctuation band of  $\pm 15\%$  applies.

#### YEN/EURO

Over the three months to 4 August 2010 the euro depreciated vis-à-vis the Japanese yen. On 4 August it stood at JPY 112.9, 10.3% weaker than at the end of April and 13.4% below its 2009 average. Over the same three-month period the implied volatility of the JPY/EUR exchange rate increased at both the short-term and long-term horizons (see Chart 34).

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

Over the three-month period to 4 August 2010 the currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates (see Chart 35). At the same time, the Latvian lats remained on the weak side of the unilaterally set fluctuation band of  $\pm 1\%$ .

On 13 July 2010 the EU Council adopted a decision allowing Estonia to adopt the euro as its currency from 1 January 2011. The fixed conversion rate was set at 15.6466 kroons to one euro (see Box 8).

With regard to the currencies of the EU Member States not participating in ERM II, the euro depreciated by 4.8% vis-à-vis the pound sterling in the three months to 4 August, trading on

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4 August at GBP 0.83. Over the same period the euro strengthened against the Hungarian forint (by 5.7%) and the Polish zloty (by 2.2%), and weakened against the Czech koruna (by 3.1%).

# **OTHER CURRENCIES**

The euro weakened vis-à-vis the Swiss franc over the three months to the beginning of August, as the Swiss currency benefited from flight-to-safety behaviour on the part of international investors. In late June interventions by the Swiss National Bank to limit the appreciation of the Swiss franc were suspended. On 4 August 2010 the euro stood at CHF 1.37, 4.3% lower than at the end of April. Over the same period the bilateral euro exchange rates vis-à-vis the Chinese renminbi and the Hong Kong dollar continued to move in line with the USD/EUR exchange rate.

#### Box 8

# THE INTRODUCTION OF THE EURO IN ESTONIA ON I JANUARY 2011

The European Central Bank (ECB) and the European Commission prepared their respective Convergence Reports in 2010, pursuant to the requirement set out in Article 140 of the Treaty on the Functioning of the European Union to report to the Council of the European Union (EU Council) at least once every two years – or at the request of a Member State with a derogation – on the progress made by the Member States with a derogation in fulfilling their obligations regarding the achievement of Economic and Monetary Union. These reports were published on 12 May 2010. On the basis of the results of the underlying examination, the European Commission concluded that Estonia had fulfilled the necessary conditions for the adoption of the single currency. On 13 July 2010 the EU Council adopted a decision allowing Estonia to adopt the euro as its currency from 1 January 2011.

On 13 July 2010 the EU Council also adopted a regulation fixing the irrevocable conversion rate between the Estonian kroon and the euro. This conversion rate is set at 15.6466 kroons to one euro, which corresponds to the central rate agreed on 28 June 2004, when the Estonian currency entered the Exchange Rate Mechanism II (ERM II). Since entry in ERM II, the Estonian currency's central rate against the euro has not been devalued, and the exchange rate for the kroon has been maintained at its central rate as a unilateral commitment, thus placing no additional obligations on the ECB. The ECB supported the choice of the current central rate as the conversion rate upon adoption of the euro. Following the fixing of the conversion rate of the Estonian kroon, the ECB and Eesti Pank will monitor developments in the market exchange rate of the Estonian kroon against the euro in the context of the ERM II agreement until the end of 2010.

With the introduction of the euro by Estonia on 1 January 2011, the euro area will comprise 17 EU Member States. Estonia will be able to share the benefits of the single currency, which eliminates exchange rate uncertainty within Economic and Monetary Union and offers a credible monetary policy framework for maintaining price stability in an environment of low long-term interest rates, full price and cost transparency, reduced transaction and information costs, and a greater resilience to economic and financial shocks. At the same time, in order to fully reap the advantages of the euro and to allow adjustment mechanisms to operate efficiently within the enlarged currency area, it is important for Estonia to conduct policies that are fully geared towards meeting the challenge of ensuring the sustainability of the convergence process. Importantly,



the Estonian authorities have publicly underlined 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 the build-up of imbalances.

# **5.2 BALANCE OF PAYMENTS**

Extra-euro area trade further expanded in recent months, although there are some signs of stabilisation in its rate of growth. In May the 12-month cumulated current account deficit of the euro area narrowed markedly compared with a year earlier to  $\notin$ 43.9 billion (around 0.5% of euro area GDP). In the financial account, net inflows in combined direct and portfolio investment fell to a cumulative  $\notin$ 189.8 billion in the year to May.

#### TRADE AND THE CURRENT ACCOUNT

Extra-euro area trade in goods further expanded in recent months, with imports growing at a higher pace than exports. According to balance of payments data, extra-euro area export values of goods advanced by 9.4%, while extra-euro area import values of goods increased by 11.0% in the three-month period to May (see Chart 36 and Table 7). However, some signs of stabilisation in the growth of extra-euro area trade in goods have emerged.

The strong growth in foreign demand, partly supported by fiscal stimuli and the inventory cycle, remains an important determinant of a continued expansion of exports of goods. Moreover,



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the improved price competitiveness as a result of the depreciation of the euro may also have had a positive impact on recent developments in extra-euro area exports.

At the same time, extra-euro area imports of goods are increasingly supported by strengthening domestic demand, as well as continued export-induced demand for imported inputs. The rise in the import values of goods reflects to some extent a surge in import prices, which is partly attributed to the depreciation of the euro and higher commodity prices.

The growth in extra-euro area trade in services also strengthened somewhat in May, but remained rather subdued compared with that of goods. Following weaker developments in the previous months, values of both exports and imports of services registered a pick-up in growth in May, increasing by 1.9% and 2.5% respectively on a three-month on three-month basis.

From a longer-term perspective the 12-month cumulated current account deficit has been showing signs of stabilisation in recent months, although it declined significantly compared with the deficit recorded a year earlier (see Chart 37 and Table 7). In the year to May the cumulated current account

lable / Main items of the euro area balance of payments										
(seasonally adjusted data; unless otherwise indicated)										
			Three-month moving average figures ending				12-month cumulated figures ending			
	2010	2010	2009	2009	2010	2010	2009	2010		
	Apr.	May	Aug.	Nov.	Feb.	May	May	May		
EUR billions										
Current account	-5.6	-5.8	-2.8	-5.2	-2.2	-4.4	-156.3	-43.9		
Goods balance	0.6	3.1	5.6	3.7	4.0	2.5	-17.6	47.6		
Exports	124.4	131.6	106.5	107.6	116.8	127.7	1,429.1	1,375.8		
Imports	123.8	128.5	100.8	103.9	112.8	125.2	1,446.7	1,328.2		
Services balance	4.0	3.1	2.0	2.1	3.6	3.4	33.6	33.5		
Exports	40.3	41.4	38.1	38.5	40.1	40.8	500.4	472.4		
Imports	36.3	38.4	36.1	36.3	36.5	37.4	466.9	439.0		
Income balance	-3.0	-4.4	-4.1	-3.8	-1.2	-3.0	-70.4	-36.4		
Current transfers balance	-7.2	-7.6	-6.4	-7.1	-8.6	-7.4	-101.9	-88.6		
Financial account <sup>1)</sup>	8.6	17.8	-15.6	7.3	4.3	9.1	177.6	15.4		
Combined net direct and portfolio	• • • •							400.0		
investment	20.9	46.7	8.6	15.1	26.4	13.2	292.0	189.8		
Net direct investment	-11.4	-17.2	-5.3	-10.8	0.1	-18.4	-145.1	-103.1		
Net portfolio investment	32.3	63.9	13.8	25.9	26.3	31.6	437.2	292.8		
Equities	-10.3	21.7	33.7	-21.5	11.1	-2.4	-81.5	62.8		
Debt instruments	42.6	42.1	-19.8	47.4	15.1	33.9	518.7	230.0		
Bonds and notes	35.4	39.3	-33.9	23.0	8.0	24.1	217.2	63.8		
Money market instruments	7.2	2.8	14.1	24.4	7.1	9.8	301.5	166.2		
Net other investment	-12.5	-26.6	-22.1	-9.2	-24.1	-22.1	-141.3	-173.3		
		Percentage	e changes from	n previous pe	riod					
Goods and services										
Exports	-1.9	5.0	-0.3	1.0	7.4	7.5	-7.4	-4.2		
Imports	-0.4	4.2	-2.1	2.4	6.4	8.9	-4.6	-7.6		
Goods										
Exports	-2.2	5.7	1.0	1.0	8.5	9.4	-9.1	-3.7		
Imports	0.4	3.7	-2.0	3.1	8.5	11.0	-6.2	-8.2		
Services										
Exports	-1.1	2.9	-3.6	0.9	4.1	1.9	-2.2	-5.6		
Imports	-3.1	5.6	-2.5	0.6	0.4	2.5	0.8	-6.0		

Source: ECB.

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


deficit stood at  $\notin$ 43.9 billion (around 0.5% of GDP), while it amounted to  $\notin$ 156.3 billion a year earlier. This decline in the deficit reflected a shift from a deficit to a surplus in the trade balance and a decrease in the deficits in the income and current transfers balances. A more detailed analysis of trade developments is presented in this month's article entitled "Recent developments in global and euro area trade".

Looking ahead available indicators suggest that extra-euro area exports of goods will continue to grow in the near term on the back of still robust foreign demand. However, there may be some loss of momentum against the backdrop of a slowdown in global economic growth. Indeed, the Purchasing Managers' Index of new export orders in the euro area manufacturing sector remains well above the expansion/contraction threshold of 50, but has declined somewhat in recent months.

#### **FINANCIAL ACCOUNT**

In the three-month period to May 2010 combined direct and portfolio investment recorded average monthly net inflows of  $\in 13.2$  billion, about half of the net inflows over the previous three-month period (see Chart 38 and Table 7). This moderation was almost entirely the result of higher net outflows in direct investment, partly owing to euro area companies increasing their outstanding loans to foreign affiliates.

Meanwhile, net inflows in portfolio investment only slightly increased in the three-month period to May on the back of counteracting developments in the equities and debt markets. On the one hand, investors' interest in equities declined further, notably from euro area non-residents, resulting in a shift from net inflows to net outflows in equities. The reduced appetite for risk on the part of investors was the result of a sudden re-intensification of tensions in the financial markets in early May, triggered in part by mounting concerns about the fiscal situation of some euro area countries, but also by economic developments outside of the euro area. On the other hand, investment in debt



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Exchange rate and balance of payments developments

instruments recorded substantially increased net inflows in the three-month period to May compared with the previous three-month period. This was in line with renewed risk aversion by investors in an environment of high stock market volatility, as well as flight-to-quality behaviour.

Turning to longer-term developments, net inflows in combined direct and portfolio investment decreased to €189.8 billion in the 12-month period to May 2010, compared with €292 billion in the same period a year earlier. That was mainly driven by reduced net inflows in portfolio investment (see Table 7). The breakdown of portfolio investment by instrument indicates that this reduction was primarily the result of a large decrease in the net inflows in debt instruments, which more than offset the shift from net outflows to net inflows in equities (see Chart 38). Overall, the trend in portfolio re-balancing by global investors away from debt instruments, where investment has been exceptionally high during the financial crisis, towards equities remained strong.



### OIL PRICES – THEIR DETERMINANTS AND IMPACT ON EURO AREA INFLATION AND THE MACROECONOMY

In view of the high and volatile oil prices experienced over the past decade, this article reviews oil price developments and their impact on the euro area macroeconomy. Understanding the factors underlying oil price movements and their likely future developments is important, given the impact of oil price movements on euro area inflation and the macroeconomy. Since the first oil shock in the early 1970s, the evolution of oil prices has been determined mainly by the interplay of supply and demand developments. Whereas abrupt disruptions in the supply of oil by OPEC were instrumental in explaining sharp oil price movements in the 1970s, strongly rising oil demand, particularly from non-OECD countries, together with the supply policies of some producers, appears to have been the main driver of oil prices over the past decade. Financial factors may also have played a role, especially in the surge and subsequent decline in oil prices in 2008. Looking forward, the oil supply/demand balance is likely to be tight; oil supply may well be constrained by physical factors as well as by reduced investment, while demand, particularly from emerging economies, is likely to continue to grow.

Oil price shocks have an impact on economic activity mainly via the terms of trade and demand and supply channels, although confidence and uncertainty effects may also occur. The empirical evidence suggests that an increase in oil prices dampens activity gradually over the course of three years. However, it should be noted that the effect may vary across countries, depending not only on their oil dependency and oil intensity but more importantly on the flexibility of their economies. The source of the underlying oil price shock also plays a crucial role. An increase in oil prices stemming from a supply contraction is likely to have a more negative impact on activity than a similarly sized increase stemming from high oil demand.

The impact of oil price movements on inflation is considered using a stylised framework which breaks down the impact into direct and indirect first and second-round effects. The largest and most immediate impact comes from the direct first-round effects (i.e. on consumer energy prices). Given the importance of excise taxes and the fact that distribution and retailing costs and margins have been broadly constant, the elasticity of consumer energy prices with respect to oil prices increases as the oil price level rises. At the same time, there is some evidence that the indirect first and second-round effects may have declined, owing to a combination of structural changes in the economy as well as a change in wage and price-setting behaviour. As the euro area is heavily dependent on imported oil, first-round effects are largely unavoidable and essentially represent a transfer of income to oil exporting countries. However, appropriate wage and price-setting behaviour and well-anchored inflation expectations, along with a credible monetary policy, are necessary to avoid the materialisation of second-round effects and a sustained impact on inflation over a medium-term horizon.

#### I INTRODUCTION

Oil prices have been high and volatile over the past decade. To understand how movements in oil prices propagate through the economy, monetary policy-makers need to consider not only the nature of these shocks, but also the structure of the energy sector, how oil is used in the economy more generally (i.e. in terms of its energy mix, dependency and intensity) and the degree of economic flexibility. An understanding of these factors is essential to be able to assess the impact of oil price movements on the economy, whether it has changed over time and what it may be in the future. Moreover, these factors, combined with the policy response of central banks, ultimately explain the transmission of oil price shocks to inflation and to the macroeconomy more generally. The purpose of this article is therefore to understand better the main factors behind the evolution of global oil prices and how these,



combined with the structural features of the euro area economy, affect euro area inflation and the macroeconomy.

This article is structured as follows. Section 2 reviews the determinants of global oil price developments both over the longer term and the recent past. In particular, the relative contributions from demand, supply and other factors (including financial ones) are assessed, as the source of fluctuations in oil prices has strong implications for the resulting macroeconomic impact. Section 3, in the context of the high and volatile oil prices observed over the past ten years, analyses the impact of oil price movements on the euro area macroeconomy (i.e. output and prices). The possibility that this impact may change over time or may have been partially offset by other factors (such as, for example, oil bill recycling, through which increased exports to oil-producing countries partially offset the negative impact of higher oil prices) is also considered. Section 4 concludes.

#### 2 THE DETERMINANTS OF OIL PRICES

The price of oil has risen sharply over the past decade, with new all-time highs recorded in both nominal and real terms - in July 2008 (see Chart 1). This rise has no precedent during the previous 40 years, either in terms of magnitude or speed. The oil price surge came to an end in the second half of 2008, and the subsequent price fall was exacerbated by the intensification of the financial crisis and the steep decline in global economic activity. The fall in prices was sharp and fast, to a trough of USD 38 per barrel at the end of 2008. Oil prices, however, started rebounding in the second quarter of 2009 and experienced a strong upturn, almost doubling to reach around USD 75 per barrel in June 2010. Real oil prices (i.e. deflated by the US CPI) continue to be high by historical standards, although they are slightly below the previous peak levels temporarily recorded at the beginning of the 1980s. This section will analyse the main drivers of international oil price

#### (USD per barrel) nominal price ····· real price 140 140 120 120 100 100 80 80 60 60 40 40 20 20 0 0 1970 1975 1980 1985 1990 1995 2000 2005 2010 Sources: Global Financial Data, BLS Notes: Real prices are expressed in 1982-84 USD terms. Last observation for real prices refers to May 2010 and for nominal prices to June 2010

developments over recent years, and assess their medium and long-term prospects.

# SUPPLY AND DEMAND DEVELOPMENTS IN THE OIL MARKET

To understand the determinants and prospects for oil prices, it is useful to consider oil price shocks over the past 50 years. In the 1960s, the spare capacity in the United States, which had until then been the marginal supplier of oil,<sup>1</sup> began to erode. In parallel, OPEC started to test its newly acquired market power: the oil price shocks of 1973 and 1979 were associated with significant reductions in OPEC's supply and operable capacity. Higher prices led to a marked decline in global oil demand, especially in OECD countries, and generated incentives to increase oil supply in several non-OPEC countries. This weakened OPEC's control over the marginal supply of oil and created increasing

A marginal supplier is a producer which is able to influence prices and balance the market by changing the amount it supplies. Such producers generally have ample spare capacity and can change their production levels at relatively low additional cost.

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incentives for the cartel members to exceed the agreed quotas, which caused prices to progressively decline.

Oil prices, however, became substantially more volatile again from the second half of the 1990s, and surged with increasing momentum between 2004 and mid-2008. This hike in crude oil prices was mainly triggered by increasing demand from non-OECD emerging economies, particularly China, India and the Middle East (see Chart 2 and Box 1). In turn, future oil supply prospects increasingly became a matter of concern, as the growth in non-OPEC crude oil production broadly stagnated from the end of 2004 onwards (see Chart 3). The scope for increased non-OPEC production was constrained owing to geological restrictions, and the low level of spare capacity in most OPEC countries added to market tightness.

The oil price boom was disrupted by a combination of the slowing of economic growth in major advanced economies, the onset of the financial crisis and the subsequent very sharp

decline in global economic activity, which also led oil demand growth to decline in emerging economies. Looking at the supply side, OPEC accompanied the slowdown in global oil demand by announcing a total reduction in production quotas of almost 5 million barrels per day. This served to limit the decline in oil prices. From spring 2009 oil prices started to recover and fluctuated around USD 75 per barrel in June, i.e. the level reached at the beginning of September 2007. On the demand side, amid a gradually stabilising global economy, market expectations of future oil demand have been an important factor behind the rebound in oil prices. In particular, higher than expected non-OECD oil demand most notably stemming from higher demand in large emerging market economies such as China and India - put upward pressures on oil prices. Amid rising oil demand in early 2010, OPEC's (estimated) production moved higher above its target level and non-OPEC supply also increased, mainly because of higher output in Canada and Russia. Therefore, although oil demand seems to be recovering quickly, by





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1.7 million barrels per day year on year in the first quarter of 2010, global supply has also increased, by almost 2.0 million barrels per day.

The speed and size of the recent movements in oil prices have led many to argue that there has been a decoupling of market prices from those warranted by fundamentals, and to discuss the potential role of speculative trading in driving oil price movements. The financialisation of commodity markets, particularly those for oil, has sharply increased in recent years: the volume of crude oil derivatives traded on NYMEX quintupled between 2000 and 2008. It is difficult to measure directly the extent to which movements in oil prices are related to speculative activity. Empirical studies report mixed results as regards possible systematic causality between investment positions held by non-commercial agents in oil futures markets and spot prices and the volatility of such prices. However, some research clearly suggests that a degree of overshooting of oil prices above their equilibrium level as determined by fundamentals took place in 2008, due in particular to a spike in financial investment. In any case, it is important to note that the price elasticity of demand and supply is rather low in oil markets, which means that relatively small changes in fundamentals can have a large impact on prices. Overall, the debate on speculation in commodity markets is still ongoing, as data limitations hamper more in-depth analyses.

#### Box I

#### EMERGING MARKET ECONOMIES AND OIL DEMAND

Owing in part to buoyant global economic growth, global oil consumption increased more rapidly in the period 2001-2007 than in the previous two decades (see Chart A). Most of this increase was driven by demand from several major emerging economies (notably China, India and the Middle East countries), resulting from a combination of industrialisation and a higher commodity intensity of growth, increases in per capita income, and rapid population growth. In some instances, the high demand also reflects the fact that domestic end-user prices are heavily subsidised and thus delinked from world market prices. This is especially the case in the oil-exporting economies but also in some of the emerging economies.<sup>1</sup> Since 2007, oil demand in emerging and developing economies has continued to increase - despite





See Helbling, T., V. Mercer-Blackman and K. Cheng (2008), "Riding a wave" in IMF Finance and Development, March 2008, Volume 45, Number 1.



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40

30

20

10

0

11 China

13 India

12 Indonesia

12 13

9 10 11

8

6 Mexico

8 Brazil

10 Turkey

7 Argentina

South Africa

Sources: International Energy Agency, British Petroleum and

the global downturn in economic activity – albeit less strongly than in the first half of the decade.

forward, as oil consumption Looking per capita remains significantly lower in emerging and developing countries than in advanced economies, demand in these countries has strong growth potential, even though higher energy efficiency may partially counteract this. For example, in 2008 in the euro area, around 12 barrels of crude oil were consumed per person, compared with little more than two barrels in China and less than one barrel per person in India. The difference compared with the United States, where each person in 2008 consumed on average almost 23 barrels a year, is even greater (see Chart B).

#### MEDIUM AND LONG-TERM PROSPECTS FOR THE OIL MARKET

Looking ahead, the International Energy Agency (IEA) projects oil supply to be ample in the medium term, although the risk of a tighter oil supply/demand balance remains significant. Following the substantial decline in oil demand, which has mainly been driven by the substantial decline in demand in OECD countries (see Chart 2) due to the financial crisis and subsequent recession, oil demand is expected to increase strongly as the world economy recovers. The IEA estimates that oil demand will increase by 1.2 million barrels per day per year on average between 2009 and 2015, particularly in emerging economies. Although supply prospects have also been negatively affected by the economic downturn, with investment in upstream capacity and maintenance declining substantially in 2009 <sup>2</sup>, the IEA projects global supply capacity to be ample in the medium term. The increase in global supply capacity stems mainly from increased net production capacity in OPEC countries, of which an important share is projected to be supplied by Saudi Arabia (see Box 2). However, significant uncertainties surround both the oil demand and supply outlook. If global oil demand should

recover more strongly than expected, and investment is not able to respond quickly, OPEC's spare capacity will decline again from next year on. In addition, the global production capacity base loses around 3.1 million barrels per day to mature field decline each year, which could tighten the outlook for the oil supply and demand balance in the medium term.

Chart B Crude oil consumption per capita in selected countries in 2008

(barrels per year)

3 4 5 6 7

2

1 Saudi Arabia

2 United States

3 South Korea

ECB staff calculations

4 euro area

5 Russia

40

30

20

10

In the longer term, the physical ability to expand oil production capacity will depend on the global resource base, which will be an important determinant of future global oil supply and prices. There is considerable uncertainty surrounding the volume of oil reserves. The IEA does not envisage a peak in conventional oil production until 2030. Nevertheless, additional unconventional sources will be needed to match growing demand: the IEA forecasts that global supply from unconventional oil sources will increase four-fold by 2030, to 7.4 million barrels per day. Among the unconventional oil sources, the geological resource base for heavy oil such

2 Whilst nominal investment declined by 20%, the decline in investment in real terms – which is more difficult to quantify precisely – was smaller owing to falling development (in particular wage and drilling) costs. as tar sands and oil shale is considerable.<sup>3</sup> However, the estimated costs of producing these alternative fuels are subject to wide uncertainty and the energy return is significantly less than for oil, as considerable amounts of energy are required to recover them. Apart from the environmental considerations, these new extraction technologies are also highly capital intensive, with long lead times of up to fifteen years. In addition, the uncertainty stemming from the high volatility observed in oil prices in recent years and the increased risk aversion in financial markets may have discouraged or postponed investment in this sector, even though higher prices should in theory stimulate investment in supply.

3 Tar sands represent a form of heavy oil which is present in Canada and Venezuela. Similarly, oil shale is a type of rock containing oil, of which a large resource base is available in the United States.

#### Box 2

#### SAUDI ARABIA'S OIL PRODUCTION CAPACITY - RECENT DEVELOPMENTS AND PROSPECTS

Spare capacity in oil production<sup>1</sup> – alongside spare capacity in refining and inventories – provides a cushion to absorb sudden upward shocks to oil demand and downward shocks to oil supply, such as geopolitical events or natural disasters. Low spare capacity tends to amplify price reactions to actual (or anticipated) supply or demand shocks and contributes to volatility in the oil market.

At 6.1 million barrels per day, estimated spare capacity stood in May 2010 above its levels in the period leading up to mid-2008, when it was relatively low and oil prices were rising steadily (see Chart A). This is mainly the result of cuts in OPEC's oil production, in view of the fall in oil prices in the second half of 2008 and weakening global demand, but also capacity expansion, which mainly took place in Saudi Arabia, the world's largest oil exporter. In May 2010, Saudi

## Chart A Developments in OPEC's spare crude oil production capacity

(millions of barrels per day; USD per barrel)



Arabia accounted for almost 62% of OPEC's total spare capacity. At current levels of production (8.25 million barrels per day), Saudi Arabia's spare capacity of 3.75 million barrels per day could offset a shortfall in oil supply from other large oil exporters, within a short period of time.

Saudi Arabia is likely to remain a key provider of spare capacity in the future, as the country plans significant investments to further increase its oil (and gas) production capacity. The IEA estimates that Saudi Arabia will increase its sustainable net oil production capacity in the period 2009-15 by 0.43 million barrels per day (see Chart B). This is the largest estimated capacity increase among OPEC members – with the exception of Iraq, where uncertainties surrounding

1 Spare capacity is defined by the IEA as the difference between current oil production and capacity levels that can be achieved within 30 days and sustained for 90 days.

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capacity expansion are significant –, slightly ahead of Angola and the United Arab Emirates (UAE). Non-OPEC crude supply capacity is projected to decline by 1.0 million barrels per day over the same period.

In the short run, the recent increase in spare capacity in oil production should be a stabilising factor for oil markets, when demand recovers in the wake of a global economic recovery. Over the medium term, commitment by oil producers to expand production capacity is important to match a potentially stronger than currently expected rebound in global oil demand, in particular in emerging market



economies. This is especially relevant for Saudi Arabia, given that the outlook for investment in production capacity in general has become more uncertain after the fall in oil prices in mid-2008 and in view of tighter financing conditions and the country's large oil reserves – estimated at 20% of global reserves – that can be lifted at relatively low costs. At the same time, investment in capacity in other countries and regions remains key, inter alia, to mitigate further regional concentration of prospective oil production and spare capacity.

5

#### 3 THE IMPACT OF OIL PRICES ON THE EURO AREA MACROECONOMY <sup>4</sup>

Oil has remained the principal source of energy in the euro area countries - whether measured as a percentage of total gross (46%) or final (37%) inland consumption of energy - ever since it "overtook" coal and other solid fuels in the mid-1960s. This is notwithstanding the increased use of natural gas, nuclear and renewable energies (see Chart 4). Oil derives its importance both from its direct role in private consumption (for transport and heating fuel) and from its indirect role as a factor of production (e.g. via logistics and distribution, as well as its use in the production of chemicals). However, owing to a lack of natural endowments, very little oil is produced in the euro area and consequently the dependency ratio (i.e. net imports to total supply) is high (at close to 100%). Oil is a particularly crucial source of fuel for transport, accounting for over 95% of energy consumption in that sector.<sup>5</sup> Oil prices also have an additional impact via their influence on other energy prices, in particular those of natural gas and coal, since for certain purposes, especially electricity generation, oil, natural gas and coal are substitutes for one another. Nonetheless, despite its primary role, both the share of oil in overall energy consumption and the oil intensity of economic activity have declined since the early 1970s – sharply during the late-1970s following the oil crises and more gradually, and continuously, since the 1980s. This decline, which has implications for the economic impact of oil price fluctuations, is attributable to a combination of factors, including the substitution of other energy sources for oil (e.g. the use of natural gas and nuclear power in electricity generation), increased efficiency (more fuel efficient cars), and the changing structure of the economy.

<sup>4</sup> This section draws extensively from the ECB Structural Issues Report 2010 on energy markets and the euro area macroeconomy, available on the ECB's website at www ech eurona eu

However, this overall figure masks an important distinction between household transport (in particular passenger cars) and commercial transport (freight). Approximately two-thirds of private passenger cars in the euro area are petrol powered, although around half of new passenger car registrations are for diesel powered vehicles (according to the European Automobile Manufacturers' Association). The commercial freight sector however is almost completely diesel powered. This distinction is relevant when one considers the impact on prices of refining margins for petrol/gasoline and diesel/gas oil.



Sources: Eurostat, International Energy Agency and Eurosystem staff calculations. Notes: Energy consumption may be viewed either in "gross" terms (i.e. the combination of domestic primary production and net imports) terms (i.e. after the transformation of primary energy sources into usable forms of energy). A key difference arises from the or in "final" transformation of primary energy sources (nuclear, gas, solid fuels and oil) into electricity.

#### THE IMPACT ON ECONOMIC ACTIVITY

Oil price shocks have an impact on economic activity in the euro area mainly via the terms of trade and demand and supply channels, although confidence and uncertainty effects may also occur. The impact of oil price shocks may also vary depending on the state of the business cycle and the underlying nature of the oil price shock – whether it is driven by demand, supply or other factors.

Terms-of-trade effects arise from the increases in oil import prices, which lead to a rise in average import prices relative to average export prices. The deterioration in the terms of trade may trigger adverse real income and wealth effects in net oil-importing economies like the euro area. Unless savings are reduced or borrowing increases, this translates into lower domestic consumption. Demand effects arise from the inflationary effects of oil prices on consumer prices, which lower real disposable income and, therefore, consumption. Supply effects reflect the importance of oil as an input in the production process. In the short term, the ability of firms to react to oil price increases by substituting another source of energy for oil is limited, so a rise in the price of oil inevitably leads to higher production costs. Firms may respond to this by changing either their pricing or production behaviour, which can have adverse implications for profits, investment, employment and wages. In the long run, increases in the relative price of energy may lead to substitution effects and to a reduction in the overall energy intensity of production and consumption.

The empirical evidence from a set of macroeconometric models available at the ESCB suggests that a 10% increase in oil prices gradually dampens euro area activity, reducing real GDP by 0.24% after three years (see Table 1), assuming no monetary or fiscal

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(cumulative percentage deviat	ions, annual a	averages)	
	Year 1	Year 2	Year
Real GDP	-0.08	-0.19	-0.2
The second se			

ittui obi	0.00	0.19	0.2 .
Private consumption	-0.14	-0.27	-0.33
Investment	-0.09	-0.24	-0.35
Exports (goods and services)	-0.03	-0.09	-0.12
Imports (goods and services)	-0.10	-0.15	-0.19
Net trade contribution	0.03	0.02	0.02
Employment	0.01	-0.04	-0.11

Source: Eurosystem staff calculations. Note: net trade contribution is in percentage points.

policy reaction.<sup>6</sup> Most of the effect stems from the negative impact of an oil price increase on real private consumption, which is caused by a fall in real disposable income, related to the impact on inflation, and, from the second year onwards, by lower employment. Notwithstanding lower real interest rates,7 real investment is dampened, reflecting lower demand. While both imports and exports are also dampened by the oil price shock, the contribution of net exports to GDP is estimated to be slightly positive, as the dampening impact on imports is slightly larger. It should be noted that oil bill recycling (see Box 3), which is not explicitly included in the simulation results but may be substantial, reinforces the positive impact on net trade.

The simulation results using the macroeconometric models suggest considerable variation across euro area countries in the impact of a 10% increase in oil prices, ranging from close to zero to -0.4% of real GDP (see Chart 5). These differing effects are partly due to structural differences across the countries, such as the degree of dependence on oil imports, the energy intensity of production and consumption, and trade patterns. In addition, the degree of nominal rigidity in the economy, its sector structure and openness can also be drivers of cross-country variation.8 It should be noted that most of these models do not incorporate inflation expectations. Incorporating expectations might result in a somewhat smaller dampening effect on economic activity as agents react to expected future policy actions.



There is some evidence that the impact of oil prices on activity may have become more muted since the 1990s relative to that observed in the 1970s and early 1980s.9 This attenuation may be attributable to the complex interaction of a number of factors, including the lower energy intensity of developed economies, changes in wage-setting behaviour and the role of monetary policy in stabilising inflation expectations. As mentioned above, the nature of the underlying oil shocks is an important factor shaping their impact on real GDP. In general, shocks to the oil supply have a larger negative impact on

- The results stem from a largely harmonised simulation exercise 6 using macroeconometric models available at the ESCB. Results for Finland are not available. For further details on the technical description of the exercise and the results, see the Structural Issues Report on "Energy markets and the euro area macroeconomy", ECB, June 2010.
- 7 As mentioned above, nominal interest rates were kept constant in the simulations
- Peersman and Van Robays, using a different modelling approach, also find evidence of substantial cross-country heterogeneity. See "Oil and the euro area economy", in Economic Policy, Vol. 24, Issue 60, October 2009, pp. 603-651.
- 0 See the Structural Issues Report (Annex 2.2), ECB, June 2010 for a more detailed discussion.



activity than oil price increases generated by rising oil demand, which are usually accompanied by stronger global activity. In the macroeconometric model simulations the nature of the oil price shock is generally not explicitly specified, but given that the underlying models are based on historical data going back to the 1980s for most countries, the oil price shock can be viewed as a global shock resulting from both oil supply and demand disturbances and reflecting also external adjustments. The differing nature of underlying oil price shocks may explain why there is some disagreement in the economic literature regarding the possible asymmetric effects of oil price increases and decreases on economic activity, as the relative importance of the supply and demand factors behind the oil price movements may have varied over time.

In addition to the short and medium-term effects, energy price developments may also have an impact on the long-run potential output of the economy. Model estimates suggest that a 10% increase in oil prices has a negative impact of approximately 0.1% on the level of output in the long run. These long-term losses are higher when considering the long-term levels of consumption and investment. Key factors affecting the long-run vulnerability of the economy to oil prices are the intensity and, in particular, substitutability of oil. The more flexible the economy in substituting relatively expensive energy sources, the less vulnerable it is to energy price fluctuations. Moreover, wage and price rigidities exacerbate the adjustment costs following an energy price shock. In particular the losses of output and labour input into the production process would be less pronounced if prices and wages adjusted more rapidly.

When considering model-based estimates of the impact of energy prices on economic activity, it is important to bear in mind that macroeconometric models are, by necessity, simplifications of the underlying economic structure. Even if model builders incorporate expectations formation and (monetary and fiscal) policy responses into their toolkit, these are impossible to capture in their entirety and may change over time. Thus the estimates reported here should be considered as merely indicative.

#### Box 3

#### **OIL BILL RECYCLING**

Energy products represent an important share of international trade and large movements in oil prices can have a significant impact on external balances. In 2008, for example, the net external energy deficit of the euro area reached 2.1% of GDP after oil prices climbed to almost USD 100 per barrel on average. This box focuses on the international trade effects through which oil price changes have an impact on the external accounts of oil-importing economies, such as the euro area, in the short run. A rise in oil prices directly increases the cost of imported oil, which decreases the current account balance (the direct trade effect). However, higher oil prices increase oil revenues and the demand for goods and services by oil exporters, leading in principle to higher foreign demand and counteracting increases in the current account balances of oil-importing countries (the indirect trade or "oil bill recycling" effect).

Empirical evidence from past episodes of oil price increases suggests that roughly half of the overall "petrodollar" windfall gain for oil-producing countries was spent on foreign goods, while the remainder was invested in foreign assets. However, there are significant differences across countries in the extent to which may benefit from this spending. In the period between

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(change in oil-exporters' import demand as a share of the increase in their oil export revenues (scenarios 1-4); as a percentage of GDP) Scenario 3 Scenario 1 Scenario 2 Scenario 4 0% 20% 60% 100% USD 70 USD 100 USD 70 USD 100 USD 70 USD 100 USD 70 USD 100 Oil price increases to: per barrel -0.7 -0.6 -0.3 -0.9 -0.1 -1.8 -1.5 -0.4 Euro area 2.0 to -3.0 "max-min -0.1 to -1.9 -0.2 to -5.2 0.1 to -1.8 0.3 to -4.7 0.4 to -1.4 1.1 to -3.8 0.8 to -1.1 United States -0.7 -1.8 -0.6 -1.7 -0.6 -1.6 -0.5 -1.4 China -0.4 -1.1 -0.3 -0.8 -0.1 -0.3 0.1 0.3

Sources: Eurosystem staff estimates based on the IMF World Economic Outlook and IMF Direction of Trade Statistics. Note: "max-min" denotes the range of maximum to minimum impacts of an oil price increase on the current account across euro area countries.

2002 and 2006, estimates suggest that 41% of the increase in the euro area's oil deficit, and 60% of the increase in China's oil bill, were compensated for by higher purchases of domesticallyproduced goods in the oil-exporting countries, as against only 20% for the United States and 18% for Japan.<sup>1</sup> Geographic proximity, historical ties and the sectoral specialisation of exports are likely to account for the higher initial sales base of euro area goods to oil exporters, compared with that of the United States. In China, the high amount of exports to the oil-producing countries seems to be in line with the significant gains in China's export market shares worldwide. At the same time, OPEC countries have significantly increased their net holdings of foreign assets as a percentage of GDP in recent years. Evidence suggests that the bulk was invested in the United States.

The table above shows the results of a simple benchmark calculation of the combined direct and indirect trade channels for two variants of an oil price increase: an increase of roughly 40% (from USD 52 per barrel – the average price level that prevailed in the second half of 2009 - to USD 70 per barrel) and a stronger increase of 100% (to USD 100 per barrel) in 2009. Results are shown for four alternative scenarios regarding the extent to which petrodollars are recycled: 0%, 20%, 60% and 100%. The results of the simulations broadly confirm the findings of previous empirical research.

First, as would be expected, the largest net oil importers, i.e. the euro area and the United States, experience the most pronounced deterioration in their oil balances in the short term (as illustrated by the first scenario in the table, which assumes no "oil bill recycling", and thus captures only the "direct" effect of higher oil prices on oil balances). The deterioration ranges from 0.7% to 1.8% of GDP, depending on the size of the change in oil prices. The overall euro area impact conceals considerable variation across countries, which is primarily a result of differences in their trade patterns (i.e. both their energy import dependence and export specialisation).

Second, the economies with the largest export activity towards the oil-exporting countries, i.e. the euro area and China, significantly benefit from the "indirect" effect of increased import demand by the oil exporters, although in most cases it only partly offsets the negative direct effect. As long as the propensity of oil exporters to import does not decline in favour of more saving, euro area countries should benefit from higher exports to oil-exporting economies. As mentioned above, geographical proximity to most major oil exporters and historical ties seem to partly explain the closer trade links between euro area countries and oil exporters and the

<sup>1</sup> See Higgins, M., T. Klitgaard and R. Lerman (2006), "Recycling Petrodollars", Current Issues in Economics and Finance, Federal Reserve Bank of New York, Vol. 12, No 9, December 2006.

relatively weaker export ties of the United States. Furthermore, the structure of import demand from oil-exporting countries, largely determined by an infrastructure and construction-led pattern of growth, seems to create a comparative advantage for those euro area countries that specialise in the production of capital goods, like Germany with its specialisation in transport equipment and machinery. The euro area as a whole has been gaining import market shares in a number of oil-exporting countries over the last decade, notably in Algeria, Saudi Arabia, the United Arab Emirates and Russia.

#### THE IMPACT ON INFLATION

A stylised overview of the main transmission mechanisms through which oil prices affect consumer price developments is presented in Chart 6. In terms of price effects, the impact of energy price changes is often broken down into direct and indirect first and second-round effects.<sup>10</sup> The direct first-round effects refer to the impact of changes in oil prices on consumer energy prices. The indirect first-round effects refer to changes in consumer prices that occur as a result of the impact of oil prices on production costs (e.g. an oil price increase that affects through higher input costs the prices of goods which have a significant oil input, such as some chemical goods, or the prices of transport services). In principle, first-round effects of a one-off change in the oil price, whether direct or

indirect, only generate a rise in the price level but no lasting inflationary effects. Second-round effects capture the reaction of wage and pricesetters to the first-round effects of a price shock. Attempts by economic agents to compensate for the loss of real income caused by past inflation shocks may affect inflation expectations and further influence price and wage-setting behaviour. A transitory shock may thereby become entrenched and more costly to eradicate. The likelihood of a commodity price shock leading to second-round effects depends on several factors, including the cyclical position of the economy, the flexibility of goods and labour markets (particularly the presence of indexation

10 This taxonomy of the breakdown of oil price pass-through into different effects is drawn from the article entitled "Oil prices and the euro area economy", in the November 2004 issue of the Monthly Bulletin.



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mechanisms affecting wage bargaining and price setting), the formation of inflation expectations and, crucially, the credibility of the central bank.

#### **DIRECT FIRST-ROUND EFFECTS**

Oil price fluctuations have a direct impact on HICP inflation via the HICP energy component. Energy products account for approximately 10% of the overall euro area HICP, of which around half is liquid fuels, i.e. transport (4%) and home heating fuel (0.7%). The remainder relates to electricity (2.3%), natural gas (1.8%), heat energy (0.6%) and solid fuels (0.1%).<sup>11</sup> Owing to the volatility of oil prices, energy is also by far the most volatile of the main HICP sub-components, with a standard deviation of month-on-month changes of 1.5% - compared with 0.2% for the seasonally adjusted HICP, and 0.1% for the seasonally adjusted HICP excluding energy. Given this high volatility it is particularly useful to understand the response of consumer energy prices to movements in oil prices.

In the first instance, the pass-through into consumer liquid fuel prices (i.e. transport – petrol and diesel – and heating fuel) is considered, as these are generally the most rapidly affected

by oil price movements. Understanding this pass-through can be facilitated by considering a simplified representation of the pricing chain for liquid fuel products. In particular, the key steps between the extraction of crude oil and the purchase of liquid fuels by consumers are: refining, distribution and taxation.<sup>12</sup>

Chart 7 illustrates the evolution of euro area consumer liquid fuel prices since 1994. There are a number of noteworthy features. First, taxes (excise taxes and VAT combined) account for more than half of the final selling prices of petrol and diesel (on average 60% and 52% respectively in the first half of 2010), but for a much smaller portion of heating fuel prices

- 11 The share and composition of energy products in the HICP varies substantially across euro area countries; the share ranges from 15.7% in Slovakia to 6.3% in Malta, whilst natural gas, solid fuels and heat energy have little or no weight in consumption in a number of countries.
- 12 Excise taxes are levied as a fixed amount per unit volume (e.g. the average level of excise tax on petrol in the euro area is around 59 euro cent per litre compared with around 8 euro cent per litre for home heating fuel), whereas VAT is levied as a percentage of the pre-tax price plus excise taxes (e.g. the average VAT rate on petrol in the euro area is around 19%).



Sources: European Commission (Eurostat), Bloomberg, Reuters and Eurosystem calculations. Notes: Line series (in euro cent per litre) are shown on the right-hand scale, whereas column series (percentage of final selling price including taxes) are shown on the left-hand scale. 2010 refers to the first six months of the year. (28%). Second, reflecting the strong increase in crude oil prices, the portion accounted for by the crude oil cost has increased greatly since the late 1990s. Third, although refining margins are relatively small in relation to the crude oil price, they can fluctuate substantially. For example, refining margins for diesel and heating fuel reached a level of USD 40 per barrel in mid-2008, compared with historical averages (since 1986) of around USD 5 per barrel. Thus, fluctuations in refining margins can result, at least in the short term, in movements in consumer prices that do not reflect those in crude oil prices. Lastly, the contribution from distribution costs and margins to final selling prices has been relatively constant over time, implying that mark-ups in this sector are not set as a percentage of input costs.

combination of relatively The constant distribution costs and margins, the important role of excise taxes and the strong increase observed in crude oil prices has significant implications for the elasticity of consumer liquid fuel prices with respect to oil prices. Table 2 illustrates the role of indirect taxes in determining the elasticity of consumer oil prices with respect to crude oil prices: the elasticity of heating fuel prices is much higher than that of petrol and diesel prices, owing to the relatively low level of excise taxes. The table also shows that the elasticity of consumer energy prices is a function of the level of crude oil prices: the elasticity of consumer prices is substantially higher when crude oil is at €60 per barrel than at €20 per barrel. For petrol the elasticity increases from 15% to 35%, for diesel from 19% to 41%, and for heating fuel from 39% to 66%.

In view of the high and volatile oil prices observed in recent years, numerous studies have examined the speed of pass-through to liquid fuel prices in Europe. Generally these studies show that the direct pass-through of oil price shocks into pre-tax consumer energy prices is complete (i.e. an increase in crude oil prices equivalent to 10 euro cent per litre results in an increase in pre-tax consumer prices of 10 euro cent per litre) and quick (with most of the increase being passed through within three to five weeks). Moreover, there is little significant evidence of substantial asymmetry between the pass-through of oil price increases and oil price decreases.13

Turning to natural gas prices, one of their key and well-known features is their strong co-movement with crude oil prices, albeit with some lag (see Chart 8). This mainly reflects the substitutability of, and competition between, gas and oil for certain purposes (such as electricity generation), as well as institutional arrangements,

13 See, for example, Meyler A., "The pass through of oil prices into euro area consumer liquid fuel prices in an environment of high and volatile oil prices" in Energy Economics, Issue 6, Energy Sector Pricing and Macroeconomic Dynamics, November 1990, pp. 867-881.

(percentages)					
Crude oil (€ per barrel)	Weighted average pass-through to HICP energy <sup>1)</sup>	Petrol (2.6%) <sup>2)</sup>	Diesel (1.4%) <sup>2)</sup>	Heating fuel (0.7%) <sup>2)</sup>	Natural gas (1.8%) <sup>2)</sup>
20	16	15	19	39	24
40	26	26	32	56	39
60	33	35	41	66	49
80	38	41	48	72	56
100	42	47	54	76	61

Source: Eurosystem staff calculations.

Notes: Based on taxes (VAT, excise and other) as at end-2009 and median refining and distribution costs and margins since 1999. 1) Estimated assuming HICP heat energy (0.6% weight) co-moves with natural gas. Weighted average slightly underestimates extent of pass-through as it assumes zero pass-through for electricity and solid fuels.2) Denotes weight in overall HICP.

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20

18

16

14

12

10

8

6

4 2

0



particularly in Europe, whereby many long-term gas supply contracts are explicitly linked to

Oil prices impact relatively quickly on gas

although the absolute pass-through remains

the same (i.e. complete). Given the historical

relationship between oil and border gas prices,

oil prices.14

a crude oil price level of €20 per barrel would result in an elasticity of consumer gas prices with respect to oil prices of around 25%, but this elasticity would be twice as high at

Sources: Eurostat, Haver Analytics, Reuters, Bloomberg and

2001 2003 2005 2007 2009

(euro per gigajoule)

.....

20

18

16

14

12

10

8

6

4

2

0

1995 1997 1999

consumer post-tax price

consumer pre-tax price

border gas mark-up

Eurosystem staff calculations

€60 per barrel.

border (i.e. import) prices, whilst the gap between the border and the pre-tax consumer price (here referred to as the "mark-up") reflects the costs of processing, transmitting, storing and distributing gas to consumers as well as the margins of the various operators along the gas chain. Notwithstanding the large increase in gas border prices since the late 1990s, the mark-up has remained relatively stable, at around €5/gigajoule (see Chart 9). This suggests that movements in gas border prices are passed through fully into consumer prices, albeit with some lag, and that as international gas prices have increased, the share of consumer prices accounted for by raw inputs has increased. One implication of this is that as the price level increases, the elasticity (i.e. percentage response) of consumer gas prices with respect to oil prices increases,

Turning to electricity prices, the reaction of consumer prices to oil price changes is much less clear. However, there are notable differences between wholesale and consumer electricity price developments. Chart 10 shows that there is a considerable degree of co-movement between crude oil and exchange-based (spot and one-year-ahead futures) wholesale electricity prices. This co-movement stems from the co-movement of gas and oil prices and the key role of gas power plants as the "swing" or marginal generator. Notwithstanding the link between crude oil and exchange-based wholesale electricity prices, the link between electricity



<sup>14</sup> Such institutional arrangements are a crucial determinant of these co-movements since gas, being less storable and shippable than oil, is still primarily transmitted by pipeline. In the absence of explicit indexing to oil prices, regional supply and demand developments would have more impact on gas price movements. The growing importance of spot markets and liquefied natural gas has put some pressure on these indexing arrangements.



and Eurosystem staff calculations. Note: MWh denotes megawatt hour and kWh denotes kilowatt hour.

and oil prices at the consumer level is very weak (see Chart 10). This is due to a variety of factors including taxes, the possibility of using different sources of power for electricity generation and network costs, but may also in part reflect price regulation.

Although European gas and electricity markets have undergone a sustained process of deregulation and liberalisation dating back to the mid-1990s, the process is not complete <sup>15</sup> and there is a substantial wedge between the degree of de jure and de facto competition. For example, although all gas and electricity markets are now open to competition, more than half of the Member States have regulated end-user prices and the large majority of consumers in those markets are being supplied at regulated prices.

Owing to the full pass-through into pre-tax prices, and the broad constancy of margins and indirect taxes, the elasticity of consumer energy prices (i.e. the percentage response to a given percentage change in oil prices) is a function of the crude oil price level (see Table 2). The elasticity of consumer energy prices doubles from around 16% when crude oil prices are €20 per barrel, to around 33% when prices rise to €60 per barrel (i.e. around the average level which prevailed in the first half of 2010). If oil prices were to increase to €100 per barrel, the elasticity (assuming broadly constant refining and distribution margins and excise taxes) would rise to above 40%.

#### **INDIRECT FIRST AND SECOND-ROUND EFFECTS**

Estimating the indirect first and second-round effects of energy prices is more challenging, and surrounded by more uncertainty, than is the case for direct effects. Moreover, indirect effects may differ at various stages of the production chain and across different sectors of the economy.16 Therefore, evidence should be drawn from a range of analyses. Table 3 reports the estimated impact of oil prices on inflation using a range of different approaches, including input-output tables and dynamic simulations of various model specifications (such as structural vector autoregression (VAR) models and macroeconometric models). Despite some differences across approaches, they generally provide a consistent picture. The cumulative indirect first and second-round effects on the price level of a 10% oil price increase after three years is estimated to range from 0.20% to 0.29%, about half of which represents a second-round effect from the endogenous reaction of wages. There is also some evidence (e.g. from the structural VAR analysis) that indirect first and second-round effects have declined since the mid-1980s owing to changes in the structural features of economic activity and changes in wage and price-setting behaviour. In this regard, models where expectations play an important role point to a somewhat milder reaction of core inflation to commodity prices, as agents react to expected future policy actions.

- 15 In June 2009 the European Commission initiated infringement procedures against Member States for not complying with the EU legislation on the internal market for electricity (25 Member States) and gas (21 Member States). The key grounds for complaint were lack of transparency, insufficient coordination efforts by transmission system operators to make maximum interconnection capacity available, absence of regional cooperation, lack of enforcement action by the national competent authorities and lack of adequate dispute settlement procedures.
- 16 See, for example, Landau, B. and F. Skudelny "Pass-through of external shocks along the pricing chain: A panel estimation approach for the euro area", ECB Working Paper Series No 1104, November 2009.

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# Table 3 Decomposition of the impact of a 10% increase in crude oil priceson the HICP level using different approaches

(percentages)					
Approach	Specification	Direct	Indirect	Second round	Total
Disaggregated energy components <sup>1)</sup>	€20	0.15	N/A	N/A	N/A
	€50	0.29	N/A	N/A	N/A
Input-output tables <sup>2)</sup>		0.22	0.14	N/A	N/A
Structural VARs (SVARs) <sup>3)</sup>	1971-2009	0.20	0.	25	0.45
	1971-2000	0.39	0.29		0.68
	1980-2009	0.16	0.20		0.36
Large-scale macroeconometric	wage reaction on	0.25	0.	20	0.45
models <sup>4)</sup>	wage reaction off	0.26	0.	10	0.36

Source: Eurosystem staff calculations. Notes: See the ECB's 2010 Structural Issues Report for more details. 1) Pass-through is a function of the oil price level – estimates calculated on the basis of constant refining and distribution costs and margins and of indirect taxes at end-2009. 2) Based on 2005 input-output tables. Input-output methodology implicitly assumes constant margins and no second-round effects. 3) Results reported for SVARs estimated over three different sample periods (1971-2009, 1971-2000 and 1980-2009). 4) Results reported for two variants: one allows wages to react to the oil price increase, the other blocks this reaction.

Overall, the pass-through of oil prices into consumer prices is complex, typically a function of many factors, and may vary over time. Key factors comprise the price level of oil, the amount of indirect taxation (excise taxes), and other structural aspects of the economy, including the sector specialisation of activity and wage and price-setting institutions. Wage and price-setting behaviour and monetary policy have a key role to play in determining whether the direct and indirect effects arising from oil price changes translate into inflation over a medium-term horizon. In particular, whilst there is little monetary policy can do about the first-round effects of oil price shocks, it can largely avoid second-round effects. If oil price fluctuations strongly affect wage and price expectations, more vigorous monetary policy action is required to restore price stability. Thus, monetary policy best counteracts the price and output volatility induced by oil price fluctuations by implementing a credible medium-termoriented monetary policy strategy that stabilises inflation expectations.

#### **CONCLUSION** 4

The outlook for oil prices is surrounded by a high degree of uncertainty linked to both demand and supply-side factors. On the supply side, investment in oil production and processing capacity may have been adversely impacted by

the financial crisis and subsequent recession. Furthermore, there is considerable uncertainty about the overall available energy resource base. However, technological advances and the discovery of alternative sources of energy (such as shale gas) could imply that the overall supply of energy is greater than currently estimated. On the demand side, although affected by the recession, demand is likely to increase again as the global economy picks up and energy consumption in emerging economies converges with that of developed economies. Climate change polices, such as carbon pricing and the encouragement of alternative renewable energy sources, and increased energy efficiency may attenuate demand. Nonetheless, on balance, the most likely scenario is that the oil supply/demand balance will tighten over time, putting further upward pressure on oil prices in the medium term.

The impact of future oil price movements on the euro area macroeconomy depends on a number of factors including the nature of such movements, the level of oil prices and associated excise taxes, structural features of energy use and energy markets, the degree of economic flexibility and wage and price-setting behaviour. This article has analysed the impact of oil price movements on euro area inflation using a stylised framework which breaks down the impact into direct and indirect first and second-round effects. The largest and most immediate impact comes

from direct first-round effects (i.e. on consumer energy prices). Owing to the important role of excise taxes and broadly constant distribution and retailing costs and margins, the elasticity of consumer energy prices with respect to oil prices increases as the oil price level rises. At the same time, there is some evidence that the indirect first and second-round effects may have declined, owing to a combination of structural changes in the economy and a change in wage and price-setting behaviour. As the euro area is heavily dependent on imported oil, ultimately there is little that can be done to avoid the first-round effects. However, wage and price-setting behaviour, and well-anchored inflation expectations with a credible monetary policy are key determinants of whether inflationary pressures stemming from energy prices translate into inflation over a medium-term horizon.

### RECENT DEVELOPMENTS IN GLOBAL AND EURO AREA TRADE

In the wake of the global economic downturn of 2008-09, there was an unprecedented contraction in global trade. This was due to a number of demand and supply-side factors that had exacerbated the impacts of the downturn on international trade. First, the decline in global GDP stemmed mainly from developments in its trade-intensive components (such as investment), with a particularly large drop in demand for durable goods. Second, the expansion of international production networks over the past two decades appears to have increased the responsiveness of trade to fluctuations in demand. Third, trade was hampered by tight trade finance conditions worldwide. The second half of 2009 saw global trade start to recover, partly owing to a correction of the preceding collapse, but also to temporary factors, such as fiscal stimuli and a turn in the inventory cycle.

#### **I** INTRODUCTION

Following the intensification of the global financial turmoil in autumn 2008, the prolonged period of rapid growth in global trade gave way to its most severe downturn in post-war history, with extra-euro area trade developing virtually in lockstep (see Chart 1). Moreover, the contraction in global trade was considerably greater than the decrease in global GDP. The standard aggregate models used to forecast international trade failed to fully explain the decline in trade, highlighting a potential "trade puzzle". Against this backdrop, this article reviews the main reasons for the contraction in global and euro area trade during the period 2008-09 and assesses the key determinants of the subsequent recovery.

Understanding these developments is important for several reasons. First, shedding some light on the roles played by one-off factors and structural changes in explaining the collapse in trade provides useful input for trade forecasts. Second, from an accounting perspective, these trade developments had a significant and pro-cyclical effect on euro area GDP growth (see Chart 2).<sup>1</sup> On the one hand, net trade accounted for about two-fifths of the cumulated contraction in euro area GDP between the third quarter of 2008 and the first quarter of 2009. On the other hand, around one-half of total GDP growth between the second quarter of 2009 and

 See also the article entitled "The latest euro area recession in a historical context" in the November 2009 issue of the Monthly Bulletin.



Sources: Eurostat (external trade statistics) and CPB Netherlands Bureau for Economic Policy Analysis.



Note: Net trade refers to goods and services.

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the first quarter of 2010 was attributable to net trade.<sup>2</sup>

The remainder of this article is structured as follows. Section 2 provides a set of stylised facts about global and euro area trade during the recent financial crisis. Section 3 reviews the main reasons for the contraction in global and euro area trade during the period 2008-09 and Section 4 looks at the key determinants of the subsequent recovery.<sup>3</sup> Section 5 puts developments in euro area trade into perspective by comparing them with those of other major economies.

#### 2 STYLISED FACTS

During the initial phase of the financial crisis, extra-euro area trade was fairly resilient, but it began to show signs of weakness in the second quarter of 2008 when the euro area recession started. It then proceeded to decline significantly following the intensification of the global financial crisis in autumn 2008 (see Chart 3). The pace of the decline eased in the second



Sources: CPB Netherlands Bureau for Economic Policy Analysis and Eurostat (external trade statistics).

quarter of 2009 before the recovery eventually took hold in the second half of the year. A very similar picture emerges for global trade.

#### A "TRADE PUZZLE"?

The severity of the contractions in global and euro area trade during the period 2008-09 was unprecedented in post-war history. From peak to trough, world merchandise trade volumes contracted by 19%, while the volume of extra-euro area exports and imports of goods declined by 22% and 20% respectively. At their nadir, extra-euro area trade flows had returned to 2005 levels, with the downturn lasting about 16 months in the euro area and 11 months at the global level.

The collapse in global trade significantly exceeded the contraction in global GDP, which resulted in a decrease in the trade-to-GDP ratio

3 See also the boxes entitled "The downturn in euro area trade" and "Recent developments in euro area trade" in the June 2009 and February 2010 issues of the Monthly Bulletin.





Source: ECB staff calculations.

Note: The regression line is based on the sub-sample from the first quarter of 1985 to the fourth quarter of 2007.

<sup>2</sup> This article covers data up to the first quarter of 2010.

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of about 15 percentage points. While it is well known that trade flows are generally more volatile than overall economic activity (and positively correlated with it), the decline in global trade over the fourth quarter of 2008 and the first quarter of 2009 was markedly greater than might have been expected on the basis of historical regularities and the actual decline in GDP (see Chart 4). Therefore, it is not surprising that standard aggregate quantitative trade models considerably underestimated the downturn in global and euro area trade in 2008-09, highlighting a potential "trade puzzle".<sup>4</sup> Interestingly, the observations from the second quarter of 2009 onwards were again roughly in line with historical model relationships. Furthermore, previous recessions did not give rise to a "trade puzzle" of a comparable magnitude. Thus, it appears that this puzzle may be related to the structural changes in the global economy over the past few years and the unprecedented nature of the recent financial crisis. Both factors will be discussed in Section 3.



Sources: CPB Netherlands Bureau for Economic Policy Analysis and ECB staff calculations.

Note: Based on the three-month-on-three-month export growth rate, each country is assigned to one of the above-mentioned groups. The groups' cut-off values are export growth rates of -10%, 0% and 10%. The sample covers around 97% of global merchandise trade.

Another important characteristic of the downturn in trade in 2008-09 was its truly global scope and high cross-country synchronisation. Having expanded in the overwhelming majority of countries up to September 2008, exports declined precipitously worldwide as the turmoil on the global financial markets intensified. By January 2009 73% of countries had witnessed a severe contraction in exports (i.e. three-month-on-three-month growth rates below -10%) and a further 16% had seen their exports fall, but at a more moderate pace (see Chart 5). These developments indicate that most economies were hit by a common shock or that cross-country transmission was exceptionally swift.

4 See, for instance, C. Cheung and S. Guichard, "Understanding the world trade collapse", *Economics Department Working Papers*, No 729, OECD, 2009; and M. Bussière, A. Chudik and G. Sestieri, "Modelling global trade flows: results from a GVAR model", *Working Paper Series*, No 1087, ECB, 2009.

#### Chart 6 Extra-euro area trade in goods and services

(value indices, September 2008 = 100; three-month moving average) goods exports goods imports



Source: ECB (balance of payments statistics).



#### **COMPOSITION OF EURO AREA TRADE**

During the financial crisis the euro area witnessed notable changes in the composition of its trade flows, which may provide valuable insights into the determinants of the collapse in trade. First, the decline in extra-euro area trade in goods was significantly greater than that in services (see Chart 6). This reflected the fact that global activity contracted more in the manufacturing sector than in the services sector. Second, the share of services in euro area value added is much larger (around 70%) than that in euro area trade (around 25%), resulting in a larger decline in trade than in value added. Third, extra-euro area exports contracted across all main goods categories, but the decline was not uniform. Looking at the breakdown of goods exports by Broad Economic Categories, intermediate and capital goods recorded a more severe downturn than consumer goods (see Chart 7). A more detailed breakdown reveals that exports of non-durable consumer goods - in particular food and beverages - saw

# Chart 8 Growth in extra-euro area export values of consumption goods

### (annual percentage change; percentage points; non-seasonally adjusted)



Note: The chart refers to the category "consumer goods not elsewhere specified", which excludes, for instance, cars as well as food and beverages, and accounts for about 15% of total extra-euro area exports of goods.

a relatively shallow downturn and mild recovery. By contrast, extra-euro area exports of durable consumer goods (as well as semi-durable consumer goods, such as apparel) contracted sharply (see Chart 8).<sup>5</sup> Durable goods, i.e. capital goods and (semi-) durable consumer goods, tend to respond quite strongly to changes in overall economic activity, credit conditions and uncertainty.6 In the light of the exceptional level of uncertainty about the global economic outlook during the financial crisis, many consumers and firms worldwide took a "waitand-see" approach and postponed parts of their planned expenditure, particularly on durable goods. At the same time, they may also have found it more difficult to finance "big-ticket items".

<sup>5</sup> A similar development was observed in the United States. See J. Wang, "Durable goods and the collapse of global trade", *Economic Letter*, Vol. 5, No 2, Federal Reserve Bank of Dallas, 2010.

<sup>6</sup> See the box entitled "Household consumption of durable goods during the latest recession" in the July 2010 issue of the Monthly Bulletin.

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Source: Eurostat (external trade statistics). Note: "Other non-euro area EU Member States" includes all non-euro area EU countries except Denmark, Sweden and the United Kingdom.

Finally, the contraction in extra-euro area exports of goods was broad based across destinations, but the recovery was more uneven (see Chart 9). Exports to Asia – in particular China – rebounded quickly on the back of substantial fiscal stimuli in that region, while those to other major destinations recovered only with a considerable delay.

#### 3 EXPLANATIONS FOR THE COLLAPSE IN TRADE DURING 2008-09

# A SEVERE DROP IN DEMAND SKEWED TOWARDS TRADABLE GOODS

According to standard trade forecast models, fluctuations in foreign demand – captured by the trade-weighted real imports of the euro area's trading partners – account for around 70% to 80% of the changes in extra-euro area export volumes, with the remainder being largely attributable to movements in the exchange rate and relative export prices.<sup>7</sup> Clearly, foreign Chart 10 Extra-euro area export volumes of intermediate goods and PMI global stocks of purchases

(index; September 2008 = 100; mean-adjusted diffusion index) exports of intermediate goods





Sources: Eurostat (external trade statistics) and Markit.

demand was also one of the main drivers behind the collapse in euro area trade during 2008-09 and subsequently its recovery.<sup>8</sup> As the financial crisis intensified in late 2008, consumers cut spending and businesses scaled down production and investment at the global level. As a result, global activity and hence demand for euro area exports plummeted. The fact that the global contraction in private demand was skewed towards durable goods (see Section 2) partly explains why trade contracted more significantly than GDP, in that the share of durable goods in international trade is much higher than their share in domestic value added.<sup>9</sup>

- 7 See R. Anderton and F. di Mauro, "The external dimension of the euro area: Stylised facts and initial findings", in F. di Mauro and R. Anderton (eds.), *The external dimension of the euro area: Assessing the linkages*, Cambridge University Press, 2007.
- 8 According to some estimates, 70% of the collapse in global trade in 2008-09 can be explained by changes in final demand alone. See R. Bems, R. C. Johnson and K.-M. Yi, "Demand spillovers and the collapse of trade in the global recession", Working Paper No 10/142, IMF, June 2010.
- 9 See C. Engel and J. Wang, "International trade in durable goods: Understanding volatility, cyclicality, and elasticities", Working Paper No 13814, NBER, 2008.

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The shock to final demand was also exacerbated by an inventory effect.<sup>10</sup> In the final quarter of 2008 and in early 2009, the global Purchasing Managers' Index of stocks of purchases – a measure of preproduction inventory levels – fell steeply. At the same time, there was a sharp contraction in euro area exports of intermediate goods (see Chart 10). Therefore, global production appears to have drawn largely on existing stocks of intermediate goods for some time and thus have curbed trade in these goods. As firms also ran down post-production inventories in order to restore inventory-to-sales ratios to their optimal level, a similar effect appears to have affected trade in final goods.

More generally, in the euro area and other major economies, the contraction in the tradeintensive GDP components, such as investment, was larger than that in the other components, such as government consumption. These different movements in the components of GDP account for a significant part of the contraction in global trade.<sup>11</sup>

In summary, the sharp contraction in demand following the intensification of the global financial crisis was the main driver behind the collapse in global and euro area trade. The nature of this demand shock also helps to clarify some of the stylised facts identified in Section 2. First, the underlying confidence and liquidity shock appears to have hit all major economies at the same time, partly accounting for the high cross-country synchronisation of the collapse in trade. Second, the impact on the intensively traded goods and import-intensive components of demand was particularly strong, resulting in a larger decline in trade than in GDP. Third, the fact that services cannot be stored partly accounts for the relatively small decline in trade in services, as it was less affected by the severe inventory adjustment. Overall, however, the explanatory power of fluctuations in aggregate demand for both global and euro area export growth was lower than usual in late 2008 and early 2009. While this may be due partly to different movements in the components of demand and their differential import intensities, as well as to possible non-linearities, some supplyside factors also appear to be at play.

#### STRUCTURAL CHANGES RELATED TO INTERNATIONAL SUPPLY CHAINS

Recent empirical evidence suggests that trade has become more responsive to business cycle fluctuations over the past few decades, owing to structural changes in the world economy. According to some estimates, the elasticity of world trade to world income has risen from 2.8 in the 1980s to 3.7 in the 2000s (see Chart 11).<sup>12</sup> Furthermore, it appears to have been particularly high, at 4.7, during previous downturns (as compared with tranquil times), indicating that trade adjustments may sometimes be characterised by non-linearities and asymmetries. Consequently, the contraction in world trade, relative to the fall in GDP, was more pronounced during the period 2008-09 than during past recessions.

To some extent, the gradual increase in the elasticity of trade has been driven by the international fragmentation of production over the past two decades. Propelled by trade liberalisation and technological advances, international production networks have gained drastically in importance (see Chart 12). They have stimulated trade in intermediate goods and thereby boosted the import content of GDP components in many economies, including the euro area (see Box 1).<sup>13</sup> In such an environment, any decrease in global GDP (measured in terms of value added) may trigger a significantly larger decline in trade (measured in gross terms), provided that marginal trade disproportionately involves vertically fragmented industries. With regard to the recent financial crisis, there is

- 11 See R. Anderton and T. Tewolde, "Turmoil, global trade and the internationalisation of production", paper presented at the conference "The global financial crisis", University of Nottingham, 10-11 November 2009, available at http://www. nottingham.ac.uk/gep/documents/china/conferences/2009/bobanderton.pdf
- 12 See C. Freund, "The trade response to global downturns: historical evidence", Policy Research Working Paper No 5015, The World Bank, 2009.
- 13 See, for instance, D. Hummels, J. Ishii and K.-M. Yi, "The nature and growth of vertical specialization in world trade", *Journal of International Economics*, Vol. 54, Issue 1, 2001.

B ECB Monthly Bulletin August 2010

<sup>10</sup> See G. Alessandria, J. P. Kaboski and V. Midrigan, "The Great Trade Collapse of 2008-09: An inventory adjustment?", Working Paper No 16059, NBER, 2010.

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35

30

25

20

15

10

5

0

2005



Chart II Elasticity of world trade to world

1980s

1990s

indeed some evidence that trade contracted systematically more in industries that are closely involved in vertical production networks, controlling for various industry characteristics.<sup>14</sup> Of course, this finding has to be viewed against the backdrop of the considerable long-term benefits of international specialisation and trade.

The fact that international production networks allow for the instantaneous transmission of demand shocks to all countries involved partly explains why the downturn was highly synchronised across countries. This hypothesis





Sources: J. Amador and S. Cabral, "Vertical specialization across the world: A relative measure", North American Journal of Economics and Finance, 2009. Note: This index is a measure of the global volume of imports used in the production of exports.

1990

1995

2000

complements the idea that the majority of countries were hit by a common shock and is consistent with recent evidence showing that vertical linkages contribute significantly to aggregate output co-movement across countries.<sup>15</sup>

- 14 See A. Levchenko, L. Lewis and L. Tesar, "The collapse of international trade during the 2008-2009 crisis: In search of the smoking gun", Working Paper No 16006, NBER, 2010.
- 15 J. di Giovanni and A. Levchenko, "Putting the parts together: Trade, vertical linkages, and business cycle comovement", *American Economic Journal*, Vol.2, Issue 2, 2010.

#### Box I

0.0

1960s

1970s

#### THE IMPORT CONTENT OF EURO AREA GDP COMPONENTS

The vertical fragmentation of production across borders has been accompanied by a surge in international trade in intermediate goods and services. Partly as a result of this development, the share of both exports and imports in euro area GDP has increased significantly, rising from around 30% in 1996 to around 40% of GDP in 2007, according to the national accounts statistics (which include both intra and extra-euro area trade). The international integration of production has also contributed to the high co-movement of exports and imports. According to Eurostat's external trade statistics, the contemporaneous correlation coefficient for quarter-on-quarter growth rates

0.0

2000s

0

1975

1980

1985

Source: C. Freund, "The trade response to global downturns: historical evidence", Policy Research Working Paper No 5015, The World Bank, 2009.

of extra-euro area imports and exports of goods was around 0.6 for the period 2000-07 (the most recent years are excluded owing to their exceptionality), up from around 0.2 for the period 1992-99. Furthermore, the import content of euro area exports has increased over time, i.e. euro area exports increasingly embody foreign value added. This box sheds some light on the importance of imports for the euro area economy. First, it compares the relative import intensities of euro area GDP components, and second, it compares the use of imported versus domestic inputs in euro area production.

The measure of the import intensity of GDP expenditure components used in this box takes into account two effects: first, the amount of goods and services imported directly, and second, foreign value added embodied in

# Import intensity of euro area GDP components



Sources: ECB and R. van der Helm and R. Hoekstra "Attributing Quarterly GDP Growth Rates of the Euro Area to Final Demand Components", Statistics Netherlands, 2009. Note: Exports and imports refer to extra-euro area trade. At the time of compilation, data limitations prevented separate compilation of changes in inventories data.

domestically produced goods and services for consumption, investment or export purposes. Foreign value added is embodied in domestic production either directly, in the form of imported inputs, or indirectly, via domestic inputs which, in turn, have been produced with the help of foreign inputs.

These two effects can be estimated for the various euro area GDP components using the euro area input-output table for 2005.<sup>1</sup> Among the GDP components, extra-euro area exports have the highest total import intensity – around 23% of total exports to the rest of the world (see Chart).<sup>2</sup> This share is the sum of the direct imports (around 6%) – which are then re-exported – and the import content embodied in domestically produced exports (around 17%). These estimates do not include intra-euro area trade.

The import content of euro area investment and private consumption is lower, but still sizeable. Estimates indicate that around 18% and 15% respectively of total investment and private consumption are import-related, with directly imported goods accounting for about one-third of the total import content for both of these expenditure components. Government consumption has the smallest import intensity, amounting to around 6% in total, most of which reflects imports embodied in the intermediate inputs supplied by domestic producers.

1 The input-output table for the euro area as an aggregate was commissioned by the ECB and compiled by Statistics Netherlands using individual country input-output tables published by national statistical institutes. For more information, see R. van der Helm and R. Hoekstra, "Attributing quarterly GDP growth rates of the euro area to final demand components", Statistics Netherlands, 2009. The estimates for the import content of consumption, gross capital formation and exports are based on nominal values available in the input-output table with a breakdown for 30 sectors. Imports and exports refer to euro area trade with the rest of the world. At the time the input-output table was constructed, data limitations meant that it was decided not to compile changes in inventory data separately.

2 See also the box entitled "The import content of exports and the internationalisation of production", in "Competitiveness and the export performance of the euro area" by a task force of the Monetary Policy Committee of the ESCB, *Occasional Paper Series*, No 30, ECB, 2005. According to this paper, the euro area import content of exports to countries outside the EU was around 20% in 2000. The paper uses a weighted aggregation of input-output tables for selected euro area countries, covering around 55% of the euro area. By contrast, this box uses an estimated input-output table for the euro area aggregate and refers to euro area trade vis-à-vis the rest of the world. Notably, the import content varies significantly across euro area countries.



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The aggregate figures for the import content of euro area production conceal a considerable amount of variation across sectors, with the industrial sector having the largest share (around 20%) of inputs directly imported from outside the euro area. Standing at around 10%, the share of imported inputs is smaller for the services sector.

Overall, the euro area economy depends quite strongly on imports from other countries, particularly for exports and, to a lesser extent, investment and private consumption. The recent downturn in the euro area was characterised by severe declines in both investment – which accounted for more than half of the contraction in euro area real GDP – and gross exports. It also was more pronounced in the industrial sector than in the services sector.<sup>3</sup> These developments triggered a sharp decline in imports, limiting the negative contribution of net trade to euro area GDP.

3 For a discussion of investment, trade and sectoral developments during the downturn, see the box entitled "Euro area investment in the current downturn" in the July 2009 issue of the Monthly Bulletin, the box entitled "Recent developments in euro area trade" in the February 2010 issue of the Monthly Bulletin and the box entitled "The current euro area recovery across economic sectors from a historical perspective" in the April 2010 issue of the Monthly Bulletin.

#### TIGHTENING FINANCIAL CONDITIONS

The contraction in trade during the period 2008-09 may have differed from past contractions, not only because of significant changes in the global economy itself, but also because of the specific nature of the shock. In particular, the turmoil on the global financial markets during 2008-09 may have had a direct impact on global and euro area trade as a

result of the tightening financial conditions for exporters and importers. Box 2 provides an overview of the financial instruments geared at facilitating international trade, commonly known as "trade finance". Of course, firms engaged in international trade will also be affected by financial conditions outside trade finance, e.g. when foreign customers find it more difficult to finance "big-ticket items", such as capital or durable consumer goods.

#### Box 2

#### **AN INTRODUCTION TO TRADE FINANCE**

Broadly defined, trade finance includes all types of loans, insurance policies or guarantees that are directly linked to cross-border sales of goods and services.<sup>1</sup> The common feature of all these instruments is that they aim to facilitate international trade, either in the form of financing or risk management.

Since shipping goods from the factory to customers overseas takes time, many exporters face a lag between production and payment by the importer.<sup>2</sup> Therefore, they may have to extend trade credit to their customers – a form of trade finance known as an "open account transaction".

2 For more details on the time lags involved in international trade, see S. Djankov, C. Freund and C. S. Pham, "Trading on time", Policy Research Working Paper No 3909, The World Bank, 2006; and D. Hummels, "Time as a trade barrier", *GTAP Working Paper Series*, No 18, 2001.



<sup>1</sup> This definition of trade finance is widely used in the literature, although some authors prefer a narrower definition that excludes, for instance, working capital financing. For background information, see M. Auboin, "Boosting the availability of trade finance in the current crisis: Background analysis for a substantial G20 package", CEPR Policy Insight No 35, 2009; and T. Dorsey, "Trade finance stumbles", *Finance and Development*, Vol. 46, No 1, March 2009.

Alternatively, exporters may insist on "cash in advance", which also eliminates the risk of non-payment. While both forms of financial relationship do not require the assistance of banks or other institutions, they are commonly seen as being part of trade finance.

However, firms may find it useful to have recourse to specialised intermediaries, such as commercial banks, private insurers, national export credit agencies and multilateral development banks. For instance, a bank can provide a letter of credit, which constitutes a commitment by the bank on behalf of the importer that payment will be made as soon as the terms and conditions stated in the letter are met. While this service is relatively costly, it reduces the risk of non-payment, as long as the bank itself is financially robust and healthy. Alternatively, an intermediary (the exporter's bank) can be brought in to collect payment from the importer – through the importer's bank – as soon as the exporter presents the shipping documents, usually without a verification process or recourse in the event of non-payment ("documentary collections"). Furthermore, export credit insurance and related instruments (e.g. export factoring or forfeiting) allow exporters to mitigate or transfer the risk of non-payment in the case of open account transactions. Commercial banks also provide export working capital financing for the entire cash cycle, either in the form of short-term loans or a revolving line of credit. Finally, in many countries, exporters are given support by national agencies, e.g. in the form of government-backed guarantees.

All these trade finance instruments are vulnerable to a deterioration in liquidity conditions and the evaporation of trust. In times of financial turmoil, commercial banks and insurers are likely to introduce more stringent lending conditions and increase the spreads on trade finance instruments. At the same time, exporters may attempt to switch from open account transactions to cash-in-advance transactions, which may be difficult if the importers are short of liquidity themselves. In brief, one would expect financial market turmoil to be accompanied by a deterioration in trade finance conditions. As a result of such supply-side disruptions, some international transactions, which would be warranted by final demand, may not take place.

In the wake of the financial crisis, the aggregate values of bank-intermediated trade finance contracted worldwide. Survey-based evidence clearly indicates that this decline was mainly the result of lower trade flows (i.e. demand for trade finance fell as trade itself declined).<sup>16</sup> The decline in the bank-intermediated trade finance business appears to have been lower than that in trade values.17 This finding should be interpreted with caution, however, as the aggregate figures mask shifts in the composition of overall trade finance. First of all, there has been a shift away from open account transactions towards more secure cash-in-advance transactions and bank-intermediated trade finance (see Chart 13), possibly signalling exporters' reassessment of counterparty risk. Moreover, some firms' higher demand for export credit insurance and similar instruments may have partly counterbalanced

the significant decline in other instruments, such as letters of credit.

Surveys also show that importers and exporters were faced with more stringent lending standards (e.g. in the form of higher collateral requirements or shorter tenors) and higher trade finance costs during the global financial crisis. Spreads increased across the board as many financial institutions faced higher funding costs or capital requirements and reassessed counterparty risk

<sup>16</sup> See the two reports by the IMF and the Banker's Association for Finance and Trade entitled "IMF-BAFT Trade Finance Survey: A survey among banks assessing the current trade finance environment", March 2009 and "Global Finance Markets: The Road to Recovery", September 2009.

<sup>17</sup> For a comparison of the changes in trade finance values and trade values, see J.-P. Chauffour and T. Farole, "Trade finance in crisis: market adjustment or market failure?", Policy Research Working Paper No 5003, The World Bank, 2009.

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in an environment of exceptional uncertainty and sharp exchange rate movements.

Increases in trade costs may have severe ramifications for international trade. First, exporters may find it difficult to raise the working capital needed to finance their international activities, while importers may not be able to pay for their purchases in advance. Second, tight financial conditions appear to hamper international transactions more than domestic transactions. When the health of an exporter's main reference bank deteriorates, it is likely to have a greater negative impact on foreign sales than on domestic sales.18 This may be explained by the fact that international transactions tend to be associated with a greater need for working capital financing (given the time lags involved) and are often perceived by banks as being more risky than similar domestic transactions (e.g. owing to differences in legal systems across countries). In addition, trade finance is provided largely at short maturities and therefore needs to be constantly renewed. Third, the complex nature of international production networks implies that confidence and liquidity shocks - even when confined to a small number of firms - can be quickly transmitted across countries. This can lead to supply bottlenecks that disrupt the entire network and magnify the contraction in trade.19 For instance, final goods producers may have to temporarily scale down their exports because financially distressed suppliers are no longer in a position to provide essential intermediate goods on time. Concerns about the liquidity position of final goods producers or retailers, in turn, may discourage foreign suppliers from timely delivery.

Empirical evidence on the recent financial crisis further underpins the idea that international trade and financial conditions are closely intertwined. In fact, exports of firms reliant on external finance were particularly affected by the crisis.<sup>20</sup> Thus, the difficulties faced by financial institutions worldwide during the crisis appear to have resulted in supply-side disruptions to international trade. Crucially, this effect compounds the effects operating through the demand side, partly accounting for the "trade puzzle".<sup>21</sup>



Source: World Economic Outlook, IMF, October 2009.

Some may argue, however, that the impact of tightening conditions in bank-intermediated trade finance may have been mitigated by the growing recourse to liquidity provided along international supply chains.<sup>22</sup> Large, liquid companies ("deep pockets") with access to global financial markets – and often at the centre of these production networks – have an incentive to alleviate the liquidity constraints of affiliates, suppliers and customers to sustain production.<sup>23</sup>

- 18 See M. Amiti and D. E. Weinstein, "Exports and financial shocks", Working Paper No 15556, NBER, 2009. The authors also find that the deterioration in trade finance conditions accounted for about one-third of the decline in Japanese exports during the Japanese financial crises of the 1990s.
- 19 For a closely related theoretical model, see N. Kiyotaki and J. Moore, "Credit chains", mimeo, London School of Economics, 1998.
- 20 See J.-C. Bricongne, L. Fontagné, G. Gaulier, D. Taglioni and V. Vicard, "Exports and sectoral financial dependence: evidence on French firms during the great global crisis", *Working Paper Series*, ECB, forthcoming; and M. Wynne, "The financial crisis, trade finance and the collapse of world trade", in *Globalization* and Monetary Policy Institute 2009 Annual Report, Federal Reserve Bank of Dallas, 2009.
- 21 The OECD estimates that trade finance accounted for about one-third of the decline in global trade in the winter of 2008-09. See Economic Outlook, OECD, June 2009.
- 22 See M. Kolasa, M. Rubaszek and D. Taglioni, "Firms in the Great Global Recession: The role of foreign ownership and intra-group finance", Working Paper, Narodowy Bank Polski, forthcoming; and C. Altomonte and G. Ottaviano, "Resilient to the crisis? Global supply chains and trade flows", in R. Baldwin (ed.), *The Great Trade Collapse: Causes, Consequences and Prospects*, CEPR, 2009.
- 23 See, for instance, F. Boissay and R. Gropp, "Trade credit defaults and liquidity provision by firms", *Working Paper Series*, No 753, ECB, 2007.

In this respect, international production networks may have been a source of resilience during the recent financial crisis, preventing an even sharper downturn in global and euro area trade. However, it appears that this partial substitution of bank-intermediated trade finance was not sufficient to shield international trade from the direct impact of the financial crisis.

#### PROTECTIONISM

During the Great Depression of the 1930s, many governments succumbed to protectionist pressures, thereby exacerbating the global downturn. The recent financial crisis has also seen greater recourse to restrictive trade policy measures. So far, the scope of these measures has been fairly narrow. The import-restricting measures introduced between October 2008 and mid-February 2010 by G20 members cover around 2.0% of G20 imports, which is equivalent to around 1.2% of total world imports. The induced reduction in trade volumes is likely to be significantly lower than these figures. The timing of these measures suggests that the increase in protectionism was indeed mostly a result of the collapse in trade.24

It is difficult to capture more covert forms of protectionism, particularly those related to the fiscal stimulus packages implemented worldwide, such as "buy-local clauses".<sup>25</sup> Furthermore, weak labour markets, an uneven recovery and the lack of room for fiscal manoeuvre in many countries could increasingly tempt governments to resort to protectionism.<sup>26</sup> Looking back at the 1970s, it can be particularly difficult to remove non-tariff protectionist measures. Therefore, an intensification of protectionism across the world remains a downward risk to the global economic outlook and should be strongly resisted.

#### 4 THE RECENT RECOVERY IN GLOBAL AND EURO AREA TRADE

Following the severe contraction in late 2008 and early 2009, a recovery in global and euro area trade started to take hold in the second half



of 2009 and continued into the first half of 2010. In the advanced economies, both imports and exports expanded in late 2009 at a pace well above the average for the past two decades. In the emerging economies, however, the rebound in trade was even more pronounced, on both the import and export side (see Chart 14). This was due not only to resilient GDP growth in many emerging economies and the increased importance of trade between them, but also to demand impulses from some advanced economies – partly transmitted through international supply chains.

- 25 See the box entitled "The risks of protectionism" in the September 2009 issue of the Monthly Bulletin and the article entitled "Assessing global trends in protectionism" in the February 2009 issue of the Monthly Bulletin. See also S. Evenett (ed.), "Unequal compliance: The 6th GTA Report", CEPR, 2010.
- 26 During the Great Depression, trade policy was particularly restrictive in countries that could not resort to alternative expansionary policies. See B. Eichengreen and D. A. Irwin, "The slide to protectionism in the Great Depression: Who succumbed and why?", Working Paper No 15142, NBER, 2009.

<sup>24</sup> See H. K. Kee, C. Neagu and A. Nicita, "Is protectionism on the rise? Assessing national trade policies during the crisis of 2008", Policy Research Working Paper No 5274, The World Bank, 2010. The authors estimate that the increase in protectionism accounted for less than 2% of the collapse in world trade in 2009.

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Notably, the upswing in global trade was supported by some of the factors that had actually curbed trade growth during the downturn. First, although the trade-intensive global manufacturing sector had contracted more than the services sector, it rebounded vigorously, thereby supporting international trade. Indeed, this can be seen as a correction of the severe contraction following the global confidence and liquidity shock in late 2008. Second, the car-scrapping schemes and related measures implemented in many economies helped to revive, at least temporarily, the automobile industry, whose output is traded intensively.<sup>27</sup> This contributed to a sharp increase in extra-euro area exports of cars, as well as related parts and components, which had witnessed a particularly severe downturn (see Chart 15).<sup>28</sup> Third, the inventory effect started to reverse globally towards the end of 2009, which further supported trade.

In parallel, global supply chains appear to have been gradually reactivated, as signalled by the rebound in intermediate goods trade. Moreover, trade finance conditions eased globally on account of the various policy measures implemented worldwide to stabilise



-50

2009

-50

1999

2001

Source: Eurostat (Comext)

2003

2005

2007

Chart 15 Extra-euro area export values of goods

the financial system and of the decision by the G20, in April 2009, to ensure the availability of USD 250 billion for trade finance over the period 2009-11. However, lending standards and trade finance costs have generally remained above pre-downturn levels, which may have prevented a stronger recovery in trade.<sup>29</sup> Following past global downturns, industries reliant on external finance experienced a more sluggish recovery in exports than other industries, controlling for demand effects. This suggests that supplyside financial frictions also affect the recovery of trade. Therefore, a sustainable recovery in global and euro area trade not only requires improvements in global demand conditions, but also a robust and healthy financial system.

#### 5 RELATIVE EXPORT PERFORMANCE

While the contraction in euro area exports in 2008-09 was severe by historical standards, all other major economies experienced equally severe downturns in trade. The subsequent recovery, however, was weaker in the euro area than in most other major economies (see Chart 16). Overall, the euro area appears to have lost export market share between the first quarter of 2008 and the final quarter of 2009, as indicated by a negative "export growth gap" (i.e. the growth differential between euro area exports and total foreign import demand). The most recent data for 2010 suggest some correction in this regard, owing in particular, but not exclusively, to the growing demand for capital goods.

During the downturn, import demand contracted across the globe, dominating other determinants of export growth. Thereafter, country-specific factors – such as the product

- 27 OECD data show that in Germany, for instance, the automobile industry accounts for about 21% and 13% of total manufacturing exports and imports respectively.
- 28 For an overview of the recent measures to support the car industry, see D. Haugh, A. Mourougane and O. Chatal, "The automobile industry in and beyond the crisis", *Economics Department Working Papers*, No 745, OECD, 2010.
- 29 See, for instance, the report entitled "Rethinking trade finance 2010", International Chamber of Commerce, 2010.

# Chart 16 Merchandise export volume growth in selected economies

#### (percentage changes; percentage points)



trough to end-2009
export growth gap (right-hand scale)



Sources: CPB Netherlands Bureau for Economic Policy Analysis, Eurostat and ECB staff calculations.

Eurostat and ECB staff calculations. Note: "Euro area" excludes intra-euro area trade. The "export growth gap" is computed as the percentage point difference between export growth and growth in country-specific foreign demand between the first quarter of 2008 and the final quarter of 2009. Foreign demand is proxied by the trade-weighted real imports of the euro area's trading partners.

and country composition of exports, as well as price competitiveness - made more of an impact amid an uneven recovery of the global economy. Above all, euro area exports were constrained during the recovery by relatively weaker import demand in some of its major export markets, particularly the non-euro area EU Member States. At the same time, the increase in export growth stemming from buoyant imports in emerging Asia was smaller for the euro area than for other major economies, particularly compared with Japan, owing to the relatively lower weight of emerging Asia in euro area exports (see Chart 17). The significant movements in effective exchange rates, particularly in the final quarter of 2008, are also likely to have affected the export performance of all major economies. However, in the light of the time lags in exchange rate pass-through,

Chart 17 Composition of world imports and euro area foreign demand

#### (percentages; average for 2000-08)



Sources: IMF and ECB staff calculations. Notes: Euro area foreign demand is a trade-weighted measure of the total import volumes of the euro area's trading partners. "World imports" excludes the euro area.

the impact of these developments in price competitiveness was arguably mostly felt during the trade recovery and thus contributed to its uneven shape.

#### **6** CONCLUSIONS

The unprecedented contraction in global and euro area trade in the wake of the global economic downturn of 2008-09 gave rise to a "trade puzzle". The contraction in trade was significantly larger than might have been expected on the basis of historical regularities, leading to the failure of aggregate quantitative trade models to predict the severity of this downturn. Recent empirical evidence suggests that the puzzle was due partly to various factors that exacerbated the impacts of the global economic downturn on international trade.

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First, the decline in global and euro area GDP was focused mainly in the trade-intensive components (such as investment), with a particularly large drop in demand for durable goods. Second, the expansion of international production networks over the past two decades appears to have increased the responsiveness of trade to fluctuations in demand and may have acted as an additional amplification mechanism. Third, trade was hampered by financial constraints worldwide. In brief, the unusual responsiveness of global and euro area trade during the recent financial crisis appears to be related to both the structural changes in the global economy and the exceptional nature of the crisis itself.

In the second half of 2009 global trade and with some lag - euro area trade started to recover from its worst downturn in post-war history. The rebound can be seen as a correction of the severe contraction following the intensification of the financial crisis in late 2008. However, it was also supported by temporary effects, such as the turn in the inventory cycle and government car-scrapping schemes. The sustainability of the recovery in global and euro area trade will depend critically not only on a further strengthening of private demand, but also on the robustness and health of the global financial system. Finally, an intensification of protectionism across the world remains a downward risk to the global economic outlook and should be strongly resisted.
## HARMONISED ECB STATISTICS ON EURO AREA INVESTMENT FUNDS AND THEIR ANALYTICAL USE FOR MONETARY POLICY PURPOSES

The ECB published harmonised statistics on the assets and liabilities of investment funds resident in the euro area for the first time in December 2009.<sup>1</sup> High-quality statistics on the activities of euro area investment funds are important to enhance monetary, financial and economic analyses. This article sets out the main features and concepts of the new statistics and provides an overview of the euro area investment fund industry. In this context, it also presents supplementary statistics on euro area money market funds. It further shows how the new statistics can be used by the ECB to analyse portfolio shifts, sectoral contributions to M3 developments, funding of the economy and the impact of changes in net wealth on saving and consumption, also in combination with other euro area statistics.

## **I** INTRODUCTION

The availability of reliable and timely information on the balance sheets of investment funds is important for the ECB's monetary, financial and economic analyses. Together with other monetary and financial statistics for the euro area,<sup>2</sup> the new investment fund (IF) statistics can give indications regarding changes in investors' confidence and risk appetite and help in detecting and quantifying portfolio reallocations between monetary assets and longer-term asset classes in a timely manner. The new IF statistics will also be used to support the financial stability analysis carried out by the ECB. Investment fund activity is central to financial stability surveillance for identifying investment behaviour and its implications for financial sector developments. This article, however, focuses on the analytical use of these data for monetary policy purposes only.

The ECB has been publishing quarterly euro area IF balance sheet statistics since 2003. Until 2009 these statistics were neither fully harmonised nor complete. At the end of 2009 new harmonised ECB statistics on euro area investment funds were released. These provide a comparable and complete picture of the IF industry within the euro area, as well as detailed information on the assets held and liabilities incurred by the investment funds.<sup>3</sup> The statistical reporting requirements are contained in Regulation ECB/2007/8 (hereafter the "Regulation"),<sup>4</sup> which is addressed to investment funds resident in the euro area. This article presents the new data and explains how they are used to enhance monetary, financial and economic analyses. Section 2 defines investment funds and their role in financial intermediation. It also provides a general overview of the IF industry in the euro area and an insight into the specific national features of the countries with the largest IF sectors. Section 3 provides a description of the IF statistics published by the ECB and also includes information on quarterly data published on euro area money market funds (MMFs; see box). Section 4 shows how the statistics are used for regular analyses.

## 2 THE INVESTMENT FUND INDUSTRY IN THE EURO AREA

## **ACTIVITIES OF INVESTMENT FUNDS**

Investment funds are financial investment vehicles which raise capital from private and institutional investors by issuing shares and/or units and which invest the proceeds in financial and non-financial assets. As financial intermediaries, investment funds perform two main functions. Firstly, they offer investors

- These new statistics do not include the assets and liabilities of money market funds, which are included instead in the statistics on the MFI sector.
- 2 In particular, the MFI balance sheet and euro area accounts statistics in parts 2 and 3 of the "Euro area statistics" section of the Monthly Bulletin.
- 3 The main improvements of the new statistics were presented in Box 2 of the January 2010 issue of the Monthly Bulletin.
- 4 Regulation (EC) No 958/2007 of the European Central Bank of 27 July 2007 concerning statistics on the assets and liabilities of investment funds (ECB/2007/8).

## ARTICLES

Harmonised ECB statistics on euro area investment funds and their analytical use for monetary policy purposes



opportunities to invest in a diversified pool of assets with a single purchase of shares/units issued by an investment fund. Secondly, investment funds provide a source of funding to other sectors, such as monetary financial institutions (MFIs), non-financial corporations or government agencies. This is primarily carried out through purchases of debt or equity securities issued by these sectors. Investment funds may also invest in assets other than securities, such as bank deposits, real estate, commodities or financial derivatives. Chart 1 illustrates the role of investment funds in financial intermediation.

# INVESTMENT FUNDS IN THE EURO AREA FINANCIAL SECTOR

In the euro area, investment funds represent around 10% of the financial sector in terms of total assets and are, together with further intermediaries, included in a sub-sector entitled "other financial intermediaries" (OFIs) (see Table 1). The largest financial sub-sector is the MFI sector, which accounts for about two-thirds. This sub-sector mainly consists of credit institutions and also includes MMFs. The OFI sector accounts for about one-fourth of total assets and includes, alongside investment funds, institutions such as securitisation vehicles and security and derivative dealers. Insurance corporations and pension funds (ICPFs) account for 12% of the financial sector's total assets.

The euro area IF sector has grown significantly over the last decade. As shown in Chart 2, the outstanding amount of IF shares/units issued stood at the end of 1998 at slightly over €2 trillion. It reached almost €6 trillion at its peak in 2007 before the financial crisis started to unfold. The value of IF shares/units then tumbled to around  $\notin$ 4 trillion in early 2009, before recovering to the current level above €5 trillion. This evolution reflects both the net sales of shares/units by investment funds to their investors and valuation effects, since in particular changes in stock market valuations have a strong influence on the value of IF shares/units. Chart 2 also shows how the outstanding amount of IF shares/units issued would have evolved

Table | Comparison of euro area financial intermediarie

(data as at Q4 2009)						
	Total	ICPFs <sup>1)</sup>	OFIs			
		Total	Of which MMFs		Total <sup>1)</sup>	Of which IFs
Total assets (EUR billions)	52,784	33,535	1,233	6,421	12,828	5,371
As a percentage of total	100	64	2	12	24	10
Source: ECB. 1) Total financial assets.						



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Chart 3 Total assets of euro area investment funds, broken down by country

since the first quarter of 2001 if the effect of price revaluations on the outstanding amount were not taken into account. As an example, the net sales were positive between the first quarter of 2001 and the first quarter of 2003, while the outstanding amount of IF shares/units actually declined due to falling asset prices during that period.

The cornerstone of the EU regulatory framework for investment funds is the Directive on Undertakings for Collective Investment in Transferable Securities (UCITS Directive).<sup>5</sup> The UCITS Directive, originally adopted in 1985 and subsequently amended, triggered strong growth in the European IF industry. Investment funds conforming to the UCITS Directive can be marketed in all EU Member States based on an authorisation by a single Member State. This has allowed companies to establish investment funds in the jurisdiction they consider the most suitable, regardless of the residency of the targeted investor base.

# THE INVESTMENT FUND INDUSTRY IN SELECTED EURO AREA COUNTRIES

The countries with the largest IF sectors in the euro area,<sup>6</sup> in terms of total assets, are Luxembourg, Germany and France, which together accounted for 70% of the euro area total at the end of the first quarter of 2010 (see Chart 3). They are followed by Ireland and the Netherlands, which bring the largest five countries to 87% of the euro area total. The specific features of the IF sectors in these countries are highlighted in the following paragraphs.

5 Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) (recast).
6 The IF sector covers the investment funds resident in a certain country. The managers of these funds may or may not be resident in this country.

An important reason for the size of the IF sector in Luxembourg has been the early incorporation of the UCITS Directive in national legislation. Luxembourg was the first EU Member State to implement the first UCITS Directive in 1988. Due to its infrastructure for establishing and administering funds, as well as favourable fiscal and regulatory conditions, many companies have found in Luxembourg a suitable jurisdiction to establish investment funds. Consequently, the country's IF sector has grown to be the largest in the euro area, and globally second after the United States.<sup>7</sup>

The German IF sector is dominated by funds targeted at institutional investors ("Spezialfonds"), which represented roughly 70% of the investment funds resident in Germany at the end of the first quarter of 2010 in terms of total assets.8 At the same time, the relatively small number of German resident investment funds targeting the general public also mirrors the success of the retail fund industry in Luxembourg. As at end-2008 the amount outstanding of IF shares/units issued abroad but sold in Germany was higher than the outstanding amount of IF shares/units issued by UCITS funds resident in Germany.9 Indeed, some of the largest German IF providers predominantly operate by using so-called "round-trip funds" established in Luxembourg.10 Round-trip funds are investment funds which are established abroad, but sold to domestic investors.

The IF sector in France is comparable in size to that of Germany. The large majority of investment funds are primarily targeted at domestic investors, while the use of round-trip funds by French IF providers is relatively small.<sup>11</sup>

Like Luxembourg, Ireland has also emerged as an international IF centre. One aspect that contributed to this position is the foundation of the International Financial Services Centre (IFSC) in 1987 with the objective to support the local economy by increasing activity in the financial sector. Furthermore, the UCITS Directive was incorporated in the national legislation in 1989, which also facilitated the establishment of the round-trip funds and other cross-border funds.<sup>12</sup>

The size of the IF sector in the Netherlands increased sharply in 2009 as large pension funds sold equity and debt securities holdings and purchased IF shares/units instead. These asset transfers roughly doubled the size of the IF sector in the Netherlands.<sup>13</sup>

## 3 FEATURES OF THE NEW EURO AREA INVESTMENT FUND STATISTICS

This section presents the harmonised statistics on euro area investment funds which the ECB released for the first time in December 2009. These statistics replace the non-harmonised euro area IF statistics that were previously published by the ECB on a quarterly basis.

## **REPORTING INVESTMENT FUNDS**

The new IF statistics cover all investment funds resident in the euro area that comply with the statistical definition provided by the Regulation. All these funds are registered by the ECB in a list, which is also published.<sup>14</sup> At the end of the first quarter of 2010, over 47 thousand investment funds were resident in the euro area. In accordance with European statistical

- 7 See "EFAMA Fact Book Trends in the European investment funds",  $7^{\rm th}$  edition.
- 8 See "Kapitalmarktstatistik", Deutsche Bundesbank, May 2010.
- 9 See footnote 7.
- 10 See "BVI-Investmentstatistik", Bundesverband Investment und Asset Management e.V., 28 February 2010.
- 11 See footnote 7.
- 12 "The investment fund industry in Ireland A statistical overview", Central Bank and Financial Services Authority of Ireland, January 2010.
- 13 See statistical news release by De Nederlandsche Bank, "Continued rise of Dutch investment fund assets" (http://www. dnb.nl/en/news-and-publications/news-and-archive/statistischenieuwsberichten/dnb224751.jsp), dated 17 November 2009.
- 14 http://www.ecb.europa.eu/stats/money/mfi/funds/html/index. en.html

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standards,<sup>15</sup> the statistics do not cover MMFs, which form part of the MFI sector (see box), nor pension funds, which form part of the ICPF sector.16 Investment funds conforming to the UCITS Directive, as well as non-UCITS funds (i.e. all non-harmonised funds whether subject to national regulation or not), are covered. The criterion for inclusion in the statistics refers to the residency of the fund itself and not that of its manager. It follows that while the statistics cover investment funds resident in the euro area which are managed from outside the euro area, they do not cover investment funds established outside the euro area, even if they are operated by management companies located in the euro area.

## SUB-CATEGORIES OF INVESTMENT FUNDS

Euro area aggregates are available for total investment funds and for six sub-categories according to investment policy: equity funds, bond funds, mixed funds, real estate funds, hedge funds and other funds. Each sub-category is further broken down into open-end and closed-end funds. Broadly speaking, the shares/units of open-end funds can be redeemed out of the fund's assets. Closed-end funds are funds with a fixed number of issued shares/units. In the euro area, the latter category mainly consists of real estate funds.

The classification by investment policy is, in principle, done on the basis of the type of asset in which the investment fund primarily invests, where "primarily" should be understood as "more than 50%". For example, if an investment fund primarily invests in shares and other equity, then it should be classified in the equity funds category. Funds of funds, i.e. investment funds investing in shares/units issued by other investment funds, are classified in the category of funds in which they primarily invest. The classification is based on national regulatory provisions, if they exist, or alternatively on what has been declared in the investment funds' prospectuses.

In the absence of a generally accepted definition of hedge funds, a definition for statistical purposes was developed. In line with this definition, hedge funds cover in particular funds with relatively unconstrained investment strategies, including the use of leverage and the taking of short positions, as well as few restrictions on the types of financial asset in which they may invest.

## ASSET AND LIABILITY CATEGORIES **OF INVESTMENT FUNDS**

The statistics contain various categories of assets held and liabilities incurred by investment funds. The liabilities of investment funds mainly consist of the shares or units they issue (see Chart 4). These indicate the net assets of the investment funds and represent the value of the investors' holdings (also referred to as the net asset value). Information on the residency of the investors in investment funds (euro area/non-euro area) is also available.

- 15 The European Statistical Standards are set out in the "European system of national and regional accounts in the Community' (the ESA 95)
- 16 New statistics on the assets and liabilities of euro area insurance corporations and pension funds are being developed and are scheduled to be published in 2011 (see Box 15 in the ECB Financial Stability Review, June 2010).





The investment portfolio of investment funds is broken down into six categories (see Chart 5), where the share in total assets of each category may vary considerably depending on market conditions. The assets of investment funds also include shares/units issued by other investment funds. This is the primary asset class of the funds of funds.

For a number of asset categories, the statistics show the geographical location and the economic sector of the issuer of the assets. This makes it possible, for example, to identify to what extent euro area investment funds are investing in debt issued by euro area governments, non-financial corporations and financial institutions or the rest of the world (see Section 4). In the case of bonds held by investment funds, a further breakdown by original maturity is also available, as well as an indication of the currency in which the bonds issued by MFIs are denominated.

An important feature of the new statistics is the reporting by investment funds on a security-bysecurity (s-b-s) basis. This means that the



Monthly Bulletin August 2010 investment funds report a list of individual securities held, together with their publicly available identification codes (e.g. ISIN codes) and the corresponding amounts. This is in contrast to the more traditional "aggregated reporting" of data, which would require the reporter to aggregate its holdings by type of instrument (e.g. bond, share), maturity, currency, geographical location and sector of the issuer. In the case of s-b-s reporting, the national central banks, as opposed to the reporters, compile the required statistical aggregates by mapping the individual securities to the information available in a common securities reference database. The s-b-s reporting approach is cost-effective for the investment funds since information on individual securities is in general readily available to them. Furthermore, the s-b-s reporting provides more flexibility to the statistical compilers who may produce new aggregates when additional requirements for analytical purposes emerge, without the need to issue new reporting requirements to the investment funds.17

### **OUTSTANDING AMOUNTS AND TRANSACTIONS**

The data cover key variables at a monthly frequency, while more detailed data are quarterly. The quarterly data contain, in addition to outstanding amounts (i.e. the value at the end of the period), financial transactions for each item. Financial transactions refer to the net acquisition of a given type of asset during the period, or the net incurrence of a liability. The monthly dataset mainly consists of outstanding amounts; monthly transactions are currently available only for the shares/units issued by investment funds. The latter provide an approximation of the investment funds' net sales of shares to investors during a given reference period.

Table 2 summarises the euro area aggregates that are published.

<sup>17</sup> Details concerning the securities reference database and security-by-security reporting are available in the ECB booklet entitled "The 'Centralised Securities Database' in brief", available online at http://www.ecb.europa.eu/pub/pdf/other/ centralisedsecuritiesdatabase201002en.pdf.

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Table 2 Summary of published euro area aggregates for IF statistics

		Further breakdowns					
	Total	Geographical location of the counterpart <sup>1)</sup>	Sector of the counterpart <sup>2)</sup>	Maturity <sup>3)</sup>	Currency <sup>4)</sup>		
ASSETS							
Deposit and loan claims	Q and M	Q	Q				
Securities other than shares	Q and M	Q and M	Q and M	Q and M	Q and M		
Shares and other equity	Q and M	Q	Q				
o/w quoted shares	Q	Q	Q				
o/w IF and MMF shares/units	Q and M	Q and M	Q and M				
Non-financial assets	Q and M	Q					
Remaining assets	Q and M						
LIABILITIES							
IF shares/units	M*	Q and M					
Loans and deposits received	Q and M						
Remaining liabilities	Q and M						

#### Source: ECB

Notes: Q: quarterly outstanding amounts and transactions; M: monthly outstanding amounts; \* including transactions. 1) Euro area; rest of the world (in the case of securities, further broken down into issuers resident in non-euro area EU Member States,

the United States and Japan). 2) For euro area counterparts: MFIs, general government, other financial intermediaries, insurance corporations and pension funds,

a) The term of term o

### TIMELINESS AND BACKDATA

The statistics are published around one and a half months after the end of the reference period. The new harmonised time series date back to the reference period December 2008. The ECB has estimated longer historical time series derived mainly from the previously published non-harmonised data. These estimates are also used in this article and are

not fully comparable with data starting from December 2008.

## SUPPLEMENTARY STATISTICS ON MONEY MARKET **FUNDS**

In order to provide a comprehensive picture of the euro area fund industry, the ECB also publishes statistics on the MMF sector. The background to that is explained in the box below.

#### Box

### HARMONISED ECB STATISTICS ON MONEY MARKET FUNDS

Money market funds (MMFs) are collective investment undertakings which primarily invest in short-term transferable debt instruments and/or in bank deposits. MMFs incur liabilities by issuing shares or units. For investors, MMF shares/units are close substitutes for bank deposits in terms of their liquidity. Therefore, for monetary analysis purposes, MMFs are included in the money-issuing sector and classified in the ECB's statistics together with credit institutions in the MFI sector. Consequently, monthly statistical data on shares/units issued by MMFs have always been published by the ECB as a contribution to the consolidated balance sheet of the MFI sector. As a complement to this, since December 2009, new quarterly statistics on the assets and liabilities of euro area MMFs are separately published starting with the reference quarter Q1 2006. The reporting obligations for MMFs, however, remained unchanged.

## Main features of the euro area money market fund statistics

The MMF statistics provide: (i) full coverage across the euro area; (ii) breakdowns of assets and liabilities consistent with the MFI and IF statistics; and (iii) key information on a monthly basis and more detailed information on a quarterly basis. MMF statistics are published in the monthly ECB press release on investment fund statistics, providing a comprehensive picture of the euro area fund industry.

MMF statistics are available as outstanding amounts and transactions. The statistics on MMF assets include breakdowns by euro area/non-euro area and sector of the counterparts, by original maturity and by currency of denomination. For holders of MMF shares/units, a distinction between euro area and non-euro area residents is made.

## Some characteristics of the euro area money market fund industry

At the end of the first quarter of 2010 the approximately 1,500 MMFs resident in the euro area held assets of around  $\notin$ 1.2 trillion, compared with  $\notin$ 5.8 trillion for other euro area investment funds. The countries with the largest MMF sectors in the euro area, in terms of total assets, are France, Luxembourg and Ireland, which together accounted for 92% of the euro area total.

As shown in Chart A, more than three-quarters of MMFs' portfolio consists of debt securities. MMFs are also buying shares/units from other MMFs in the euro area, as well as placing deposits in banks. The euro area MFI sector is the main counterpart of MMFs, with 47% of total assets (see Chart B); at the same time, MMFs hold a substantial portfolio of external assets, amounting to 35% of total assets, which are mainly debt securities denominated in US dollars and pounds



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sterling issued by non-euro area banks. The high share of external assets matches similar levels of external liabilities, mostly shares/units sold to non-euro area investors; this is more evident for MMFs based in Ireland and Luxembourg, which are mostly serving non-euro area residents. Finally, exposure to other euro area sectors is more limited and accounts in total for around 18% of all MMF assets.

## 4 THE USE OF EURO AREA INVESTMENT FUND STATISTICS FOR MONETARY POLICY PURPOSES

The greater comprehensiveness and timeliness considerably increases the scope to apply the harmonised euro area IF statistics in the monetary, financial and economic analyses that are regularly conducted as part of the monetary policy decision-making process at the ECB. In this respect, it is important to note that this increased scope not only refers to the IF statistics themselves, but also to the mutually enhancing way in which these statistics can be linked with other statistics regularly used in the analyses. This section provides some examples of the type of issues and questions that can be addressed with the new statistics in the different types of analyses.

## MONETARY ANALYSIS: CHANGES IN THE PORTFOLIO INVESTMENT BEHAVIOUR OF MONEY-HOLDING SECTORS

A key challenge in the ECB's monetary analysis is to analyse in real time the underlying pace of monetary expansion that provides the relevant signal for risks to price stability in the medium term. In this context, the identification of a stronger liquidity preference in the demand for money and the possible exclusion of such influences from headline M3 growth is a major issue. The identification and quantification of portfolio shifts from non-monetary assets – including those held in investment funds – into M3, and the construction of a measure of M3 corrected for portfolio shifts, is a good example of this.

Previously, the analysis and quantification of these shifts in real time had to rely solely on the MFI balance sheet and balance of payments (BOP) statistics.<sup>18</sup> The monthly MFI balance sheet data are published after 19 working days following the reference month, while the BOP data are published after around 35 working days. By contrast, the more detailed annual financial accounts data and more recently the quarterly euro area sectoral accounts data only become available with a longer time-lag and are thus mainly used for retrospective checking of the real-time estimates.<sup>19</sup> The fact that the new IF statistics become available very shortly after the MFI statistics will significantly improve the real-time analysis of portfolio shifts.

The general framework of the enhanced analysis is shown in Charts 6 and 7. In general, portfolio shifts between monetary assets and other asset classes are explained by differences in the rates of return offered by various asset types and changes in the risk appetite of investors. The yield curve and economic confidence are convenient but inevitably not fully encompassing indicators for such effects.

Inflows to M3 were strong in the euro area during the period from early 2001 until mid-2003 (see Chart 6). These inflows occurred in an environment in which consumer confidence deteriorated markedly following the emergence of substantial economic and financial uncertainty. The strong impact of this deterioration on portfolio shifts into M3 assets is visible inter alia in the fact that these shifts occurred when the yield curve was steepening, which should in principle have increased the relative attractiveness of longer-term assets

<sup>19</sup> See the article entitled "The introduction of quarterly sectoral accounts statistics for the euro area" in the November 2007 issue of the Monthly Bulletin.



<sup>18</sup> See the box entitled "Estimating the size of portfolio shifts from equity to money" in the May 2003 issue of the Monthly Bulletin and the article entitled "Monetary analysis in real time" in the October 2004 issue of the Monthly Bulletin.



nominal long-term bond yields and short-term market interest rates. IF shares/units are displayed against an inverted scale in order to allow a better visualisation of shifts in the allocation between the selected financial instrument classes.

outside M3. Transactions in IF shares/units issued by euro area investment funds decreased noticeably in this period, although they still remained positive.

Sizeable portfolio reallocations also took place between the second quarter of 2007 and the second quarter of 2009. In this period, the transactions in IF shares/units issued not only declined, but actually became negative, implying net withdrawals by investors. The outflows reflected the combination of a flat yield curve and a sharp deterioration in the world growth outlook, downward revisions of corporate profitability expectations and increased concerns regarding the sustainability of the global financial system. All these factors dented substantially the confidence and the risk appetite of investors and influenced also the relative asset returns. Euro area investors appear to have mostly parked the proceeds from selling IF shares/units in monetary assets and government bonds in this period. Monetary assets benefited particularly from the inverted shape of the yield curve, and from the government measures taken to restore confidence in credit institutions (e.g. the extension of deposit guarantee schemes).

However, developments since the second quarter of 2009 suggest a strong recovery in the net issuance of IF shares/units and a gradual rebalancing of financial investment portfolios by investors. This was consistent with the improved financial market sentiment until early 2010 and the marked steepening of the yield curve observed in 2009. Both factors fostered shifts back into riskier and longer-term assets from monetary assets.

Valuable information for analysing changes in the portfolio investment behaviour of moneyholding sectors is also contained in the data for issuance of IF shares/units broken down by investment policy. Indeed, the individual fund types have different risk profiles and they offer varying returns on investment. It is therefore interesting to look at whether portfolio shifts take place, for instance, more from equity than bond funds to other types of assets or whether all types of investment fund are similarly affected. Moreover, portfolio shifts do not necessarily have to be limited to the reallocation of assets between investment funds and other asset classes, but may also take place between different types of investment fund as the relative returns change.

Chart 7 shows that net withdrawals took place from all types of investment fund in the period between the second quarter of 2007 and the second quarter of 2009. Nevertheless, both in absolute and relative terms, the outflows were the most pronounced from bond funds, amounting to €281 billion in this period, or 15% of their outstanding amount in the second quarter of 2007. The net withdrawals were much smaller from equity funds, summing up to €176 billion or 10% of their outstanding amount.

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(quarterly transactions in EUR billions; not adjusted for seasonal effects)



and mixed funds.

The particularly strong outflows from bond funds could reflect two factors. First, bond funds and monetary assets are both interest-bearing financial instruments and, in normal times, close substitutes due to their "safety". Given that the slope of the yield curve was very flat during the period, investors may have preferred to switch from longer to shorter maturities and, thus, have shifted their investments from bond funds to monetary assets. Second, investors might also have wanted to reduce the weight of bond funds in their investment portfolios, due to the strains in the asset-backed securities markets and the high uncertainty about the extent to which various bond funds were holding such instruments.

The new IF statistics can also enhance the regular monetary analysis through additional information on sectoral contributions to M3. Information on the asset side of the IF statistics and the liability side of MFI statistics shows that investment funds accounted for about 30% of total OFI M3 deposit holdings and some 5% of total M3 holdings in the first quarter of 2010.

This implies that money holdings of investment funds influence M3 growth, especially if there is more volatility in the deposit holdings of investment funds than in other parts of the OFI sector and the money-holding sector more generally. Such volatility may for instance stem from investment funds' use of monetary assets as a way of parking funds or building up liquidity buffers.

## FINANCIAL ANALYSIS: CAPITAL MARKET FUNDING **OF THE ECONOMY**

A key issue in the regular financial analysis is to assess the funding situation that different sectors face in the financial market. Investment funds are large institutional investors and, in this capacity, purchase shares and debt securities issued by non-financial corporations, financial corporations or government. This provides direct market-based funding to the sectors concerned and also indirectly influences the quantity of bank-based financing. Through their net purchases of securities, investment funds also influence the levels of stock prices and bond yields (directly), as well as bank lending rates (indirectly). Together with the MFI balance sheet and securities issuance statistics and market prices, the new IF statistics provide timely information on changes in the overall financing conditions of individual institutional sectors in the euro area.

The data on the assets side show that euro area investment funds mainly invested in debt securities and in shares and other equity in 2009 and the first quarter of 2010 (see Chart 8). They also modestly purchased other assets, while at the same time reducing their liquidity (mostly deposit) holdings. These developments mirror closely the issuance and purchases of IF shares/units by policy type on the liabilities side of investment funds' balance sheet, since different investment funds are obliged mostly to invest in their respective asset classes.

The new statistics include also fairly detailed geographical and sectoral breakdowns of investment funds' net purchases of securities other than shares and of shares and other





2009

Source: ECB

2010

purchases of securities other by euro area investment funds

equity.<sup>20</sup> Such information can be particularly helpful during economic or financial crises. For instance, the purchases and shedding by investment funds of asset-backed securities would be visible as changes in the net purchases of securities other than shares. In this respect, the data suggest that in 2009 and the first quarter of 2010 euro area investment funds were mainly acquiring debt securities issued by euro area governments and by the rest of the world (see Chart 9).<sup>21</sup> By contrast, their purchases of bonds issued by MFIs and non-financial corporations resident in the euro area were fairly muted over this period.

Euro area investment funds seem to have increased their foreign equity holdings significantly more than their domestic ones in the past quarters (see Chart 10). This might reflect differences in expected asset returns between the rest of the world and the euro area, but in the context of the financial turmoil it may also reflect some reversal of a home bias that might have been operating in the early phases of the crisis. Based on the total outstanding amount of debt securities in the euro area accounts, the new IF statistics imply that investment funds were holding in the fourth quarter of 2009 about 10% and 15% of the bonds issued by euro area MFIs and non-financial corporations, respectively, and around 15% of the total amount of quoted shares issued by these sectors (based on the data from the euro area accounts and the new IF statistics). Similarly, they were holding some 10% of the total outstanding amount of bonds issued by governments in the euro area. This shows that investment funds have a

- 20 Previously, this more detailed information was only partially available from the MFI balance sheet and balance of payments statistics. The former contains a disaggregation of MFI holdings and net purchases of shares and debt securities issued originally by MFIs, general government and euro area private sectors, while the latter include a split of holdings and net purchases of different financing instruments by MFIs, non-MFI private sectors and general government vis-à-vis the rest of the world.
- 21 The apparent selling of direct bond and equity holdings and purchasing of IF shares/units instead by the Dutch pension funds also explain a significant part of the rise in the foreign securities holdings of investment funds in the second and third quarters of 2009.

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relatively important, albeit not a dominant role in intermediating financing to banks, firms and governments.

## ECONOMIC ANALYSIS: THE IMPACT OF FINANCIAL WEALTH ON SPENDING

The new IF statistics can also be used to support economic analysis, for instance to assess the impact of changes in net worth on saving and consumption. First, the total outstanding amounts of IF shares/units issued (on the liabilities side of the IF balance sheet) provide information on the level of wealth that euro area residents and non-residents hold in euro area investment funds. Second, the data on IF shares issued by policy type and on asset holdings of investment funds by asset type offer information on the type of asset price changes to which investors may be exposed through their investment in investment funds.

This kind of information is particularly helpful to assess the effects that the size and structure of wealth holdings could have on the propensity to consume and invest, and on the saving behaviour



of different institutional sectors. In this respect, changes in the value of the assets held by investment funds are transmitted through the valuation of their shares/units issued to the net worth of households, non-financial corporations, insurance corporations and pension funds and ultimately to spending and saving decisions.

Sustained valuation effects may make the holders of IF shares/units – in particular households – feel richer and could prompt them to reduce saving and increase spending.<sup>22</sup> Chart 11 shows that in the case of euro area investment funds, changes in outstanding shares/units issued have on balance been driven more by changes in prices than by transactions. This impact was particularly strong in the period between the second quarter of 2003 and the first quarter of 2008 due to favourable stock price developments after the earlier decline in asset

22 Based on the data in the euro area accounts and the new IF statistics, households' direct mutual fund share holdings accounted for around 40% of total mutual fund shares held by euro area residents in the fourth quarter of 2009 (net of those held by investment funds).



prices following the bursting of the dotcom bubble. In this period, the rate of return on IF share holdings exceeded by a sizeable margin the returns offered by alternative financial instruments such as monetary assets.

At the moment, the IF statistics only provide counterpart information on the liabilities side of the IF balance sheet in terms of a breakdown into euro area residents and non-residents. The envisaged further breakdown in terms of resident sectors will help to understand how shocks to asset prices change the value of IF asset holdings and IF shares/units issued and thus the wealth of the various domestic sectors.

## **5** CONCLUSION

Harmonised statistics on the assets and liabilities of investment funds resident in the euro area have been published by the ECB since December 2009. These data significantly improve the euro area's statistical framework with regard to financial intermediaries other than MFIs and act as an important complement to MFI statistics. They facilitate more detailed analysis of the changes in the investment behaviour of the money-holding sector, the funding situation in the economy, and the potential impact on consumption through changes in the financial wealth of economic agents.



EURO AREA STATISTICS





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1 For further information, please contact us at: 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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Conventions	used	in	the	tables	

··_··	data do not exist/data are not applicable
"."·	data are not yet available
·· ''	nil or negligible
"billion"	109
(p)	provisional
s.a.	seasonally adjusted
n.s.a.	non-seasonally adjusted





## **EURO AREA OVERVIEW**

### 1. Monetary developments and interest rates 1)

	M1 <sup>2)</sup>	M2 <sup>2)</sup>	<b>M3</b> <sup>2),3)</sup>	M3 <sup>2),3)</sup> <b>3-month</b> 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
2008 2009	2.4 9.5	9.6 4.8	9.7 3.3	-	9.5 1.6	19.2 23.6	4.64 1.22	3.69 3.76
2009 Q3 Q4 2010 Q1 Q2	12.2 12.3 11.3 10.3	4.5 2.2 1.7 1.4	2.7 0.3 -0.2 -0.1	- - -	0.4 -0.6 -0.4 0.1	23.6 18.8 8.9	0.87 0.72 0.66 0.69	3.64 3.76 3.46 3.03
2010 Feb. Mar. Apr. May June July	11.0 10.8 10.7 10.3 9.2	1.6 1.6 1.3 1.5 1.4	-0.4 -0.1 -0.2 -0.1 0.2	-0.2 -0.2 -0.1 0.0	-0.4 -0.2 0.2 0.2 0.3	7.7 6.8 5.6 4.1	0.66 0.64 0.64 0.69 0.73 0.85	3.49 3.46 3.40 3.00 3.03 3.03

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

	HICP <sup>1)</sup>	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (%)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2008	3.3	6.1	3.5	0.6	-1.7	81.8	0.7	7.5
2009	0.3	-5.1	2.7	-4.1	-14.9	71.1	-1.9	9.4
2009 Q4	0.4	-4.6	1.7	-2.1	-7.4	71.7	-2.0	9.8
2010 Q1	1.1	-0.1	2.1	0.6	4.8	73.9	-1.2	9.9
Q2	1.5	3.0	•			76.5		10.0
2010 Feb.	0.9	-0.4	-	-	4.4	-	-	9.9
Mar.	1.4	0.9	-	-	7.8	-	-	10.0
Apr.	1.5	2.8	-	-	9.5	75.5	-	10.0
May	1.6	3.1	-	-	9.6	-	-	10.0
June	1.4	3.0	-	-		-	-	10.0
Inly	17					77.4		

### 3. External statistics

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)			Reserve assets (end-of-period	Net international	Gross external debt	Effective excha the euro: EF	nge rate of CR-21 <sup>5)</sup>	USD/EUR exchange rate
	Current and		Combined	positions)	investment	(as a % of GDP)	(index: 1999 (	Q1 = 100)	
	capital	Goods	direct and		position				
	accounts		portfolio		(as a % of GDP)		Nominal	Real (CPI)	
			investment		-		-	0	0
	1	2	3	4	5	6	7	8	9
2008	-144.0	-19.1	145.4	374.2	-17.6	118.2	110.5	110.1	1.4708
2009	-49.7	40.7	229.8	462.4	-15.5	115.8	111.7	110.6	1.3948
2009 Q3	-2.2	13.8	54.4	430.9	-17.7	116.1	112.1	110.9	1.4303
Q4	8.0	20.5	62.9	462.4	-15.5	115.8	113.8	112.2	1.4779
2010 Q1	-22.9	2.8	-12.6	498.7	-14.8	119.9	108.7	106.9	1.3829
Q2				583.3			103.1	101.8	1.2708
2010 Feb.	-7.9	4.2	-15.3	492.6			108.0	106.1	1.3686
Mar.	-2.1	6.2	-27.8	498.7			107.4	105.7	1.3569
Apr.	-7.7	2.9	20.9	521.6			106.1	104.5	1.3406
May	-14.7	0.6	46.7	569.7			102.8	101.4	1.2565
June				583.3			100.7	99.4	1.2209
Inly							102.5	101.2	1 2770

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.

M3 and its components exclude holdings by non-euro area residents of money market fund shares/units and debt securities with a maturity of up to two years. 3)

Based on AAA-rated euro area central government bond yield curves. For further information, see Section 4.7. For a definition of the trading partner groups and other information, please refer to the General Notes. 4)

5)





# MONETARY POLICY STATISTICS

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

## 1. Assets

	9 July 2010	16 July 2010	23 July 2010	30 July 2010
Gold and gold receivables	352,092	352,093	351,970	351,969
Claims on non-euro area residents in foreign currency	234,242	234,071	235,568	236,347
Claims on euro area residents in foreign currency	30,780	30,479	29,840	29,473
Claims on non-euro area residents in euro	17,545	19,690	18,066	17,945
Lending to euro area credit institutions in euro	635,009	619,406	625,198	632,499
Main refinancing operations	229,070	195,661	201,286	189,986
Longer-term refinancing operations	405,927	423,722	423,722	442,042
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	1	1	3	366
Credits related to margin calls	10	22	187	104
Other claims on euro area credit institutions in euro	43,009	42,630	44,382	42,934
Securities of euro area residents in euro	418,037	417,074	418,516	417,768
Securities held for monetary policy purposes	120,894	121,196	121,372	121,454
Other securities	297,143	295,878	297,143	296,315
General government debt in euro	35,037	35,041	35,041	35,041
Other assets	238,995	236,504	235,031	237,684
Total assets	2,004,747	1,986,989	1,993,612	2,001,660

## 2. Liabilities

	9 July 2010	16 July 2010	23 July 2010	30 July 2010
Banknotes in circulation	818,831	818,993	817,525	820,583
Liabilities to euro area credit institutions in euro	391,437	384,440	366,596	377,258
Current accounts (covering the minimum reserve system)	126,783	265,865	245,255	195,798
Deposit facility	205,544	58,550	61,325	120,894
Fixed-term deposits	59,000	60,000	60,000	60,500
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	109	25	17	66
Other liabilities to euro area credit institutions in euro	645	626	1,392	1,784
Debt certificates issued	0	0	0	0
Liabilities to other euro area residents in euro	108,907	100,028	124,824	118,125
Liabilities to non-euro area residents in euro	42,190	42,785	42,181	42,232
Liabilities to euro area residents in foreign currency	915	909	906	1,342
Liabilities to non-euro area residents in foreign currency	16,281	15,676	16,633	16,096
Counterpart of special drawing rights allocated by the IMF	56,711	56,711	56,711	56,711
Other liabilities	161,822	159,811	159,835	160,520
Revaluation accounts	328,818	328,818	328,818	328,818
Capital and reserves	78,191	78,191	78,190	78,190
Total liabilities	2,004,747	1,986,989	1,993,612	2,001,660

Source: ECB.



## I.2 Key ECB interest rates

With effect from: 1)	Deposit	Deposit facility Main refinancing operations			Marginal lend	ing facility	
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
	Laval	Change	Laval	Laval	Change	Laval	Change
	Level	Change	Levei	Level	Change	Level	Change
	1	2	3	4	5	6	7
1999 1 Jan.	2.00	0.75	3.00	-	-	4.50	-
22	2.73	-0.75	3.00	-		5.23 4.50	-1.23
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. 9 June	2.75	0.25	5./5 4.25	-	0.25	4./5	0.25
$28^{3}$	3.25	0.50		4.25	0.50	5.25	0.50
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
2002 6 Dec	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2002 0 Dec.	1.75	-0.50	-	2.13	-0.50	3.75	-0.50
2003 / Mar. 6 June	1.50	-0.25	-	2.50	-0.25	3.50 3.00	-0.25
2005 6 Dec	1.00	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
15 5)	3.25	0.50	3 75	-	-0.50	4.23	-0.50
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.

1) From 1 January 1999 to 9 March 2004, the date refers to the deposit and marginal lending facilities. For main refinancing operations, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day. From 10 March 2004 onwards, the date refers 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 2) 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

3) 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. 4) 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. 5)



## 1.3 Eurosystem monetary policy operations allotted through tender procedures $1_{j,2}$

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

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	v	ariable rate tende procedures	er	Running for () days
			_	Fixed rate	Minimum bid rate	Marginal rate <sup>4)</sup>	Weighted average rate	
	1	2	3	4	5	6	7	8
			Main refin	ancing operations				
2010 7 Apr.	71,535	67	71,535	1.00	-	-	-	7
14	70,577	68	70,577	1.00	-	-	-	7
21	70,228	67	70,228	1.00	-	-	-	7
28	75,624	66	75,624	1.00	-	-	-	7
5 May	90,317	76	90,317	1.00	-	-	-	7
12	99,570	81	99,570	1.00	-	-	-	7
19	104,/52	81	104,/52	1.00	-	-	-	4
20 2 June	100,014	85	100,014	1.00	-	-	-	7
	122 030	80 96	122 030	1.00	-	-	-	7
16	126,672	101	122,039	1.00	-	-	-	7
23	151 511	101	151 511	1.00	-	-		7
30	162,912	157	162,912	1.00	_	_	_	7
7 July	229.070	151	229.070	1.00	-	-	-	7
14	195,661	147	195,661	1.00	-	-	-	7
21	201,286	163	201,286	1.00	-	-	-	7
28	189,986	151	189,986	1.00	-	-	-	7
4 Aug.	154,844	125	154,844	1.00	-	-	-	7
			Longer-term re	efinancing operations				
2010 10 Mar.	9,315	11	9,315	1.00	-	-	-	35
1 Apr.	2,015	11	2,015	1.00	-	-	-	91
1 5)	17,876	62	17,876		-	-	-	182
14	15,730	12	15,730	1.00	-	-	-	28
29 3)	4,846	24	4,846	-	1.00	1.00	1.15	91
12 May	20,480	18	20,480	1.00	-	-	-	35
13 5	35,668	56	35,668		-	-	-	182
27	12,163	35	12,163	1.00	-	-	-	91
16 June	31,603	23	31,603	1.00	-	-	-	28
1 July	131,933	1/1	131,933	1.00	-	-	-	91
14	49,399	54	49,399	1.00	-	-	-	28
29	23,100	/0	25,100	1.00	-	-	-	91

## 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures		Variable r proce	ate tender dures		Running for
					Fixed rate	Minimum	Maximum	Marginal	Weighted	() days
	1	2	2	4	5		bid rate	rate*	average rate	10
	1	2	3	4		0	1	8	9	10
2010 19 May	Collection of fixed-term deposits	162,744	223	16,500	-	-	1.00	0.29	0.28	7
26	Collection of fixed-term deposits	86,003	93	26,500	-	-	1.00	0.28	0.27	7
2 June	Collection of fixed-term deposits	73,576	68	35,000	-	-	1.00	0.28	0.28	7
9	Collection of fixed-term deposits	75,627	64	40,500	-	-	1.00	0.35	0.31	7
15	Collection of fixed-term deposits	363,775	174	363,475	-	-	1.00	0.80	0.77	1
16	Collection of fixed-term deposits	71.078	66	47,000	-	-	1.00	0.30	0.28	7
23	Collection of fixed-term deposits	71.560	67	51,000	-	-	1.00	0.40	0.31	7
30	Collection of fixed-term deposits	31.866	45	31.866	-	-	1.00	1.00	0.54	7
1 July	Reverse transaction	111.237	78	111.237	1.00	-	-	-	-	6
7	Collection of fixed-term deposits	87.431	88	59,000		-	1.00	0.75	0.56	7
13	Collection of fixed-term deposits	201.673	158	200,908	-	-	1.00	0.80	0.76	1
14	Collection of fixed-term deposits	98,288	85	60,000	-	-	1.00	0.65	0.56	7
21	Collection of fixed-term deposits	97 169	88	60,000	-	-	1.00	0.64	0.56	7
28	Collection of fixed-term deposits	88 550	86	60,500	-	-	1.00	0.60	0.55	7
4 Aug.	Collection of fixed-term deposits	115,689	93	60,500	-	-	1.00	0.50	0.45	7

Source: ECB.

1)

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 2) operation) are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.

3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate 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. 4)

5) In the final one-year longer-term refinancing operation, which was settled on 17 December 2009, as well as in the six-month longer-term refinancing operations settled on 1 April and 13 May 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

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

Reserve Total Liabilities to which a 2% reserve coefficient is applied Liabilities to which a 0% reserve coefficient is applied base 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 Debt securities issued with a maturity of over 2 years as at: 1) Deposits with an agreed Repos maturity or notice period of over 2 years 6 2008 2009 18,169.6 18,318.2 10,056.8 9,808.5 848.7 760.4 2,376.9 2,475.7 3,643.7 4,103.5 1,243.5 1,170.1 4,168.7 4,166.8 4,207.6 4,254.8 4,290.0 2010 Jan. 18,454.5 9,829.1 766.1 2,465.6 1,225.0 9,829.1 9,828.1 9,807.3 9,912.0 9,993.3 2,403.0 2,479.5 2,506.7 2,584.6 2,600.6 1,225.0 1,282.5 1,283.5 1,345.7 1,411.4 Feb. Mar. 18,516.2 18,587.9 759.3 782.8 Apr. May 18,861.5 19,042.0 764.4 746.6

## 2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2008 2009	217.2 210.2	218.7 211.4	1.5 1.2	0.0 0.0	3.25 1.00
2010 9 Mar. 13 Apr. 11 May 15 June 13 July	210.9 211.4 211.2 211.3 213.0 213.0	211.8 212.5 212.4 212.5 214.4	1.0 1.2 1.2 1.3 1.4	0.0 0.0 0.0 0.0 0.0 0.0	1.00 1.00 1.00 1.00 1.00
IU Aug.	214.3				

## 3. Liquidity

Maintenance period ending on:		Liquidity	-providing fact Monetary pol	ors	ns of the Euro	osystem	Liquidi		Credit institutions' current	Base money		
- -	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity- providing operations <sup>2)</sup>	Deposit facility	Other liquidity- absorbing operations 3)	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)	accounts	
	1	2	3	4	5	6	7	8	9	10	11	12
2008 2009	580.5 407.6	337.3 55.8	457.2 593.4	2.7 0.7	0.0 24.6	200.9 65.7	4.9 9.9	731.1 775.2	107.8 150.1	114.3 -130.2	218.7 211.4	1,150.7 1,052.3
2010 9 Feb. 9 Mar. 13 Apr. 11 May 15 June 13 July	425.6 426.9 439.8 457.0 462.4 500.9	59.7 80.5 77.7 76.7 110.0 167.5	662.2 641.1 650.5 666.4 706.7 573.2	0.2 0.9 0.4 0.9 0.3 0.3	33.5 38.0 43.6 49.4 86.9 140.2	168.3 186.4 200.7 218.2 288.8 230.4	13.3 10.5 8.4 11.4 34.1 54.4	783.6 784.6 792.9 796.6 806.2 813.0	122.6 113.2 113.6 112.1 123.1 126.5	-117.5 -119.3 -116.1 -100.3 -98.4 -56.5	210.9 211.8 212.5 212.4 212.5 214.4	1,162.8 1,182.9 1,206.1 1,227.2 1,307.5 1,257.8

Source: ECB.

1) End of period.

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. 2)

3)

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           Total government euro area area         Other euro area				Holdi shares i	ngs of secur ssued by eu	ities other t ro area res	han idents	Money market fund	Holdings of shares/ other equity	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents	MFIs	shares/ units <sup>2)</sup>	issued by euro area residents			
	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	319.6	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	557.7	8.5	320.0
2010 Q1	2,880.9	1,476.1	19.6	0.7	1,455.9	472.4	376.1	8.4	87.9	-	16.6	583.0	8.4	324.4
Q2 <sup>(p)</sup>	3,390.3	1,822.1	18.8	0.9	1,802.4	526.7	416.5	9.7	100.5	-	15.8	670.4	8.6	346.7
2010 Jan.	2,823.5	1,464.9	19.5	0.7	1,444.8	451.7	364.3	7.9	79.5	-	16.2	563.2	8.4	319.1
Feb.	2,867.1	1,479.4	19.5	0.7	1,459.3	465.4	373.7	8.0	83.7	-	16.1	585.8	8.4	312.0
Mar.	2,880.9	1,476.1	19.6	0.7	1,455.9	472.4	376.1	8.4	87.9	-	16.6	583.0	8.4	324.4
Apr.	2,946.5	1,511.9	19.0	0.7	1,492.3	478.9	377.6	8.7	92.6	-	16.4	609.9	8.4	321.0
May	3,259.3	1,732.5	19.0	0.7	1,712.9	516.5	408.6	9.2	98.7	-	15.9	665.6	8.5	320.3
June (p)	3,390.3	1,822.1	18.8	0.9	1,802.4	526.7	416.5	9.7	100.5	-	15.8	670.4	8.6	346.7
						MFIs exc	luding the Eu	irosystem						
2008	31,842.1	18,052.6	968.4	10,772.1	6,312.0	4,630.0	1,245.9	1,406.8	1,977.4	98.7	1,196.1	4,754.3	211.4	2,898.9
2009	31,153.8	17,703.7	1,002.3	10,780.3	5,921.1	5,061.5	1,483.9	1,496.8	2,080.8	85.1	1,234.9	4,258.1	220.4	2,590.2
2010 01	31.570.0	17.749.5	1.032.8	10.797.4	5.919.3	5.127.5	1.551.5	1.482.7	2.093.2	77.7	1.228.3	4.420.6	217.9	2.748.5
Q2 <sup>(p)</sup>	32,593.4	18,236.5	1,067.0	10,957.7	6,211.8	5,122.6	1,569.8	1,522.4	2,030.3	67.3	1,231.3	4,599.5	221.0	3,115.3
2010 Jan.	31,408.1	17,723.1	1,013.9	10,770.2	5,939.0	5,077.0	1,496.5	1,493.2	2,087.4	86.9	1,250.2	4,383.5	219.7	2,667.6
Feb.	31,525.0	17,712.6	1,009.1	10,773.5	5,930.0	5,094.9	1,523.7	1,497.4	2,073.7	85.6	1,232.7	4,432.0	218.2	2,749.0
Mar.	31,570.0	17,749.5	1,032.8	10,797.4	5,919.3	5,127.5	1,551.5	1,482.7	2,093.2	77.7	1,228.3	4,420.6	217.9	2,748.5
Apr.	31,990.9	17,905.5	1,037.2	10,818.9	6,049.4	5,130.9	1,561.6	1,490.1	2,079.2	76.6	1,271.2	4,517.5	217.9	2,871.3
May	32,714.6	18,182.1	1,051.4	10,861.0	6,269.6	5,080.2	1,553.0	1,469.0	2,058.2	74.6	1,255.3	4,688.2	218.5	3,215.7
June (p)	32.593.4	18,236.5	1.067.0	10.957.7	6.211.8	5.122.6	1.569.8	1.522.4	2.030.3	67.3	1.231.3	4.599.5	221.0	3.115.3

## 2. Liabilities

	Total	Currency in		Deposits of euro	o area residents		Money market	Debt securities	Capital and	External liabilities	Remaining liabilities
		circulation	Total	Central government	Other general government/ other euro area residents	MFIs	fund shares/ units <sup>3)</sup>	issued <sup>4)</sup>	reserves		
	1	2	3	4	5	6	7	8	9	10	11
					Eurosystem						
2008	2,982.9	784.7	1,240.7	68.8	16.6	1,155.2	-	0.1	273.8	377.8	305.9
2009	2,829.9	829.3	1,185.7	102.6	22.6	1,060.5		0.1	320.9	140.2	353.7
2010 Q1	2,880.9	819.9	1,222.8	101.2	22.0	1,099.6	-	0.1	353.0	135.4	349.6
Q2 <sup>(p)</sup>	3,390.3	835.4	1,623.2	137.2	21.4	1,464.6		0.1	413.5	142.5	375.6
2010 Jan.	2,823.5	806.2	1,204.1	116.3	23.5	1,064.2	-	0.1	328.4	133.5	351.3
Feb.	2,867.1	807.0	1,225.9	107.0	23.6	1,095.2		0.1	344.7	138.1	351.4
Mar	2,880.9	819.9	1,222.8	101.2	22.0	1,099.6		0.1	353.0	135.4	349.6
Apr.	2,946.5	821.1	1,264.2	87.8	22.0	1,154.4	-	0.1	369.2	140.1	351.8
May	3,259.3	828.4	1,510.9	128.8	22.7	1,359.5		0.1	407.0	155.3	357.6
June <sup>(p)</sup>	3,390.3	835.4	1,623.2	137.2	21.4	1,464.6		0.1	413.5	142.5	375.6
				MFIs	excluding the Eur	osystem					
2008	31,842.1	-	16,740.2	191.0	9,690.4	6,858.8	824.8	4,848.4	1,767.6	4,404.3	3,256.9
2009	31,153.8		16,465.8	144.2	10,034.6	6,287.1	732.3	4,919.1	1,921.0	4,099.8	3,015.8
${ \begin{array}{c} 2010 \ Q1 \\ Q2 \ ^{(p)} \end{array} }$	31,570.0 32,593.4	-	16,419.1 16,988.6	166.3 168.1	10,026.2 10,291.2	6,226.5 6,529.3	705.8 672.4	5,019.0 4,988.2	1,930.1 1,994.8	4,289.1 4,477.0	3,207.0 3,472.4
2010 Jan.	31,408.1	-	16,461.2	161.1	10,009.6	6,290.5	738.8	4,975.7	1,920.4	4,227.0	3,084.9
Feb.	31,525.0		16,460.3	166.5	10,012.0	6,281.8	729.4	4,961.0	1,916.9	4,285.4	3,172.0
Mar.	31,570.0		16,419.1	166.3	10,026.2	6,226.5	705.8	5,019.0	1,930.1	4,289.1	3,207.0
Apr.	31,990.9	-	16,593.5	159.7	10,113.7	6,320.1	710.6	5,025.0	1,933.8	4,410.1	3,317.9
May	32,714.6		16,867.7	155.6	10,138.1	6,574.0	704.6	5,034.7	1,941.0	4,550.4	3,616.2
June <sup>(p)</sup>	32,593.4		16,988.6	168.1	10,291.2	6,529.3	672.4	4,988.2	1,994.8	4,477.0	3,472.4

 Data refer to the changing composition of the euro area. For further information, see the General Notes.
 Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets.
 Amounts issued with a maturity of up to two years and held by non-euro area residents are included to the second se Amounts issued with a maturity of up to two years and held by non-euro area residents are included in external liabilities.



## **EURO AREA STATISTICS**

Money, banking and investment funds

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

## 1. Assets

	Total	Loans to	euro area res	idents	Holdings of so issued b	ecurities other y euro area re	than shares sidents	Holdings of shares/ other equity	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents	issued by other euro area residents			
	1	2	3	4	5	6	7	8	9	10	11
					Outstand	ing amounts					
2008	24,127.6	11,761.8	989.0	10,772.8	2,975.6	1,565.5	1,410.1	784.2	5,239.0	220.0	3,147.1
2009	23,866.5	11,802.7	1,021.7	10,781.0	3,356.4	1,852.2	1,504.2	811.8	4,815.8	228.9	2,851.0
2010 Q1	24,314.2	11,850.4	1,052.3	10,798.1	3,418.7	1,927.6	1,491.1	793.5	5,003.7	226.3	3,021.6
Q2 <sup>(p)</sup>	25,260.5	12,044.3	1,085.7	10,958.6	3,518.5	1,986.4	1,532.2	785.9	5,269.9	229.5	3,412.2
2010 Jan.	24,094.3	11,804.2	1,033.3	10,770.9	3,361.8	1,860.7	1,501.1	815.6	4,946.7	228.1	2,937.7
Feb.	24,264.8	11,802.7	1,028.5	10,774.2	3,402.8	1,897.4	1,505.4	801.4	5,017.8	226.6	3,013.6
Mar.	24,314.2	11,850.4	1,052.3	10,798.1	3,418.7	1,927.6	1,491.1	793.5	5,003.7	226.3	3,021.6
Apr.	24,636.5	11,875.7	1,056.2	10,819.5	3,438.0	1,939.2	1,498.8	825.2	5,127.4	226.3	3,143.9
May	25,240.0	11,932.1	1,070.4	10,861.7	3,439.8	1,961.6	1,478.2	800.6	5,353.8	227.0	3,486.7
June <sup>(p)</sup>	25,260.5	12,044.3	1,085.7	10,958.6	3,518.5	1,986.4	1,532.2	785.9	5,269.9	229.5	3,412.2
					Tran	sactions					
2008	1,711.2	599.0	12.8	586.2	499.6	90.1	409.4	-56.0	-56.3	-3.0	728.9
2009	-649.7	20.5	34.9	-14.4	364.5	269.8	94.7	12.8	-467.7	7.8	-588.1
2010 Q1	271.0	31.0	30.1	0.9	53.0	71.6	-18.5	-13.1	52.7	-2.7	150.0
Q2 <sup>(p)</sup>	531.0	124.6	34.8	89.8	52.4	59.6	-7.2	1.0	-36.6	2.7	385.3
2010 Jan.	126.6	-18.1	11.3	-29.5	2.2	8.6	-6.4	4.9	62.5	-0.7	75.8
Feb.	118.6	-1.7	-4.9	3.3	34.4	31.9	2.5	-12.1	16.7	-1.8	83.0
Mar.	25.8	50.8	23.7	27.1	16.4	31.1	-14.7	-6.0	-26.5	-0.1	-8.8
Apr.	282.1	33.7	3.6	30.1	20.4	13.3	7.1	34.9	71.5	0.1	121.6
May	399.1	36.9	13.8	23.1	-0.5	20.9	-21.3	-20.6	37.5	0.7	345.0
June <sup>(p)</sup>	-150.2	54.0	17.4	36.6	32.5	25.5		-13.4	-145.6	2.0	-81.2

## 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
	1	2	3	4	5	6	7	8	9	10
					Outstanding am	ounts				
2008	24,127.6	722.9	259.8	9,707.1	725.7	2,831.6	1,615.2	4,782.1	3,562.7	-79.9
2009	23,866.5	770.1	246.8	10,057.2	646.9	2,762.4	1,802.3	4,240.0	3,369.6	-29.0
${ \begin{array}{c} 2010 \ Q1 \\ Q2 \ ^{(p)} \end{array} }$	24,314.2	768.7	267.5	10,048.2	628.1	2,837.9	1,831.7	4,424.5	3,556.6	-49.0
	25,260.5	785.6	305.3	10,312.6	604.8	2,857.5	1,947.1	4,619.5	3,848.1	-20.3
2010 Jan.	24,094.3	757.2	277.4	10,033.2	651.9	2,808.9	1,798.1	4,360.4	3,436.2	-29.1
Feb.	24,264.8	759.7	273.5	10,035.6	643.7	2,803.6	1,814.1	4,423.5	3,523.4	-12.2
Mar.	24,314.2	768.7	267.5	10,048.2	628.1	2,837.9	1,831.7	4,424.5	3,556.6	-49.0
Apr.	24,636.5	772.7	247.6	10,135.7	633.7	2,853.2	1,840.5	4,550.2	3,669.7	-67.2
May	25,240.0	779.1	284.3	10,160.8	629.8	2,877.9	1,877.4	4,705.7	3,973.7	-49.0
June <sup>(p)</sup>	25,260.5	785.6	305.3	10,312.6	604.8	2,857.5	1,947.1	4,619.5	3,848.1	-20.3
					Transaction	s				
2008	1,711.2	83.3	106.1	700.3	29.4	-31.8	139.0	93.1	616.2	-24.6
2009	-649.7	45.8	-4.5	288.8	-12.3	-54.8	142.7	-591.0	-506.9	42.5
2010 Q1	271.0	-1.3	20.7	-31.1	-20.1	49.8	0.5	75.4	190.7	-13.7
Q2 <sup>(p)</sup>	531.0	16.9	37.7	138.5	-27.3	-33.1	29.5	-58.1	400.9	25.5
2010 Jan.	126.6	-12.8	30.7	-32.3	4.7	30.5	-8.8	56.3	72.6	-14.2
Feb.	118.6	2.4	-3.9	-10.6	-8.2	-13.3	-1.0	28.9	101.7	22.5
Mar.	25.8	9.1	-6.0	11.8	-16.6	32.6	10.4	-9.7	16.4	-22.0
Apr.	282.1	4.0	-20.0	83.5	1.6	8.3	-1.0	96.5	121.2	-12.3
May	399.1	6.4	36.8	5.2	-4.0	-14.8	14.0	4.0	329.2	22.3
June <sup>(p)</sup>	-150.2	6.5	20.9	49.8	-24.9	-26.6	16.5	-158.6	-49.4	15.5

Source: ECB.

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

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

	M3 M2 M3-M2			M3 3-month	Longer-term financial	Credit to	Cred	it to other euro	area residents	Net		
		M2		M3-M2		moving average	liabilities	government		Loans	Memo item: Loans adjusted	assets 3)
	M1	M2-M1				(centred)					for sales and	
	1	2	3	4	5	6	7	8	9	10	11	12
						Outstandi	ng amounts					
2008 2009	3,980.2 4,492.2	4,033.1 3,688.4	8,013.3 8,180.6	1,372.0 1,146.3	9,385.4 9,327.0	-	6,286.8 6,761.6	2,576.2 2,899.9	12,966.7 13,087.2	10,777.2 10,779.2	-	437.2 555.7
2010 Q1	4,567.8	3,653.8	8,221.5	1,103.0	9,324.5	-	6,908.9	2,979.0	13,097.2	10,803.2	-	590.8
Q2 <sup>(p)</sup>	4,662.6	3,630.9	8,293.5	1,129.7	9,423.2	-	7,134.2	3,048.5	13,238.4	10,931.3	-	656.3
2010 Feb.	4,561.1	3,659.6	8,220.7	1,091.1	9,311.8	-	6,876.7	2,929.6	13,122.5	10,795.6	-	572.7
Mar.	4,567.8	3,653.8	8,221.5	1,103.0	9,324.5	-	6,908.9	2,979.0	13,097.2	10,803.2	-	590.8
May	4.645.6	3.630.0	8,205.1	1,120.0	9.379.0	-	7.021.6	3.025.0	13,102.0	10,859.0	-	689.9
June <sup>(p)</sup>	4,662.6	3,630.9	8,293.5	1,129.7	9,423.2	-	7,134.2	3,048.5	13,238.4	10,931.3	-	656.3
						Trans	actions					
2008	130.2	484.0	614.1	47.8	661.9	-	253.3	103.1	928.1	581.9	737.8	-150.3
2009	496.0	-368.3	127.7	-157.7	-30.0	-	420.7	308.8	83.7	-20.7	19.6	122.9
2010 Q1	71.6	-45.1	26.5	-43.7	-17.2	-	83.9	74.8	-6.4	7.8	-1.9	9.0
Q2 (9)	77.0	-32.6	44.5	23.9	68.4	-	-12.3	71.6	31.0	57.5	65.0	15.7
2010 Feb.	21.2	-11.7	9.5	-8.6	0.9	-	3.4	27.3	19.6	21.6	18.7	-17.6
Mar.	0.0 79.8	-0.2	0.4 40.4	11.1	11.5 53.4	-	35.6	50.2	-20.5	10.8	8.9 28.3	-94
May	-10.1	6.7	-3.3	-16.7	-20.1	-	-9.0	39.5	-16.7	18.5	19.2	48.1
June <sup>(p)</sup>	7.3	0.1	7.4	27.6	35.0	-	-39.0	26.2	31.0	12.1	17.5	-23.0
						Grow	th rates					
2008	3.4	13.7	8.3	3.6	7.6	7.1	4.2	4.2	7.7	5.7	7.1	-150.3
2009	12.4	-9.1	1.6	-11.6	-0.3	-0.2	6.7	11.9	0.6	-0.2	0.2	122.9
2010 Q1 Q2 <sup>(p)</sup>	10.8 9.2	-8.0 -7.2	1.6 1.4	-10.9 -7.3	-0.1 0.2	-0.2 0.0	5.9 3.7	9.7 8.1	0.2 0.0	-0.2 0.3	-0.1 0.2	155.5 76.3
2010 Feb.	11.0	-8.1	1.6	-12.6	-0.4	-0.2	5.7	9.2	0.3	-0.4	-0.2	139.2
Mar.	10.8	-8.0	1.6	-10.9	-0.1	-0.2	5.9	9.7	0.2	-0.2	-0.1	155.5
Apr.	10.7	-8.6	1.3	-10.0	-0.2	-0.1	6.0	8.7	0.4	0.2	0.2	87.9
May	10.3	-8.0	1.5	-9.8	-0.1	0.0	5.1	9.4	0.1	0.2	0.2	105.0
June (P)	9.2	-1.2	1.4	-1.3	0.2		5./	8.1	0.0	0.3	0.2	/6.3

Monetary aggregates 1) CI



#### Source: ECB.

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

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

For definitions of M1, M2 and M3, see glossary. Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated. 3)

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



## 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
				(	Jutstanc	ling amounts					
2008	710.6	3,269.7	2,464.5	1,568.6	350.3	754.9	266.9	2,576.9	121.6	1,984.4	1,603.9
2009	755.3	3,736.9	1,883.0	1,805.4	340.3	673.5	132.6	2,642.3	131.9	2,198.3	1,789.1
2010 Q1	775.5	3,792.3	1,817.2	1,836.6	342.9	625.2	134.9	2,704.8	132.2	2,242.0	1,829.9
Q2 <sup>(p)</sup>	785.1	3,877.5	1,791.0	1,840.0	399.3	605.5	124.8	2,718.3	127.7	2,340.3	1,947.9
2010 Feb.	764.8	3,796.3	1,830.1	1,829.5	323.6	641.7	125.8	2,685.2	131.2	2,245.2	1,815.1
Mar.	775.5	3,792.3	1,817.2	1,836.6	342.9	625.2	134.9	2,704.8	132.2	2,242.0	1,829.9
Apr.	769.2	3,879.3	1,773.6	1,843.0	359.2	624.2	136.6	2,721.1	131.2	2,261.2	1,848.7
May	780.4	3,865.2	1,784.2	1,845.8	358.2	615.9	129.3	2,743.0	129.0	2,254.3	1,895.3
June <sup>(p)</sup>	785.1	3,877.5	1,791.0	1,840.0	399.3	605.5	124.8	2,718.3	127.7	2,340.3	1,947.9
					Trar	isactions					
2008	83.6	46.5	463.4	20.5	47.0	32.6	-31.9	1.4	0.7	114.6	136.7
2009	43.4	452.6	-605.7	237.4	-10.1	-13.2	-134.4	79.6	8.9	191.4	140.8
2010 Q1	20.2	51.4	-75.3	30.2	2.4	-49.5	3.3	35.4	0.3	36.3	11.9
Q2 <sup>(p)</sup>	9.7	67.4	-43.4	10.8	56.2	-23.7	-8.5	-40.5	-3.6	0.0	31.8
2010 Feb.	4.0	17.3	-20.6	8.9	14.9	-16.8	-6.7	-15.7	-0.5	14.4	5.2
Mar.	10.7	-4.1	-13.4	7.1	19.2	-17.4	9.3	17.7	1.0	-3.5	7.6
Apr.	-6.2	86.0	-45.6	6.2	16.3	-5.1	1.9	9.2	0.2	17.2	9.0
May	11.1	-21.2	4.4	2.4	-1.2	-8.3	-7.3	-17.6	-1.1	-13.9	23.5
June <sup>(p)</sup>	4.8	2.5	-2.2	2.3	41.1	-10.4	-3.1	-32.2	-2.7	-3.4	-0.7
					Gro	wth rates					
2008	13.3	1.4	23.3	1.3	15.3	4.7	-10.6	0.1	0.5	6.1	9.3
2009	6.1	13.8	-24.4	15.1	-2.8	-1.8	-50.1	3.1	7.2	9.6	8.6
2010 Q1	6.8	11.7	-22.0	11.8	1.3	-11.8	-29.4	3.6	5.5	7.0	8.3
Q2 <sup>(p)</sup>	6.9	9.7	-19.5	8.7	15.9	-13.3	-29.1	1.4	-0.8	4.6	6.3
2010 Feb.	6.0	12.0	-22.5	12.7	-1.2	-9.4	-41.0	2.8	5.9	8.1	7.2
Mar.	6.8	11.7	-22.0	11.8	1.3	-11.8	-29.4	3.6	5.5	7.0	8.3
Apr.	5.5	11.8	-22.6	10.6	7.2	-11.8	-32.3	4.1	4.7	7.0	7.8
May	6.8	11.0	-21.2	9.7	9.8	-12.4	-33.0	2.8	2.3	5.6	8.0
June <sup>(p)</sup>	6.9	9.7	-19.5	8.7	15.9	-13.3	-29.1	1.4	-0.8	4.6	6.3

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## C3 Components of monetary aggregates 1)





1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

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C4 Components of longer-term financial liabilities 1)

debt securities with a maturity of over 2 years . . . . deposits with an agreed maturity of over 2 years



Source: ECB.

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



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

	Insurance corporations and pension funds	Other financial intermediaries <sup>3)</sup>	]	Non-financial	corporations			House	holds <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
			Outsta							
2008	104.9	973.0	4,822.5	1,381.6	961.1	2,479.8	4,876.8	631.0	3,482.3	763.5
2009	90.0	1,059.9	4,685.9	1,185.8	936.9	2,563.2	4,943.4	630.3	3,542.4	770.7
2010 Q1	87.4	1,048.7	4,684.9	1,169.7	926.4	2,588.7	4,982.3	622.4	3,581.0	778.8
Q2 <sup>(p)</sup>	86.9	1,092.1	4,668.8	1,133.8	918.4	2,616.6	5,083.5	636.4	3,634.9	812.2
2010 Feb.	91.3	1,042.4	4,694.7	1,183.9	931.2	2,579.7	4,967.2	624.8	3,565.5	776.9
Mar.	87.4	1,048.7	4,684.9	1,169.7	926.4	2,588.7	4,982.3	622.4	3,581.0	778.8
Apr.	90.5	1,069.7	4,664.1	1,152.8	921.5	2,589.9	4,997.1	623.8	3,593.5	779.9
May	90.2	1,070.9	4,689.2	1,164.1	920.9	2,604.1	5,008.7	623.1	3,604.7	781.0
June <sup>(p)</sup>	86.9	1,092.1	4,668.8	1,133.8	918.4	2,616.6	5,083.5	636.4	3,634.9	812.2
			Ti	ransactions						
2008	-3.7	87.2	418.7	86.8	119.8	212.0	79.8	10.4	52.3	17.1
2009	-13.6	35.9	-105.7	-181.0	-18.2	93.5	62.6	-0.9	51.2	12.3
2010 Q1	-2.8	-32.3	2.7	-10.5	-8.1	21.3	40.2	-4.1	36.4	7.9
Q2 <sup>(p)</sup>	-1.1	34.5	-14.2	-31.7	-4.5	22.0	38.3	-7.9	35.8	10.4
2010 Feb.	3.7	-6.6	12.8	-2.2	1.9	13.0	11.7	-1.7	10.4	3.0
Mar.	-4.0	3.7	-4.9	-7.6	-3.6	6.2	16.0	-0.5	14.5	2.0
Apr.	3.1	19.5	-11.8	-16.5	-1.3	6.0	16.1	0.1	12.5	3.6
May	-0.5	-8.3	18.1	9.9	-1.7	9.9	9.3		9.1	1.4
June <sup>(p)</sup>	-3.7	23.4	-20.5	-25.1	-1.5	6.1	12.9	-6.7	14.2	5.4
			G	rowth rates						
2008	-3.5	10.0	9.5	6.7	13.9	9.4	1.7	1.7	1.5	2.3
2009	-13.0	3.6	-2.2	-13.1	-1.9	3.8	1.3	-0.1	1.5	1.6
2010 Q1	-11.4	0.1	-2.3	-11.2	-4.1	3.0	2.2	-1.0	2.6	2.8
Q2 <sup>(p)</sup>	-13.4	-0.4	-1.9	-10.1	-4.6	3.3	2.8	-1.6	3.4	3.4
2010 Feb.	-5.4	-0.6	-2.4	-12.0	-3.5	3.1	1.8	-0.8	2.1	2.7
Mar.	-11.4	0.1	-2.3	-11.2	-4.1	3.0	2.2	-1.0	2.6	2.8
Apr.	-7.4	2.3	-2.5	-11.4	-4.7	3.0	2.5	-0.3	2.9	3.1
May	-7.8	0.5	-2.1	-10.4	-4.7	3.2	2.6	-0.3	3.1	2.9
June <sup>(p)</sup>	-13.4	-0.4	-1.9	-10.1	-4.6	3.3	2.8	-1.6	3.4	3.4

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C5 Loans to other financial intermediaries and non-financial





Source: ECB. 1) MFI sector

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1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

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

1) 2) 3) 4) Including non-profit institutions serving households.



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

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

	Insurance corporations and pension funds           Total         Up to         Over 1         Over 1           1         year         and up to         5 year			funds	Othe	er financial int	ermediaries <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	5	4	Outstand	ding amounts	/	0	9	10	11	12
2009	80.3	57.4	7.0	15.9	1,052.9	593.4	186.2	273.3	4,692.3	1,181.7	937.3	2,573.2
${}^{2010}_{Q2}{}^{(p)}_{^{(p)}}$	87.0 91.1	65.2 69.7	5.9 5.6	15.9 15.8	1,056.3 1,102.6	594.4 590.5	184.9 214.2	277.0 297.9	4,681.4 4,677.1	1,166.5 1,145.9	927.6 918.3	2,587.3 2,612.9
2010 Apr. May June <sup>(p)</sup>	92.1 93.8 91.1	70.2 71.7 69.7	6.1 5.8 5.6	15.9 16.3 15.8	1,077.5 1,083.5 1,102.6	613.5 617.0 590.5	186.1 186.0 214.2	277.9 280.5 297.9	4,668.2 4,688.0 4,677.1	1,156.5 1,160.9 1,145.9	923.0 922.9 918.3	2,588.7 2,604.3 2,612.9
					Trai	nsactions						
2009	-11.9	-11.8	0.9	-0.9	39.4	24.4	7.6	7.4	-105.0	-180.8	-18.0	93.8
2010 Q1 Q2 <sup>(p)</sup>	6.5 3.5	7.7 4.0	-1.2 -0.3	0.0 -0.2	-17.7 36.5	-15.1 28.1	-5.8 5.2	3.1 3.2	-7.1 -2.5	-9.7 -16.3	-7.4 -5.8	9.9 19.6
2010 Apr. May June <sup>(p)</sup>	5.1 1.5 -3.1	4.9 1.5 -2.5	0.2 -0.4 -0.1	0.0 0.4 -0.5	19.6 -3.5 20.5	18.3 -2.9 12.7	0.7 -1.4 6.0	0.6 0.8 1.8	-4.3 12.9 -11.0	-9.6 3.0 -9.7	-1.0 -1.3 -3.5	6.3 11.1 2.3
					Gro	wth rates						
2009	-13.1	-17.1	14.2	-4.8	4.1	4.3	4.4	3.1	-2.2	-13.1	-1.9	3.8
2010 Q1 Q2 <sup>(p)</sup>	-11.3 -13.1	-12.7 -14.7	-12.0 -29.1	-3.2 3.6	-0.1 -0.2	-0.7 -1.2	-5.6 -3.9	5.4 5.1	-2.3 -1.9	-11.2 -10.1	-4.1 -4.5	3.0 3.3
2010 Apr. May June <sup>(p)</sup>	-7.5 -7.8 -13.1	-8.2 -8.5 -14.7	-2.4 -7.9 -29.1	-5.3 -3.9 3.6	2.2 0.4 -0.2	3.6 0.4 -1.2	-5.3 -5.9 -3.9	4.2 5.0 5.1	-2.5 -2.1 -1.9	-11.4 -10.3 -10.1	-4.7 -4.8 -4.5	3.0 3.2 3.3

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

	Total Consumer credit					L	oans for hous	e purchase			Other lo	ans	
		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	0	utstanding am	Jounts	8	9	10	11	12	15
2009	4,954.8	632.3	135.5	195.0	301.8	3,550.9	14.8	60.9	3,475.1	771.6	146.2	87.3	538.1
2010 Q1 Q2 <sup>(p)</sup>	4,972.7 5,086.9	620.2 639.7	129.3 140.8	191.5 192.7	299.4 306.2	3,575.3 3,629.9	14.5 13.9	59.0 56.5	3,501.8 3,559.4	777.2 817.3	146.8 152.5	85.7 86.1	544.6 578.7
2010 Apr. May June <sup>(p)</sup>	4,981.1 4,995.7 5,086.9	621.4 621.0 639.7	128.9 130.0 140.8	191.9 190.1 192.7	300.7 300.9 306.2	3,582.7 3,595.9 3,629.9	14.6 14.7 13.9	58.9 58.7 56.5	3,509.2 3,522.5 3,559.4	777.0 778.8 817.3	145.5 144.6 152.5	84.1 84.2 86.1	547.4 550.0 578.7
						Transactior	ıs						
2009	63.1	-0.8	-1.3	-4.3	4.8	51.5	-2.6	-8.2	62.4	12.3	-7.8	-1.7	21.9
${ \begin{array}{c} 2010 \ Q1 \\ Q2 \ ^{(p)} \end{array} }$	19.2 51.0	-8.4 -2.4	-5.2 1.7	-2.3 -6.5	-0.8 2.3	22.3 36.4	-0.2 -0.7	-1.6 -2.2	24.1 39.4	5.3 17.0	0.1 -0.6	-0.8 -3.5	6.1 21.1
2010 Apr. May June <sup>(p)</sup>	9.7 12.3 29.0	0.0 -1.0 -1.4	-0.4 0.3 1.8	-0.5 -1.5 -4.5	0.9 0.1 1.3	7.4 11.2 17.9	0.0 0.2 -0.9	-0.1 -0.3 -1.8	7.5 11.3 20.6	2.3 2.1 12.6	-1.2 -0.3 0.8	-0.4 0.0 -3.1	3.9 2.4 14.8
						Growth rate	es						
2009	1.3	-0.1	-0.9	-2.1	1.6	1.5	-15.2	-12.0	1.8	1.6	-5.1	-1.9	4.2
2010 Q1 Q2 <sup>(p)</sup>	2.2 2.8	-1.0 -1.6	-2.9 -2.1	-2.3 -5.1	0.7 0.9	2.6 3.4	-11.7 -11.5	-9.9 -11.2	2.9 3.8	2.8 3.4	-2.4 -5.3	-1.2 -5.3	5.0 7.4
2010 Apr. May June <sup>(p)</sup>	2.5 2.6 2.8	-0.3 -0.4 -1.6	-2.0 -0.9 -2.1	-1.7 -2.3 -5.1	1.4 1.1 0.9	2.9 3.1 3.4	-9.1 -8.1 -11.5	-10.0 -10.2 -11.2	3.2 3.4 3.8	3.1 2.9 3.4	-1.5 -1.2 -5.3	-2.1 -2.1 -5.3	5.2 4.9 7.4

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

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

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

		G	eneral governme	nt			Non-o	euro area reside	nts			
	Total	Central	Other	general governm	nent	Total	Banks 3)		Non-banks			
		go en mient	State government	Local government	Social security funds			Total	General government	Other		
	1	2	3	4	5	6	7	8	9	10		
	Outstanding amounts											
2008 2009	968.4 1,002.3	227.1 229.9	210.1 211.0	509.0 527.7	22.2 33.8	3,247.8 2,826.3	2,282.0 1,917.4	965.8 908.9	57.8 46.3	908.1 862.6		
2009 Q2 Q3 Q4 2010 Q1 <sup>(p)</sup>	999.0 994.7 1,002.3 1,032.8	249.4 235.9 229.9 242.9	206.5 209.7 211.0 210.5	514.5 518.3 527.7 537.0	28.6 30.7 33.8 42.2	2,949.2 2,808.1 2,826.3 2,954.7	1,999.9 1,894.1 1,917.4 1,987.8	949.3 914.0 908.9 966.9	57.1 47.7 46.3 47.0	892.2 866.2 862.6 920.0		
	Transactions											
2008 2009	13.7 36.0	12.4 2.8	-8.1 0.9	16.5 20.8	-7.2 11.5	-59.3 -385.5	-85.8 -346.8	26.4 -39.3	0.3 -1.5	26.1 -37.8		
2009 Q2 Q3 Q4 2010 Q1 <sup>(p)</sup>	28.0 -4.2 10.2 30.0	16.9 -13.4 -6.2 12.6	0.9 3.2 1.3 -0.4	2.6 3.9 12.0 9.4	7.6 2.1 3.1 8.5	-72.3 -75.1 -4.0 54.0	-78.9 -70.0 10.6 24.1	6.9 -5.1 -15.4 29.6	-1.1 0.8 -1.4 -0.6	8.1 -5.9 -14.0 30.2		
				Gi	rowth rates							
2008 2009	1.4 3.7	5.8 1.2	-3.7 0.5	3.3 4.1	-24.5 52.0	-1.8 -11.8	-3.6 -15.1	2.8 -4.1	0.5 -3.1	3.0 -4.2		
2009 Q2 Q3 Q4 2010 Q1 <sup>(p)</sup>	2.6 1.7 3.7 6.6	12.8 4.5 1.2 4.2	-4.1 -0.2 0.5 2.4	3.9 4.4 4.1 5.5	-31.9 -32.3 52.0 101.0	-13.8 -18.2 -11.8 -3.2	-16.5 -21.9 -15.1 -5.4	-7.5 -9.4 -4.1 1.7	-7.8 -1.3 -3.1 -4.7	-7.5 -9.9 -4.2 2.1		

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







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)</sup>, <sup>2)</sup> (EUR billions and annual growth rates; outstanding amoun

### 1. Deposits by financial intermediaries

	v		Insurance corp	orations and	d pension fun	ds		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
						Outstand	ing amou	nts						
2008 2009	761.9 738.3	84.4 84.2	114.3 87.0	537.5 543.3	1.1 2.2	1.5 1.4	23.1 20.2	1,803.1 1,873.1	320.3 313.4	420.6 335.3	852.9 957.6	12.3 15.9	0.1 0.0	197.0 250.9
${ \begin{array}{c} 2010 \ Q1 \\ Q2 \ ^{(p)} \end{array} } \\$	735.7 739.7	87.0 94.7	84.8 84.9	539.7 535.8	2.5 2.3	1.4 0.3	20.2 21.8	1,888.4 2,070.7	329.3 368.0	312.0 299.1	957.9 1,059.5	17.1 9.0	0.1 0.2	271.9 334.9
2010 Feb. Mar. Apr. May June <sup>(p)</sup>	736.4 735.7 735.9 732.7 739.7	90.3 87.0 88.4 91.3 94.7	85.6 84.8 84.7 87.3 84.9	539.5 539.7 540.6 536.4 535.8	2.3 2.5 2.5 2.4 2.3	1.4 1.4 1.4 0.3 0.3	17.3 20.2 18.3 15.0 21.8	1,897.4 1,888.4 1,950.5 1,954.0 2,070.7	334.4 329.3 367.5 369.4 368.0	327.4 312.0 301.9 299.8 299.1	962.9 957.9 967.2 967.4 1,059.5	17.0 17.1 18.3 12.4 9.0	0.2 0.1 0.2 0.2 0.2	255.5 271.9 295.4 304.8 334.9
	Transactions													
2008 2009	69.4 -27.7	12.4 -1.0	42.8 -30.5	12.3 5.6	-0.3 1.1	0.1 -0.1	2.2 -2.8	268.9 56.6	4.5 6.8	71.8 -93.7	142.3 85.8	-0.3 3.7	-0.3 0.0	51.0 54.1
2010 Q1 Q2 <sup>(p)</sup>	-3.9 0.5	2.7 3.5	-3.2 0.7	-3.7 -6.1	0.3 -0.2	0.0 1.1	0.0 1.5	-1.5 72.3	13.7 33.6	-30.1 -19.8	-7.1 3.8	1.0 -8.2	0.1 0.1	20.9 62.7
2010 Feb. Mar. Apr. May June <sup>(p)</sup>	-7.2 -1.5 0.1 -5.2 5.6	-3.8 -3.3 1.3 2.6 -0.4	2.4 -1.6 -0.2 2.3 -1.3	-0.7 0.2 -0.2 -6.6 0 7	0.0 0.2 0.0 -0.1 -0.1	$0.0 \\ 0.0 \\ 1.1 \\ 0.0 \\ 0.0$	-5.0 3.0 -1.9 -3.3 6.8	9.2 -10.5 58.8 -4.9 18.4	-8.8 -5.4 37.3 -0.6 -3.2	-0.9 -16.1 -11.6 -3.8 -4 4	-2.9 -5.4 8.4 -3.9 -0.8	-0.1 0.0 1.2 -6.0 -3.4	$0.1 \\ 0.0 \\ 0.0 \\ 0.1 \\ 0.0$	21.8 16.4 23.4 9.2 30.1
						Grow	th rates							
2008 2009	10.0 -3.6	17.3 -1.1	60.0 -26.5	2.3 1.0	-23.4 96.8	-	10.5 -12.3	17.6 3.1	1.4 2.0	20.9 -22.0	20.0 10.0	-2.5 30.0	-	34.6 27.4
${}^{2010}_{Q2}{}^{(p)}_{(p)}$	-3.6 -1.9	-4.7 5.6	-16.5 -6.9	-1.1 -3.1	53.8 32.3	-	-5.6 14.4	1.2 1.6	2.7 6.7	-15.2 -16.1	3.1 -1.0	18.1 -37.2	-	15.9 31.2
2010 Feb. Mar. Apr. May June <sup>(p)</sup>	-3.2 -3.6 -3.6 -3.4 -1.9	-3.1 -4.7 -2.1 8.4 5.6	-14.6 -16.5 -15.6 -12.6 -6.9	-0.8 -1.1 -1.8 -3.2 -3.1	64.7 53.8 42.2 28.7 32.3	-	-18.9 -5.6 -12.1 -23.8 14.4	3.1 1.2 2.8 2.6 1.6	2.1 2.7 11.4 16.7 6.7	-13.0 -15.2 -20.0 -20.0 -16.1	5.7 3.1 3.3 0.9 -1.0	21.7 18.1 21.6 -17.1 -37.2	-	20.6 15.9 24.1 27.3 31.2

**C9 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. Data refer to the changing composition of the euro area. For further information, see the General Notes. 2)

3) Includes investment funds.

4)

Covers deposits in columns 2, 3, 5 and 7. Covers deposits in columns 9, 10, 12 and 14. 5)



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

			Non-fin	ancial corpo	orations						Households	3)		
	Total	Overnight	With an agreed	maturity of:	Redeemable	at notice of:	Repos	Total	Overnight	With an agreed	l 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
						Outstan	ding amo	ounts						
2008	1,502.8	883.4	502.2	64.4	27.9	1.3	23.7	5,368.6	1,813.3	1,350.0	517.9	1,490.2	113.6	83.7
2009	1,603.3	1,001.2	434.7	80.7	68.7	1.7	16.3	5,590.9	2,155.6	988.5	605.6	1,680.2	123.7	37.3
2010 Q1	1,576.3	982.1	424.4	82.6	72.9	1.8	12.6	5,594.4	2,157.8	924.8	631.7	1,722.3	121.7	36.1
Q2 <sup>(p)</sup>	1,587.7	1,004.9	413.5	84.8	70.8	1.5	12.3	5,648.0	2,229.7	895.9	643.2	1,729.3	117.1	32.8
2010 Feb.	1,534.7	954.1	414.8	81.7	70.7	1.8	11.7	5,611.7	2,176.5	935.8	625.0	1,715.9	121.6	37.0
Mar.	1,576.3	982.1	424.4	82.6	72.9	1.8	12.6	5,594.4	2,157.8	924.8	631.7	1,722.3	121.7	36.1
Apr.	1,587.9	995.3	417.9	86.3	73.7	1.9	12.8	5,609.2	2,182.7	908.1	636.0	1,728.7	119.8	33.9
May	1,596.1	1,004.0	415.5	88.1	74.1	1.8	12.7	5,618.8	2,191.1	902.1	641.1	1,734.2	118.1	32.3
June <sup>(p)</sup>	1,587.7	1,004.9	413.5	84.8	70.8	1.5	12.3	5,648.0	2,229.7	895.9	643.2	1,729.3	117.1	32.8
	Transactions													
2008	7.8	-5.1	13.3	3.2	-3.4	-0.3	0.0	347.5	28.7	335.5	-43.1	28.1	1.7	-3.4
2009	93.0	114.2	-70.1	15.0	40.8	0.4	-7.4	187.6	320.5	-371.3	85.6	190.5	8.6	-46.3
2010 Q1	-28.6	-20.5	-10.8	2.1	4.2	0.1	-3.7	1.2	2.1	-64.7	25.9	41.2	-2.0	-1.2
Q2 <sup>(p)</sup>	4.8	21.0	-17.5	2.1	-0.1	-0.3	-0.3	48.0	65.2	-33.3	12.6	12.7	-6.0	-3.3
2010 Feb.	-14.2	-11.0	-4.0	0.2	2.0	0.0	-1.4	-0.8	2.1	-18.7	9.5	6.9	-0.6	0.0
Mar.	42.9	28.4	10.5	0.9	2.2	0.1	0.8	-17.1	-18.7	-10.8	6.7	6.5	0.1	-0.9
Apr.	11.3	13.2	-6.7	3.7	0.8	0.0	0.2	14.6	24.9	-16.7	4.3	6.2	-1.8	-2.2
May	2.0	5.7	-5.2	1.4	0.2	0.0	-0.1	6.6	7.2	-7.5	4.9	5.3	-1.7	-1.6
June <sup>(p)</sup>	-8.5	2.1	-5.7	-3.0	-1.2	-0.3	-0.4	26.7	33.1	-9.1	3.4	1.2	-2.4	0.6
						Gro	wth rates	5						
2008	0.5	-0.6	2.8	5.4	-11.0	-16.2	0.0	6.9	1.6	33.2	-7.7	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	-27.3	16.4	12.8	7.5	-55.4
2010 Q1	6.9	12.7	-10.6	17.2	89.7	37.2	-29.8	2.7	13.6	-27.8	20.5	10.0	5.3	-41.2
Q2 <sup>(p)</sup>	4.1	9.3	-11.3	18.2	46.3	2.1	-37.5	2.5	10.6	-24.9	20.2	8.1	-2.1	-35.5
2010 Feb. Mar. Apr. May June <sup>(p)</sup>	5.1 6.9 6.6 5.7 4.1	11.3 12.7 13.8 12.2 9.3	-12.9 -10.6 -12.7 -12.2 -11.3	18.1 17.2 20.5 21.7 18.2	100.9 89.7 68.0 56.8 46.3	32.4 37.2 33.7 30.4 2 1	-45.1 -29.8 -35.2 -37.8 -37.5	3.1 2.7 2.3 2.1 2.5	15.6 13.6 11.6 10.3 10.6	-28.4 -27.8 -26.8 -25.9 -24.9	19.7 20.5 20.5 20.5 20.5 20.2	10.8 10.0 9.1 8.7 8 1	5.8 5.3 3.5 0.7	-47.1 -41.2 -40.3 -40.4 -35.5

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



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



1)

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

3) Including non-profit institutions serving households.

Covers deposits in columns 2, 3, 5 and 7

4) 5) Covers deposits in columns 9, 10, 12 and 14.



Source: ECB.

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

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

		Ge	neral governme	nt			Non-	euro area reside	nts				
	Total	Central government	Other	general governi	nent	Total	Banks 3)		Non-banks				
		8	State government	Local government	Social security funds			Total	General government	Other			
	1	2	3	4	5	6	7	8	9	10			
	Outstanding amounts												
2007 2008	373.7 445.0	126.9 191.0	59.0 52.3	107.6 115.9	80.3 85.8	3,862.1 3,715.5	2,953.9 2,818.1	908.2 897.4	143.3 65.8	764.9 831.7			
2009 Q2 Q3 Q4 2010 Q1 <sup>(p)</sup>	476.6 403.0 373.1 397.8	227.3 157.0 144.2 166.3	48.9 51.2 45.0 51.6	118.9 123.0 112.7 107.2	81.4 71.8 71.2 72.7	3,565.2 3,422.4 3,370.5 3,544.3	2,685.4 2,564.0 2,534.2 2,640.4	879.8 858.5 836.3 903.8	64.3 63.5 56.9 67.0	815.5 795.0 779.5 836.9			
					Transactions	-,	_,						
2008 2009	72.8 -64.9	63.5 -38.2	-6.5 -7.2	8.7 -4.0	7.1 -15.5	-183.5 -331.6	-165.9 -275.8	-17.6 -55.8	-36.9 -4.5	19.3 -51.3			
2009 Q2 Q3 Q4 2010 Q1 <sup>(p)</sup>	11.8 -62.1 -30.2 24.6	10.9 -58.9 -12.8 22.1	-1.6 2.3 -6.1 6.5	4.5 4.1 -10.3 -5.5	-2.0 -9.6 -0.9 1.5	-61.4 -80.1 -80.4 94.0	-67.8 -73.1 -56.3 49.5	6.4 -7.0 -24.1 44.4	0.7 -0.2 -2.7 9.1	5.7 -6.9 -21.5 35.4			
					Growth rates								
2007 2008	9.7 19.5	-2.4 49.9	29.9 -11.0	10.7 8.1	16.9 8.8	17.9 -4.6	21.3 -5.6	7.7 -1.8	15.8 -25.6	6.3 2.7			
2009 Q2 Q3 Q4 2010 Q1 <sup>(p)</sup>	15.3 2.9 -14.6 -12.1	43.7 18.6 -20.1 -17.5	-13.0 -16.6 -13.8 2.0	5.3 8.2 -3.4 -6.3	-4.9 -15.4 -17.9 -13.3	-14.7 -16.3 -8.9 -3.5	-15.6 -17.4 -9.8 -5.4	-11.9 -12.7 -6.2 2.3	-21.9 -27.0 -6.9 11.9	-10.4 -10.3 -6.2 1.6			

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



- 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. The term "banks" is used in this table to indicate institutions similar to MFIs which are resident outside the euro area. 3)



# **2.6** MFI holdings of securities: breakdown <sup>1</sup>), <sup>2</sup>) (EUR billions and annual growth rates; outstanding amounts a

			5	Securities o	ther than sh	ares				Shares and	l other equity	y	
	Total	MF	Is	Gen govern	eral nment	Other area res	euro sidents	Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents	
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro						
	1	2	3	4	5	6	7	8	9	10	11	12	
	Outstanding amounts												
2008	5,857.6	1,884.9	92.4	1,226.6	19.3	1,355.6	51.2	1,227.5	1,473.3	421.7	774.4	277.2	
2009	6,209.6	1,971.7	109.2	1,467.9	16.1	1,457.3	39.4	1,148.0	1,515.9	434.7	800.2	281.0	
2010 Q1	6,301.7	1,979.4	113.8	1,534.8	16.7	1,442.7	40.0	1,174.2	1,517.0	446.5	781.8	288.6	
Q2 <sup>(p)</sup>	6,322.8	1,913.2	117.2	1,551.3	18.5	1,492.7	29.8	1,200.2	1,528.6	456.3	775.0	297.3	
2010 Feb.	6,275.5	1,964.1	109.6	1,507.4	16.3	1,456.8	40.6	1,180.7	1,516.0	442.6	790.1	283.2	
Mar.	6,301.7	1,979.4	113.8	1,534.8	16.7	1,442.7	40.0	1,174.2	1,517.0	446.5	781.8	288.6	
Apr.	6,308.5	1,965.3	113.9	1,544.5	17.0	1,449.8	40.3	1,177.6	1,561.4	457.5	813.7	290.2	
May	6,272.2	1,942.5	115.7	1,535.2	17.8	1,440.6	28.4	1,192.0	1,544.3	465.7	789.6	289.0	
June <sup>(p)</sup>	6,322.8	1,913.2	117.2	1,551.3	18.5	1,492.7	29.8	1,200.2	1,528.6	456.3	775.0	297.3	
	Transactions												
2008	696.1	214.4	5.9	38.3	1.9	389.7	19.0	26.9	-84.8	22.4	-56.5	-50.7	
2009	353.3	83.0	16.6	230.7	-3.2	102.7	-12.0	-64.6	43.2	29.3	12.0	1.9	
2010 Q1	46.5	6.3	-0.4	65.1	-0.3	-17.3	-2.1	-4.8	10.2	13.3	-13.1	10.0	
Q2 <sup>(p)</sup>	-105.8	-67.8	-7.7	15.2	-0.4	5.2	-13.8	-36.4	22.1	12.2	1.0	9.0	
2010 Feb.	9.0	-14.3	-2.7	26.4	-3.1	3.8	-1.3	0.3	-15.0	-4.0	-12.1	1.1	
Mar.	22.8	15.6	3.6	28.7	0.4	-13.7	-1.2	-10.5	6.3	4.5	-6.0	7.8	
Apr.	-3.6	-12.6	-1.4	10.3	-0.1	6.9	-0.2	-6.5	48.8	12.7	34.9	1.2	
May	-85.4	-21.4	-5.1	-9.8	-0.6	-7.3	-14.4	-26.6	-10.8	9.4	-20.6	0.3	
June <sup>(p)</sup>	-16.8	-33.8	-1.1	14.7	0.3	5.6	0.8	-3.4	-15.9	-10.0	-13.4	7.4	
						Growth rate	es						
2008	13.4	12.8	8.1	3.2	9.9	39.9	57.2	2.2	-5.3	5.3	-6.7	-15.3	
2009	6.0	4.4	17.5	18.7	-16.0	7.6	-23.2	-5.3	2.9	7.0	1.5	0.7	
2010 Q1	2.3	-0.5	7.7	12.0	-19.1	3.1	-23.2	-4.1	3.5	7.5	0.6	5.8	
Q2 <sup>(p)</sup>	-2.2	-5.5	-3.3	6.6	-23.2	-0.4	-47.9	-7.0	3.6	8.5	-0.4	7.7	
2010 Feb. Mar. Apr. May June <sup>(p)</sup>	2.8 2.3 1.2 -1.2	-0.7 -0.5 -2.6 -4.9	5.4 7.7 9.6 -2.0	13.5 12.0 11.4 8.9	-18.5 -19.1 -19.8 -19.8 -23.2	5.8 3.1 1.7 0.3	-24.8 -23.2 -23.1 -49.1	-5.1 -4.1 -4.1 -6.4 -7.0	2.4 3.5 4.8 4.0 3.6	6.8 7.5 9.0 10.0 8 5	0.4 0.6 2.2 0.1	1.3 5.8 5.5 5.7 7 7	

## CI4 MFI holdings of securities <sup>2)</sup>



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



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

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

		Consume	er credit		L	ending for h	ouse 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	
2009 Q4	-2.5	-0.8	-0.8	-0.9	-1.1	0.0	-0.1	-1.0	-2.3	-0.4	-0.6	-1.2	
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 <sup>(p)</sup>	-1.6	-0.4	-0.4	-0.8	-1.5	0.0	-0.5	-1.0	-2.0	-0.2	-0.5	-1.3	
2010 Apr.	-0.3	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.2	-0.5	-0.1	-0.1	-0.3	
May	-0.4	-0.1	-0.1	-0.2	-0.4	0.0	0.0	-0.4	-0.5	-0.1	-0.1	-0.3	
June (p)	-0.9	-0.3	-0.2	-0.4	-0.9	0.0	-0.5	-0.4	-1.0	-0.1	-0.3	-0.6	

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

		Non-financial	corporations	No	n-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	-5.2	-3.4	-1.8
2008	-17.8	-4.1	-9.1	-4.6	-6.6	-3.4	-3.2
2009	-35.4	-12.7	-12.5	-10.2	-6.8	-2.6	-4.2
2009 Q4	-15.2	-5.3	-6.3	-3.7	-2.1	-0.5	-1.6
2010 Q1	-11.4	-7.1	-4.0	-0.3	-1.0	-0.4	-0.6
Q2 <sup>(p)</sup>	-16.7	-4.8	-6.1	-5.9	-1.0	-0.2	-0.8
2010 Apr.	-6.5	-1.2	-2.4	-3.0	-0.1	-0.1	-0.1
May	-5.3	-2.2	-1.6	-1.4	-0.5	-0.1	-0.3
June <sup>(p)</sup>	-5.0	-1.4	-2.1	-1.5	-0.4	0.0	-0.4

## 3. Revaluation of securities held by MFIs

			-	Securities o		Shares and other equity						
	Total	Ml	FIs	Gen gover	eral nment	Other area res	euro sidents	Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
	1	Euro 2	Non-euro	Euro 4	Non-euro 5	Euro	Non-euro 7	8	9	10	11	12
2007	-14.2	-3.3	0.1	-0.4	-0.2	-3.2	-0.6	-6.7	27.6	3.8	11.7	12.1
2008	-60.5	-12.1	0.0	4.5	0.0	-19.1	-2.2	-31.7	-63.6	-9.2	-46.2	-8.2
2009	4.3	8.2	0.2	-0.8	-0.1	-1.0	0.8	-2.9	1.0	-5.9	3.4	3.5
2009 Q4	1.1	1.2	0.1	-1.5	-0.1	0.2	-0.1	1.2	-0.4	-1.7	0.6	0.8
2010 Q1	14.3	3.2	0.3	4.5	0.1	2.4	0.1	3.7	0.4	-1.0	-0.2	1.7
Q2 <sup>(p)</sup>	-10.1	-1.9	0.7	-8.0	0.5	-4.2	0.2	2.7	-9.8	-3.2	-4.9	-1.7
2010 Apr.	-4.0	-1.7	0.0	-3.6	0.2	-0.1	0.0	1.2	-4.3	-1.7	-3.0	0.4
May	-0.8	-1.2	0.3	0.1	0.3	-1.6	0.0	1.4	-6.4	-1.2	-3.6	-1.6
June <sup>(p)</sup>	-5.3	1.0	0.4	-4.4	0.1	-2.5	0.1	0.0	0.8	-0.3	1.7	-0.5

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


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

#### 1. Deposits

			MF	<b>[S</b> <sup>3)</sup>				Non-MFIs							
	All	Euro <sup>4)</sup>		Non-eur	o currencies	5		All	Euro <sup>4)</sup>		Non-euro	o currencies	;		
	(outstanding amount)	_	Total				(	outstanding		Total					
	uniounit)	2		USD	JPY	CHF	GBP	uniouni)			USD	JPY	CHF	GBP	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
						By euro ar	ea resider	nts							
2007 2008	6,087.5 6,858.8	92.1 89.7	7.9 10.3	4.8 7.3	0.4 0.4	1.1 1.2	1.0 0.8	9,054.4 9,881.4	95.8 96.9	4.2 3.1	2.2 1.9	0.4 0.5	$\begin{array}{c} 0.1 \\ 0.1 \end{array}$	0.5 0.4	
2009 Q2 Q3	6,625.7 6,287.5	92.2 92.4	7.8 7.6	5.1 4.8	0.3 0.4	1.1 1.1	0.8 0.8	10,145.9 10,061.2	97.0 97.0	3.0 3.0	1.9 1.9	0.3 0.3	0.1 0.1	0.5 0.4	
Q4 2010 Q1 <sup>(p)</sup>	6,287.1 6,226.5	93.0 93.1	7.0 6.9	4.4 4.1	0.3 0.3	1.1 1.2	0.7 0.8	10,178.7 10,192.5	97.0 97.0	3.0 3.0	1.9 2.0	0.2 0.2	$0.1 \\ 0.1$	$\begin{array}{c} 0.4 \\ 0.4 \end{array}$	
					By	y non-euro	area resid	lents							
2007 2008	2,953.9 2,818.1	47.0 48.3	53.0 51.7	33.5 33.4	2.9 2.8	2.4 2.6	11.0 10.2	908.2 897.4	50.1 54.9	49.9 45.1	32.9 28.7	1.6 1.4	1.8 1.9	9.9 9.4	
2009 Q2 Q3	2,685.4 2,564.0	49.0 49.1	51.0 50.9	33.2 34.3	1.6 1.5	2.6 2.5	10.7 9.5	879.8 858.5	51.9 54.1	48.1 45.9	32.5 30.6	1.8 1.5	1.8 1.6	7.8 7.7	
Q4 2010 Q1 <sup>(p)</sup>	2,534.2 2,640.4	49.2 50.1	50.8 49.9	34.2 32.9	1.8 2.2	2.2 2.2	9.6 9.4	836.3 903.8	53.5 54.9	46.5 45.1	31.4 31.9	1.1 1.1	1.8 1.3	7.5 6.1	

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

	All	Euro <sup>4)</sup>			Non-euro currencies		
	(outstanding		Total				
	anount)		[	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2007 2008	4,933.2 5,111.7	81.5 83.3	18.5 16.7	9.2 8.4	1.7 2.0	1.9 1.9	3.4 2.5
2009 Q2 Q3 Q4 2010 Q1 <sup>(p)</sup>	5,225.1 5,203.1 5,179.1 5,294.8	83.6 84.0 83.3 82.5	16.4 16.0 16.7 17.5	8.3 8.2 8.7 9.5	1.8 1.8 1.7 1.6	1.8 1.9 1.9 1.9	2.7 2.3 2.5 2.5

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



#### **EURO AREA STATISTICS**

Money, banking and investment funds

### 2.8 Currency breakdown of selected MFI balance sheet items $^{1), 2)}$

#### 3. Loans

	MFIs <sup>3)</sup>							Non-MFIs						
	All	Euro <sup>4)</sup>		Non-e	uro currenci	es		All	Euro <sup>4)</sup>		Non-eu	iro currencie	s	
	(outstanding amount)		Total					(outstanding amount)		Total				
	Í Í			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 reside	ents						
2007 2008	5,794.2 6,312.0	-	-	-	-	-	-	11,098.9 11,740.6	96.2 95.9	3.8 4.1	1.8 2.1	0.2 0.3	0.9 1.0	0.6 0.4
2009 Q2	6,215.5	-	-	-	-	-	-	11,835.0	96.1	3.9	2.0	0.2	1.0	0.5
Q3	5,911.3	-	-	-	-	-	-	11,763.1	96.2	3.8	1.9	0.2	1.0	0.4
2010 Q1 <sup>(p)</sup>	5,919.3	-	-	-	-	-	-	11,830.1	96.1	3.9	2.0	0.2	1.0	0.4
						To non-eu	ro area resi	idents						
2007 2008	2,344.5 2,282.0	48.2 45.8	51.8 54.2	28.8 31.8	2.3 3.0	2.4 2.6	12.7 11.3	955.7 965.8	40.9 40.5	59.1 59.5	41.2 41.9	1.2 1.4	3.7 4.3	8.2 7.4
2009 Q2 Q3	1,999.9 1,894.1	45.2 45.5	54.8 54.5	29.6 29.9	2.8 2.7	3.2 3.1	13.5 12.6	949.3 914.0	40.2 40.4	59.8 59.6	42.5 41.9	1.1 1.5	3.9 3.8	7.6 7.6
Q4 2010 Q1 <sup>(p)</sup>	1,917.4 1,987.8	45.8 46.6	54.2 53.4	29.4 29.8	2.7 2.6	2.9 3.0	12.6 11.2	908.9 966.9	40.1 40.2	59.9 59.8	42.0 42.5	1.2 1.3	3.7 3.4	8.0 7.5

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

	Issued by MFIs <sup>3)</sup>						Issued by non-MFIs							
	All	Euro <sup>4)</sup>		Non-eur	o currencies	5		All	Euro <sup>4)</sup>		Non-eu	ro currencies	3	
	(outstanding amount)		Total					(outstanding amount)	-	Total				
				USD	JPY	CHF	GBP				USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
					Iss	ued by euro	o area res	idents						
2007	1,740.3	95.2	4.8	2.4	0.3	0.3	1.5	2,210.3	97.7	2.3	1.4	0.2	0.1	0.5
2008	1,977.4	95.3	4.7	2.6	0.4	0.2	1.2	2,652.7	97.3	2.7	1.7	0.3	0.1	0.4
2009 Q2	2,123.6	95.0	5.0	2.5	0.5	0.4	1.4	2,961.9	97.7	2.3	1.5	0.2	0.1	0.3
Q3	2,118.3	95.1	4.9	2.9	0.2	0.3	1.3	2,998.1	97.9	2.1	1.4	0.2	0.1	0.4
Q4	2,080.8	94.8	5.2	3.1	0.2	0.3	1.4	2,980.7	98.1	1.9	1.2	0.2	0.1	0.3
2010 Q1 <sup>(p)</sup>	2,093.2	94.6	5.4	3.2	0.2	0.3	1.4	3,034.2	98.1	1.9	1.2	0.2	0.1	0.3
					Issue	d by non-ei	uro area r	residents						
2007	582.4	53.9	46.1	27.3	0.7	0.4	14.4	652.3	35.9	64.1	39.3	4.5	0.8	12.6
2008	580.7	54.1	45.9	28.6	0.9	0.5	13.3	646.8	39.0	61.0	37.1	6.4	0.8	11.0
2009 Q2	571.0	55.3	44.7	24.6	1.7	1.4	14.6	633.1	33.5	66.5	41.4	4.0	0.9	15.0
Q3	562.7	56.3	43.7	25.3	0.6	0.5	14.7	618.5	34.8	65.2	39.3	4.2	0.9	15.1
Q4	547.2	55.8	44.2	26.3	0.4	0.5	14.8	600.9	34.9	65.1	38.5	4.2	0.9	15.2
2010 Q1 <sup>(p)</sup>	562.4	55.3	44.7	28.0	0.4	0.5	14.8	611.8	32.9	67.1	39.9	4.2	0.9	14.9

Source: ECB.
 MFI sector excluding the Eurosystem; sectoral classification is based on the ESA 95.
 Data refer to the changing composition of the euro area. For further information, see the General Notes.
 For non-euro area residents, the term "MFIs" refers to institutions similar to euro area MFIs.
 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) 7
	· ·	2	Outsta	nding amounts	5	0	,
2009 Nov.	5,240.8	340.4	2,043.5	1,562.3	693.6	208.2	392.8
Dec.	5,370.6	343.7	2,076.7	1,673.4	709.0	212.6	355.2
2010 Jan.	5,453.5	353.3	2,120.1	1,650.3	726.7	215.5	387.7
Feb.	5,527.4	355.6	2,146.3	1,670.2	741.5	216.8	397.0
Mar.	5,779.1	350.5	2,209.7	1,802.9	767.0	233.7	415.4
Apr.	5,863.9	358.2	2,232.7	1,817.7	780.6	235.1	439.6
May <sup>(p)</sup>	5,818.5	367.1	2,253.1	1,751.6	772.5	236.3	438.0
			Tr	ansactions			
2009 Q3	173.1	-9.0	69.9	112.6	9.1	2.7	-12.1
Q4	87.2	-11.9	58.2	42.7	15.5	5.9	-23.2
2010 Q1	184.6	-3.3	65.9	30.5	29.9	17.8	43.8

#### 2. Liabilities

	Total         Loans and deposits         Investment fund shares issued           received         Total         Held by euro area residents						Other liabilities
		received	Total	Held by euro area re	Investment funds	Held by non-euro area residents	(incl. financial derivatives)
	1	2	3	4	5	6	7
			Outstanding	g amounts			
2009 Nov. Dec.	5,240.8 5,370.6	98.2 101.2	4,808.0 4,965.2	3,911.5 4,020.1	528.8 539.6	896.5 945.1	334.6 304.2
2010 Jan. Feb. Mar. Apr. May <sup>(p)</sup>	5,453.5 5,527.4 5,779.1 5,863.9 5,818.5	101.1 101.0 113.1 120.7 115.6	5,014.7 5,077.1 5,293.0 5,354.3 5,298.4	4,042.9 4,082.1 4,221.8 4,234.9 4,173.7	546.7 559.3 582.6 594.0 582.3	971.8 995.0 1,071.2 1,119.4 1,124.6	337.7 349.3 373.0 389.0 404.5
			Transa	ctions			
2009 Q3 Q4 2010 Q1	173.1 87.2 184.6	0.8 4.0 5.4	186.2 107.7 132.4	94.7 77.1 96.2	16.7 15.3 22.2	91.4 30.6 36.2	-13.9 -24.5 46.8

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

	Total			Funds by inve	estment policy			Funds l	by type	Memo item: Money market
		Bond funds	Equity funds	Mixed funds	Real estate funds	Hedge funds	Other funds	Open-end funds	Closed-end funds	funds
	1	2	3	4	5	6	7	8	9	10
				(	Outstanding amo	ounts				
2009 Oct. Nov. Dec.	4,747.0 4,808.0 4,965.2	1,547.8 1,561.5 1,577.6	1,323.7 1,350.4 1,451.1	1,178.3 1,194.1 1,215.6	232.3 234.9 240.3	78.8 78.8 84.4	386.2 388.3 396.1	4,679.3 4,740.5 4,893.8	67.7 67.5 71.4	1,246.2 1,223.7 1,201.6
2010 Jan. Feb. Mar. Apr. May <sup>(p)</sup>	5,014.7 5,077.1 5,293.0 5,354.3 5,298.4	1,613.9 1,639.3 1,701.7 1,727.1 1,741.4	1,422.4 1,441.4 1,551.6 1,569.1 1,501.8	1,237.8 1,248.5 1,272.3 1,286.6 1,281.2	242.5 244.3 250.5 249.3 249.1	93.7 95.6 97.9 99.7 104.9	404.4 408.0 419.1 422.4 420.0	4,944.7 5,006.4 5,218.4 5,279.7 5,222.1	70.0 70.7 74.6 74.6 76.3	1,215.5 1,202.0 1,174.8 1,182.5 1,190.1
					Transactions	8				
2009 Nov. Dec.	20.0 51.1	8.6 4.9	5.3 18.8	4.4 15.4	1.2 7.0	-0.5 2.7	1.0 2.2	20.0 47.3	-0.1 3.7	-18.6 -36.7
2010 Jan. Feb. Mar. Apr. May <sup>(p)</sup>	60.9 21.8 49.7 28.6 -6.0	20.2 13.3 39.4 15.3 2.3	10.6 4.1 2.5 -0.9 -12.3	11.2 3.0 -5.6 11.6 1.7	7.9 1.1 1.2 0.5 -1.4	7.3 0.2 3.6 -0.1 1.6	3.8 0.0 8.6 2.2 2.1	60.2 21.6 48.3 28.9 -7.6	0.8 0.1 1.4 -0.3 1.6	3.0 -16.7 -30.1 -2.2 -15.7

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

#### 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		
					Outstandin	g amounts							
2009 Q2 Q3	1,872.9 1,998.6	1,293.8 1,384.6	357.9 388.6	635.7 669.0	173.3 186.0	4.0 4.9	122.9 136.2	579.1 614.0	161.9 180.2	234.6 234.4	21.8 21.8		
2010 Q1 <sup>(p)</sup>	2,076.7 2,209.7	1,413.3 1,463.1	387.7 392.5	689.1 710.1	186.8 199.5	5.5 5.9	144.3 155.1	663.3 746.6	198.8 211.4	252.0 290.2	15.9 15.3		
					Transa	ctions							
2009 Q3 Q4 2010 Q1 <sup>(p)</sup>	69.9 58.2 65.9	47.6 23.9 24.4	10.6 -2.9 0.3	20.9 19.0 9.0	6.1 0.2 8.2	0.3 0.5 0.0	9.7 7.1 6.8	22.2 34.3 41.5	11.2 15.9 10.7	3.5 13.3 16.4	-1.0 -6.2 -1.6		

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

	Total		Euro area						Rest of the world				
	1	Total 2	MFIs 3	General government 4	Other financial intermediaries 5	Insurance corporations and pension funds 6	Non-financial corporations 7	8	EU Member States outside the euro area 9	United States 10	Japan 11		
			·		Outstandir	g amounts			· · ·				
2009 Q2 Q3 Q4 2010 Q1 <sup>(p)</sup>	1,251.3 1,544.6 1,673.4 1,802.9	565.6 701.4 723.3 742.3	69.5 97.2 97.5 92.8		28.7 35.8 36.1 37.5	16.8 24.8 23.8 28.3	450.4 543.4 565.7 583.5	685.8 843.2 950.1 1,060.5	110.8 127.0 138.4 147.2	210.9 265.1 295.4 327.8	59.7 61.8 65.8 75.3		
					Transa	octions							
2009 Q3 Q4 2010 Q1 <sup>(p)</sup>	112.6 42.7 30.5	34.6 3.4 8.7	7.5 4.6 -0.1	- - -	4.1 1.0 0.6	2.3 -0.7 1.8	20.6 -1.5 6.4	78.0 39.3 21.8	2.4 3.2 0.2	34.0 7.4 1.8	1.4 3.5 0.9		

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

	Total			Eu	ro area				Rest of the v	vorld	
		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
					Outstandin	g amounts					
2009 Q2	628.0	540.2	82.9	-	457.3	-	-	87.9	12.9	16.2	0.4
Q3	680.4	592.0	78.1	-	514.0	-	-	88.4	14.5	18.9	0.3
Õ4	709.0	614.1	74.4	-	539.6	-	-	95.0	15.7	19.0	0.3
2010 Q1 <sup>(p)</sup>	767.0	654.1	71.5	-	582.6	-	-	112.9	18.2	33.5	0.5
					Transa	ctions					
2009 O3	9.1	10.5	-6.2	-	16.7	-	-	-1.5	0.9	-0.3	0.0
Ò4	15.5	10.9	-4.4	-	15.3	-	-	4.6	0.9	-0.4	0.1
2010 Q1 <sup>(p)</sup>	29.9	18.4	-3.7	-	22.2	-	-	11.5	1.3	12.2	0.2

Source: ECB.
Other than money market funds. For further details, see the General Notes.
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
2010 Q1						
External account	I					
Exports of goods and services Trade balance <sup>1)</sup>						461.8 -4.3
Generation of income account						
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) Compensation of employees Other taxes less subsidies on production Consumption of fixed capital <i>Net operating surplus and mixed income</i> <sup>1)</sup>	1,049.1 17.6 353.1 557.5	105.7 3.3 97.5 279.9	658.8 7.3 197.3 237.3	52.7 3.2 11.6 39.7	232.0 3.8 46.7 0.5	
Allocation of primary income account						
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income	623.5 363.9 259.6	36.4 34.0 2.4	234.3 62.6 171.7	290.8 205.4 85.4	62.0 62.0 0.0	4.9 86.2 48.2 38.0
Net national income <sup>1)</sup>	1,843.1	1,521.1	78.8	42.3	200.8	
Secondary distribution of income account						
Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims Other Net disposable income <sup>1</sup>	221.4 404.4 444.0 199.2 44.7 44.8 109.7 1,806.5	197.8 404.4 1.5 70.6 32.3 38.2 1,380.3	19.0 15.9 26.8 10.8 16.0 44.4	4.5 33.0 46.4 0.9 44.8 0.7 51.4	0.2 393.6 55.4 0.7 54.7 330.4	1.5 0.7 1.1 8.1 1.5 0.6 6.0
Use of income account						
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in the net equity of households in pension fund reserves <i>Net saving/current external account</i> <sup>1)</sup>	1,774.1 1,587.8 186.3 14.0 32.5	1,295.3 1,295.3 0.1 98.9	0.4 44.0	13.5 38.0	478.7 292.5 186.3 0.0 -148.4	0.0 38.4
Capital account						
Net saving/current external account Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital	424.0 407.6 16.4	130.0 127.8 2.2	237.1 223.3 13.8	10.1 10.0 0.1	46.9 46.6 0.2	
Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes Other capital transfers <i>Net lending</i> (+ <i>)/net borrowing</i> (- <i>) (from capital account)</i> <sup>1)</sup> Statistical discrepancy	-0.1 40.2 5.5 34.8 -35.9 0.0	-1.6 7.9 5.3 2.6 73.7 3.5	1.1 -0.8 0.2 -1.0 19.6 -3.5	-0.1 1.0 0.0 1.0 48.6 0.0	0.5 32.1 -177.8 0.0	0.1 4.8 0.0 4.8 35.9 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 Q1						
External account						
Imports of goods and services Trade balance						457.5
Generation of income account						
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) <sup>2)</sup> Compensation of employees Other taxes less subsidies on production Consumption of fixed capital <i>Net operating surplus and mixed income</i>	1,977.3 225.1 2,202.4	486.4	1,100.7	107.3	283.0	
Allocation of primary income account						
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income Net national income	557.5 1,051.7 241.7 615.8 348.3 267.5	279.9 1,051.7 225.9 54.0 172.0	237.3 75.7 32.8 42.9	39.7 293.4 254.6 38.9	0.5 241.7 20.7 6.9 13.7	2.4 1.0 93.9 63.8 30.1
Secondary distribution of income account						
Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims Other Net disposable income	1,843.1 222.0 404.0 442.3 164.2 44.8 43.7 75.7	1,521.1 1.2 442.3 89.9 34.6 55.3	78.8 16.2 11.0 8.1 2.9	42.3 47.2 45.8 44.8 0.6 0.4	200.8 222.0 339.4 17.4 0.3 17.1	0.9 1.2 2.8 43.1 1.5 1.6 40.0
Use of income account						
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in the net equity of households in pension fund reserves Net saving/current external account	1,806.5	1,380.3	44.4	51.4	330.4	0.0
Capital account						
Net saving/current external account Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital	32.5	98.9 97.5	44.0	38.0	-148.4 46.7	38.4
Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes Other coming transfers	42.7 5.5 27.2	13.7	15.7	9.9	3.4 5.5	2.3 0.0
Net lending (+)/net borrowing (-) (from capital account) Statistical discrepancy	31.2	13.7	15.7	9.9	-2.1	2.3

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-	Insurance corporations and pension	General govern- ment	Rest of the world
2010 Q1					mediaries	funds		
Opening balance sheet, financial assets								
Total financial assets		18,162.0	15,952.6	32,354.5	13,018.5	6,468.6	3,420.4	15,248.2
Monetary gold and special drawing rights (SDRs)				316.9				
Currency and deposits		6,425.4	1,827.9	9,428.6	1,978.6	852.3	652.7	3,634.9
Short-term debt securities		45.0	141.1	611.0	291.7	386.2	35.2	833.9
Long-term debt securities		1,3/4.6	210.0	0,301.0 12.686.7	2,122.0	2,074.6	350.3 452.0	3,226.1
of which: Long-term		57.0	1 632 6	9 819 9	2 324 3	317.1	366.5	1,700.0
Shares and other equity		4,264.5	7,333.3	2.062.8	5,173.6	2.272.3	1.286.0	5.210.7
Quoted shares		737.5	1,261.5	503.5	1,797.9	423.3	283.8	<i>.</i>
Unquoted shares and other equity		2,117.2	5,692.8	1,224.4	2,694.7	481.3	854.9	
Mutual fund shares		1,409.9	379.0	334.9	681.0	1,367.7	147.4	•
Insurance technical reserves		5,475.8	145.1	1.9	0.0	198.8	3.9	181.3
Other accounts receivable and financial derivatives		502.8	3,403.4	945.0	253.2	262.8	640.2	395.2
Nei jinanciai worin								
Tetal transactions in financial assets		105.0	00.8	155.4	152.6	122.6	12.2	241.0
Monetary gold and SDRs		105.0	99.0	-0.2	155.0	125.0	-13.2	0.2
Currency and deposits		-3.5	-30.9	3.2	-20.4	-2.9	7.4	89.1
Short-term debt securities		-6.5	9.1	17.0	-4.0	0.6	-9.1	2.3
Long-term debt securities		-9.2	12.5	57.5	69.2	75.9	-4.5	79.8
Loans		-1.7	76.5	26.9	83.7	6.8	-2.5	-15.1
of which: Long-term		-1.7	30.9	27.1	38.4	6.0	-1.1	•
Shares and other equity		27.9	24.8	-11.0	24.1	31.0	9.6	70.3
Quoted shares		11.0	15.8	8.1	16.6	-1.7	0.3	•
Unquoted snares and other equity Mutual fund shares		13./	12.0	-15./	-21.0	2.4	0.1	•
Insurance technical reserves		87.6	-5.0	-3.4	29.1	67	0.0	. 4.4
Other accounts receivable and financial derivatives		10.5	5.7	62.1	0.9	5.6	-14.0	10.9
Changes in net financial worth due to transactions								
Other changes account, financial assets								
Total other changes in financial assets		108.3	262.6	179.8	235.7	102.5	14.0	375.9
Monetary gold and SDRs				23.3				
Currency and deposits		3.8	4.3	53.7	29.0	2.2	-0.2	84.3
Short-term debt securities		1.6	4.5	3.2	11.1	0.8	0.6	2.7
Long-term debt securities		-4.0	3.0	30.4	35.4	18.6	4.0	96.3
Loans		0.0	26.3	45.4	2.7	0.1	-0.3	12.1
of which: Long-Ierm		0.0	15.5	15.3	6.4 155.6	-0.5	-5.3	176.2
Quoted shares		29.0	211.2	23.2	88.8	14.9	0.0 8.0	170.2
Unquoted shares and other equity		3.9	160.2	89	59.4	6.2	-2.7	
Mutual fund shares		19.1	16.7	3.4	7.4	54.0	3.5	
Insurance technical reserves		58.2	0.1	0.0	0.0	3.9	0.0	-1.5
Other accounts receivable and financial derivatives		-3.3	13.1	0.5	2.0	2.0	1.0	5.8
Other changes in net financial worth								
Closing balance sheet, financial assets								
Total financial assets Monetary gold and SDPs		18,375.2	16,315.0	32,689.7	13,407.8	6,694.7	3,421.2	15,865.8
Currency and deposits		6 4 2 5 6	1 801 3	9 485 5	1 987 2	851.6	659.9	3 808 3
Short-term debt securities		40.0	154.7	631.2	298.8	387.6	26.7	838.9
Long-term debt securities		1,361.4	232.1	6,389.5	2,226.6	2,169.1	349.8	3,402.1
Loans		72.3	2,988.0	12,759.0	3,285.8	428.5	449.1	1,763.0
of which: Long-term		55.2	1,679.0	9,862.4	2,369.1	322.7	360.2	
Shares and other equity		4,344.4	7,569.3	2,075.1	5,353.3	2,378.3	1,304.5	5,457.1
Quoted shares		777.5	1,311.6	522.6	1,903.3	436.4	292.1	•
Unquoted shares and other equity		2,134.8	5,865.6	1,217.6	2,732.5	489.9	858.2	•
Insurance technical reserves		1,432.1 5,621.6	392.1 147.2	334.9	/1/.4	200 2	154.1	184 2
Other accounts receivable and financial derivatives		510.0	3.422.3	1.007.5	256.0	270.4	627.2	411.9
Net financial worth		11010	.,	-,				

Source: ECB.



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

Liabilities	Euro area	Households	Non-financial corporations	MFIs	Other financial inter-	Insurance corporations and pension	General govern- ment	Rest of the world
2010	Q1				mediaries	funds		
Opening balance sheet, liabilities								
Total liabilities		6,571.1	24,743.7	31,589.9	12,908.3	6,557.3	8,206.3	13,731.2
Monetary gold and special drawing rights (SDRs)		,	,	,	<i>.</i>	,	,	,
Currency and deposits			29.2	22,013.3	23.8	0.0	233.9	2,500.2
Short-term debt securities			303.0	688.0	69.0	9.6	1,007.6	266.9
Long-term debt securities		5 001 5	524.1	4,561.1	2,604.2	40.7	5,166.7	2,768.9
Loans		5,891.5	8,206.0		2,894.0	244.6	1,351.6	2,897.3
Of which: Long-term		5,552.1	5,/88./	2 0 1 7 5	1,380.4	90.5 401.6	1,107.5	49172
Quoted shares			3 398 8	2,917.3	192.0	491.0	0.5	4,017.5
Unquoted shares and other equity		67	8 843 6	1 142 8	2 174 2	318.8	63	
Mutual fund shares		0.7	0,015.0	1,201.3	4,755,3	510.0	0.5	
Insurance technical reserves		34.1	331.5	65.6	0.8	5,574.3	0.5	
Other accounts payable and financial derivatives		638.8	3,107.6	1,344.5	195.0	196.4	439.6	480.6
Net financial worth <sup>1)</sup>	-1,200.1	11,590.8	-8,791.1	764.6	110.2	-88.6	-4,785.9	
Financial account, transactions in liabilities								
Total transactions in liabilities		27.8	83.8	143.8	124.3	115.9	164.6	206.0
Monetary gold and SDRs								
Currency and deposits			0.1	40.7	-0.4	0.0	-11.3	12.9
Short-term debt securities			7.9	28.4	0.3	1.2	-15.2	-13.2
Long-term debt securities			27.6	45.9	-18.1	0.1	178.5	47.0
Loans		13.9	21.8		4.7	12.3	18.6	103.2
of which: Long-term		19.6	18.1		-12.0	0.9	3.4	
Shares and other equity			50.7	-41.3	125.7	0.7	0.0	40.8
Quoted shares			10.3	5.7	0.3	0.0	0.0	
Unquoted shares and other equity		0.0	40.4	-3.2	-4.6	0.7	0.0	
Mutual fund shares		0.1	1.0	-43.9	130.0	101.0	0.0	•
Insurance technical reserves		0.1	1.0	-1.6	0.0	101.3	0.0	15.0
Other accounts payable and financial derivatives	25.0	13./	-25.5	/1.8	12.1	0.3	-0.1	15.2
	-55.9	11.2	10.1	11.0	29.3	1.1	-177.0	55.9
Other changes account, liabilities								
Total other changes in liabilities		-0.8	252.9	129.6	319.7	77.3	46.2	430.6
Monetary gold and SDRs								
Currency and deposits			0.0	112.0	0.0	0.0	0.0	65.0
Short-term debt securities			6.3	7.7	1.3	0.1	0.7	8.5
Long-term debt securities		0.2	10.4	50.0	20.7	0.8	42.9	04.1 54.7
of which: Long term		-9.3	10.4		29.7	-0.2	1.1	54.7
Shares and other equity		-0.2	188 5	21.5	246.5	20.1	-0.1	225 5
Ouoted shares			81.3	-27.0	14.5	6.7	0.0	
Unquoted shares and other equity		0.1	107.2	31.1	38.8	13.4	-0.1	
Mutual fund shares				17.4	193.2			
Insurance technical reserves		0.0	0.0	0.0	0.0	60.8	0.0	
Other accounts payable and financial derivatives		8.5	40.0	-48.3	10.6	-4.2	1.6	12.9
Other changes in net financial worth <sup>1</sup> )	78.0	109.1	9.7	50.3	-84.0	25.2	-32.2	-54.7
Closing balance sheet, liabilities								
Total liabilities		6,598.1	25,080.4	31,863.2	13,352.3	6,750.5	8,417.1	14,367.8
Monetary gold and SDRs								
Currency and deposits			29.4	22,166.0	23.4	0.0	222.7	2,578.1
Short-term debt securities			317.3	724.1	70.6	10.8	993.1	262.2
Long-term debt securities		E 007 1	559.5	4,643.6	2,617.8	41.6	5,388.2	2,880.0
Loans		5,896.1	8,238.2		2,928.3	256.7	1,3/1.3	3,055.2
of which: Long-term Shares and other equity		3,343.6	5,812.7	2 807 6	1,383.7	97.1 512.5	1,1/1.9	5 092 5
Quoted shares			3 490 3	2,097.0	206.8	512.5 178 5	0.2	5,085.5
Unquoted shares and other equity		6.8	8 991 2	1,170.7	2,208.4	332.9	6.2	·
Mutual fund shares		0.0	0,771.2	1,174.8	5,078.6	552.9	0.2	·
Insurance technical reserves		34.2	332.5	64.0	0.8	5.736.4	0.6	·
Other accounts payable and financial derivatives		661.0	3,122.1	1,368.0	217.7	192.5	435.2	508.8
Net financial worth 1)	-1,158.0	11,777.2	-8,765.4	826.5	55.5	-55.7	-4,995.9	
Source: ECB.								



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

Uses	2006	2007	2008	2008 Q2- 2009 Q1	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1
Generation of income account								
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) Compensation of employees Other taxes less subsidies on production Consumption of fixed capital <i>Net operating surplus and mixed income</i> <sup>1</sup> )	4,070.7 128.5 1,251.9 2,186.0	4,256.3 136.2 1,318.9 2,334.9	4,433.0 133.1 1,382.2 2,344.8	4,438.0 129.7 1,391.8 2,279.0	4,434.4 122.7 1,397.7 2,198.7	4,424.7 117.2 1,401.7 2,154.5	4,415.8 110.8 1,405.1 2,138.7	4,417.3 106.6 1,408.3 2,159.0
Allocation of primary income account								
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income <i>Net national income</i> <sup>1)</sup>	3,021.4 1,649.2 1,372.1 7,327.2	3,591.9 2,067.4 1,524.5 7,715.1	3,878.9 2,322.6 1,556.3 7,795.9	3,747.2 2,222.8 1,524.4 7,707.9	3,486.1 2,057.9 1,428.2 7,612.4	3,208.9 1,839.3 1,369.6 7,547.8	2,964.6 1,641.7 1,322.9 7,530.5	2,850.3 1,538.8 1,311.5 7,554.7
Secondary distribution of income account								
Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims Other Net disposable income <sup>1</sup>	1,028.3 1,540.7 1,554.0 722.9 179.9 180.2 362.8 7,234.7	1,112.1 1,594.6 1,600.1 752.9 184.3 184.1 384.5 7,619.8	1,123.4 1,660.7 1,667.4 786.0 187.8 188.8 409.4 7,690.4	1,106.0 1,667.8 1,691.8 782.4 185.6 186.6 410.2 7,603.0	1,068.4 1,667.2 1,723.5 777.8 183.2 183.9 410.7 7,506.7	1,038.0 1,668.7 1,754.7 772.2 179.9 180.4 412.0 7,440.6	1,012.5 1,669.6 1,783.9 772.1 176.9 177.1 418.2 7,422.1	1,010.7 1,672.4 1,803.9 776.8 177.6 177.7 421.6 7,441.1
Use of income account								
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in the net equity of households in pension fund reserves <i>Net saving</i> <sup>1)</sup>	6,635.2 5,948.2 687.0 63.4 599.7	6,898.5 6,186.0 712.5 60.4 721.4	7,162.4 6,411.0 751.4 65.1 528.0	7,168.0 6,403.2 764.8 64.9 435.0	7,159.8 6,385.8 774.0 63.2 346.8	7,151.4 6,368.0 783.4 61.2 289.2	7,167.2 6,376.3 791.0 59.9 254.9	7,196.1 6,405.0 791.1 59.2 245.1
Capital account								
Net saving Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital	1,878.5 1,855.7 22.9	2,021.7 1,991.3 30.4	2,057.1 2,022.5 34.6	1,989.0 1,969.7 19.3	1,890.5 1,898.2 -7.7	1,809.5 1,836.7 -27.2	1,734.7 1,791.5 -56.8	1,715.6 1,767.1 -51.4
Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes Other capital transfers <i>Net lending</i> (+)/ <i>net borrowing</i> (-) (from capital account) <sup>1)</sup>	-0.4 169.6 22.5 147.1 -11.9	-1.2 151.9 24.3 127.7 34.3	0.7 160.5 23.8 136.7 -137.3	1.1 159.4 23.6 135.8 -155.4	0.7 171.1 28.6 142.5 -138.5	0.3 174.2 29.0 145.2 -110.3	1.4 182.3 33.9 148.4 -67.3	1.2 187.3 34.3 153.0 -53.8

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 Q2- 2009 Q1	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1
Generation of income account								
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) <sup>23</sup> Compensation of employees Other taxes less subsidies on production Consumption of fixed capital <i>Net operating surplus and mixed income</i>	7,637.1 914.8 8,551.9	8,046.3 960.0 9,006.3	8,293.1 946.0 9,239.2	8,238.5 929.5 9,168.1	8,153.4 912.5 9,065.9	8,098.1 901.3 8,999.4	8,070.3 894.5 8,964.8	8,091.2 894.4 8,985.6
Allocation of primary income account								
Net operating surplus and mixed income Compensation of employees Taxes less subsidies on production Property income Interest Other property income <i>Net national income</i>	2,186.0 4,078.2 1,055.4 3,029.0 1,619.5 1,409.6	2,334.9 4,264.3 1,104.0 3,603.9 2,027.8 1,576.1	2,344.8 4,441.4 1,085.6 3,803.0 2,259.8 1,543.2	2,279.0 4,446.2 1,065.5 3,664.4 2,157.1 1,507.3	2,198.7 4,442.6 1,042.8 3,414.4 1,990.4 1,424.0	2,154.5 4,432.7 1,027.9 3,141.6 1,768.2 1,373.4	2,138.7 4,423.2 1,022.2 2,911.1 1,571.3 1,339.8	2,159.0 4,424.7 1,018.4 2,802.8 1,472.0 1,330.8
Secondary distribution of income account								
Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers Net non-life insurance premiums Non-life insurance claims Other Net disposable income	7,327.2 1,033.0 1,539.9 1,545.9 634.5 180.2 177.1 277.2	7,715.1 1,119.5 1,593.8 1,591.1 660.0 184.1 181.4 294.4	7,795.9 1,131.6 1,660.1 1,659.4 681.0 188.8 185.2 307.0	7,707.9 1,114.0 1,666.9 1,684.0 678.2 186.6 182.9 308.7	7,612.4 1,074.8 1,666.1 1,715.9 674.2 183.9 180.4 310.0	7,547.8 1,043.7 1,667.7 1,747.3 667.7 180.4 176.9 310.5	7,530.5 1,018.4 1,668.8 1,776.6 665.9 177.1 173.8 315.0	7,554.7 1,016.2 1,671.7 1,796.7 665.7 177.7 174.2 313.8
Use of income account								
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in the net equity of households in pension fund reserves <i>Net saving</i>	7,234.7 63.6	7,619.8	7,690.4	7,603.0	7,506.7	7,440.6	7,422.1	7,441.1
Capital account								
Net saving Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables	599.7	721.4	528.0	435.0	346.8	289.2	254.9	245.1
Consumption of fixed capital Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital transfers Other capital transfers	1,251.9 184.2 22.5 161.7	1,318.9 166.4 24.3 142.2	1,382.2 170.8 23.8 146.9	1,391.8 167.2 23.6 143.6	1,397.7 179.2 28.6 150.7	1,401.7 182.8 29.0 153.8	1,405.1 191.1 33.9 157.2	1,408.3 197.0 34.3 162.7
Net lending (+)/net borrowing (-) (from capital account)								

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 Q2- 2009 Q1	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1
Income, saving and changes in net worth	2000	2007	2000	2005 Q1	1003 Q1	2005 Q0	2003 Q4	2010 Q1
Compensation of employees (+)	4.078.2	4.264.3	4,441,4	4.446.2	4.442.6	4.432.7	4.423.2	4.424.7
Gross operating surplus and mixed income (+)	1.416.1	1,497.5	1.547.5	1,538.5	1.523.2	1.509.9	1,502.8	1.504.3
Interest receivable (+)	263.6	308.8	343.4	328.9	305.0	273.5	246.2	231.4
Interest payable (-)	165.7	213.3	238.6	223.5	200.1	172.9	149.7	141.3
Other property income receivable (+)	748.4	793.4	799.3	790.0	763.0	743.3	733.7	725.3
Other property income payable (-)	9.8	10.0	10.1	10.2	10.3	10.3	10.2	10.2
Current taxes on income and wealth (-)	794.4	851.7	892.6	890.0	877.5	870.5	859.3	855.6
Net social contributions (-)	1,536.6	1,590.4	1,656.3	1,663.3	1,662.6	1,664.0	1,664.8	1,667.6
Net social benefits (+)	1,540.4	1,585.4	1,653.5	1,678.1	1,710.0	1,741.4	1,770.7	1,790.7
Net current transfers receivable (+)	66.9	69.5	70.5	72.3	75.3	79.2	82.2	81.8
= Gross disposable income	5,607.1	5,853.6	6,058.0	6,066.9	6,068.5	6,062.2	6,074.8	6,083.5
Final consumption expenditure (-)	4,900.9	5,094.5	5,268.8	5,247.7	5,220.2	5,190.0	5,189.3	5,209.5
Changes in net worth in pension funds (+)	63.2	60.1	64.8	64.5	62.9	60.9	59.6	58.9
= Gross saving	769.4	819.3	854.0	883.7	911.2	933.1	945.1	932.8
Consumption of fixed capital (-)	345.9	367.3	385.4	387.4	388.5	389.1	389.1	389.3
Net capital transfers receivable (+)	19.0	11.6	13.1	12.8	13.8	15.2	10.0	7.8
Other changes in net worth 1) (+)	524.2	70.9	-1,534.2	-1,207.3	-651.4	21.9	486.0	870.3
= Changes in net worth <sup>1)</sup>	966.7	534.4	-1,052.5	-698.2	-114.9	581.1	1,052.0	1,421.7
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	606.2	641.6	639.3	619.9	594.3	571.2	553.4	542.9
Consumption of fixed capital (-)	345.9	367.3	385.4	387.4	388.5	389.1	389.1	389.3
Main items of financial investment (+)								
Short-term assets	327.0	440.4	437.1	365.8	263.9	153.4	-23.2	-97.5
Currency and deposits	284.1	349.8	436.7	397.4	335.2	256.8	121.3	64.6
Money market fund shares	7.3	58.0	-17.3	-12.2	-28.5	-30.1	-61.8	-89.0
Debt securities <sup>2)</sup>	35.5	32.7	17.8	-19.3	-42.8	-73.3	-82.7	-73.1
Long-term assets	306.5	142.4	39.6	80.0	189.8	343.3	496.3	574.8
Deposits	1.0	-31.5	-35.1	-13.3	15.5	56.9	95.3	121.3
Debt securities	33.9	52.0	41.3	22.9	13.7	8.9	-9.5	-23.7
Shares and other equity	-26.8	-100.5	-94.6	-65.0	-3.7	86.7	167.2	202.6
Quoted and unquoted shares and other equity	-3.8	-2.7	30.2	35.8	51.5	88.6	77.9	91.3
Mutual fund shares	-23.0	-97.8	-124.8	-100.8	-55.1	-1.8	89.3	111.3
Life insurance and pension fund reserves	298.4	222.5	128.0	135.4	164.2	190.7	243.2	274.7
Main items of financing (-)								
Loans	401.5	357.9	210.0	153.7	126.1	96.6	96.1	119.7
of which: From euro area MFIs	355.3	283.7	82.7	20.4	10.6	-15.8	63.1	74.0
Other changes in financial assets (+)								
Shares and other equity	463.8	44.9	-1,267.7	-970.0	-574.8	-106.1	271.1	532.0
Life insurance and pension fund reserves	46.5	24.9	-250.8	-199.9	-97.5	59.4	155.6	254.6
Remaining net flows (+)	-35.9	-34.5	-54.8	-52.9	23.9	45.6	84.1	123.9
= Changes in net worth 1)	966.7	534.4	-1,052.5	-698.2	-114.9	581.1	1,052.0	1,421.7
Financial balance sheet								
Financial assets (+)								
Short-term assets	4,838.2	5,308.8	5,825.1	5,886.6	5,891.5	5,828.6	5,798.1	5,757.4
Currency and deposits	4,454.2	4,843.0	5,312.3	5,373.9	5,429.7	5,397.7	5,465.7	5,438.6
Money market fund shares	290.9	347.3	371.5	389.6	354.3	348.6	276.3	268.3
Debt securities <sup>2)</sup>	93.1	118.4	141.3	123.1	107.5	82.3	56.1	50.5
Long-term assets	11,849.5	12,025.6	10,460.7	10,212.4	10,651.8	11,207.5	11,447.1	11,690.4
Deposits	1,015.5	953.5	886.1	863.7	882.6	914.4	959.6	987.0
Debt securities	1,247.2	1,291.9	1,321.1	1,292.4	1,313.4	1,372.3	1,363.5	1,350.9
Shares and other equity	4,974.4	4,920.4	3,516.6	3,309.2	3,572.7	3,874.5	3,988.2	4,076.1
Quoted and unquoted shares and other equity	3,581.2	3,607.4	2,588.1	2,417.3	2,595.4	2,830.1	2,854.7	2,912.3
Mutual fund shares	1,393.2	1,313.0	928.5	892.0	977.3	1,044.4	1,133.5	1,163.8
Life insurance and pension fund reserves	4,612.4	4,859.8	4,737.0	4,/4/.1	4,883.0	5,046.3	5,135.8	5,276.4
Kemaining net assets (+) Liabilities (-)	243.0	228.5	234.1	223.0	248.2	237.6	237.1	225.4
Loans	5,247.7	5,597.0	5,802.8	5,795.7	5,831.6	5,851.9	5,891.5	5,896.1
of which: From euro area MFIs	4,553.1	4,825.5	4,901.1	4,879.0	4,899.3	4,916.2	4,955.4	4,941.8
= Net financial wealth	11.683.0	11.965.8	10.717.1	10 526 4	10.959.9	11.421.8	11 590 8	11.777.2

Sources: ECB and Eurostat.1) Excluding changes in net worth which are due to other changes in non-financial assets, such as revaluations of residential property.2) Securities issued by MFIs with a maturity of less than two years and 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 Q2- 2009 Q1	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1
Income and saving		I		I	I	I		
Gross value added (basic prices) (+)	4,372.9	4,629.1	4,758.7	4,696.9	4,610.7	4,550.1	4,514.8	4,524.0
Compensation of employees (-)	2,585.2	2,713.5	2,832.4	2,827.6	2,816.2	2,798.4	2,782.2	2,779.0
Other taxes less subsidies on production (-)	75.0	79.6	77.2	74.8	69.2	64.0	59.8	55.0
= Gross operating surplus (+)	1,712.7	1,836.1	1,849.1	1,794.5	1,725.3	1,687.7	1,672.8	1,690.1
Consumption of fixed capital (-)	702.2	738.0	773.3	779.1	782.4	784.8	787.4	789.0
= Net operating surplus (+)	1,010.5	1,098.0	1,075.8	1,015.4	942.9	902.9	885.4	901.1
Property income receivable (+)	507.4	587.1	590.3 210.2	205.3	529.5	503.0	4/8.3	469.2
Other property income receivable	337.1	201.0	219.2	200.9	330.6	333.7	326.7	141./ 327.4
Interest and rents payable (_)	285.3	348 7	403.5	388.0	360.5	324.2	292.2	2757
= Net entrepreneurial income (+)	1 232 6	1 336 4	1 262 6	1 192 7	1 112 0	1 081 6	1 071 5	1 094 6
Distributed income (-)	927.6	990.0	1.022.0	1.006.2	963.5	926.2	900.4	885.6
Taxes on income and wealth payable (-)	189.8	212.0	193.6	181.3	159.0	137.5	125.0	126.0
Social contributions receivable (+)	74.8	63.5	65.8	65.5	65.4	65.3	65.3	65.5
Social benefits payable (-)	60.6	61.8	63.3	63.5	63.7	64.0	64.0	64.0
Other net transfers (-)	65.4	56.4	58.3	57.9	58.3	60.1	61.2	62.1
= Net saving	64.1	79.8	-8.7	-50.7	-67.1	-40.8	-13.7	22.4
Investment, financing and saving								
Net acquisition of non-financial assets (+)	313.4	369.6	356.8	299.4	215.9	154.7	97.3	89.7
Gross fixed capital formation (+)	990.6	1,077.3	1,096.3	1,060.4	1,007.6	968.0	941.1	929.6
Consumption of fixed capital (-)	702.2	738.0	773.3	779.1	782.4	784.8	787.4	789.0
Net acquisition of other non-financial assets (+)	24.9	30.4	33.8	18.1	-9.3	-28.4	-56.4	-51.0
Main items of financial investment (+)		4.60.0	<i></i>					
Short-term assets	168.7	169.8	61.7	2.7	38.2	84.0	110.2	99.1
Currency and deposits	146.2	154.4	15.5	-5.5	10.4	37.5	89.8	97.3
Debt securities 1)	10.5	-13.1	27.3 18.7	18.0	58.0 10.1	43.0	20.0	0.9 7 2
Long-term assets	510.5	758.8	659.0	661.7	528.6	343.4	130.9	142.7
Deposits	29.4	-12.3	27.9	40.3	47.5	28.7	17.1	50
Debt securities	13.9	-21.5	-71.1	4.7	21.3	0.3	12.1	13.9
Shares and other equity	263.2	451.4	347.6	358.5	331.6	253.1	98.0	65.3
Other (mainly intercompany loans)	204.0	341.2	354.6	258.2	128.1	61.3	3.6	58.5
Remaining net assets (+)	103.7	127.6	29.1	-114.9	-91.8	-45.5	-46.2	22.5
Main items of financing (-)								
Debt	740.1	864.4	730.8	533.8	360.3	187.6	4.5	48.1
of which: Loans from euro area MFIs	457.9	543.7	392.7	251.6	97.6	-35.5	-152.9	-114.5
of which: Debt securities	39.6	36.8	59.4	65.4	78.3	88.7	78.5	97.8
Shares and other equity	219.5	413.1	306.5	284.0	315.6	305.8	217.2	200.8
Unquoted shares and other equity	30.2 191.2	242.8	2.0	15.5	47.1	247.0	157.6	140.2
Net capital transfers receivable (_)	72.0	69.4	505.8 75.6	270.8	208.5	247.9 78.8	81.0	80.5
= Net saving	64.1	79.8	-8.7	-50.7	-67.1	-40.8	-13.7	22.4
Financial halance sheet								
Financial assats								
Short-term assets	1 703 7	1 855 3	1 915 5	1 902 6	1 935 4	1 980 7	2 024 8	2 000 6
Currency and deposits	1 367 2	1,000.0	1,515.5	1 511 8	1,552.6	1,581.1	1 635 5	1 605 2
Money market fund shares	208.7	188.8	212.8	236.8	242.7	247.9	232.8	226.0
Debt securities 1)	127.8	158.9	163.5	154.0	140.0	151.7	156.5	169.4
Long-term assets	10,148.6	11,087.9	9,396.9	9,112.5	9,481.5	10,102.9	10,379.2	10,744.8
Deposits	149.7	169.4	193.4	199.1	192.8	192.5	192.4	196.1
Debt securities	281.2	257.7	190.5	192.1	167.8	159.7	201.2	217.4
Shares and other equity	7,507.5	8,135.1	6,127.4	5,813.9	6,242.9	6,879.6	7,100.5	7,343.3
Other (mainly intercompany loans)	2,210.1	2,525.8	2,885.6	2,907.4	2,878.0	2,871.1	2,885.2	2,988.0
Remaining net assets	353.7	390.8	444.8	434.1	457.0	442.5	470.2	476.8
Liabilities	70071	86150	0 275 7	0 202 0	0 400 0	0 207 7	0.264.6	0 447 4
of which: Loans from auro area MEIs	7,883.0	0,045.8	9,5/5./	9,595.0	9,409.8	9,387.7	9,304.0	9,447.4
of which. Louns from euro area MFIS of which. Debt securities	5,965.0	4,000.0	4,890.7 744 A	4,039.0	4,820.5	4,139.1	4,700.9	4,099.3
Shares and other equity	13 187 0	14 378 1	10 768 6	10 107 9	10 830 6	11 934 2	12 242 3	12 481 5
Ouoted shares	4,511.4	4,997.0	2.840.4	2,483 7	2,827.5	3,267.0	3,398.8	3,490.3
Unquoted shares and other equity	8,676.6	9,381.1	7,928.2	7,624.2	8,003.1	8,667.2	8,843.6	8,991.2
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 Q2- 2009 Q1	2008 Q3- 2009 Q2	2008 Q4- 2009 Q3	2009 Q1- 2009 Q4	2009 Q2- 2010 Q1
Financial account, financial transactions		I				I	I	
Main items of financial investment (+)								
Short-term assets	68.2	76.4	116.8	66.8	51.3	40.4	16.8	0.3
Currency and deposits	10.6	6.4	57.0	18.6	11.8	-0.7	-33.1	-20.8
Money market fund shares	7.2	6.8	19.2	16.8	10.9	6.1	7.7	-9.4
Debt securities <sup>1)</sup>	50.4	63.1	40.7	31.5	28.6	35.0	42.2	30.5
Long-term assets	290.1	162.8	66.6	69.4	92.7	126.0	206.2	276.4
Deposits	67.4	49.8	0.8	13.5	13.0	19.9	16.2	-0.3
Debt securities	112.3	45.9	17.3	44.8	-0.2	10.9	70.2	95.3
Loans	-1.2	-15.2	22.4	1.1	11.1	8.7	6.0	9.5
Quoted shares	-2.7	-0.7	-14.3	-19.8	-24.4	-99.9	-86.9	-80.8
Unquoted shares and other equity	30.2	21.5	30.0	23.0	15.4	3.9	-7.1	0.2
Mutual fund shares	84.1	61.5	10.4	6.7	77.8	182.4	207.9	252.6
Remaining net assets (+)	10.1	-7.8	26.6	14.5	36.3	34.1	34.6	46.4
Main items of financing (-)								
Debt securities	5.8	3.0	11.7	13.9	9.9	10.1	1.0	-0.1
Loans	44.3	-5.0	27.2	2.9	14.9	9.5	-24.1	-14.2
Shares and other equity	9.3	1.0	3.3	5.5	4.9	6.2	5.1	3.9
Insurance technical reserves	312.0	247.5	142.6	143.1	171.4	198.3	272.5	319.1
Net equity of households in life insurance and pension fund reserves	304.6	243.2	125.3	133.3	164.7	194.3	259.9	304.4
Prepayments of insurance premiums and reserves for								
outstanding claims	7.4	4.3	17.2	9.8	6.7	4.0	12.6	14.7
= Changes in net financial worth due to transactions	-2.9	-15.1	25.3	-14.7	-20.9	-23.6	3.1	14.4
Other changes account								
Other changes in financial assets (+)								
Shares and other equity	180.1	18.1	-566.1	-431.0	-265.3	-31.0	208.8	354.4
Other net assets	-41.5	-41.4	43.5	24.5	44.9	78.3	65.3	104.3
Other changes in liabilities (-)								
Shares and other equity	41.4	-32.5	-180.1	-189.0	-123.8	-52.6	15.6	96.7
Insurance technical reserves	51.2	22.2	-243.0	-199.9	-95.1	64.5	159.3	263.0
Net equity of households in life insurance and pension fund reserves	47.7	23.7	-242.8	-193.4	-91.4	65.4	162.0	260.2
Prepayments of insurance premiums and reserves for	2.5		0.0			1.0		•
outstanding claims	3.5	-1.5	-0.2	-6.4	-3.7	-1.0	-2.7	2.8
= Other changes in het infancial worth	40.0	-13.1	-99.0	-17.0	-1.0	33.4	99.1	99.0
Financial balance sheet								
Financial assets (+)	515 (	506.0	707 7	72( 0	702.1	711.1	700.5	720 7
Short-term assets	515.6	586.2	/0/./	726.9	/23.1	/11.1	132.5	/29./
Management of the second	130.0	105.1	112.6	212.9	193.0	109.0	194./	193.7
Debt coourition D	92.1	226.2	270.2	286.0	400.8	113.9	111.0	108.5
Long term assets	200.8 5 114 8	5 255 5	1 785 4	4 743 6	409.8	5 137 8	5 274 5	5 485 4
Denosite	590.6	640.8	644.1	657.9	4,915.8	664.3	657.7	655.9
Debt securities	1 852 9	1 854 4	1 897 4	1 932 3	1 913 1	1 986 1	2 034 5	2 131 1
Loans	407.8	394.3	415.6	419.2	422.1	422.0	421.6	428.5
Ouoted shares	721.8	716.7	420.4	376.4	438.3	414.4	423.3	436.4
Unquoted shares and other equity	489.7	528.7	452.1	434.1	442.5	473.5	481.3	489.9
Mutual fund shares	1.052.1	1.120.6	955.8	923.7	1.037.1	1.177.5	1.256.1	1.343.6
Remaining net assets (+)	213.8	197.1	245.6	246.8	261.2	267.5	265.2	287.2
Liabilities (-)								
Debt securities	35.9	29.4	46.4	45.6	45.0	48.8	50.3	52.4
Loans	244.0	235.2	269.8	274.6	273.0	263.3	244.6	256.7
Shares and other equity	679.2	647.7	470.9	411.9	438.1	492.2	491.6	512.5
Insurance technical reserves	4,973.3	5,243.0	5,142.5	5,154.3	5,301.4	5,473.3	5,574.3	5,736.4
Net equity of households in life insurance and pension fund reserves	4,263.2	4,530.1	4,412.6	4,423.7	4,567.1	4,735.9	4,834.5	4,988.3
Prepayments of insurance premiums and reserves								
for outstanding claims	710.1	712.9	729.9	730.5	734.3	737.4	739.8	748.0
= Net financial wealth	-88.3	-116.5	-190.9	-169.2	-159.3	-161.2	-88.6	-55.7

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

		P.4.11					By euro area residents					
		l otal in euro "			In euro				In all cu	rrencies		
	Outstanding	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding	Gross issues	Net issues	Annual growth rates	Seasonally	adjusted 2)
		2	2	4	F	C		0	0	10	Net issues	6-month growth rates
	1	2	3	4	5	Total	1	0	9	10	11	12
2009 May	15 072 4	1 165 6	209.3	12 837 8	1 076 3	175.4	14 216 3	1 157 2	177.6	11.8	118.0	12.6
June	15,163.0	1,098.0	89.7	12,898.8	1,015.8	59.7	14,287.1	1,096.7	74.1	11.7	92.8	10.3
July	15,193.7	1,129.6	31.2	12,953.5	1,074.9	55.3	14,354.7	1,154.3	68.9	11.5	103.3	10.2
Aug.	15,242.1	888.4	47.4	12,983.1	832.6	28.6	14,371.9	898.9	20.1	10.7	58.6	8.8
Sep.	15,346.8	970.4	105.5	13,060.9	887.2	78.6	14,440.7	971.5	84.2	11.7	150.9	9.0
Nov	15,546.0	930.4 804 3	2.0	13,091.3	900.8	53.2	14,475.9	9/6.4	50.1 64.0	10.8	10.5	7.0
Dec.	15,929.5	942.5	-59.2	13,676.3	889.0	-57.4	15,311.7	980.2	-57.4	7.9	14.3	5.1
2010 Jan.	15,976.5	1.094.6	45.8	13.725.7	1.032.0	48.0	15,407.6	1,148.7	68.4	7.2	44.9	4.2
Feb.	16,012.3	874.4	37.7	13,763.1	825.5	39.3	15,452.8	920.3	33.0	5.9	-20.0	3.1
Mar.	16,157.8	1,037.7	143.9	13,866.6	933.8	101.9	15,567.8	1,045.9	108.2	5.6	98.4	2.3
Apr.				13,926.5	953.8	58.3	15,659.9	1,063.6	79.1	5.3	64.1	3.0
May		•	•	13,959.3	848.0	34.0	15,765.9	958.6	46.4	4.3	-20.0	2.2
						Long-term						
2009 May	13,432.5	339.4	204.9	11,311.2	281.5	172.0	12,501.2	301.9	179.5	10.4	116.2	12.9
June	13,553.7	314.2	119.0	11,420.4	275.6	106.7	12,632.5	309.5	129.6	10.6	101.8	11.7
July	13,580.7	269.2	27.2	11,453.9	247.8	33.7	12,675.9	272.7	44.0	10.6	86.9	11.0
Aug.	13,039.1	131.5	58.0 71.7	11,497.2	108.9	43.0	12,/10.5	121.8	40.9	10.3	90./	10.5
Oct	13,711.1	245.1	64.0	11,571.0	216.7	59.9	12,778.8	222.0	66.1	11.2	61.0	9.9
Nov.	13,860.7	200.8	81.4	11,712.9	180.0	77.2	12,918.1	195.2	81.6	10.6	46.8	8.5
Dec.	14,372.6	169.5	-32.7	12,234.8	154.0	-22.8	13,663.8	166.0	-32.8	8.9	-35.8	5.9
2010 Jan.	14,417.3	309.3	44.8	12,272.8	277.8	38.1	13,744.3	315.7	56.5	8.6	102.8	6.0
Feb.	14,471.3	212.2	56.2	12,333.4	193.7	62.8	13,814.6	211.7	58.7	7.5	16.8	4.7
Mar.	14,605.5	310.1	132.8	12,442.5	250.1	107.7	13,932.3	281.5	112.6	7.2	118.4	4.5
Apr. May	•	•		12,498.7	223.3	53.3	14,018.2	255.1 183.4	72.0	/.1	-20.3	4.5
Iviay	· ·	•		12,529.1	140.5	51.0	17,123.2	105.4	50.5	5.9	-20.5	5.4
CI5 Tot	al outstan	ding amou	nts and g	ross issue	s of securi	ties other	than sha	res issued	by euro a	irea resider	nts	



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 1)					
	Total	MFIs (including	Non-MFI co	orporations	General go	overnment	Total	MFIs (including	Non-MFI co	orporations	General go	overnment
		Eurosystem)	Financial corporations other than	Non-financial corporations	Central government	Other general government		Eurosystem)	Financial corporations other than	Non-financial corporations	Central government	Other general government
	1	2	MFIs 3	4	5	6	7	8	MFIs 9	10	11	12
						Total						
2008 2009	13,461 15,312	5,272 5,378	2,196 3,235	715 815	4,938 5,510	340 373	1,190 1,130	817 739	82 63	105 86	162 221	24 22
2009 Q2	14,287	5,438	2,378	771	5,349	351	1,170	750	68	92	241	20
Q3 Q4	14,441	5,431 5,378	2,398 3,235	801	5,452 5,510	358 373	1,008 959	630	48 53	85 73	182	12 20
2010 Q1	15,568	5,471	3,200	853	5,656	389	1,038	653	61	74	230	20
2010 Feb. Mar.	15,453	5,418 5,471	3,206	841 853	5,612 5,656	375	920 1.046	575 664	37 61	71 81	215 215	22 25
Apr.	15,660	5,496	3,215	869	5,686	394	1,064	674	63	85	219	23
May	13,700	5,464	5,240	665	3,740	Short term	939	014		11	191	18
2008	1 627	822	92	123	566	25	975	722	34	97	101	19
2009	1,648	733	96	73	725	21	880	639	19	69	137	15
2009 Q2	1,655	785	67	88	699	16	874	631	20	71	139	13
Q3 04	1,662	733	56 96	84 73	752 725	21	802 760	569	15	72 60	139	13
2010 Q1	1,636	747	87	77	708	17	769	547	28	61	123	10
2010 Feb.	1,638	734	86 87	78 77	723	17	709	499	28	55	115	12
Apr.	1,642	754	87 91	79	699	20	809	545	31	69	121	12
May	1,641	752	96	82	689	21	775	553	34	67	106	17
						Long-term <sup>2)</sup>						
2008 2009	11,834 13.664	4,450 4,645	2,105 3,139	593 742	4,371 4,784	316 353	216 250	95 99	48 44	8 16	61 84	4
2009 Q2	12,632	4,652	2,311	683	4,650	335	296	119	48	21	102	7
Q3	12,779	4,681	2,342	716	4,701	339	206	83	33	14	72	4
2010 Q1	13,004	4,645	3,139	742 776	4,784 4,948	355 371	270	106	33 33	13	107	10
2010 Feb.	13,815	4,683	3,120	763	4,890	358	212	76	10	17	100	10
Mar.	13,932	4,724	3,113	776 790	4,948	371	282	119	30	14	104	13
May	14,125	4,732	3,150	802	5,058	382	183	61	24	10	85	2
					of which	ı: Long-term fi	ixed rate					
2008 2009	7,721 8,839	2,306 2,587	755 1,034	454 609	3,955 4,338	250 271	120 172	49 60	9 18	6 16	53 74	3 4
2009 Q2	8,357	2,471	867	548	4,211	260	210	72	23	20	90	5
Q3 04	8,491 8,839	2,507 2,587	893 1.034	581 609	4,251 4,338	259 271	139	49 46	14 10	13 12	61 59	3
2010 Q1	9,101	2,657	1,048	636	4,482	277	185	61	10	12	95	7
2010 Feb.	8,996	2,628	1,039	624	4,435	271	160	41	4	14	93	8
Mar. Apr.	9,101 9,187	2,678	1,048	650	4,482 4,525	277 280	191	62	14	15	92 87	10
May	9,277	2,672	1,073	660	4,590	282	117	22	6	8	80	1
				100	of which:	Long-term var	riable rate					
2008 2009	3,601 4,386	1,744 1,771	1,301 2,038	128 123	363 374	64 81	81 62	36 28	38 25	1	5	1 2
2009 Q2	3,736	1,761	1,401	125	374	74	65	31	24	1	7	2
Q3 Q4	4,386	1,740	2,038	123	374	81	49 58	21	24	1	5	1
2010 Q1	4,377	1,778	1,995	129	382	93	70	38	20	1	7	3
2010 Feb. Mar	4,368 4 377	1,766 1,778	2,012	129 129	374 382	86 93	41 77	30 50	3	3	3	2
Apr.	4,382	1,774	1,998	129	388	94	60	33	16	1	7	3
May	4,390	1,768	2,003	129	391	99	52	33	15	1	3	1

Source: ECB.
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.
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

#### Non-seasonally adjusted 1) Seasonally adjusted 1) MFIs (including MFIs (including Total Non-MFI corporations General government Total Non-MFI corporations General government Financial Non-financial Financial Non-financial Central Eurosystem Other Eurosystem) Central Other corporations other than MFIs corporations other than MFIs government general government general government government 10 11 12 Total 2008 2009 96.2 88.4 $\begin{array}{c} 22.9\\ 10.2 \end{array}$ 35.9 20.8 31.8 46.4 96.9 88.2 $\begin{array}{c} 23.1\\ 10.0 \end{array}$ 35.1 20.3 33.1 47.3 $1.0 \\ 2.8$ 4.5 8.2 1.1 2.8 4.6 7.9 28.4 30.2 -19.4 1.0 119.3 57.7 21.9 0.3 28.3 8.9 53.8 35.4 2.8 2.3 21.2 9.8 2.8 3.5 2.5 4.5 2009 Q2 Q3 12.5 99.8 104.3 8.3 39.0 10.8 13.6 47.1 -21.6 25.7 -11.8 7.9 14.9 69.9 15.3 -16.4 3.6 11.1 12.5 46.4 5.1 3.1 21.2 41.1 5.7 10.7 44.3 17.0 $\tilde{04}$ 2010 Q1 7.3 7.6 5.0 -1.7 -20.9 54.7 21.0 -25.1 60.7 42.8 29.3 52.8 6.6 8.3 -20.0 98.4 -46.6 50.8 -33.1 1.9 17.8 12.9 34.6 25.1 22.1 33.0 16.6 11.2 13.7 9.6 2010 Feb -29.9 -8.7 9.4 Mar 108.2 16.8 9.4 79.1 46.4 5.7 -2.7 64.1 -20.0 10.3 -52.2 Apr. May 9.9 11.8 0.4 24.1 Long-term 2008 32.7 2.8 0.6 64.7 87.8 16.1 15.1 31.9 22.7 2.8 13.3 0.5 65.4 16.0 13.4 2009 88.2 15.0 23.2 12.3 34.5 3.1 12.4 34.6 3.1 127.1 27.7 3.5 2.5 3.5 4.3 2009 Q2 36.2 28.7 17.1 41.3 3.7 95.9 25.5 13.4 25.7 55.4 38.3 12.2 -13.9 12.4 13.2 12.0 7.3 9.6 17.4 27.3 1.4 4.4 4.3 23.3 22.4 -4.3 13.7 34.0 -21.1 13.9 7.8 29.8 38.1 Q3 Q4 102.6 24.0 79.4 2010 Q1 75.9 22.4 -13.2 52.8 4.6 11.4 45.4 3.2 7.5 3.4 58.7 -18.1 -19.7 13.8 79.5 57.9 4.3 2010 Feb. 16.8 -40.6 -19.8 15.1 -9.1 5.7 7.1 112.6 72.0 44.0 12.8 12.0 12.2 58.0 37.9 118.4 69.3 38.0 3.2 3.4 14.0 14.7 10.4 55.5 39.2 6.8 2.5 Mar Apr. May 50.3 -4.0 -22.5 5.9 64.3 -4.4 -20.3 -46.6 0.9 -2.1 31.5

#### 2. Net issues

**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.



		Annual g	growth rates (1	ion-seasonally	adjusted)		6-month seasonally adjusted growth rates					
	Total	MFIs (including	Non-MFI c	orporations	General go	overnment	Total	MFIs (including	Non-MFI co	orporations	General go	overnment
		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6 Total	7	8	9	10	11	12
2009 May June July Aug. Sep. Oct. Nov. Dec. 2010 Jan.	11.8 11.7 11.5 10.7 11.7 10.8 9.5 7.9 7.2	5.4 4.8 4.1 3.5 4.1 2.9 2.5 2.3 2.3	30.6 27.5 28.0 24.3 24.5 24.0 19.3 11.1 10.1	10.2 11.9 13.4 13.1 15.7 16.5 16.1 13.7 13.0	12.8 13.7 13.6 13.4 14.9 13.6 12.1 11.3 10.2	9.5 9.6 9.4 9.0 10.6 10.4 10.6 9.8 9.2	12.6 10.3 10.2 8.8 9.0 7.8 6.5 5.1 4.2	5.8 4.8 4.8 3.2 3.5 0.1 -0.6 -0.2 0.0	30.5 20.5 20.5 16.1 16.0 12.7 9.1 2.4 0.6	15.1 10.3 14.4 13.4 18.6 18.1 17.2 15.8 11.4	13.0 12.0 11.1 10.7 10.2 12.1 11.3 10.7 9.4	11.9 9.7 10.3 10.8 11.3 9.4 9.3 10.5 7.9
Feb. Mar. Apr. May	5.9 5.6 5.3 4.3	0.7 1.5 1.3 -0.2	6.8 5.1 4.1 2.9	14.4 15.5 15.5 14.5	9.8 8.6 8.5 8.0	10.8 11.6 11.0 10.2	3.1 2.3 3.0 2.2	-1.7 -0.4 2.7 0.2	-2.0 -4.8 -3.9 -3.0	15.3 12.6 13.3 12.2	8.8 6.9 5.0 4.9	11.0 11.9 12.4 11.2
2009 May June July Aug. Sep. Oct. Nov. Dec.	10.4 10.6 10.6 10.3 11.2 11.5 10.6 8.9	5.1 4.8 4.5 4.8 5.1 4.9 5.0 4.0	32.3 29.4 30.9 27.6 27.8 27.0 21.7 13.0	16.1 19.2 21.9 21.4 23.8 26.0 27.2 24.9	7.2 8.5 7.8 7.8 9.6 10.4 9.6 9.5	8.5 8.4 8.0 9.3 10.4 10.8 11.8	12.9 11.7 11.0 10.3 9.9 9.7 8.5 5.9	5.7 5.7 6.2 6.8 6.4 4.7 4.3 2.4	35.4 23.8 21.9 17.6 17.4 13.3 9.6 3.1	30.5 29.9 28.1 24.0 27.3 25.9 24.1 20.3	9.1 9.8 8.6 8.3 7.5 11.0 10.1 9.0	14.2 12.6 12.0 13.2 11.4 9.0 7.6 10.9
2010 Jan. Feb. Mar. Apr. May	8.6 7.5 7.2 7.1 5.9	4.7 3.3 3.7 3.2 1.6	10.7 7.4 5.8 4.7 3.2	21.8 21.8 21.9 21.0 18.2	9.5 9.7 9.2 10.4 10.1	11.4 12.3 12.7 10.9 8.8	6.0 4.7 4.5 4.5 3.4	3.3 -0.1 1.2 1.7 -1.1	0.3 -2.0 -4.7 -3.2 -2.9	15.8 19.5 16.6 16.2 12.6	10.5 11.2 10.9 9.8 10.2	10.7 11.5 14.0 12.6 10.0

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

CI7 Annual growth rates of long-term debt securities, by sector of the issuer, in all currencies combined

general government . . . . MFIs (including Eurosystem) non-MFI corporations \_ 

Source: ECB.

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



(per	centage enai	iiges)										
			Long-tern	n fixed rate					Long-term	variable rate		
	Total	MFIs (including	Non-MFI co	orporations	General go	overnment	Total	MFIs (including	Non-MFI c	orporations	General go	overnment
		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government		Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	13	14	15	16	17	18	19	20	21	22	23	24
					In all	currencies cor	nbined					
2008 2009	3.1 9.4	4.9 7.0	5.7 18.1	4.8 23.8	1.5 8.1	1.4 4.2	12.8 12.1	5.4 1.9	33.4 36.0	7.0 -1.9	7.6 0.1	3.2 20.7
2009 Q2 Q3 Q4	8.9 10.5 12.2	6.8 7.2 9.0	17.8 21.1 21.3	20.9 28.0 33.5	7.5 9.0 10.3	4.8 3.9 6.6	14.4 11.3 7 5	3.1 0.9 -1.6	43.0 35.2 24.0	-1.1 -3.2 -4 1	-0.6 -1.6 2.0	19.9 25.1 26.2
2010 Õi	11.1	9.7	14.0	27.8	9.6	8.1	1.3	-3.8	6.2	-2.3	4.6	26.7
2009 Dec.	11.9	9.7	19.3	32.3	9.7	8.3	2.5	-3.9	10.1	-4.2	3.0	25.2
2010 Jan. Feb. Mar. Apr. May	11.4 10.8 10.4 10.6 9.3	10.7 8.9 9.2 8.8 6.0	16.1 11.5 10.1 8.3 6.9	27.6 26.7 26.3 24.9 20.9	9.3 10.0 9.4 10.7 10.5	7.0 8.3 9.5 7.8 5.8	2.4 0.5 -0.1 -0.4 -1.0	-3.2 -4.4 -3.6 -4.3 -4.2	7.5 4.8 2.6 1.6 0.2	-3.2 -1.5 -0.2 -0.5 -0.5	7.3 3.2 3.5 7.7 6.1	28.2 27.1 24.4 22.1 20.0
						In euro						
2008 2009	2.9 10.0	4.8 8.9	6.1 21.4	2.9 22.4	1.7 8.2	1.3 3.6	14.3 14.5	6.6 3.9	35.1 38.5	7.2 -2.5	7.9 -0.4	2.0 21.8
2009 Q2 Q3 Q4 2010 Q1	9.5 11.2 12.8 11.4	8.8 9.4 11.3 10.7	21.8 24.4 23.5 15.3	19.3 27.0 33.1 28.8	7.7 9.2 10.4 9.7	4.2 3.3 6.1 7.8	17.2 13.6 9.1 1.8	5.3 2.9 -0.2 -3.4	46.3 37.9 25.6 6.7	-1.8 -3.8 -4.9 -2.5	-0.7 -2.4 0.7 3.2	21.7 27.4 26.8 26.7
2009 Dec.	12.2	11.2	20.5	33.0	9.8	8.0	3.4	-3.0	11.1	-4.7	1.7	25.1
2010 Jan. Feb. Mar. Apr. May	11.7 11.1 10.7 10.8	11.7 9.9 9.7 9.0	17.8 12.5 11.3 8.8 7.6	28.4 27.8 27.4 26.1	9.3 10.1 9.4 10.7	6.6 8.0 9.4 7.5	2.9 0.8 0.3 -0.2	-2.8 -4.1 -3.3 -3.8 4.2	8.1 5.2 3.0 1.4	-3.6 -1.7 0.0 -0.5	5.9 1.8 2.1 6.3	28.3 27.0 24.5 22.0
iviay	9.4	5.9	7.0	21.3	10.5	5.5	-1.4	-4.2	-0.0	-0.5	4./	19.0

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

Cl8 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined



Source: ECB.

 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>)

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

(outstanding amounts as at end of period)

	Total			MF	Is	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 (%)	
		2	3	4	5	6	/	8	9	
2008 May	5,747.7	104.5	0.9	772.3	1.8	497.1	2.5	4,478.4	0.6	
June	5,100.2	104.5	0.6	666.5	1.8	435.8	2.5	3,997.9	0.2	
July	4,991.5	104.7	0.6	692.8	2.7	428.2	2.5	3,870.5	0.0	
Aug.	5,017.9	104.6	0.7	666.7	2.8	438.4	2.7	3,912.7	0.0	
Sep.	4,448.1	104./	0.7	613.3	3.6	382.3	2.6	3,452.5	0.0	
Oct.	3,760.0	105.0	0.7	452.9	4.2	280.5	2.8	3,026.6	-0.1	
Nov.	3,504.9	105.2	0.9	393.0	5.9	205.4	2.3	2,845.9	-0.1	
Dec.	3,512.7	105.4	1.0	5/8.1	5.8	282.3	2.1	2,852.1	-0.1	
2009 Jan.	3,315.7	105.6	1.1	343.7	7.4	259.0	2.8	2,712.9	-0.1	
Feb.	2,943.5	105.6	1.1	275.9	7.3	206.3	2.8	2,461.3	-0.1	
Mar.	3,027.4	106.1	1.5	315.5	7.9	223.9	2.9	2,488.0	0.4	
Apr.	3,461.0	106.2	1.6	413.7	8.2	274.6	3.0	2,772.7	0.5	
May	3,609.3	106.5	1.9	454.1	8.9	283.3	2.9	2,871.9	0.8	
June	3,560.2	107.3	2.7	449.5	9.8	279.4	3.9	2,831.4	1.5	
July	3,846.1	107.5	2.7	510.4	9.5	301.1	3.6	3,034.6	1.6	
Aug.	4,044.3	107.5	2.7	573.3	9.4	321.7	4.0	3,149.3	1.6	
Sep.	4,213.9	107.6	2.8	594.0	8.4	351.6	4.1	3,268.3	1.8	
Oct.	4,068.7	107.8	2.7	569.0	9.0	326.2	1.3	3,173.6	1.9	
Nov.	4,082.3	108.1	2.7	568.5	8.8	317.9	2.2	3,195.9	1.9	
Dec.	4,428.9	108.5	3.0	572.1	9.1	348.8	5.3	3,508.0	1.8	
2010 Jan	4 261 5	108 7	2.9	522.5	83	338.7	53	3 400 3	19	
Feb.	4,179,3	108.7	3.0	503.6	8.2	337.2	5.4	3.338.4	2.0	
Mar.	4,492.7	109.0	2.8	548.3	7.4	363.3	5.4	3,581,1	1.8	
Apr.	4.427.9	109.0	2.7	512.7	7.0	343.8	5.3	3.571.4	1.7	
May	4,110.2	109.1	2.4	449.6	6.3	320.9	5.3	3,339.7	1.5	

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** <sup>(1)</sup> (EUR billions; market values)

#### 2. Transactions during the month

	Total				MFIs		Financial cor	porations othe	er than MFIs	IFIs 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 May	7.3	6.0	1.4	4.1	0.1	4.1	1.5	0.3	1.2	1.7	5.6	-3.9
June	3.9	4.8	-0.9	1.3	0.0	1.3	0.5	0.1	0.4	2.1	4.7	-2.6
July	12.7	3.4	9.4	6.7	0.0	6.7	1.5	0.5	1.0	4.5	2.9	1.6
Aug.	1.6	3.0	-1.4	0.3	0.0	0.3	0.1	0.0	0.1	1.1	3.0	-1.9
Sep.	7.8	2.9	5.0	7.0	0.0	7.0	0.0	0.1	-0.1	0.8	2.8	-2.0
Oct.	12.9	0.6	12.2	1.4	0.0	1.4	10.7	0.0	10.7	0.8	0.6	0.1
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	0.1	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

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



#### Source: ECB.

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



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

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

			Deposits fr	om household	s		Depos	ations	Repos		
	Overnight <sup>2)</sup>	With a	n agreed matur	ity of:	Redeemable at	notice of: 2), 3)	Overnight 2)	With a	n agreed matur	ity 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 July	0.52	1.86	2.41	2.61	1.86	3.38	0.57	0.82	2.41	2.92	0.68
Aug.	0.50	1.72	2.32	2.64	1.64	3.23	0.54	0.71	2.06	2.93	0.57
Sep.	0.49	1.61	2.27	2.52	1.60	3.12	0.52	0.69	2.10	2.74	0.58
Oct.	0.46	1.68	2.11	2.55	1.55	2.97	0.49	0.66	1.99	2.72	0.56
Nov.	0.46	1.67	2.23	2.56	1.52	2.76	0.48	0.70	2.11	2.92	0.58
Dec.	0.45	1.67	2.31	2.40	1.53	2.45	0.47	0.77	2.00	2.53	0.64
2010 Jan.	0.43	1.74	2.33	2.52	1.47	2.23	0.45	0.72	1.95	2.44	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	0.80	2.73	2.34	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	0.42	2.15	2.10	2.48	1.41	1.95	0.43	0.87	1.81	2.40	0.66

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

	Revolving loans and		Consumer	credit			Lending f	or house pu		Other lending by initial rate fixation			
	overdrafts,	By initi	al rate fixati	on	Annual	I	By initial rate	e fixation		Annual	· ·		
	convenience				percentage					percentage			
	and extended	Floating rate	Over 1	Over	rate of	Floating rate	Over 1	Over 5	Over	rate of	Floating rate	Over 1	Over
	credit card	and up to	and up to	5 years	charge 4)	and up to	and up to	and up to	10 years	charge 4)	and up to	and up to	5 years
	debt 2)	1 year	5 years			1 year	5 years	10 years			1 year	5 years	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2009 July	9.31	7.63	6.49	8.03	8.02	3.03	4.10	4.54	4.54	4.02	3.35	4.77	4.91
Aug.	9.26	7.93	6.54	7.96	8.17	3.00	4.10	4.54	4.45	4.06	3.24	4.74	4.82
Sep.	9.26	7.69	6.45	7.91	8.00	2.81	4.05	4.48	4.45	3.92	3.13	4.66	4.74
Oct.	9.16	7.32	6.38	7.94	7.87	2.77	4.02	4.45	4.40	3.85	3.21	4.73	4.72
Nov.	9.07	7.03	6.29	7.87	7.76	2.71	3.97	4.46	4.32	3.78	3.16	4.57	4.66
Dec.	8.99	6.42	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	3.13	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	3.17	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	6.77	6.12	7.92	7.66	2.62	3.70	4.18	4.12	3.67	3.06	4.32	4.53
May	8.78	6.69	6.14	7.84	7.62	2.58	3.65	4.14	4.01	3.58	3.09	4.45	4.50
Iune	9.02	5 23	6.06	7 89	7 14	2.55	3 60	4 08	3 90	3 52	3.03	4 25	4 27

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

	Revolving loans and overdrafts.	Other loa by	ns of up to EUR 1 m initial rate fixation	Other loans of over EUR 1 million by initial rate fixation				
	convenience and extended credit card debt <sup>2)</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	
	1	2	3	4	5	6	7	
2009 July	4.34	3.56	4.78	4.32	2.37	2.89	3.90	
Aug.	4.23	3.42	4.67	4.24	2.30	2.80	3.83	
Sep.	4.25	3.36	4.54	4.16	2.06	2.89	3.64	
Oct.	4.18	3.33	4.49	4.18	2.14	2.73	3.64	
Nov.	4.11	3.34	4.49	4.10	2.22	2.74	3.80	
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	2.83	3.41	
June	3.73	3.25	4.10	3.81	2.17	2.92	3.33	

Source: ECB.

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

Data refer to the changing composition of the curo area. For further miomation, see the General Notes. 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). 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. 2) 3)

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>)

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

		Depos	its from househo	olds		Deposits from	rporations	Repos	
	Overnight <sup>2)</sup>	With an agreed 1	naturity of:	Redeemable at	notice of: 2),3)	Overnight 2)	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 July	0.52	3.07	3.03	1.86	3.38	0.57	1.97	3.52	1.53
Aug.	0.50	2.94	3.01	1.64	3.23	0.54	1.89	3.39	1.53
Sep.	0.49	2.83	3.01	1.60	3.12	0.52	1.80	3.39	1.45
Oct.	0.46	2.64	2.96	1.55	2.97	0.49	1.70	3.34	1.35
Nov.	0.46	2.50	2.95	1.52	2.76	0.48	1.62	3.37	1.28
Dec.	0.45	2.36	2.91	1.53	2.45	0.47	1.56	3.30	1.21
2010 Jan.	0.43	2.20	2.80	1.47	2.23	0.45	1.45	3.23	1.20
Feb.	0.42	2.15	2.84	1.45	2.11	0.44	1.42	3.31	1.20
Mar.	0.42	2.13	2.75	1.45	2.05	0.44	1.38	3.26	1.16
Apr.	0.41	2.13	2.75	1.42	2.01	0.43	1.37	3.24	1.16
May	0.40	2.13	2.71	1.40	1.98	0.43	1.42	3.22	1.14
June	0.42	2.13	2.72	1.41	1.95	0.43	1.45	3.11	1.26

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

			Loans to he		Loans to non-financial corporations				
	Lendi w	ng for house purcha	ase	Consum w	er credit and other vith a maturity of:	· loans	W	ith 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 July	4.31	4.31	4.36	7.82	6.79	5.70	3.72	3.59	3.81
Aug.	4.23	4.25	4.28	7.82	6.74	5.65	3.65	3.50	3.73
Sep.	4.18	4.26	4.25	7.80	6.71	5.63	3.62	3.43	3.68
Oct.	4.05	4.19	4.18	7.69	6.66	5.54	3.56	3.37	3.60
Nov.	4.01	4.15	4.12	7.56	6.66	5.51	3.53	3.36	3.57
Dec.	4.07	4.11	4.07	7.55	6.57	5.43	3.46	3.35	3.50
2010 Jan.	3.99	4.05	4.00	7.51	6.52	5.38	3.47	3.31	3.45
Feb.	4.04	4.11	4.03	7.49	6.61	5.43	3.45	3.33	3.43
Mar.	3.98	4.04	3.98	7.44	6.52	5.36	3.43	3.26	3.37
Apr.	3.89	4.01	3.92	7.38	6.51	5.30	3.42	3.21	3.33
May	3.87	3.97	3.89	7.40	6.46	5.29	3.41	3.20	3.31
June	3.79	3.96	3.83	7.59	6.43	5.25	3.27	3.20	3.29

#### C21 New deposits with an agreed maturity







Source: ECB.

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



			Euro area <sup>1), 2)</sup>			United States	Japan
	Overnight	1-month	3-month	6-month	12-month	3-month	3-month
	deposits	deposits	deposits	deposits	deposits	deposits	deposits
	(EONIA)	(EURIBOR)	(EURIBOR)	(EURIBOR)	(EURIBOR)	(LIBOR)	(LIBOR)
	1	2	3	4	5	6	7
2007	3.87	4.08	4.28	4.35	4.45	5.30	0.79
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
2009 Q2	0.77	0.94	1.31	1.51	1.67	0.84	0.53
Q3	0.36	0.53	0.87	1.13	1.34	0.41	0.40
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
2009 July	0.36	$\begin{array}{c} 0.61 \\ 0.51 \\ 0.46 \\ 0.43 \\ 0.44 \\ 0.48 \end{array}$	0.97	1.21	1.41	0.52	0.43
Aug.	0.35		0.86	1.12	1.33	0.42	0.40
Sep.	0.36		0.77	1.04	1.26	0.30	0.36
Oct.	0.36		0.74	1.02	1.24	0.28	0.33
Nov.	0.36		0.72	0.99	1.23	0.27	0.31
Dec.	0.35		0.71	1.00	1.24	0.25	0.28
2010 Jan. Feb. Mar. Apr. May June July	$\begin{array}{c} 0.34 \\ 0.34 \\ 0.35 \\ 0.35 \\ 0.34 \\ 0.35 \\ 0.48 \end{array}$	$\begin{array}{c} 0.44 \\ 0.42 \\ 0.41 \\ 0.40 \\ 0.42 \\ 0.45 \\ 0.58 \end{array}$	0.68 0.66 0.64 0.69 0.73 0.85	0.98 0.96 0.95 0.96 0.98 1.01 1.10	1.23 1.23 1.22 1.23 1.25 1.28 1.37	0.25 0.25 0.27 0.31 0.46 0.54 0.54	0.26 0.25 0.25 0.24 0.24 0.24 0.24



Source: ECB.

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



#### 4.7 Euro area yield curves <sup>1</sup>) (AAA-rated euro area central governm

				Spot rate		Instantaneous forward rates						
	3 months	1 year	2 years	5 years	7 years	10 years	10 years - 3 months (spread) 7	10 years - 2 years (spread) 8	1 year	2 years	5 years	10 years
2007 2008 2009	3.85 1.75 0.38	4.00 1.85 0.81	4.01 2.14 1.38	4.11 2.95 2.64	4.23 3.32 3.20	4.38 3.69 3.76	0.52 1.94 3.38	0.36 1.55 2.38	4.06 2.09 1.41	4.02 2.76 2.44	4.40 4.04 4.27	4.78 4.60 5.20
2009 Q2 Q3 Q4 2010 Q1 Q2	0.62 0.41 0.38 0.33 0.34	0.90 0.70 0.81 0.60 0.42	1.50 1.33 1.38 1.05 0.69	2.85 2.59 2.64 2.28 1.79	3.42 3.12 3.20 2.86 2.41	3.99 3.64 3.76 3.46 3.03	3.37 3.23 3.38 3.13 2.68	2.49 2.31 2.38 2.41 2.33	$1.47 \\ 1.34 \\ 1.41 \\ 1.02 \\ 0.62$	2.67 2.47 2.44 1.98 1.35	4.54 4.14 4.27 3.96 3.54	5.42 4.96 5.20 5.02 4.52
2009 July Aug. Sep. Oct. Nov. Dec.	$\begin{array}{c} 0.49 \\ 0.44 \\ 0.41 \\ 0.50 \\ 0.44 \\ 0.38 \end{array}$	$\begin{array}{c} 0.74 \\ 0.74 \\ 0.70 \\ 0.81 \\ 0.80 \\ 0.81 \end{array}$	1.43 1.46 1.33 1.43 1.34 1.38	2.68 2.69 2.59 2.61 2.49 2.64	3.21 3.19 3.12 3.13 3.01 3.20	3.74 3.68 3.64 3.68 3.57 3.76	3.26 3.24 3.23 3.18 3.13 3.38	2.31 2.22 2.31 2.25 2.23 2.38	$     \begin{array}{r}       1.49 \\       1.55 \\       1.34 \\       1.49 \\       1.38 \\       1.41 \\     \end{array} $	2.62 2.66 2.47 2.50 2.32 2.44	4.21 4.16 4.14 4.12 4.00 4.27	5.13 4.95 4.96 5.11 5.04 5.20
2010 Jan. Feb. Mar. Apr. May June July	$\begin{array}{c} 0.28 \\ 0.30 \\ 0.33 \\ 0.32 \\ 0.21 \\ 0.34 \\ 0.45 \end{array}$	$\begin{array}{c} 0.71 \\ 0.54 \\ 0.60 \\ 0.60 \\ 0.28 \\ 0.42 \\ 0.59 \end{array}$	1.25 1.02 1.05 1.01 0.57 0.69 0.87	2.48 2.29 2.28 2.18 1.75 1.79 1.88	3.06 2.88 2.86 2.78 2.39 2.41 2.44	3.66 3.49 3.46 3.40 3.00 3.03 3.01	3.38 3.19 3.13 3.07 2.78 2.68 2.56	2.42 2.46 2.41 2.39 2.43 2.33 2.14	$1.28 \\ 0.98 \\ 1.02 \\ 1.00 \\ 0.47 \\ 0.62 \\ 0.82$	2.25 2.01 1.98 1.85 1.28 1.35 1.51	4.15 3.99 3.96 3.89 3.58 3.54 3.45	5.23 5.08 5.02 4.94 4.46 4.52 4.43



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.



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

		Dow Jones EURO STOXX indices 1)           Benchmark         Main industry indices													
	Bench	ımark					Main indus	stry indices							
	Broad index	50	Basic materials	Consumer services	Consumer goods	Oil and gas	Financials	Industrials	Technology	Utilities	Telecoms	Health care	Standard & Poor's 500	Nikkei 225	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2007	416.4	4,315.8	543.8	235.4	366.5	449.6	408.3	488.4	383.4	561.4	492.7	519.2	1,476.5	16,984.4	
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	
2009 Q2	220.5	2,376.6	326.9	136.6	229.5	287.3	158.6	251.0	201.1	337.7	351.5	343.8	892.0	9,274.8	
Q3	247.2	2,660.6	369.0	142.0	257.1	296.8	192.7	286.0	211.3	361.1	386.0	365.1	994.2	10,117.3	
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	
2009 July	228.0	2,462.1	337.9	134.8	243.7	288.6	170.6	256.8	198.8	334.7	364.8	352.9	934.1	9,678.3	
Aug.	250.7	2,702.7	377.6	142.1	261.8	293.2	198.6	290.3	208.5	365.7	387.2	364.1	1,009.7	10,430.4	
Sep.	264.0	2,827.9	393.3	149.5	266.5	308.7	210.2	312.5	227.2	384.4	407.0	378.8	1,044.6	10,302.9	
Oct.	268.7	2,865.5	403.7	150.1	277.5	314.2	216.0	318.4	221.3	375.4	415.0	393.6	1,067.7	10,066.2	
Nov.	265.4	2,843.8	415.4	149.5	280.0	315.3	208.7	313.6	209.9	369.8	414.5	391.5	1,088.1	9,641.0	
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	

Jones EURO STOXX broad index, Standard & Poor's 500 and Nikkei 225



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





# PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

### 5.1 HICP, other prices and costs

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

			Total			Tot	al (s.a.; perc	d)	Memo item: Administered prices 2)				
	Index: 2005 = 100		Total Total excl. unprocessed food and energy	Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
% of total 3)	100.0	100.0	83.1	58.0	42.0	100.0	11.9	7.3	29.3	9.6	42.0	88.9	11.1
	1	2	3	4	5	6	7	8	9	10	11	12	13
2006 2007 2008 2009	102.2 104.4 107.8 108.1	2.2 2.1 3.3 0.3	1.5 2.0 2.4 1.3	2.3 1.9 3.8 -0.9	2.0 2.5 2.6 2.0	- - -	- - -		- - -	- - -	- - -	2.1 2.1 3.4 0.1	2.5 2.3 2.7 1.7
2009 Q2 Q3 Q4 2010 Q1 Q2	108.3 108.0 108.6 108.6 110.0	0.2 -0.4 0.4 1.1 1.5	1.5 1.2 1.0 0.9 0.8	-1.2 -1.9 -0.4 0.9 1.7	2.2 1.8 1.7 1.5 1.2	0.3 0.2 0.2 0.4 0.6	0.1 0.3 0.1 0.0 0.3	-0.8 -0.9 0.1 0.7 0.7	0.1 0.0 0.0 0.0 0.2	0.7 0.8 0.3 3.0 3.9	0.5 0.4 0.4 0.3 0.3	0.0 -0.6 0.4 1.2 1.5	1.8 1.2 0.8 0.4 1.3
2010 Feb. Mar. Apr. May June	108.4 109.4 109.9 110.0 110.0	0.9 1.4 1.5 1.6 1.4	0.8 0.9 0.8 0.9 0.9	0.6 1.3 1.8 1.9 1.5	1.3 1.6 1.2 1.3 1.3	0.1 0.4 0.2 0.1 0.1	0.0 0.0 0.1 0.2 0.3	0.3 0.6 0.5 -0.6 0.2	0.0 0.0 0.1 0.1 0.1	-0.1 2.6 2.0 0.6 -0.4	0.1 0.3 -0.1 0.1 0.1	1.0 1.6 1.6 1.6 1.4	0.4 0.4 1.2 1.4 1.4
July 4)		1.7											

			Goods	6			Services						
	Food (incl. ald	coholic beverage	es and tobacco)		Industrial good	s	Hous	ing	Transport	Communication	Recreation and	Miscellaneous	
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy		Rents			personal		
% of total 3)	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 Q2	1.0	1.1	0.8	-2.3	0.7	-10.7	2.1	1.8	3.1	-1.2	2.7	2.0	
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	
2010 Jan.	-0.1	0.6	-1.3	1.1	0.1	4.0	1.9	1.7	2.6	-0.9	1.0	1.6	
Feb.	-0.1	0.6	-1.2	0.9	0.1	3.3	1.9	1.6	2.2	-0.4	0.9	1.6	
Mar.	0.3	0.5	-0.1	1.8	0.1	7.2	1.9	1.6	2.7	-0.3	1.4	1.5	
Apr.	0.7	0.6	0.7	2.3	0.2	9.1	1.9	1.5	2.4	-0.6	0.4	1.4	
May	0.7	0.9	0.4	2.5	0.3	9.2	1.8	1.5	2.2	-1.1	0.9	1.5	
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	

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.



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

				Construct-	Residential							
	Total (index:	Т	otal		Industry ex	cluding con	struction	and energy		Energy	IOI ·	prices 2)
	2005 = 100)		Manu- facturing	Total	Intermediate	Capital		Consumer g	oods			
			racturning		goods	20045	Total	Durable	Non-durable			
% of total 3)	100.0	100.0	83.0	75.8	30.1	21.9	23.7	2.7	21.0	24.2		
	1	2	3	4	5	6	7	8	0	10	11	12
	1		5			0		0	2	10	11	12
2006	105.1	5.1	3.5	2.7	4.6	1.6	1.5	1.4	1.4	13.5	4.6	6.6
2007	107.9	2.7	3.0	3.2	4.6	2.2	2.2	2.4	2.2	1.2	4.1	4.5
2008	114.4	6.1	4.8	3.4	3.9	2.1	3.9	2.8	4.1	14.2	3.8	1.5
2009	108.6	-5.1	-5.4	-2.8	-5.3	0.4	-2.0	1.2	-2.5	-11.7	0.1	-3.1
2009 O2	108.3	-5.8	-6.8	-3.0	-5.8	0.7	-2.0	1.5	-2.5	-13.6	-0.2	-3.1 <sup>4</sup>
<u> </u>	108.0	-7.9	-7.4	-4.1	-7.5	-0.1	-2.6	1.0	-3.1	-18.2	-1.7	-
Ò4	108.4	-4.6	-3.0	-3.1	-5.0	-0.6	-2.4	0.5	-2.8	-9.5	-0.2	$-3.0^4$
2010 Õi	109.6	-0.1	1.7	-0.5	-0.4	-0.5	-0.5	0.3	-0.7	0.3	0.2	-
Ž2	111.5	3.0	3.8	1.6	3.6	0.2	0.0	0.6	-0.1	7.0		
2010 Ian	109.3	-1.0	0.9	-10	-15	-0.6	-0.7	0.5	-0.8	-1.5		
Feh	109.4	-0.4	15	-0.5	-0.4	-0.5	-0.5	0.2	-0.6	-0.6		
Mar.	110.1	0.9	27	0.1	0.8	-0.3	-0.4	0.2	-0.5	3.0		
Anr	111.1	2.8	3.7	1.0	2.7	0.0	-0.3	0.0	-0.4	7.8		
May	111.5	3.1	4.1	1.0	3.9	0.0	0.0	0.4	-0.4	7.3		
June	111.8	3.0	3.5	1.9	4.3	0.3	0.2	0.8	0.1	6.0	-	-

#### 3. Commodity prices and gross domestic product deflators 1)

	Oil prices 5) (EUR per		Non	-energy co	mmodity	prices					GDP	deflators			
	barrel)	Impo	ort-weig	hted 6)	Use	-weighte	ed 7)	Total (s.a.; index:	Total		Domesti	c demand		Exports <sup>8)</sup>	Imports <sup>8)</sup>
		Total	Food	Non-food	Total	Food	Non-food	2000 = 100)		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 2007 2008 2009	52.9 52.8 65.9 44.6	27.7 7.8 2.0 -18.5	5.8 14.3 18.5 -8.9	37.9 5.5 -4.4 -23.1	24.5 5.3 -1.7 -18.0	5.9 9.4 9.7 -11.5	38.2 2.9 -8.6 -22.8	113.8 116.5 119.0 120.2	1.9 2.4 2.2 1.0	2.4 2.3 2.7 0.0	2.2 2.3 2.8 -0.2	2.0 1.6 2.6 1.8	2.9 2.7 2.4 -0.9	2.6 1.6 2.6 -3.1	3.8 1.4 3.7 -5.6
2009 Q1 Q2 Q3 Q4 2010 Q1	35.1 43.8 48.1 51.2 56.0	-29.3 -24.5 -18.7 3.2 29.0	-15.0 -11.2 -12.7 5.8 7.5	-36.1 -30.9 -21.5 1.9 42.7	-28.7 -22.5 -18.9 2.5 27.4	-17.7 -10.0 -15.3 -0.9 7.5	-36.9 -31.4 -21.4 5.1 46.6	120.1 120.0 120.2 120.3 120.8	1.8 1.0 0.8 0.2 0.5	0.9 -0.2 -0.6 0.0 0.2	0.3 -0.4 -0.8 0.2 1.3	2.4 1.3 2.2 1.4 1.6	0.6 -0.9 -1.8 -1.4 -0.4	-1.9 -3.4 -4.3 -2.7 2.3	-4.2 -6.6 -8.0 -3.5 1.3
2010 Feb. Mar. Apr. May June July	54.5 59.1 64.0 61.6 62.2 58.9	25.4 34.5 51.9 52.1 50.9 56.0	5.0 8.9 8.1 11.5 17.6 24.9	38.4 50.5 78.7 77.8 71.4 73.6	25.0 31.5 43.8 43.6 44.0 49.4	7.1 7.7 8.9 12.0 20.9 31.1	42.3 54.5 76.2 73.8 64.8 64.5								

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).

Input prices for residential buildings.
 Experimental data based on non-harmonised national sources (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for further details).
 In 2005.

4) The quarterly data for the second and fourth quarters refer to biannual averages for the first and second halves of the year respectively. Since some national data are only available annually, the biannual estimate is partially derived from annual results; consequently, the accuracy of biannual data is lower than the accuracy of annual data.

5) Brent Blend (for one-month forward delivery).

6)

Refers to prices expressed in euro. Weighted according to the structure of euro area imports in the period 2004-06. 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 7) (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for details).

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



#### 4. Unit labour costs, compensation per labour input and labour productivity (seasonally adjusted)

	Total	Total				By economic activity		
	2000 = 100		Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
	1	2	3	4	5	6	7	8
				t	Jnit labour costs	I)		
2008	115.4	3.3	0.4	3.7	2.9	3.1	3.6	2.8
2009	119.8	3.8	-1.2	10.1	1.1	4.9	0.8	2.7
2009 Q2	120.2	4.7	-0.2	14.0	0.8	6.1	1.3	1.9
Q3	119.7	3.5	-2.2	8.7	0.2	3.8	0.4	3.5
2010 01	119.7	1.3	-1.0	1.5	1.2	2.2	0.7	2.0
2010 Q1	119.7	-0.5	-0.7	-0.8	ensation per emr	-0.1	1.1	1.4
2008	121.5	2.1	2.0	2.0		27	2.7	2.4
2008	121.5	1.5	2.2	0.2	2.1	2.7	1.4	2.6
2009 02	122.9	14	2.4	0.0	2.6	2.0	19	19
03	123.6	1.5	2.0	0.4	2.1	0.4	1.4	3.3
Q4	124.0	1.3	2.3	0.4	1.7	1.0	1.8	2.1
2010 Q1	124.3	1.5	1.4	2.1	0.4	1.3	2.0	1.3
				Labour produ	ctivity per person	n employed 2)		
2008	105.3	-0.2	3.5	-0.7	1.4	-0.4	-0.8	0.6
2009	102.9	-2.3	3.5	-8.9	1.1	-3.3	0.6	-0.1
2009 Q2	102.3	-3.1	2.6	-12.4	1.8	-3.8	0.5	0.0
Q3	103.3	-1.9	4.2	-7.6	1.9	-3.3	1.0	-0.3
Q4	103.6	0.0	3.4	-1.1	0.5	-1.1	1.0	0.1
2010 Q1	103.9	1.9	2.2	9.5	-1.4	1.4	0.9	-0.1
				Compe	nsation per hour	worked		
2008	123.7	3.1	2.8	3.5	3.8	2.7	2.3	3.1
2009	127.5	3.1	3.2	4.5	4.2	2.2	2.6	3.0
2009 Q2	127.5	3.5	2.5	5.9	4.6	2.9	3.2	2.6
Q3	127.8	3.1	2.7	4.8	4.0	1.2	2.6	3.6
2010 01	127.8	2.1	3.2	1.5	3.8	1.4	2.5	2.3
2010 Q1	128.0	0.7	2.0	0.0	-0.9	0.2	1.9	1.1
				Hourl	y labour producti	(vity <sup>2)</sup>		
2008	108.0	-0.1	3.7	-0.2	1.2	-0.2	-1.2	0.2
2009	107.0	-0.9	3.5	-5.3	2.8	-2.7	1.8	0.2
2009 Q2	106.6	-1.4	1.6	-7.4	3.5	-3.0	2.0	0.4
Q3	107.4	-0.6	4.4	-3.9	3.5	-2.7	2.4	-0.1
2010 01	107.4	0.5	3.3	-0.2	1.9	-1.1	1.9	0.2
2010 Q1	107.6	1.5	3.4	1.3	-2.6	0.6	0./	-0.6

#### 5. Labour cost indices 3)

	Total (s.a.; index:	Total	Вус	component	For selec	cted economic activ	vities	Memo item: Indicator
	2008 = 100)		Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	of negotiated wages 4)
% 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 2009	100.0 102.6	3.5 2.7	3.6 2.6	3.4 3.0	3.8 3.1	4.7 3.7	3.1 2.3	3.3 2.7
2009 Q2 Q3	102.5 102.9	3.3 2.6	3.2 2.7	3.4 2.6	4.3 3.5	4.5 2.5	2.6 2.2	2.8 2.4
2010 Q4	103.3	2.1	1.6	2.0	0.6	3.3	2.1	2.2

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).

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).
 Compensation (at current prices) per employed divided by value added (volumes) per person employed.
 Value added (volumes) per labour input (persons employed and hours worked).
 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.
 Experimental data (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for further details).
 In 2008.



#### 5.2 Output and demand

#### 1. GDP and expenditure components

					GDP				
	Total		E	Oomestic demand			Exter	mal balance 1)	
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories 2)	Total	Exports 1)	Imports 1)
	1	2	3	4	5	6	7	8	9
			Curr	ent prices (EUR bill	ions; seasonally ad	justed)			
2006 2007	8,562.4 9,013.3	8,466.0 8,874.2	4,872.9 5.067.5	1,733.6 1.802.8	1,834.4 1,970.5	25.2 33.4	96.3 139.2	3,453.2 3,734.7	3,356.9 3,595.5
2008	9,258.2	9,160.0	5,228.6	1,891.8	2,000.5	39.2	98.2	3,862.7	3,764.5
2009	8,967.8	8,849.3	5,158.8	1,979.1	1,769.0	-57.7	118.5	3,249.6	3,131.1
2009 Q1	2,237.1	2,221.6	1,285.4	488.7	452.9	-5.5	15.5	807.7	792.2
02	2,255.8	2,204.5	1,287.5	492.7	444.2	-19.9	29.4	/91.4	780.8
	2,240.5	2,212.0	1 298 2	498.0	433.7	-13.0	393	835.5	796.2
2010 Q1	2,263.4	2,232.3	1,302.2	503.3	429.4	-2.6	31.1	873.2	842.1
				percenta	ge of GDP				
2009	100.0	98.7	57.5	22.1	19.7	-0.6	1.3	-	-
			Chain-linked vol	umes (prices for the	previous year; sea	sonally adjusted 3) )			
				quarter-on-quarter	percentage change	?S			
2009 Q1	-2.5	-2.4	-0.6	0.8	-5.3	-	-	-8.4	-8.0
Q2	-0.1	-0.7	0.1	0.7	-1.5	-	-	-1.1	-2.8
Q3	0.4	0.3	-0.2	0.7	-1.1	-	-	2.9	2.8
2010 01	0.1	-0.1	0.2	-0.2	-1.2	-	-	1.8	1.2
2010 Q1	0.2	0.8	-0.1	annual naraa	-1.2	-	-	2.1	5.0
2007	2.0	2.0	2.0	21	nuge changes			0.6	0.5
2006	3.0	2.9	2.0	2.1	5.4	-	-	8.6	8.5
2007	2.0	2.4	1.0	2.5	-0.6			0.5	5.5
2009	-4.1	-3.5	-1.2	2.7	-10.9	-	-	-13.3	-12.0
2009.01	-5.2	-3.7	-17	3.0	-11.5			-16.4	-13.3
2005 Q1 Õ2	-4.9	-3.8	-1.2	2.9	-11.5	-	-	-17.0	-14.7
Q3	-4.1	-3.5	-1.3	3.0	-11.4	-	-	-13.6	-12.4
Q4	-2.1	-2.8	-0.5	2.0	-8.7	-	-	-5.2	-7.0
2010 Q1	0.6	0.3	0.0	1.4	-4.8	-	-	5.7	4.9
		со	ntributions to quar	ter-on-quarter perce	entage changes in C	GDP; percentage poi	ıts		
2009 Q1	-2.5	-2.4	-0.3	0.2	-1.1	-1.1	-0.2	-	-
Q2	-0.1	-0.7	0.1	0.1	-0.3	-0.6	0.6	-	-
Q3	0.4	0.3	-0.1	0.1	-0.2	0.5	0.1	-	-
2010 01	0.1	-0.1	-0.1	0.0	-0.2	1.0	-0.6	-	-
2010 Q1	0.2	0.0	contributions to	annual percentage	changes in GDP: 1	percentage points	0.0		
2006	3.0	28	1.2	0.4	11	0.1	0.1		
2007	2.8	2.8	0.9	0.4	1.0	0.0	0.4	_	-
2008	0.6	0.6	0.2	0.4	-0.1	0.1	0.0	-	-
2009	-4.1	-3.4	-0.7	0.5	-2.3	-0.9	-0.7	-	-
2009 Q1	-5.2	-3.7	-1.0	0.6	-2.5	-0.8	-1.5	-	-
Q2	-4.9	-3.7	-0.7	0.6	-2.5	-1.1	-1.2	-	-
Q3	-4.1	-3.4	-0.7	0.6	-2.5	-0.8	-0.7	-	-
2010 01	-2.1	-2.8	-0.3	0.4	-1.8	-1.1	0.7	-	-

Sources: Eurostat and ECB calculations.

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.
 Including acquisitions less disposals of valuables.
 Annual data are not working day-adjusted.



Prices, output, demand and labour markets

### 5.2 Output and demand

#### 2. Value added by economic activity

			Gross	alue added (basic p	rices)			Taxes less subsidies on
	Total	Agriculture, hunting, forestry and fishing activities	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services	products
	1	2	3	4	5	6	7	8
			Current prices	(EUR billions; seaso	nally adjusted)			
2006 2007 2008 2009	7,648.5 8,054.7 8,312.4 8,074.5	140.8 151.4 147.0 130.7	1,565.3 1,644.5 1,656.5 1,431.8	477.8 511.1 534.2 516.0	1,596.8 1,671.0 1,731.3 1,670.5	2,137.2 2,273.8 2,361.7 2,370.5	1,730.4 1,802.9 1,881.7 1,955.0	913.9 958.7 945.8 893.2
2009 Q1 Q2 Q3 Q4 2010 Q1	2,013.9 2,012.1 2,022.7 2,025.9 2,041.6	34.1 32.8 31.7 32.1 33.0	356.2 353.1 360.2 362.3 369.1	131.5 129.6 128.4 126.5 124.0	416.9 417.1 418.5 417.9 419.3	591.4 592.3 592.7 594.1 599.5	483.8 487.1 491.1 493.0 496.6	223.3 221.8 223.6 224.6 221.9
			pe	rcentage of value ada	led			
2009	100.0	1.6	17.7	6.4	20.7	29.4	24.2	-
		Chain-	linked volumes (pric	ces for the previous y	ear; seasonally adjuste	d <sup>1)</sup> )		
			quarter-a	on-quarter percentage	e changes			
2009 Q1 Q2 Q3 Q4 2010 Q1	-2.6 -0.1 0.3 0.1 0.5	0.9 -0.1 0.8 -0.5 0.4	-8.7 -1.0 2.1 0.6 1.9	-1.1 -1.2 -1.4 -1.4	-3.2 0.0 0.0 0.0 0.1	-1.0 0.0 -0.1 0.1	$0.2 \\ 0.6 \\ 0.2 \\ 0.2 \\ 0.4$	-1.8 0.4 0.9 0.7 -2.2
2010 Q1	0.5	0.1	am	ual percentage chan	905	0.5	0.1	2.2
2006	2.9	0.0	36	2.8	2.7	4 2	14	33
2007 2008 2009	3.0 0.8 -4.3	0.4 1.6 1.2	2.5 -0.7 -13.6	2.4 -0.9 -5.8	3.4 0.8 -5.0	4.1 1.4 -1.6	2.1 1.6 1.2	0.9 -1.2 -2.5
2009 Q1 Q2 Q3 Q4	-5.3 -5.1 -4.3 -2.4	1.2 0.7 1.6 1.1	-16.7 -16.7 -13.2 -7.1	-6.5 -5.6 -5.5 -5.0	-6.0 -5.6 -5.1 -3.3	-1.6 -1.9 -1.8 -1.1	1.2 1.4 1.1 1.2	-4.5 -3.2 -2.3 0.1
2010 Q1	0.7	0.0	3.0	-0.2	0.0	0.5	1.4	-0.3
2009 Q1	-2.6	Contributions to	o quarter-on-quarter	r percentage changes	in value added; perce	-0.3	0.0	_
Q2 Q3 Q4 2010 Q1	-0.1 0.3 0.1 0.5	0.0 0.0 0.0 0.0	-0.2 0.4 0.1 0.3	-0.1 -0.1 -0.1 -0.1	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.2	0.1 0.0 0.0 0.1	-
		contribut	tions to annual perc	entage changes in val	ue added; percentage	points		
2006 2007 2008 2009	2.9 3.0 0.8 -4.3	0.0 0.0 0.0 0.0	0.7 0.5 -0.1 -2.7	0.2 0.1 -0.1 -0.4	0.6 0.7 0.2 -1.1	1.1 1.2 0.4 -0.5	0.3 0.5 0.4 0.3	
2009 Q1 Q2 Q3 Q4 2010 Q1	-5.3 -5.1 -4.3 -2.4 0.7	$\begin{array}{c} 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\end{array}$	-3.4 -3.4 -2.6 -1.4 0.6	-0.4 -0.4 -0.4 -0.3 -0.4	-1.3 -1.2 -1.1 -0.7 0.0	-0.5 -0.5 -0.5 -0.3 0.1	0.3 0.3 0.3 0.3 0.3	

Sources: Eurostat and ECB calculations.

1) Annual data are not working day-adjusted.



### 5.2 Output and demand

#### **3. Industrial production**

	Total				Indu	stry excluding o	onstruction	1				Construction
		Total (s a · index:		Fotal		Industry ex	cluding con	struction a	nd energy		Energy	
		2005 = 100)		Manu- facturing	Total	Intermediate goods	Capital goods		Consumer go	ods		
				0		0		Total	Durable	Non-durable		
% of total 1)	100.0	78.0	78.0	69.4	68.8	28.2	22.1	18.5	2.6	15.9	9.1	22.0
	1	2	3	4	5	6	7	8	9	10	11	12
2007 2008	3.2 -2.3	108.1 106.2	3.7 -1.7	4.1 -1.9	4.3 -1.9	3.7 -3.4	6.6 -0.1	2.4 -2.0	1.4 -5.7	2.5 -1.4	-0.9 0.3	1.2 -4.6
2009	-13.8	90.4	-14.9	-15.9	-16.4	-19.2	-20.9	-5.0	-17.5	-3.0	-5.5	-8.1
2009 Q2 Q3 Q4	-16.7 -13.6 -7.3	88.6 90.9 92.1	-18.7 -14.4 -7.4	-19.5 -15.2 -8.0	-20.0 -15.7 -8.4	-24.2 -18.3 -6.6	-24.2 -21.0 -14.0	-5.9 -4.0 -2.6	-21.2 -18.4 -10.1	-3.4 -1.9 -1.4	-8.9 -5.7 -3.8	-7.4 -9.1 -6.0
2010 Q1	2.0	94.4	4.8	5.1	5.2	8.2	2.8	3.5	0.1	3.9	2.9	-9.7
2009 Dec.	-3.8	92.1	-3.7	-4.2	-4.6	0.0	-11.0	-0.9	-7.3	0.0	-1.6	-3.6
2010 Jan. Feb. Mar. Apr. May	-0.2 0.8 5.1 6.5 6.3	94.3 93.7 95.3 96.1 97.1	2.1 4.4 7.8 9.5 9.6	2.3 4.6 8.1 9.6 9.8	2.6 4.7 7.8 9.7 9.9	4.9 7.3 12.0 15.8 14.9	0.0 3.1 4.8 9.2 9.0	1.7 2.6 5.9 2.8 4.0	-2.5 1.0 1.6 0.4 7.3	2.3 2.9 6.5 3.1 3.5	0.8 2.4 5.8 5.2 5.4	-10.3 -14.0 -5.4 -5.7 -6.0
				month-	on-month p	ercentage chang	es (s.a.)					
2009 Dec.	-1.0	-	-0.8	0.2	1.1	-2.2	-2.1	0.4	-2.9	0.6	2.8	0.4
2010 Jan. Feb. Mar. Apr. May	1.7 -1.1 2.4 0.6 0.5	- - - -	2.3 -0.6 1.8 0.8 1.0	1.9 0.6 1.7 0.5 0.7	0.9 0.9 1.6 1.0 0.6	2.3 0.6 2.5 2.1 0.9	3.2 -1.3 1.9 1.7 1.3	1.1 -0.1 1.5 -1.3 0.8	2.7 -0.5 0.5 -0.3 3.4	1.0 -0.1 1.7 -1.4 0.5	3.0 0.0 -1.6 -0.7 0.6	-1.9 -6.2 6.5 -0.3 -0.9

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

	Industrial ne	w orders	Industrial t	urnover		Reta		New passen	ger car ions				
	Manufactu (current p	ring <sup>2)</sup> rices)	Manufac (current p	turing prices)	Current prices			Constan	t prices			- og som at	
	Total (s.a.; index:	Total	Total (s.a.; index:	Total	Total	Total (s.a.; index:	Total	Food, beverages,	r	Non-food		Total (s.a.; thousands) <sup>3)</sup>	Total
	2005 = 100)		2005 = 100)			2005 = 100)		tobacco		footwear	Household equipment		
% of total 1)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42.9	57.1	9.9	13.9		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2007	119.9	8.6	115.0	6.5	2.6	104.3	1.8	0.0	3.1	4.0	3.1	968 806	-0.6
2008	87.7	-22.8	95.5	-18.5	-2.7	103.4	-1.8	-1.9	-1.9	-1.2	-3.9	926	3.2
2009 Q3	90.4	-21.4	95.9	-18.9	-3.5	101.4	-2.0	-1.4	-2.5	-2.8	-3.2	962	10.1
2010 Q1	92.1 95.3	-2.8 13.8	97.5 101.1	-9.3	-1.5 0.6	101.7	-0.6	-0.4	-0.7	3.3	-0.8	965 892	20.7
Q2		•	•	•	0.8	102.0	0.5	0.0	0.8	•	•	826	-10.6
2010 Jan.	91.6	7.5	99.4	1.1	-1.0	101.9	-0.3	0.7	-0.8	2.2	-1.5	859	8.3
Feb. Mar	94.8 99.4	12.5	100.5	6.0 11.0	0.2	101.9	0.4	0.6	0.5	2.2	0.6	878	2.9
Apr.	100.1	22.0	101.4	10.0	-0.1	101.6	-0.3	-0.9	0.0	-0.5	1.0	839	-10.1
May	103.7	22.6	106.0	13.1	1.2	102.2	1.0	0.9	1.0	-1.7	4.4	786	-13.1
June	•	•	•	•	1.3	102.1	0.8	0.1	1.4	•	•	853	-8.8
					month-on-m	onth percentag	e changes (	(s.a.)					
2010 Feb.	-	3.5	-	1.1	0.2	-	0.0	-0.1	0.1	-0.9	0.6	-	2.3
Mar.	-	4.9	-	3.0	0.9	-	0.6	0.5	0.6	1.8	1.3	-	6.8
May	_	37	-	-2.0	-1.0	-	-0.9	-1.0	-0.7	-2.7	-0.9	-	-10.0
June	-		-		0.0	-	-0.1	-0.7	0.3			-	8.5

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).
In 2005.
Includes manufacturing industries working mainly on the basis of orders, which represented 61.2% of total manufacturing in 2005.
Annual and quarterly figures are averages of monthly figures in the period concerned.



Prices, output, demand and labour markets

#### 5.2 Output and demand

#### 5. Business<sup>2)</sup> and Consumer Surveys

	Economic sentiment		Man	ufacturing ind	lustry			Consur	ner confidence	indicator	
	indicator <sup>3)</sup> (long-term	In	dustrial confid	lence indicator		Capacity utilisation <sup>4)</sup>	Total 5)	Financial situation	Economic situation	Unemployment situation	Savings over next
	average = 100)	Total 5)	Order books	Stocks of finished products	Production expectations	(%)		over next 12 months	over next 12 months	over next 12 months	12 months
	1	2	3	4	5	6	7	8	9	10	11
2006	107.3	2	0	6	13	83.2	-9	-3	-9	15	-9
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
2009 Q2	75.6	-33	-62	18	-20	69.9	-28	-9	-34	59	-11
Q3	84.1	-26	-58	12	-9	70.3	-21	-5	-20	51	-9
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	76.5	-17	-6	-18	34	-9
2010 Feb. Mar	95.9 97.9	-13	-42	4	7 9	-	-17	-4	-12	47	-7
Apr.	100.6	-7	-32	-1	9	75.5	-15	-5	-12	36	-8
May	98.4	-6	-28	1	10		-18	-7	-21	34	-10
June	99.0	-6	-26	0	9	77.4	-17	-7	-20	32	-9
July	101.3	-4	-21	-1	10		-14	-7	-14	27	-9

	Constructio	n confidence	indicator	Reta		Services confidence indicator					
	Total 5)	Order books	Employment expectations	Total <sup>5)</sup>	Present business situation	Volume of stocks	Expected business situation	Total 5)	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2006	1	-4	6	1	3	14	13	18	13	18	24
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
2009 Q2	-33	-42	-24	-17	-23	9	-19	-22	-29	-23	-15
Õ3	-31	-41	-22	-14	-19	10	-13	-12	-18	-13	-5
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
2010 Feb.	-29	-39	-18	-9	-12	9	-5	1	-2	-3	7
Mar.	-25	-35	-14	-6	-9	9	-1	1	-3	-1	8
Apr.	-25	-37	-13	-1	-1	8	4	6	0	5	11
May	-28	-40	-17	-6	-7	10	-1	4	-1	4	8
June	-30	-43	-17	-6	-7	7	-3	4	2	4	5
July	-29	-42	-16	-4	-6	7	0	6	5	8	6

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 activitites 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.

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>

#### 1. Employment in terms of persons employed

	Whole eco	onomy	By employ	ment status			By eco	onomic activity		
	Total (s.a.; 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 2)	100.0	100.0	85.3	14.7	3.8	17.1	7.5	25.5	16.1	30.0
	1	2	3	4	5	6	7	8	9	10
2007 2008 2009	146.754 147.846 145.079	1.8 0.7 -1.9	2.0 0.9 -1.8	0.7 -0.3 -2.1	-1.6 -1.8 -2.2	0.3 0.0 -5.1	3.6 -2.3 -6.7	1.9 1.2 -1.8	4.3 2.3 -2.2	1.3 1.1 1.3
2009 Q2 Q3 Q4 2010 Q1	145.362 144.587 144.258 144.261	-1.9 -2.3 -2.0 -1.2	-1.9 -2.3 -2.0 -1.2	-2.1 -2.3 -2.1 -0.9	-2.0 -2.6 -2.0 -1.1	-4.9 -6.4 -6.1 -5.3	-7.2 -7.3 -5.4 -4.3	-1.9 -1.9 -2.0 -1.3	-2.4 -2.8 -2.1 -0.4	1.4 1.4 1.0 1.5
				quarter-	on-quarter per	centage changes (:	s.a.)			
2009 Q2 Q3 Q4 2010 Q1	-0.752 -0.775 -0.329 0.004	-0.5 -0.5 -0.2 0.0	-0.5 -0.5 -0.2 -0.1	-0.5 -0.6 -0.3 0.4	-0.7 -1.2 0.3 0.1	-1.7 -1.7 -1.1 -0.9	-1.3 -1.7 -0.4 -1.5	-0.5 -0.3 -0.6 0.0	-0.7 -0.5 0.2 0.5	0.4 0.3 0.2 0.5

### 2. Employment in terms of hours worked

	Whole eco	onomy	By employ	ment status			By eco	onomic activity		
	Total (s.a.; 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 2)	100.0	100.0	80.4	19.6	5.0	17.1	8.4	26.9	15.6	27.0
	1	2	3	4	5	6	7	8	9	10
2007 2008 2009	237,005.4 238,642.1 230,970.5	1.8 0.7 -3.2	2.0 1.0 -3.3	0.8 -0.6 -2.7	-2.3 -2.0 -2.2	0.6 -0.5 -8.7	3.6 -2.0 -8.3	1.9 1.0 -2.5	4.3 2.6 -3.4	1.1 1.4 1.1
2009 Q2 Q3 Q4 2010 Q1	57,761.5 57,578.7 57,653.2 57,622.3	-4.1 -3.5 -2.2 -0.4	-4.5 -3.7 -2.3 -0.5	-2.7 -2.8 -1.8 -0.2	-1.3 -2.6 -1.8 -2.6	-11.1 -9.9 -6.2 -3.1	-9.3 -8.6 -6.0 -3.7	-3.1 -2.6 -1.7 -0.3	-4.3 -4.2 -2.6 -0.1	0.6 1.3 1.1 2.1
				quarter-	on-quarter per	centage changes (.	s.a.)			
2009 Q2 Q3 Q4 2010 Q1	-215.7 -182.8 74.5 -30.9	-0.4 -0.3 0.1 -0.1	-0.5 -0.3 0.2 0.0	0.1 -0.6 0.0 -0.1	0.0 -1.3 -0.2 -1.1	-1.9 -0.8 -0.3 -0.5	-0.2 -1.1 -0.5 -1.9	-0.2 -0.4 0.0 0.0	-0.7 -0.5 0.6 0.4	0.5 0.5 0.4 0.6

#### 3. Hours worked per person employed

	whole econ	omy	By employi	nent status			By eco	nomic activity		
-	Total (s.a.; 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 2008 2009	1.615 1.614 1.592	0.0 -0.1 -1.4	0.0 0.1 -1.5	0.2 -0.3 -0.6	-0.7 -0.2 -0.1	0.3 -0.5 -3.8	0.0 0.3 -1.7	0.0 -0.2 -0.7	0.0 0.3 -1.2	-0.1 0.3 -0.3
2009 Q2 Q3 Q4	0.397 0.398 0.400	-2.3 -1.3 -0.1	-2.7 -1.5 -0.3	-0.7 -0.5 0.3	0.7 -0.1 0.2	-6.6 -3.8 -0.1	-2.3 -1.4 -0.6	-1.2 -0.7 0.3	-1.9 -1.4 -0.5	-0.9 -0.1 0.1

Source: Eurostat.
 Data for employment are based on the ESA 95.
 In 2009.



#### 4. Unemployment <sup>1)</sup>

(seasonally adjusted)

	Tot	al		B	y age 3)		By gender 4)					
	Millions	% of labour force	A	dult	Y	outh	١	Male	F	emale		
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force		
% of total 2)	100.0		78.4		21.6		53.8		46.2			
	1	2	3	4	5	6	7	8	9	10		
2006 2007 2008 2009	12.877 11.679 11.890 14.866	8.3 7.5 7.6 9.4	10.053 9.126 9.265 11.646	7.3 6.6 6.6 8.2	2.824 2.553 2.625 3.220	16.4 14.9 15.4 19.4	6.389 5.737 5.997 7.997	7.5 6.7 6.9 9.3	6.488 5.942 5.893 6.869	9.4 8.5 8.3 9.6		
2009 Q2 Q3 Q4 2010 Q1 Q2	14.784 15.295 15.502 15.666 15.753	9.4 9.7 9.8 9.9 10.0	11.546 11.996 12.241 12.422 12.586	8.2 8.5 8.7 8.8 8.9	3.237 3.299 3.261 3.244 3.167	19.4 20.0 20.0 20.0 19.8	7.959 8.258 8.421 8.479 8.465	9.2 9.6 9.8 9.8 9.8	6.825 7.038 7.082 7.187 7.288	9.5 9.8 9.9 10.0 10.1		
2010 Jan. Feb. Mar. Apr. May June	15.595 15.672 15.732 15.724 15.765 15.771	9.9 9.9 10.0 10.0 10.0 10.0	12.352 12.406 12.509 12.519 12.591 12.648	8.7 8.8 8.8 8.8 8.9 8.9	3.243 3.266 3.224 3.205 3.174 3.123	20.0 20.1 20.0 19.9 19.8 19.6	8.460 8.498 8.479 8.469 8.470 8.470 8.457	9.8 9.9 9.8 9.8 9.8 9.8 9.8	7.135 7.174 7.253 7.256 7.295 7.313	10.0 10.0 10.1 10.1 10.1 10.2		

Source: Eurostat.
 Data for unemployment refer to persons and follow ILO recommendations.
 In 2009.
 Adult: 25 years of age and over; youth: below 25 years of age; rates are exprised over the second second

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.
 Rates are expressed as a percentage of the labour force for the relevant gender.



### **GOVERNMENT FINANCE**

### 6.1 Revenue, expenditure and deficit/surplus 1)

#### 1. Euro area - revenue

	Total			Capital	Memo item:									
			Direct			Indirect		Social			Sales		Capital	Fiscal
			taxes	Households (	Corporations	taxes	Received by EU	contributions	Employers	Employees			taxes	burden 2)
							institutions							
	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	0.4	0.3	40.9
2006	45.3	45.0	12.1	8.9	3.0	13.9	0.3	15.3	8.0	4.5	2.1	0.3	0.3	41.5
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	41.6
2008	44.9	44.7	12.2	9.3	2.8	13.3	0.3	15.3	8.0	4.5	2.1	0.2	0.3	41.0
2009	44.5	44.2	11.3	9.2	2.0	13.1	0.3	15.7	8.2	4.5	2.2	0.3	0.4	40.5

#### 2. Euro area - expenditure

	Total				Current e	expenditure				Capital expenditure				Memo item:
		Total	Compensation	Intermediate	Interest	Current					Investment	Capital		Primary
			of	consumption		transfers	Social	Subsidies				transfers	Paid by EU	expenditure 3)
			employees				payments		Paid by EU				institutions	
					_		_		institutions					
	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	42.8	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	42.3	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	46.9	43.0	10.1	5.1	3.0	24.8	22.0	1.6	0.4	3.8	2.5	1.3	0.0	43.9
2009	50.7	46.5	10.8	5.6	2.8	27.3	24.2	1.8	0.5	4.2	2.8	1.4	0.0	47.9

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

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Government consumption 4)	Government o	(			Primary		15 (+)	(-)/surplu	Deficit		
2001         -1.9         -1.7         -0.4         -0.1         0.3         1.9         20.5         10.4         4.9         5.1         1.8         2.1         8.3           2001         -1.9         -1.7         -0.4         -0.1         0.3         1.9         20.2         10.4         4.9         5.1         1.8         2.1         8.3           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           2004         -3.0         -2.5         -0.4         -0.3         0.1         0.1         20.4         10.4         5.0         5.2         1.9         2.1         8.3           2005         -2.6         -2.2         -0.3         0.1         0.1         20.4         10.4         5.0         5.1         1.9         2.1         8.3           2005         -2.6         -2.2         0.4         -0.3         0.1         0.1         20.4         10.4         5.0         5.1         1.9         2.1         8.3           2005         -2.6         -2.2         0.4         1.6         20.3	Collective Ind				Total	deficit (-)/	Social	Local	State	Central	Total	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	ate Transfers Consumption Sales consumption consu	Transfers	Intermediate	Compensation			security	gov.	gov.	gov.		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	ion in kind of fixed (minus)	in kind	consumption	of employees			funds					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	via market capital	via market										
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	9 10 11 12 13	10	9	8	7	6	5	4	3	2	1	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4.8 4.9 1.8 2.1 8.2	4.9	4.8	10.3	19.8	1.9	0.3	-0.1	-0.4	-1.7	-1.9	2001
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4.9 5.1 1.8 2.1 8.3	5.1	4.9	10.4	20.2	0.9	0.2	-0.2	-0.5	-2.1	-2.6	2002
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5.0 5.2 1.9 2.1 8.3	5.2	5.0	10.5	20.5	0.2	0.0	-0.2	-0.5	-2.4	-3.1	2003
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           2006         -1.3         -1.5         -0.1         -0.2         0.4         1.6         20.3         10.2         5.0         5.2         1.9         2.1         8.0	5.0 5.1 1.9 2.1 8.3	5.1	5.0	10.4	20.4	0.1	0.1	-0.3	-0.4	-2.5	-3.0	2004
2006 -1.3 -1.5 -0.1 -0.2 0.4 1.6 20.3 10.2 5.0 5.2 1.9 2.1 8.0	5.1 5.1 1.9 2.2 8.2	5.1	5.1	10.4	20.4	0.4	0.2	-0.2	-0.3	-2.2	-2.6	2005
	5.0 5.2 1.9 2.1 8.0	5.2	5.0	10.2	20.3	1.6	0.4	-0.2	-0.1	-1.5	-1.3	2006
2007 -0.6 -1.1 0.0 -0.1 0.5 2.3 20.0 10.0 5.0 5.2 1.9 2.1 7.9	5.0 5.2 1.9 2.1 7.9	5.2	5.0	10.0	20.0	2.3	0.5	-0.1	0.0	-1.1	-0.6	2007
2008 -2.0 -2.0 -0.2 -0.2 0.4 1.0 20.4 10.1 5.1 5.3 1.9 2.1 8.1	5.1 5.3 1.9 2.1 8.1	5.3	5.1	10.1	20.4	1.0	0.4	-0.2	-0.2	-2.0	-2.0	2008
2009 -6.2 -5.0 -0.5 -0.3 -0.4 -3.4 22.1 10.8 5.6 5.8 2.0 2.2 8.8	5.6 5.8 2.0 2.2 8.8	5.8	5.6	10.8	22.1	-3.4	-0.4	-0.3	-0.5	-5.0	-6.2	2009

#### 4. Euro area countries – deficit (-)/surplus (+)<sup>5</sup>)

	<b>BE</b> 1	DE 2	<b>IE</b> 3	GR 4	<b>ES</b> 5	<b>FR</b> 6	<b>IT</b> 7	<b>CY</b> 8	<b>LU</b> 9	<b>MT</b> 10	<b>NL</b> 11	<b>AT</b> 12	<b>PT</b> 13	<b>SI</b> 14	<b>SK</b> 15	<b>FI</b> 16
2006	0.3	-1.6	3.0	-3.6	2.0	-2.3	-3.3	-1.2	1.4	-2.6	0.5	-1.5	-3.9	-1.3	-3.5	4.0
2007	-0.2	0.2	0.1	-5.1	1.9	-2.7	-1.5	3.4	3.6	-2.2	0.2	-0.4	-2.6	0.0	-1.9	5.2
2008	-1.2	0.0	-7.3	-7.7	-4.1	-3.3	-2.7	0.9	2.9	-4.5	0.7	-0.4	-2.8	-1.7	-2.3	4.2
2009	-6.0	-3.3	-14.3	-13.6	-11.2	-7.5	-5.3	-6.1	-0.7	-3.8	-5.3	-3.4	-9.4	-5.5	-6.8	-2.2

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit/surplus.
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.

The fiscal burden comprises taxes and social contributions.
 Comprises total expenditure minus interest expenditure.
 Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
 Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.



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

	Total		Financial in	nstruments				Holders		
		Currency and	Loans	Short-term securities	Long-term securities		Domestic o	creditors <sup>2)</sup>		Other creditors 3)
		deposits				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	43.8	22.1	12.3	9.5	25.4
2001	68.2	2.8	12.4	4.0	48.9	42.0	20.6	11.0	10.4	26.2
2002	67.9	2.7	11.8	4.6	48.9	40.5	19.4	10.6	10.5	27.4
2003	69.0	2.1	12.4	5.0	49.6	39.7	19.6	11.0	9.1	29.3
2004	69.4	2.2	12.0	5.0	50.3	38.2	18.5	10.7	9.0	31.2
2005	70.0	2.4	11.8	4.7	51.1	36.3	17.2	11.1	7.9	33.8
2006	68.2	2.4	11.5	4.1	50.2	34.4	17.4	9.3	7.7	33.8
2007	65.9	2.2	10.8	4.2	48.7	32.6	16.7	8.5	7.3	33.4
2008	69.3	2.3	11.0	6.7	49.4	32.4	16.6	7.9	7.8	37.0
2009	78.7	2.4	11.9	8.6	55.8	36.6	19.6	8.7	8.2	42.2

#### 2. Euro area - by issuer, maturity and currency denomination

	Total		Issued	<b>by:</b> 4)	1	0	riginal matu	ırity	R	Residual maturit	y	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	
	1	2	3	4	5	6	7	8	9	10	11	12	13	
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	69.2 68.2 67.9 69.0 69.4 70.0 68.2 65.9 69.3 78.7	58.1 57.0 56.6 56.9 57.3 57.6 55.9 53.9 57.1	5.8 6.0 6.2 6.5 6.6 6.7 6.5 6.2 6.2 6.2	4.8 4.7 5.1 5.2 5.3 5.2 5.2 5.2	$\begin{array}{c} 0.4 \\ 0.4 \\ 0.4 \\ 0.6 \\ 0.4 \\ 0.5 \\ 0.5 \\ 0.5 \\ 0.4 \\ 0.6 \\ 0.4 \\ 0.6 \\$	6.5 7.0 7.6 7.8 7.8 7.9 7.4 7.4 10.2	62.7 61.1 60.3 61.2 61.6 62.1 60.8 58.5 59.2	6.2 5.3 5.2 5.0 4.6 4.3 4.3 4.3	13.4 13.7 15.5 14.9 14.8 14.8 14.8 14.4 14.6 17.7	27.8 26.6 25.3 26.0 26.2 25.5 24.0 23.5 23.3 26.7	28.0 27.9 27.2 28.2 28.4 29.6 29.8 27.8 28.3 28.3	67.4 66.6 66.7 68.1 68.6 69.0 67.6 65.4 68.6 78.6	1.8 1.5 1.3 0.9 0.9 1.0 0.6 0.5 0.8	
3. Euro ai	rea cour	ntries	10	510	010	1212	0012	10	1910	200	0212	7010	010	

	BE	DE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	РТ	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2006 2007 2008	88.1 84.2 89.8	67.6 65.0 66.0	24.9 25.0 43.9	97.8 95.7 99.2	39.6 36.2 39.7	63.7 63.8 67.5	106.5 103.5 106.1	64.6 58.3 48.4	6.5 6.7 13.7	63.7 61.9 63.7	47.4 45.5 58.2	62.2 59.5 62.6	64.7 63.6 66.3	26.7 23.4 22.6	30.5 29.3 27.7	39.7 35.2 34.2
2009	96.7	73.2	64.0	115.1	53.2	77.6	115.8	56.2	14.5	69.1	60.9	66.5	76.8	35.9	35.7	44.0

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' debt.
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.

Holders resident in the country whose government has issued the debt. 2)

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 1)

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

	Total	Source	ce of change			Financial	instruments			Hol	ders	
	-	Borrowing requirement <sup>2)</sup>	Valuation effects 3)	Other changes in volume <sup>4)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>5)</sup>	MFIs	Other financial corporations	Other creditors 6)
	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	0.0	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	3.1
2005	3.1	3.0	0.0	0.0	0.3	0.3	-0.1	2.6	-0.6	-0.7	0.8	3.6
2006	1.5	1.4	0.1	0.0	0.2	0.2	-0.4	1.5	-0.1	1.0	-1.2	1.6
2007	1.1	1.1	0.0	0.0	-0.1	-0.1	0.3	1.0	-0.2	0.2	-0.3	1.2
2008	5.2	5.1	0.1	0.0	0.1	0.4	2.6	2.0	0.7	0.4	-0.4	4.5
2009	7.1	7.3	-0.2	0.0	0.1	0.6	1.6	4.8	3.1	2.5	0.5	4.0

## 2. Euro area - deficit-debt adjustment

	Change in debt	Deficit (-) /						Deficit-de	bt adjustment <sup>s</sup>					
	dente	Surpius (1)	Total		Transactio	ons in main	n financial asse	ts held by gen	neral governmen	t	Valuation		Other	Other 9)
				Total	Cumanar	Loona	Convertion 10	Change and			effects	Exchange	changes in	
				Totai	and	Loans	Securities	other	Privatisations	Equity		effects	volume	
					deposits			equity	Thrutisations	injections		enteetis		
		2	2		-	(	7	0	0	10	11	10	12	14
	1	2	3	4	5	0	/	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	0.0	0.0
2003	3.1	-3.1	0.0	0.1	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.1	0.0	0.1
2004	3.1	-3.0	0.2	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.1
2005	3.1	-2.6	0.5	0.6	0.3	0.1	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	-0.1
2006	1.5	-1.3	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	-0.6	0.4	0.6	0.2	0.0	0.2	0.1	-0.2	0.2	0.0	0.0	0.0	-0.1
2008	5.2	-2.0	3.3	3.1	0.8	0.7	0.8	0.8	0.0	0.6	0.1	0.0	0.0	0.1
2009	7.1	-6.2	0.9	1.0	0.4	0.0	0.2	0.4	-0.2	0.5	-0.2	0.0	0.0	0.0

Source: ECB.

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. [debt(t) - debt(t-1)] ÷ GDP(t).
 The borrowing requirement is by definition equal to transactions in debt.
 Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).

Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.

4) 5) Holders resident in the country whose government has issued the debt.

Includes residents of euro area countries other than the country whose government has issued the debt.

Including proceeds from sales of UMTS licences.

6) 7) 8) 9) The difference between the annual charge in gross nominal consolidated debt and the deficit as a percentage of GDP. Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).

10) Excluding financial derivatives.



	Total			Current reven	ue			Capital r	evenue	Memo item:
			Direct taxes	Indirect taxes	Social contributions	Sales	Property income		Capital taxes	Fiscal burden <sup>2)</sup>
	1	2	3	4	5	6	7	8	9	10
2004 Q1 Q2 Q3 Q4	41.3 44.7 42.8 48.9	40.9 43.9 42.3 48.0	9.5 11.9 10.7 12.9	12.9 12.9 12.8 14.2	15.3 15.3 15.3	1.7 2.0 1.9 2.9	0.6 1.1 0.7 0.7	0.4 0.8 0.5	0.3 0.6 0.3 0.4	38.0 40.7 39.1 43.7
2005 Q1 Q2 Q3 Q4	40.3 42.0 44.3 43.5 49.0	41.5 43.6 42.8 48.2	10.0 11.5 11.1 13.3	14.2 13.0 13.2 13.0 14.2	15.2 15.1 15.2 16.1	1.7 2.0 1.9 2.9	0.6 1.1 0.7 0.8	0.5 0.6 0.7 0.7	0.3 0.3 0.3 0.3	38.5 40.1 39.7 43.9
2006 Q1 Q2 Q3 Q4	42.4 45.3 43.8 49.3	42.0 44.9 43.3 48.7	10.3 12.2 11.6 14.0	13.4 13.5 13.0 14.2	15.1 15.1 15.1 15.1 15.8	1.6 1.9 2.0 2.9	0.8 1.3 0.8 0.9	0.4 0.5 0.5 0.6	0.3 0.3 0.3 0.3	39.0 41.1 40.0 44.4
2007 Q1 Q2 Q3 Q4	42.1 45.6 43.7 49.6	41.7 45.2 43.3 49.1	10.2 12.7 12.2 14.4	13.5 13.5 12.8 14.1	14.8 15.0 14.8 15.7	1.7 1.8 1.9 3.0	0.8 1.5 0.8 0.9	0.4 0.4 0.5 0.5	0.3 0.3 0.3 0.3	38.8 41.4 40.1 44.6
2008 Q1 Q2 Q3 Q4	42.2 44.9 43.2 48.8	41.9 44.5 42.9 48.3	10.7 12.6 11.9 13.6	12.9 12.8 12.4 13.6	14.8 15.0 15.0 16.2	1.7 1.9 1.9 3.0	1.0 1.5 0.8 1.0	0.3 0.4 0.3 0.5	0.2 0.3 0.3 0.3	38.6 40.7 39.7 43.7
2009 Q1 Q2 Q3 Q4	41.9 44.4 42.6 48.5	41.8 43.8 42.2 47.9	10.3 11.5 10.9 12.7	12.5 12.6 12.3 13.7	15.4 15.5 15.5 16.4	1.8 2.0 2.0 3.2	1.0 1.5 0.8 1.0	0.2 0.6 0.3 0.7	0.2 0.5 0.3 0.5	38.4 40.1 39.0 43.2
2010 Q1	41.4	41.3	10.0	12.3	15.3	1.8	0.9	0.2	0.2	38.0

## 1. Euro area - quarterly revenue

## 2. Euro area - quarterly expenditure and deficit/surplus

	Total			Curren	nt expendi	ture			Сарі	tal expenditu	ire	Deficit (-)/	Primary deficit (-)/
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies		Investment	Capital transfers	Sur prus (+)	surplus (+)
	1	2	3	4	5	6	7	8	9	10	11	12	13
2004 Q1	46.3	42.9	10.3	4.6	3.2	24.9	21.3	1.2	3.4	1.9	1.5	-5.0	-1.8
Q2	46.6	43.2	10.4	4.8	3.2	24.7	21.4	1.3	3.4	2.3	1.1	-1.9	1.4
Q3	46.0	42.6	9.9	4.7	3.1	24.9	21.5	1.3	3.4	2.4	1.0	-3.2	-0.1
Q4	50.8	45.6	11.0	5.7	2.9	26.0	22.6	1.4	5.2	3.1	2.1	-1.9	1.0
2005 Q1	46.7	43.0	10.2	4.6	3.1	25.1	21.3	1.2	3.7	1.9	1.8	-4.8	-1.7
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
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
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	0.1
Q2	45.4	42.2	10.2	4.9	3.1	24.0	21.0	1.1	3.2	2.3	0.9	-0.1	3.0
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
Q4	50.3	45.0	10.7	5.7	2.7	25.9	22.2	1.4	5.3	3.2	2.2	-1.0	1.7
2007 Q1	44.3	41.1	9.8	4.5	2.9	23.9	20.5	1.2	3.2	2.0	1.2	-2.2	0.8
Q2	44.6	41.4	9.9	4.8	3.2	23.5	20.5	1.1	3.2	2.3	0.9	1.0	4.2
Q3	44.5	41.1	9.5	4.7	2.9	23.9	20.6	1.2	3.4	2.5	0.9	-0.8	2.1
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	41.4	9.7	4.6	3.0	24.1	20.5	1.2	3.2	2.0	1.2	-2.4	0.6
Q2	45.2	41.9	10.1	4.9	3.2	23.7	20.6	1.1	3.3	2.3	1.0	-0.3	2.9
Q3	45.4	41.9	9.6	4.8	3.1	24.4	21.2	1.2	3.5	2.5	1.0	-2.2	0.9
Q4	51.8	46.8	11.0	6.1	2.8	26.9	23.0	1.4	5.0	3.4	1.6	-3.0	-0.2
2009 Q1	48.4	44.9	10.5	5.3	2.9	26.3	22.4	1.3	3.4	2.2	1.2	-6.4	-3.6
Q2	50.1	46.1	10.9	5.5	3.2	26.6	23.1	1.3	4.0	2.7	1.3	-5.7	-2.6
Q3	49.2	45.3	10.3	5.2	2.7	27.0	23.4	1.4	3.8	2.6	1.1	-6.6	-3.9
Q4	54.7	49.4	11.4	6.3	2.5	29.1	24.8	1.6	5.4	3.4	1.9	-6.2	-3.7
2010 Q1	49.5	45.9	10.5	5.2	2.8	27.4	23.3	1.4	3.6	2.1	1.5	-8.0	-5.2

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.
 The fiscal burden comprises taxes and social contributions.

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# 6.5 Quarterly debt and change in debt (as a percentage of GDP)

## 1. Euro area – Maastricht debt by financial instrument 1)

	Total		Financial in	struments	
	1	Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2007 Q2	68.6	2.2	11.2	5.1	50.2
Q3	67.6	2.1	11.1	5.1	49.3
Q4	65.9	2.2	10.8	4.2	48.7
2008 Q1	67.0	2.1	11.2	5.0	48.7
Q2	67.3	2.1	11.2	4.9	49.0
Q3	67.4	2.1	11.1	5.5	48.6
Q4	69.3	2.3	11.1	6.7	49.4
2009 Q1	72.8	2.3	11.3	7.9	51.4
Q2	76.1	2.3	11.6	8.4	53.7
Q3	77.9	2.3	11.8	9.2	54.6
Q4	78.7	2.4	11.9	8.6	55.8
2010 Q1	80.5	2.4	12.2	8.4	57.6

## 2. Euro area - deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)				Deficit-d	lebt adjustment				Memo item:
		• • • •	Total	Transact	ons in main fina	ncial assets h	eld by general g	overnment	Valuation effects and other changes	Other	Borrowing requirement
				Total	Currency and deposits	Loans	Securities	Shares and other equity	in volume		•
	1	2	3	4	1 5	6	7	1 8	9	10	11
2007 O2	4.2	1.0	5.2	4.9	4.1	0.0	0.5	0.3	0.6	-0.3	3.5
Ò3	-0.6	-0.8	-1.4	-1.4	-2.1	0.0	0.4	0.2	0.1	-0.1	-0.6
Q4	-3.6	-0.7	-4.2	-2.9	-2.1	0.0	-0.6	-0.2	-0.1	-1.2	-3.4
2008 Q1	6.7	-2.4	4.3	3.4	2.0	0.0	1.1	0.3	0.1	0.9	6.6
Q2	4.0	-0.3	3.7	3.9	1.8	0.3	1.3	0.4	0.0	-0.2	3.9
Q3	2.2	-2.2	0.0	-0.9	-1.6	0.0	0.2	0.5	0.5	0.4	1.8
Q4	7.9	-3.0	5.0	5.8	0.8	2.6	0.5	1.9	-0.1	-0.8	8.0
2009 Q1	12.1	-6.4	5.6	6.5	5.1	-0.1	0.8	0.7	-1.1	0.2	13.2
Q2	9.9	-5.7	4.2	3.3	2.5	-0.6	0.1	1.2	0.6	0.3	9.3
Q3	4.7	-6.6	-1.9	-2.9	-3.1	0.7	-0.1	-0.4	0.2	0.8	4.5
Q4	2.1	-6.2	-4.1	-2.6	-2.7	0.0	0.0	0.1	-0.3	-1.1	2.4
2010 01	83	-8.0	0.2	0.7	0.7	0.0	-0.4	0.4	-0.1	-0.4	84

C28 Deficit, borrowing requirement and change in debt

## C29 Maastricht debt







Sources: ECB calculations based on Eurostat and national data.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)

		Cu	rrent acco	unt		Capital	Net lending/			Financial	account			Errors and
	Total	Goods	Services	Income	Current transfers	account	borrowing to/from rest of the world (columns 1+6)	Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	omissions
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007 2008 2009	13.5 -153.8 -55.9	48.0 -19.1 40.7	49.6 41.4 29.9	2.9 -76.6 -38.2	-87.0 -99.5 -88.2	5.0 9.8 6.2	18.5 -144.0 -49.7	-10.7 163.2 43.0	-73.7 -198.7 -78.9	151.5 344.1 308.7	-63.7 -62.5 42.1	-19.6 83.7 -233.3	-5.1 -3.4 4.5	-7.8 -19.2 6.8
2009 Q1 Q2 Q3	-37.2 -22.0 -3.6	-7.6 14.0 13.8	1.8 6.9 12.2	-3.0 -25.5 -6.7	-28.4 -17.3 -22.8	1.5 2.2 1.4	-35.8 -19.8 -2.2	50.9 10.9 -12.6	-64.6 0.3 -23.7	105.8 70.8 78.2	15.8 22.9 -4.5	-11.8 -81.7 -62.9	5.6 -1.4 0.3	-15.1 8.9 14.8
Q4 2010 Q1	6.8 -25.4	20.5 2.8	9.1 3.3	-3.1 3.3	-19.7 -34.8	1.2 2.6	8.0 -22.9	-6.2 24.4	9.0 -34.9	53.9 22.4	7.9 1.8	-76.9 39.8	-0.1 -4.6	-1.8 -1.6
2009 May June	-13.7	2.6 7.3	3.0 1.8	-12.7 -6.2	-6.7 -1.3	0.2	-13.5 1.8	9.4 -16.6	17.5 -24.8	33.8 42.3	9.4 0.5	-49.1 -34.2	-2.2 -0.4	4.1 14.8
July Aug. Sep.	8.1 -6.1 -5.6	14.1 -1.9 1.5	3.9 4.1 4.1	-3.0 0.0 -3.7	-6.9 -8.3 -7.5	0.9 0.5 0.0	9.0 -5.5 -5.6	-19.4 -10.8 17.6	7.2 1.7 -32.6	-26.5 25.7 78.9	6.4 -9.8 -1.1	-2.9 -29.2 -30.8	-3.7 0.8 3.3	10.4 16.3 -11.9
Oct. Nov.	-1.3 -2.4	8.7 5.5	2.9 1.2	$0.2 \\ -3.1 \\ 0.2$	-13.2	-0.3 1.0	-1.6 -1.4	1.1 3.4	3.8 -3.5	6.2 -7.3	1.6 -0.1	-9.8 13.0	-0.6 1.4	0.5 -2.0
2010 Jan. Feb.	-14.4 -8.7	-7.7 4.2	0.8	-0.2 0.9 1.9	-8.5 -16.1	1.6 0.8	-12.8 -7.9	32.0 -8.4	9.2 -17.6	21.4 2.4	3.6 -0.7	-3.6 11.3	-0.8 1.5 -3.7	-19.2 16.3
Mar. Apr. May	-2.2 -7.5 -16.7	6.2 2.9 0.6	1.3 3.2 3.7	0.4 -5.8 -15.6	-10.2 -7.7 -5.4	0.1 -0.2 2.0	-2.1 -7.7 -14.7	0.8 8.6 17.8	-26.5 -11.4 -17.2	-1.4 32.3 63.9	-1.0 0.3 -2.2	32.1 -12.5 -26.6	-2.5 0.0 -0.1	1.3 -1.0 -3.1
						12-mo	nth cumulated	transaction	S					
2010 May	-44.8	47.9	33.2	-34.1	-91.8	7.2	-37.6	15.4	-103.1	292.8	3.9	-173.3	-4.9	22.2
					12-mont	h cumulate	ed transactions	as a percer	ntage of GDI	D				
2010 May	-0.5	0.5	0.4	-0.4	-1.0	0.1	-0.4	0.2	-1.1	3.3	0.0	-1.9	-0.1	0.2

**C30 Euro area b.o.p.: current account** (seasonally adjusted; 12-month cumulated transactions as a percentage of **C31 Euro area b.o.p.: direct and portfolio investment** (12-month cumulated transactions as a percentage of GDP)



net direct investment net portfolio investment



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

						Curre	nt accoun	t						Capital ac	count
		Total		Goo	ds	Servi	ces	Incon	ne		Current	transfers	5		
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	C	Credit	E	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	Workers' remit- tances 11	12	Workers' remit- tances 13	14	15
2007 2008 2009	2,702.7 2,732.5 2,269.9	2,689.2 2,886.3 2,325.8	13.5 -153.8 -55.9	1,518.0 1,580.4 1,291.2	1,470.1 1,599.5 1,250.5	494.9 517.6 469.8	445.3 476.2 439.9	598.7 546.1 416.0	595.8 622.6 454.2	91.0 88.5 92.9	6.4 6.7 6.1	178.1 188.0 181.1	20.7 21.4 21.6	25.7 24.2 19.0	20.7 14.5 12.8
2009 Q1 Q2 Q3 Q4 2010 Q1	557.1 559.5 556.0 597.3 579.0	594.4 581.4 559.6 590.4 604.4	-37.2 -22.0 -3.6 6.8 -25.4	307.5 312.5 322.5 348.8 348.7	315.1 298.5 308.7 328.2 346.0	110.4 114.8 124.0 120.6 110.1	108.6 107.9 111.9 111.5 106.8	113.5 111.2 95.1 96.2 99.1	116.4 136.7 101.8 99.2 95.7	25.8 21.0 14.3 31.7 21.0	1.4 1.6 1.5 1.4	54.2 38.3 37.2 51.4 55.8	5.0 5.4 5.5 5.7 5.0	4.1 4.9 3.9 6.0 5.1	2.6 2.8 2.4 4.9 2.5
2010 Mar. Apr. May	215.7 195.4 206.2	218.0 202.9 222.9	-2.2 -7.5 -16.7	136.6 122.9 124.0	130.3 120.0 123.4	39.2 38.2 40.1	37.9 35.0 36.4	35.8 30.2 34.6	35.3 36.0 50.2	4.2 4.1 7.5		14.4 11.8 12.9	•	1.1 0.7 2.7	0.9 0.9 0.8
						Seaso	nally adju	sted							
2009 Q3 Q4 2010 Q1	550.6 568.6 606.5	561.4 575.7 616.0	-10.8 -7.1 -9.6	316.2 332.7 363.6	302.6 317.6 353.2	115.2 117.3 120.7	107.1 108.5 111.5	97.5 92.1 102.5	109.4 101.8 104.7	21.8 26.5 19.7		42.3 47.8 46.6			•
2010 Mar. Apr. May	206.9 200.2 215.2	208.8 205.8 221.0	-1.9 -5.6 -5.8	127.2 124.4 131.6	123.3 123.8 128.5	40.7 40.3 41.4	37.5 36.3 38.4	33.1 30.2 34.0	34.8 33.1 38.4	5.8 5.3 8.2	•	13.2 12.5 15.8	•	- - -	•
					1	2-month cu	mulated tr	ansactions							
2010 May	2,329.3	2,373.2	-43.9	1,375.8	1,328.2	472.4	439.0	390.4	426.8	90.6		179.2		•	
				12-	month cun	nulated tran	sactions a	is a percenta	ge of GDI	D					
2010 May	25.9	26.4	-0.5	15.3	14.8	5.3	4.9	4.3	4.7	1.0		2.0	·	•	

# C32 Euro area b.o.p.: goods (seasonally adjusted; 12-month cumulate

# **C33 Euro area b.o.p.: services** (seasonally adjusted; 12-month cumulated tran





Source: ECB.



External transactions and positions

# 7.2 Current and capital accounts (EUR billions)

## 2. Income account

(transactions)

	Comper of emp	nsation loyees							Investme	nt income						
	Credit	Debit	То	tal			Direct in	nvestment				Portfolio i	nvestment		Other inve	stment
			Credit	Debit		Equ	ity		De	bt	Equ	iity	Det	ot	Credit	Debit
					C	Credit Reinv. earnings		ebit	Credit	Debit	Credit	Debit	Credit	Debit		
					[	Credit Reinv. earnings		Reinv.								
		2	2		c	earnings	-	earnings	0	10		10	10	1.4	1.5	16
	1	2	3	4	5	6	/	8	9	10	11	12	13	14	15	16
2007	18.8	10.3	579.9	585.5	208.7	70.9	137.7	44.2	26.6	25.2	45.3	113.7	118.8	111.1	180.5	197.8
2008	18.9	10.4	527.1	612.2	154.4	17.9	147.0	50.0	29.9	24.8	43.0	119.0	125.2	125.3	174.5	196.1
2009	19.0	11.6	397.0	442.7	129.1	21.9	104.8	31.9	20.3	20.7	30.9	79.6	108.6	139.8	108.2	97.8
2009 Q1	4.7	2.1	108.8	114.4	34.1	7.8	26.7	15.2	5.2	5.1	6.9	13.3	29.4	37.5	33.3	31.9
Q2	4.6	2.6	106.6	134.2	33.1	1.5	25.6	4.3	5.6	5.9	10.6	38.8	27.5	36.6	29.8	27.2
Q3	4.6	3.5	90.5	98.4	29.0	7.5	25.1	8.5	4.1	4.7	7.1	13.9	27.4	34.8	22.9	19.9
Q4	5.1	3.5	91.1	95.8	32.9	5.0	27.4	3.8	5.4	5.0	6.3	13.7	24.3	30.9	22.2	18.8
2010 Q1	4.9	2.1	94.2	93.6	37.8	2.8	28.2	12.3	4.5	4.3	5.8	12.0	25.0	31.7	21.0	17.3

# **3. Geographical breakdown** (cumulated transactions)

	Total	E	U Memb	er States	outside th	e euro are	a	Brazil	Canada	China	India	Japan	Russia	Switzer- land	United States	Other
		Total	Den- mark	Sweden	United Kingdom	Other EU countries	EU insti-							minu	States	
2009 Q2 to		2	2		-	(	tutions	0	0	10		10	12	14	15	16
2010 Q1	1	2	3	4	3	0	/	8	9	10	11	12	13	14	15	16
								Cı	redits							
Current account	2,291.7	802.5	45.1	67.5	391.9	237.5	60.4	36.6	30.8	93.5	31.3	46.8	71.4	168.5	307.6	702.8
Goods	1,332.5	440.0	27.4	42.9	188.3	181.2	0.2	20.2	15.8	76.0	23.3	29.7	51.3	84.7	156.6	434.9
Services	469.6	157.6	10.9	12.5	101.8	26.8	5.5	7.1	6.5	12.8	6.3	10.4	13.0	50.0	70.6	135.2
Income	401.6	140.6	6.2	10.8	89.9	26.2	7.6	8.9	7.6	4.5	1.6	6.5	6.7	26.7	75.7	122.9
Investment income	382.4	133.8	6.1	10.7	88.2	25.5	3.4	8.9	7.5	4.4	1.5	6.5	6.7	19.3	73.8	119.9
Current transfers	88.1	64.3	0.7	1.2	11.9	3.3	47.2	0.4	0.8	0.2	0.0	0.2	0.3	7.1	4.8	9.9
Capital account	19.9	16.1	0.0	0.0	0.8	0.3	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	2.9
								Ε	Debits							
Current account	2,335.8	751.3	39.7	66.9	332.5	212.8	99.4	-	24.3	-	-	84.4	-	157.3	315.6	-
Goods	1,281.4	369.8	25.7	37.8	140.5	165.8	0.0	20.5	10.3	157.7	18.8	42.1	85.1	71.7	117.0	388.5
Services	438.1	132.6	7.0	10.3	83.2	31.9	0.2	5.5	5.5	10.1	4.4	7.8	7.8	42.0	92.3	130.1
Income	433.5	136.8	6.2	17.7	96.4	10.9	5.7	-	6.9	-	-	34.2	-	37.3	99.7	-
Investment income	421.9	129.3	6.1	17.6	94.8	5.2	5.7	-	6.8	-	-	34.1	-	36.7	98.8	-
Current transfers	182.7	112.1	0.8	1.1	12.5	4.2	93.5	1.4	1.8	2.9	0.7	0.4	0.5	6.2	6.7	50.0
Capital account	12.6	2.4	0.1	0.1	1.0	0.2	1.0	0.2	0.1	0.1	0.1	0.1	0.1	0.5	1.3	7.8
									Net							
Current account	-44.1	51.1	5.4	0.6	59.4	24.7	-39.0	-	6.4	-	-	-37.6	-	11.2	-8.0	-
Goods	51.1	70.2	1.6	5.1	47.8	15.4	0.2	-0.3	5.5	-81.6	4.5	-12.4	-33.8	13.0	39.6	46.3
Services	31.4	24.9	3.9	2.2	18.7	-5.0	5.2	1.7	1.1	2.7	1.9	2.6	5.3	7.9	-21.7	5.1
Income	-32.0	3.8	0.0	-6.9	-6.5	15.3	1.9	-	0.7	-	-	-27.6	-	-10.6	-24.0	-
Investment income	-39.6	4.5	0.0	-6.9	-6.5	20.3	-2.3	-	0.8	-	-	-27.6	-	-17.4	-25.1	-
Current transfers	-94.6	-47.8	-0.1	0.1	-0.6	-0.9	-46.3	-1.1	-0.9	-2.7	-0.6	-0.2	-0.2	0.9	-1.9	-40.1
Capital account	7.3	13.7	-0.1	-0.1	-0.1	0.1	13.8	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.8	-4.9

Source: ECB.

# 7.3 Financial account (EUR billions and annual growth r

## 1. Summary financial account

		Total 1)		as	Total a % of GD	P	Di inves	rect tment	Port inves	folio tment	Net financial	Otl invest	her tment	Reserve assets
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities	uerivatives	Assets	Liabilities	
	1	2	2	4	5	G	7	0	0	10	11	12	12	14
	1	2	3	4	Jutstanding	amounts (ir	nternational	investment	position)	10	11	12	15	14
2006 2007 2008	12,384.3 13,908.5 13,315.2	13,399.8 15,155.8 14,949.2	-1,015.5 -1,247.3 -1,634.0	144.7 154.4 143.7	156.6 168.2 161.4	-11.9 -13.8 -17.6	3,153.4 3,572.8 3,744.4	2,729.4 3,130.7 3,217.0	4,372.1 4,631.6 3,763.9	5,950.0 6,556.5 6,078.6	-20.8 -26.0 -36.2	4,553.8 5,382.9 5,468.8	4,720.4 5,468.6 5,653.6	325.8 347.2 374.2
2009 Q3 Q4 2010 Q1	13,381.5 13,717.2 14,365.3	14,979.0 15,105.7 15,701.3	-1,597.5 -1,388.5 -1,336.0	148.6 152.9 159.7	166.3 168.4 174.5	-17.7 -15.5 -14.8	4,042.1 4,174.6 4,318.6	3,345.1 3,423.8 3,469.4	4,059.8 4,196.6 4,453.4	6,626.7 6,761.8 7,102.0	-60.1 -45.6 -37.4	4,908.9 4,929.1 5,132.1	5,007.2 4,920.1 5,129.9	430.8 462.4 498.7
					(	Changes to	outstanding	amounts						
2005 2006 2007 2008	2,209.7 1,545.8 1,524.2	2,070.3 1,845.7 1,756.0 206.6	139.3 -299.9 -231.9 386.6	27.1 18.1 16.9	25.4 21.6 19.5 2.2	1.7 -3.5 -2.6	522.1 362.6 419.4	209.0 285.1 401.3 86.3	842.5 484.6 259.5 867.7	1,012.3 892.2 606.5 478.0	16.0 0.6 -5.2	790.0 692.3 829.1	849.1 668.4 748.1	39.1 5.7 21.4 27.0
2009 Q4 2010 Q1	335.7 648.2	126.7 595.6	209.0 52.6	14.4 29.3	5.4 26.9	9.0 2.4	132.6 144.0	78.7	136.8 256.8	135.1 340.2	14.5 8.2	20.3 202.9	-87.1 209.8	31.5 36.3
						Tr	ansactions							
2006 2007 2008 2009	1,728.6 1,946.6 464.8 -170.6	1,719.1 1,935.9 628.0 -121.7	9.4 10.7 -163.2 -48.9	20.2 21.6 5.0 -1.9	20.1 21.5 6.8 -1.4	0.1 0.1 -1.8 -0.5	417.6 476.5 323.8 289.8	257.4 402.9 125.1 210.9	519.8 438.5 -10.2 68.2	708.5 589.9 333.9 391.8	0.6 63.7 62.5 -42.1	789.3 962.8 85.3 -482.1	753.2 943.1 169.0 -724.3	1.3 5.1 3.4 -4.5
2009 Q3 Q4 2010 Q1	20.8 41.1 192.5	8.1 34.9 216.9	12.6 6.2 -24.4	0.9 1.8 8.7	0.4 1.5 9.8	0.6 0.3 -1.1	62.0 38.3 40.4	38.2 47.3 5.5	45.6 32.0 64.9	123.7 85.9 87.3	4.5 -7.9 -1.8	-91.0 -21.4 84.4	-153.8 -98.3 124.2	-0.3 0.1 4.6
2010 Jan. Feb. Mar. Apr.	85.6 56.2 50.6 128.9	117.6 47.9 51.4 137.5	-32.0 8.4 -0.8 -8.6	· · ·		•	-6.2 16.1 30.6 15.7	2.9 -1.6 4.1 4.3	31.3 8.4 25.2 17.3	52.6 10.7 23.9 49.6	-3.6 0.7 1.0 -0.3	65.7 27.4 -8.7 96.2	62.1 38.7 23.4 83.7	-1.5 3.7 2.5 0.0
May	87.0	104.8	-1/.8	•		 Otl	14.3	-2.9	-12.3	51.6	2.2	82.7	56.1	0.1
2005	851.4	749.6	101.7	10.4	9.2	1.2	163.7	56.5	426.3	487.7	-1.4	205.7	205.4	57.1
2006 2007 2008	-182.7 -422.5 -1,058.0	126.6 -179.9 -834.6	-309.3 -242.5 -223.4	-2.1 -4.7 -11.4	1.5 -2.0 -9.0	-3.6 -2.7 -2.4	-55.0 -57.1 -152.1	27.7 -1.5 -38.8	-35.2 -179.0 -857.5	183.7 16.6 -811.8	0.0 -69.0 -72.7	-97.0 -133.6 0.6	-84.8 -195.0 16.1	4.4 16.3 23.6
					Other c	hanges due	e to exchang	ge rate chan	ges					
2005 2006 2007 2008	394.2 -343.3 -531.1 -40.3	245.0 -228.5 -291.5 59.3	149.2 -114.8 -239.6 -99.6	4.8 -4.0 -5.9 -0.4	3.0 -2.7 -3.2 0.6	1.8 -1.3 -2.7 -1.1	89.8 -72.1 -113.3 -17.3	5.7 -4.2 -5.9 -0.2	158.3 -151.6 -219.2 1.8	101.4 -101.1 -106.0 42.0		129.2 -105.7 -185.0 -34.0	137.9 -123.2 -179.6 17.5	17.0 -13.9 -13.7 9.2
					Ot	her change.	s due to pri	ce changes						
2005 2006 2007 2008	284.5 288.6 82.4 -1,013.8	430.3 298.4 124.7 -1,102.1	-145.8 -9.8 -42.4 88.3	3.5 3.4 0.9 -10.9	5.3 3.5 1.4 -11.9	-1.8 -0.1 -0.5 1.0	45.0 45.4 46.5 -155.6	40.8 33.5 12.5 -138.4	199.0 226.0 75.0 -803.6	389.5 264.9 112.2 -963.7	-1.4 0.0 -69.8 -75.9			41.9 17.1 30.7 21.2
					Othe	er changes a	lue to other	adjustment	\$					
2005 2006 2007 2008	172.7 -128.1 30.7 -20.9	74.3 56.7 -16.9 191.6	98.3 -184.7 47.6 -212.5	2.1 -1.5 0.3 -0.2	0.9 0.7 -0.2 2.1	1.2 -2.2 0.5 -2.3	29.0 -28.3 5.0 18.0	10.0 -1.6 -13.6 87.4	69.0 -109.6 -33.0 -56.9	-3.1 19.8 12.4 102.2		76.5 8.7 59.5 25.4	67.4 38.4 -15.7 2.0	-1.8 1.2 -0.8 -7.3
					Gro	owth rates o	of outstandi	ng amounts						
2005 2006 2007 2008	15.2 16.1 15.7 3.3	13.4 14.8 14.3 4.2	-	- - -	· · ·		15.2 15.0 15.1 9.2	6.8 10.5 14.7 4.0	13.1 13.6 10.0 -0.5	12.1 13.7 9.8 5.3		18.5 20.5 21.2 1.6	19.5 18.7 20.0 3.2	-5.9 0.3 1.6 1.0
2009 Q3 Q4 2010 O1	-4.0 -1.3 1.9	-3.0 -0.8 1.5	-	:		:	7.9 7.7 5.8	4.9 6.6 5.5	-3.0 1.7 5.3	4.4 6.3 6.4	:	-12.2 -9.0 -3.0	-14.9 -12.7 -6.5	-1.1 -1.2 1.3

Source: ECB. 1) Net financial derivatives are included in assets.



## 7.3 Financial account

## 2. Direct investment

			By resid	lent units a	broad				B	y non-resid	ent units in	the euro ar	ea	
	Total	Ec and rei	quity capital nvested earr	nings	(mostly in	Other capital nter-compan	y loans)	Total	E and re	quity capita invested ear	l nings	(mostly i	Other capital nter-compar	iy loans)
	-	Total	MFIs	Non- MFIs	Total	MFIs	Non- MFIs		Total	Into MFIs	Into non-MFIs	Total	To MFIs	To non-MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
			•		Oustanding	g amounts (i	nternational	investment	position)					
2007	3,572.8	2,886.7	240.8	2,645.9	686.1	6.4	679.7	3,130.7	2,401.0	69.5	2,331.5	729.8	15.4	714.4
2008	3,744.4	2,946.9	234.8	2,712.1	797.5	9.3	788.2	3,217.0	2,405.5	77.0	2,328.5	811.6	16.4	795.1
2009 Q4	4,174.6	3,251.5	252.3	2,999.2	923.1	14.6	908.5	3,423.8	2,550.2	77.9	2,472.3	873.6	14.7	858.9
2010 Q1	4,318.6	3,362.2	264.9	3,097.3	956.4	15.3	941.1	3,469.4	2,640.3	80.0	2,560.2	829.1	14.9	814.2
						Т	ransactions							
2008	323.8	195.1	-4.8	199.9	128.7	-0.2	128.9	125.1	93.0	-1.3	94.3	32.1	1.6	30.4
2009	289.8	214.6	23.2	191.4	75.2	3.4	71.9	210.9	207.7	7.9	199.8	3.2	-0.7	3.9
2009 Q3	62.0	37.0	-1.6	38.7	24.9	0.3	24.6	38.2	35.4	2.4	33.0	2.8	-1.1	3.9
Q4	38.3	52.0	0.0	52.0	-13.7	1.7	-15.4	47.3	56.3	2.8	53.5	-9.0	-0.1	-9.0
2010 Q1	40.4	8.4	6.2	2.2	32.0	0.2	31.7	5.5	67.5	1.4	66.1	-62.1	-0.2	-61.9
2010 Jan.	-6.2	-12.3	0.7	-12.9	6.0	0.0	6.0	2.9	7.1	1.2	5.9	-4.2	-2.5	-1.6
Feb.	16.1	6.9	3.9	2.9	9.2	0.2	9.0	-1.6	49.3	0.0	49.3	-50.9	4.5	-55.3
Mar.	30.6	13.8	1.6	12.2	16.8	0.0	16.8	4.1	11.2	0.2	11.0	-7.1	-2.1	-5.0
Apr.	15.7	1.3	0.8	0.5	14.4	0.3	14.1	4.3	5.3	0.4	4.9	-1.0	1.5	-2.5
May	14.3	3.4	-1.4	4.8	10.9	0.2	10.6	-2.9	1.5	0.8	0.8	-4.5	0.3	-4.7
						C	browth rates							
2007	15.1	14.4	8.3	15.0	18.5	-55.0	18.7	14.7	14.6	8.8	14.7	15.3	6.3	15.4
2008	9.2	6.8	-2.0	7.6	18.9	-2.0	19.1	4.0	3.9	-1.8	4.1	4.5	9.9	4.4
2009 Q3	7.9	6.3	8.5	6.1	14.2	13.8	14.2	4.9	7.2	7.1	7.2	-1.9	-5.0	-1.8
Q4	7.7	7.2	9.9	7.0	9.4	36.9	9.1	6.6	8.7	11.0	8.6	0.4	-4.5	0.5
2010 Q1	5.8	5.6	4.6	5.7	6.8	27.2	6.5	5.5	9.7	11.5	9.7	-6.3	-6.8	-6.3

## **C34 Euro area international investment position** (outstanding amounts at end of period; as a percentage of GDP)

**C35 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)

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

## 3. Portfolio investment assets

	Total			Equity	y						Debt inst	ruments				
								I	Bonds and	notes			Mone	y market i	nstruments	;
		Total	MI	FIs	Nor	-MFIs	Total	М	FIs	Nor	-MFIs	Total	М	FIs	Non	-MFIs
			[	Euro- system		General government			Euro- system		General government			Euro- system		General government
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
					0	utstanding an	nounts (in	ernationa	ai investm	ent positio	n)					
2007 2008	4,631.6 3,763.9	1,961.8 1,162.7	136.7 68.4	2.8 3.0	1,825.1 1,094.3	44.6 27.3	2,279.7 2,179.1	990.2 970.9	16.4 19.9	1,289.5 1,208.2	17.2 18.4	390.1 422.1	297.3 353.3	34.6 61.6	92.8 68.8	0.5 1.3
2009 Q4 2010 Q1	4,196.6 4,453.4	1,474.4 1,635.6	79.2 90.2	3.4 3.6	1,395.2 1,545.3	34.4 39.1	2,327.7 2,431.9	916.7 939.0	17.0 17.3	1,411.0 1,492.9	38.3 35.7	394.5 385.9	329.3 316.7	44.9 41.0	65.2 69.2	2.0 0.6
							Tra	insaction	s							
2007 2008 2009	438.5 -10.2 68.2	64.7 -103.9 45.1	26.7 -38.4 -2.9	0.0 0.6	38.0 -65.6 48.0	8.2 -0.2 1.6	290.5 96.7 24.3	148.0 44.1 -101.5	4.9 3.2	142.4 52.6 125.8	3.3 2.6 17.2	83.3 -3.0 -1.2	63.3 26.8 3.1	26.3 15.1	20.0 -29.8 -4 3	0.8 0.4 1.0
2009 Q3 Q4 2010 Q1	45.6 32.0 64.9	39.6 34.3 34.5	3.7 -0.5 9.2	0.0 -0.2 0.0	35.9 34.9 25.3	0.2 0.4 1.0	27.4 20.1 51.7	-7.0 -12.2 3.7	-0.8 -0.5 0.2	34.4 32.3 48.0	-1.4 -1.5 -1.8	-21.4 -22.4 -21.4	-10.1 -20.3 -20.2	-11.8 1.3 -6.1	-11.2 -2.1 -1.1	-0.1 0.8 -1.5
2010 Jan. Feb. Mar. Apr. May	31.3 8.4 25.2 17.3 -12.3	12.2 4.0 18.4 6.4 -14.6	0.6 2.0 6.5 2.7 -1.0	0.0 0.0 0.0 -0.2 0.0	11.6 1.9 11.8 3.7 -13.6	· · · ·	4.2 14.1 33.5 14.3 -2.0	-5.4 4.1 5.0 5.3 -14.4	0.0 0.0 0.1 0.6 1.0	9.6 9.9 28.5 9.0 12.5	- - - - -	14.9 -9.6 -26.6 -3.4 4.3	12.5 -10.2 -22.6 -6.9 -0.4	2.3 -1.0 -7.4 0.7 7.8	2.4 0.5 -4.0 3.4 4.7	· · · ·
							Gro	owth rate	s							
2007 2008	10.0 -0.5	3.3 -6.2	22.3 -30.0	-0.5 24.6	2.0 -4.5	21.3 -0.5	13.9 4.3	16.6 4.6	38.9 20.4	11.9 4.1	23.2 15.6	23.9 -0.6	23.7 9.1	272.7 41.9	29.4 -32.3	277.4 71.6
2009 Q3 Q4 2010 Q1	-3.0 1.7 5.3	-3.0 3.3 9.3	-8.6 -4.5 16.5	12.4 -7.2 -7.0	-2.6 3.7 8.9	0.5 5.8 7.4	-2.5 1.0 5.9	-10.6 -10.3 -5.2	-20.1 -17.7 -5.6	4.0 10.3 14.6	96.8 93.2 93.7	-6.7 -0.9 -11.1	-0.2 0.1 -11.4	-30.8 -22.0 -32.1	-31.4 -5.9 -9.8	69.4 73.2 -67.0

## 4. Portfolio investment liabilities

	Total		Equity					Debt instr	uments			
						Bonds an	nd notes		М	loney market	instruments	8
		Total	MFIs	Non-MFIs	Total	MFIs	Nor	n-MFIs	Total	MFIs	Non	-MFIs
								General government				General government
	1	2	3	4	5	6	7	8	9	10	11	12
				Outstanding	g amounts (inte	ernational invo	estment posi	ition)				
2007 2008	6,556.5 6,078.6	3,272.5 2,168.7	594.6 640.7	2,677.9 1,528.0	3,041.1 3,466.5	1,143.5 1,263.8	1,897.6 2,202.8	1,118.5 1,357.1	243.0 443.3	141.5 108.9	101.5 334.4	76.1 272.9
2009 Q4 2010 Q1	6,761.8 7,102.0	2,692.9 2,813.9	689.3 663.2	2,003.6 2,150.7	3,510.1 3,733.5	1,150.0 1,189.5	2,360.1 2,544.0	1,519.3 1,656.9	558.8 554.6	86.9 113.4	471.8 441.1	418.5 389.4
					Trar	nsactions						
2008 2009	333.9 376.9	-107.1 123.7	94.8 9.3	-201.9 114.4	236.3 119.1	26.3 -16.3	210.0 135.4	196.7 127.8	204.7 134.1	-20.1 1.2	224.8 132.9	194.6 156.4
2009 Q3 Q4 2010 Q1	123.7 85.9 87.3	89.5 34.2 4.9	11.7 -4.2 -21.5	77.7 38.4 26.4	-19.2 27.3 72.2	-9.1 5.4 13.6	-10.1 22.0 58.6	-8.7 11.1 84.4	53.5 24.4 10.2	10.0 18.2 35.5	43.5 6.2 -25.3	59.2 4.4 -18.2
2010 Jan. Feb. Mar. Apr. May	52.6 10.7 23.9 49.6 51.6	-17.2 22.1 -0.1 -3.9 7.2	-9.8 -8.5 -3.3 1.0 -10.6	-7.4 30.6 3.2 -4.9 17.7	52.5 -11.4 31.1 49.7 37.4	30.9 -17.5 0.2 17.9 -6.5	21.6 6.2 30.9 31.8 43.9		17.3 0.0 -7.1 3.8 7.1	9.0 13.5 13.1 5.7 -5.5	8.4 -13.5 -20.2 -2.0 12.6	
					Grov	wth rates						
2007 2008	9.8 5.3	5.5 -4.7	4.4 16.2	5.8 -9.8	13.3 7.8	15.5 2.3	12.1 11.1	13.9 17.6	29.6 81.5	55.3 -13.3	10.1 215.6	32.0 271.7
2009 Q3 Q4 2010 Q1	4.4 6.3 6.4	-0.1 5.6 6.6	4.6 1.4 -1.7	-1.3 7.3 9.7	1.7 3.4 3.4	-5.6 -1.3 0.8	6.0 6.1 4.7	11.6 9.4 10.0	59.5 30.2 29.7	-23.2 7.7 89.1	111.6 39.3 20.5	168.4 58.0 29.3
Source: FCB												



## 7.3 Financial account (EUR billions and annual growth ra

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

## 5. Other investment assets

	Total		Eurosystem		(exclu	MFIs ding Eurosy	ystem)		Gene govern	eral ment			Other s	ectors	
		Total	Loans/ currency and	Other assets	Total	Loans/ currency and	Other assets		Trade credits	Loans/c and de	eurrency eposits		Trade credits	Loans/c and de	currency eposits
	1	2	deposits 3	4	5	deposits 6	7	8	9	10	Currency and deposits	12	13	14	Currency and deposits 15
				(	Outstanding	g amounts (ii	nternational	l investmer	nt position)	10					10
2007 2008	5,382.9 5,468.8	36.9 28.8	35.6 27.7	1.4 1.0	3,354.4 3,280.7	3,283.2 3,221.6	71.2 59.1	107.8 101.0	12.7 12.1	48.8 40.9	13.7 7.2	1,883.7 2,058.3	196.2 186.1	1,520.0 1,647.7	473.1 461.7
2009 Q4 2010 Q1	4,929.1 5,132.1	29.7 24.1	29.4 23.8	0.3 0.3	2,842.3 2,966.9	2,811.7 2,933.1	30.6 33.8	123.8 122.2	8.4 8.4	62.2 58.3	10.0 6.5	1,933.3 2,018.9	184.9 187.0	1,514.8 1,584.5	409.3 425.4
						Ti	ransactions								
2007 2008 2009	962.8 85.3 -491.0	22.0 -9.4 -2.4	22.0 -9.4 -2.4	$0.0 \\ 0.0 \\ 0.0$	546.7 -48.4 -417.4	539.5 -64.8 -396.9	7.2 16.5 -20.5	-7.8 -7.0 9.6	-1.4 -1.1 -0.3	-7.4 -7.2 8.0	-5.5 -6.0 1.1	401.9 150.0 -80.9	14.1 2.8 3.0	344.9 88.3 -86.6	54.9 -41.1 -21.3
2009 Q3 Q4 2010 Q1	-91.0 -21.4 84.4	-6.7 5.5 -7.0	-6.7 5.5 -7.0	0.0 0.0 0.0	-83.6 -7.3 55.7	-81.3 -5.2 52.6	-2.3 -2.1 3.2	0.0 6.7 -7.3	-0.3 0.0 -0.1	0.1 6.3 -8.0	-4.0 1.1 -3.7	-0.6 -26.2 43.0	0.4 0.5 -1.0	2.1 -28.3 31.4	14.7 -20.3 -0.8
2010 Jan. Feb. Mar. Apr. May	65.7 27.4 -8.7 96.2 82.7	-5.1 -1.7 -0.2 1.2 -3.9			62.6 15.3 -22.1 70.7 74.3			-4.2 -1.0 -2.2 4.9 0.5			-2.9 0.9 -1.6 4.9 0.6	12.4 14.9 15.8 19.4 11.7			-0.7 4.0 -4.1 5.7 1.8
						G	rowth rates								
2007 2008	21.2 1.6	157.3 -26.2	173.7 -26.9	-1.7 5.0	18.6 -1.4	18.8 -2.0	11.3 23.4	-6.5 -6.5	-9.8 -8.9	-12.6 -14.7	-28.6 -43.8	27.2 8.0	7.5 1.4	29.6 5.9	13.9 -8.9
2009 Q3 Q4 2010 Q1	-12.2 -9.0 -3.0	-42.5 -10.6 -4.7	-43.9 -11.7 -4.8	4.1 0.2 1.6	-18.3 -12.7 -4.0	-18.4 -12.3 -3.6	-23.1 -36.8 -27.8	3.5 9.0 -3.7	-4.7 -2.4 -3.5	7.8 16.5 -11.1	-13.4 16.2 -67.2	-1.6 -3.9 -1.2	-3.8 1.5 2.8	-1.6 -5.5 -3.0	0.6 -3.7 -3.2

## 6. Other investment liabilities

	Total		Eurosyste	m	(exclu	MFIs ding Euros	ystem)		Gei gover	neral mment			Other s	ectors	
	-	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
					Out	standing am	ounts (inter	national inv	estment po	osition)					
2007 2008	5,468.6 5,653.6	201.7 482.3	201.4 481.9	0.2 0.4	3,935.1 3,751.8	3,872.6 3,698.1	62.5 53.6	52.3 61.9	0.0 0.0	46.9 58.0	5.4 3.9	1,279.5 1,357.6	156.9 170.2	1,009.7 1,069.6	112.8 117.8
2009 Q4 2010 Q1	4,920.1 5,129.9	251.9 252.1	251.6 251.4	0.3 0.8	3,398.0 3,578.1	3,359.7 3,534.8	38.3 43.2	55.1 60.7	0.0 0.0	51.1 56.5	4.0 4.1	1,215.1 1,239.1	175.1 174.2	927.0 938.4	113.0 126.5
							Trans	actions							
2007 2008 2009	943.1 169.0 -724.3	89.6 280.7 -228.2	89.6 280.6 -233.0	0.0 0.1 4.7	625.1 -178.9 -357.1	620.4 -190.0 -345.8	4.6 11.1 -11.3	-1.0 9.4 -6.9	0.0 0.0 0.0	-2.0 10.8 -6.8	1.0 -1.4 -0.1	229.5 57.8 -132.1	10.0 10.9 0.9	220.5 47.3 -110.6	-1.1 -0.4 -22.4
2009 Q3 Q4 2010 Q1	-153.8 -98.3 124.2	-43.5 -13.3 -5.3	-43.7 -13.1 -5.7	0.3 -0.2 0.4	-79.5 -84.0 100.6	-80.1 -84.7 95.7	0.6 0.8 4.9	0.7 -3.9 5.8	0.0 0.0 0.0	1.2 -4.6 6.1	-0.5 0.7 -0.3	-31.5 2.9 23.0	1.0 1.1 -1.9	-20.8 7.1 15.9	-11.7 -5.3 9.0
2010 Jan. Feb. Mar. Apr. May	62.1 38.7 23.4 83.7 56.1	-6.9 3.3 -1.7 2.0 9.6			72.1 30.5 -2.0 90.4 34.9			1.1 4.9 -0.2 1.0 7.0	- - - -		- - - -	-4.3 0.0 27.3 -9.7 4.7			
							Grow	th rates							
2007 2008	20.0 3.2	68.1 141.3	68.2 141.4	-6.9 20.8	18.0 -4.5	18.2 -4.9	9.2 17.8	-1.8 18.1	27.4 -20.1	-4.0 23.0	20.7 -25.1	20.9 4.5	6.8 6.8	26.4 4.6	0.5 -0.9
2009 Q3 Q4 2010 Q1	-14.9 -12.7 -6.5	-27.7 -47.1 -37.6	-29.0 -48.1 -38.4	935.0 644.2 114.0	-16.3 -9.5 -3.9	-16.4 -9.3 -3.8	-13.9 -20.3 -8.0	11.8 -11.0 0.4	234.7 -148.2 -141.7	13.2 -11.6 -0.4	-9.0 -3.9 14.5	-8.0 -9.6 -4.5	-3.1 0.3 2.2	-8.8 -10.3 -5.4	-8.7 -18.1 -7.9
Source: ECB.															



## 7.3 Financial account (EUR billions and annual growth ra

## 7. Reserve assets

							Reserve a	issets								Memo items	
	Total	Monet	ary gold	SDR I	Reserve				Foreigr	n exchang	e			Other	Other	Pre-	SDR
		In EUR billions	In fine troy ounces	nordings j	in the IMF	Total	Currency deposit	and is		Sec	urities		Financial derivatives	Claims	currency assets	short-term net drains	cations
			(millions)				With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments				on foreign currency	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
					0	Outstand	ing amounts (	(internat	ional invo	estment p	osition)						
2006	325.8	176.3	365.213	4.6	5.2	139.7	6.3	22.5	110.7	0.5	79.3	30.8	0.3	0.0	24.6	-21.5	5.6
2007 2008	347.2	201.0	333.088 349.207	4.6	5.0 7.3	138.0	7.2 7.6	8.0	108.5	0.4	87.8 111.3	20.3 17.6	0.3	0.0	262.8	-38.5 -245.7	5.5 5.5
2009 Q3	430.8	236.1	347.217	49.8	11.7	133.2	12.7	7.1	113.2	0.5	89.8	22.9	0.2	0.0	56.7	-42.4	50.9
Q4 2010 Q1	462.4 498.7	266.1 287.3	347.180 347.176	50.8 52.7	10.5 12.4	134.9 146.3	11.7 9.9	8.1 10.6	115.2 126.1	0.5 0.6	92.0 99.6	22.7 26.0	-0.1 -0.3	$\begin{array}{c} 0.0\\ 0.0 \end{array}$	32.1 28.8	-24.2 -23.0	51.2 53.0
2010 May	569.7	340.6	347.163	55.6	16.2	157.3	5.0	16.5	136.4	-	-	-	-0.5	0.0	36.3	-28.2	55.9
June	383.3	351.9	347.130	30.3	10.5	158.8	9.2	T3.0	130.8	-	-	-	-0.3	0.0	32.3	-24.2	56.7
2007	5.1	-3.2		0.3	-0.9	8.8	1.0	1 6	6.2	0.0	14 5	-83	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	-4.5	-2.0	-	0.5	3.4	-6.3	3.3	-1.2	-9.5	0.0	-14.1	4.6	1.2	0.0	-	-	-
2009 Q3	-0.3	-0.2	-	0.3	0.6	-1.0	2.3	0.3	-3.8	0.0	-7.0	3.2	0.2	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	-	-	-
							(	Growth 1	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	-	-2.6	-18.3 105.3	6.3 1.7	14.9 67.7	-68.9	5./ 10.8	28.0	18.6	-27.6	-	_	-	-	-
2009 Q3	-1.1	-1.3	-	-2.9	200.8	-6.2	60.3	-70.1	-2.7	1.3	-8.9	34.6	-	-	-	-	-
Q4 2010 Q1	-1.2 1.3	-0.9 -0.5	-	-2.6 -3.8	44.6 51.2	-4.3 1.9	43.1 -12.8	-22.6 147.7	-7.3 -1.6	1.0 1.0	-12.8 -5.3	25.6 15.7	-	1	-	_	-

## 8. Gross external debt

	Total			By in	strument			By sec	tor (excluding	direct investm	ent)
		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 (int	ernational inve	stment position)				
2006 2007 2008	8,683.9 9,972.8 10,941.3	4,425.5 5,130.6 5,307.6	217.5 243.0 443.3	2,697.9 3,041.1 3,466.5	144.1 157.0 170.2	150.8 181.0 175.8	1,048.0 1,220.2 1,377.8	1,115.2 1,246.8 1,692.0	116.3 201.7 482.3	4,586.8 5,220.1 5,124.4	1,817.5 2,084.0 2,264.7
2009 Q3 Q4 2010 Q1	10,461.0 10,388.7 10,781.6	4,677.0 4,589.4 4,781.1	546.8 558.8 554.6	3,502.3 3,510.1 3,733.5	179.4 175.1 174.3	150.8 155.7 174.6	1,404.6 1,399.7 1,363.7	1,934.4 1,992.9 2,106.9	264.3 251.9 252.1	4,691.5 4,635.0 4,881.0	2,166.1 2,109.2 2,177.9
				Outstar	nding amoun	ts as a percenta	ge of GDP				
2006 2007 2008	101.4 110.6 118.2	51.7 56.9 57.3	2.5 2.7 4.8	31.5 33.7 37.4	1.7 1.7 1.8	1.8 2.0 1.9	12.2 13.5 14.9	13.0 13.8 18.3	1.4 2.2 5.2	53.6 57.9 55.4	21.2 23.1 24.5
2009 Q3 Q4 2010 Q1	116.1 115.8 119.9	51.9 51.2 53.2	6.1 6.2 6.2	38.9 39.1 41.5	2.0 2.0 1.9	1.7 1.7 1.9	15.6 15.6 15.2	21.5 22.2 23.4	2.9 2.8 2.8	52.1 51.7 54.3	24.0 23.5 24.2

Source: ECB.



External transactions and positions

## 7.3 Financial account (EUR billions; outstanding

ons: outstanding amounts at end of period: transactions during perio

## 9. Geographical breakdown

	Total		EU Men	ıber State	s outside t	he euro ar	ea	Canada	China	Japan	Switzer- land	United States	Offshore financial	Interna- tional	Other countries
		Total	Denmark	Sweden	United	Other EU	EU						centres	organisa-	
					Kingdom	countries	institutions							tions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2008					0	Outstanding	amounts (in	nternationa	al invest	ment pos	sition)				
Direct investment	527.4	-93.0	-2.1	-30.2	-293.9	233.6	-0.3	41.1	35.2	-9.5	126.2	-68.7	-7.1	-0.2	503.3
Abroad	3,744.4	1,255.3	34.9	93.9	865.7	260.8	0.0	104.1	38.8	71.7	384.5	734.6	418.5	0.1	736.8
Equity/reinvested earnings	2,946.9	967.5	30.1	60.3	660.1	216.9	0.0	83.3	32.0	53.6	335.3	551.3	386.7	0.0	537.4
Other capital	797.5	287.9	4.8	33.6	205.7	43.8	0.0	20.7	6.9	18.1	49.2	183.4	31.9	0.0	199.4
In the euro area	3,217.0	1,348.3	37.0	124.1	1,159.7	27.1	0.3	63.0	3.6	81.2	258.3	803.3	425.6	0.3	233.4
Equity/reinvested earnings	2,405.5	1,096.8	28.3	97.4	956.9	13.9	0.2	50.6	0.8	68.7	191.1	590.8	284.1	0.1	122.5
Other capital	811.6	251.5	8.7	26.7	202.8	13.2	0.1	12.4	2.9	12.5	67.2	212.5	141.6	0.2	110.9
Portfolio investment assets	3,763.9	1,242.2	63.7	122.4	895.5	80.7	80.0	82.8	25.6	213.4	95.4	1,225.8	458.4	30.5	389.8
Equity	1,162.7	228.7	6.4	19.9	191.7	9.8	0.9	18.2	22.8	84.5	81.3	378.8	197.8	2.0	148.6
Debt instruments	2,601.3	1,013.6	57.3	102.5	703.7	71.0	79.1	64.6	2.9	128.8	14.1	847.0	260.6	28.5	241.3
Bonds and notes	2,179.1	849.1	50.3	81.5	569.1	70.3	77.8	61.6	2.3	61.7	12.6	705.4	238.2	28.4	219.9
Money market instruments	422.1	164.5	6.9	21.0	134.6	0.6	1.3	3.0	0.6	67.1	1.5	141.5	22.4	0.1	21.4
Other investment	-184.8	-91.1	51.1	28.0	-110.4	108.8	-168.6	-6.2	-16.0	-10.2	-131.2	-286.3	-0.4	1.8	354.8
Assets	5,468.8	2,419.7	100.9	83.3	2,020.2	201.8	13.4	25.7	34.0	109.4	276.5	852.5	638.2	58.7	1,054.0
General government	101.0	15.0	0.7	0.4	3.6	0.7	9.7	0.0	1.8	0.2	0.1	3.4	1.4	40.1	39.1
MFIs	3,309.5	1,731.1	83.9	58.3	1,419.1	167.9	1.9	16.8	14.5	79.0	164.5	418.9	367.7	18.2	498.8
Other sectors	2,058.3	6/3.5	16.4	24.6	597.5	33.3	1.8	8.9	17.7	30.3	111.9	430.2	269.2	0.5	516.2
Liabilities	5,653.6	2,510.8	49.8	55.3	2,130.6	93.0	182.0	32.0	50.0	119.5	407.7	1,138.8	638.6	57.0	699.2
General government	61.9	32.5	0.0	0.1	2.5	0.0	29.7	0.0	0.0	0.6	200.7	7.0	525.1	1/./	5.5
MFIS	4,234.1	1,907.6	38.9	33.5	1,664.9	70.0	100.2	24.4	32.1	91.2	328.7	200.0	535.1	36.8	527.2
Other sectors	1,357.0	570.8	10.8	21.7	403.2	23.0	52.0	7.5	17.9	27.8	/8.0	380.8	103.2	2.5	108./
2009 Q2 to 2010 Q1							Cumulated	1 transactio	ons						
Direct investment	49.3	1.8	1.7	-7.3	3.2	4.2	0.0	0.6	2.1	1.9	13.7	-28.8	44.3	-0.2	14.0
Abroad	227.8	37.3	2.8	5.8	29.9	-1.2	0.0	8.5	2.4	2.0	34.8	56.4	42.3	0.0	44.2
Equity/reinvested earnings	168.8	30.4	1.6	5.6	22.8	0.3	0.0	9.4	-0.7	2.4	13.5	51.8	32.8	0.0	29.1
Other capital	59.0	6.9	1.2	0.2	7.1	-1.5	0.0	-1.0	3.0	-0.5	21.3	4.6	9.5	0.0	15.1
In the euro area	178.5	35.4	1.0	13.1	26.7	-5.4	0.0	7.9	0.3	0.1	21.1	85.2	-2.0	0.2	30.3
Equity/reinvested earnings	233.8	56.3	1.1	19.5	40.0	-4.3	0.0	7.6	0.3	2.3	11.8	87.2	51.1	0.2	16.9
Other capital	-55.2	-20.9	-0.1	-6.4	-13.3	-1.1	0.0	0.3	0.0	-2.2	9.3	-1.9	-53.2	0.0	13.4
Portfolio investment assets	203.7	102.9	12.2	28.1	28.0	13.2	21.4	5.5	8.4	-15./	5.1	26.2	-33.9	-0.2	105.3
Equity	117.9	24.9	1.1	3.1	20.1	0.7	0.0	2.8	8.9	13.6	5.8	21.7	-7.4	0.0	47.7
Debt instruments	85.7	78.0	11.2	25.0	7.9	12.5	21.4	2.7	-0.5	-29.4	-0.7	4.5	-26.4	-0.2	57.6
Bonds and notes	131.3	98.9	2.9	27.5	34./	11.1	17.7	1.8	-0.6	-1/.8	0.9	8.8	-10.3	-0.3	56.0
Money market instruments	-45.0	-20.9	3.2	-2.5	-20.8	1.4	3.7	0.9	0.2	-11.5	-1.0	-4.3	-10.1	0.1	1.0
Other investment	181.8	-65.9	0.6	-0.1	-40.9	-22.1	3.2	6.2	24.7	-5.2	24.4	150.7	/9.6	-0.5	-62./
Assets	-1/5.2	-38.9	9.2	0.0	-42.1	-8.5	2.0	-0.4	5.1	-10.2	-34.4	-83.2	25.4	1.0	-40.1
MEL	-4.2	-5.8	-0.3	5.0	-10./	0.0	0.1	0.0	-0.1	0.0	-0.1	20.4	-0.1	1.1	0.8
Other sectors	-120.3	-35.4	0.5	-7.0	-21.3	-0.0	1.0	-0.7	2.4	-0.0	-10.8	-39.4	14.1	0.4	-50.9
Liphilities	-44.8	27.1	1.0	2.5	-4.2	14.1	1.0	0.5	10.6	-2.2	-23.0	-43.8	54.2	2.1	22.6
General government	-357.0	27.1	0.0	0.7	-1.2	14.1	-1.1	-0.0	-19.0	-5.0	-09.4	-235.9	-54.2	2.1	22.0
MEIs	-295.6	57.4	9.5	5.2	39.5	0.0	-6.4	_4 2	-19.3	-0.1	_93.3	-172.0	-58.6	-1.2	-1.7
Other sectors	-61.6	-31.4	-0.9	1.5	-41.4	4.6	4.9	-2.4	-0.3	2.4	3.8	-62.1	4.4	-0.1	24.2

Source: ECB.



					B.o.p. iten	ns mirroring n	et transac	tions by MFIs				
	Total	Current				Transactions b	y non-MFI	s			Financial derivatives	Errors
		capital account	Direct inve	estment		Portfolio ir	vestment		Other in	vestment		omissions
		balance	By resident	By non- resident	А	ssets	Lia	bilities	Assets	Liabilities		
			units abroad	units in euro area	Equity	Debt instruments	Equity	Debt instruments				
	1	2	3	4	5	6	7	8	9	10	11	12
2007	-114.3	25.6	-459.4	395.0	-38.8	-162.6	144.5	218.4	-394.3	228.5	-64.0	-7.4
2008	-224.1	-137.0	-329.3	124.5	65.5	-22.4	-202.2	435.4	-143.8	67.7	-62.4	-20.2
2009	85.0	-49.7	-203.2	203.7	-48.0	-121.5	114.4	208.3	/1.5	-139.0	42.1	0.8
2009 Q1	-38.4	-35.8	-83.6	36.5	32.5	4.9	-48.1	116.5	-13.3	-48.8	15.8	-15.1
	35	-19.0	-79.7	36.9	-9.7	-73.1	40.5	90.2 33.4	04.5	-30.5	-4.5	0.9 14.8
04 04	42.0	8.0	-36.6	44.6	-34.9	-30.2	38.4	28.1	19.5	-10	79	-1.8
2010 Q1	-71.7	-22.9	-34.0	4.2	-25.3	-46.9	26.4	33.3	-35.7	28.8	1.8	-1.6
2009 May	6.3	-13.5	-5.3	20.6	-1.9	-33.9	26.5	29.9	83.7	-113.4	9.4	4.1
June	53.6	1.8	-15.7	-7.6	-13.1	6.7	45.8	18.0	-11.8	14.1	0.5	14.8
July	0.6	9.0	-10.8	18.9	-16.5	-21.2	35.3	-33.5	2.2	0.3	6.4	10.4
Aug.	20.4	-5.5	-13.9	17.1	-12.1	-22.1	48.3	5.1	9.4	-12.2	-9.8	16.3
Sep.	-17.5	-5.6	-38.6	0.9	-7.3	20.1	-5.9	61.8	-10.9	-18.9	-1.1	-11.9
Oct.	14.6	-1.6	-18.9	23.8	-13.1	-9.8	-21.2	46.4	-28.0	35.0	1.6	0.5
Dec	-7.9	-1.4	-11.9	10.0	-14./	-16.5	53.0	20.1	2.0	9.0 45.7	-0.1	-2.0
2010 Lu	20.5	12.0	-5.9	10.2	-7.1	-2.0	7.4	-29.1	.9	-+5.7	2.6	-0.4
2010 Jan.	-29.5	-12.8	0.9	4.5	-11.0	-12.0	-7.4	30.0	-8.2	-3.2	3.0	-19.2
Feb.	-0.4	-7.9	-11.9	-0.0	-1.9	-10.5	30.0	-7.4	-13.9	4.9	-0.7	10.5
Apr	-33.7	-2.1	-14.6	23	-11.0	-124.4	-49	29.8	-15.0	-8.7	-1.0	-1.0
May	30.8	-14.7	-15.4	-4.0	13.6	-17.1	17.7	56.5	-12.2	11.6	-2.2	-3.1
					12-month	cumulated tran	sactions					
2010 May	13.4	-37.6	-179.6	76.4	-99.3	-123.1	201.3	199.2	-63.9	14.0	3.9	22.2

## 7.4 Monetary presentation of the balance of payments <sup>I</sup>) (EUR billions; transactions)

C36 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.



External transactions and positions

## 7.5 Trade in goods

## 1. Values and volumes by product group $^{1)} \label{eq:volume}$

(seasonally adjusted, unless otherwise indicated)

	Total (	n.s.a.)		E	xports (f.	o.b.)				Impo	rts (c.i.f.)		
				Total			Memo item:		Tota	1		Memo item	is:
	Exports	Imports	Γ	Intermediate	Capital	Consumption	Manufacturing		Intermediate	Capital	Consumption	Manufacturing	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
				Values	(EUR bill	lions; annual pe	ercentage changes	s for colum	ins 1 and 2)				
2008 2009	3.9 -18.1	8.1 -22.1	1,561.7 1,275.6	771.0 625.5	338.0 261.7	414.0 352.9	1,305.8 1,062.5	1,610.5 1,258.7	1,019.3 725.7	233.3 191.9	334.0 313.6	1,021.4 838.5	293.6 174.4
2009 Q2	-22.9	-26.8	310.1	153.2	63.7	85.2	258.2	304.5	172.5	47.4	77.3	204.0	41.6
Q3	-19.6	-25.7	318.8	157.1	64.6	88.6	266.3	313.1	179.6	47.5	78.8	207.2	47.5
Q4	-8.6	-14.5	330.3	163.2	67.3	92.5	275.7	320.8	189.4	47.3	78.1	211.5	49.2
2010 Q1	12.7	9.6	353.7	175.3	68.4	98.4	292.9	349.8	209.0	51.7	81.8	231.7	53.2
2009 Dec.	-0.8	-5.6	112.2	55.4	23.5	30.9	93.7	109.3	64.4	16.3	26.6	71.6	16.5
2010 Jan.	4.1	1.1	112.3	56.5	20.5	31.4	92.3	111.1	66.9	16.4	27.0	74.5	17.4
Feb.	9.7	6.4	115.9	57.6	22.5	32.2	94.6	113.5	68.2	16.3	26.4	74.7	16.1
Mar.	22.6	20.8	125.5	61.3	25.5	34.8	106.0	125.1	74.0	19.0	28.4	82.4	19.6
Apr.	17.4	20.1	121.6	61.0	23.5	33.4	100.7	121.4	73.6	17.3	27.1	79.6	19.2
May	23.5	29.8	123.6		•		103.0	126.5	•	•		82.1	•
				Volume inc	lices (200	0 = 100; annua	al percentage char	nges for co	lumns 1 and 2)				
2008	1.4	0.1	143.4	136.7	154.2	147.0	142.3	126.9	119.3	140.4	144.5	133.3	108.1
2009	-16.7	-14.6	119.2	114.7	117.8	126.7	115.5	108.8	99.7	113.8	135.0	110.4	97.1
2009 Q2	-21.6	-19.3	116.6	113.3	115.1	122.5	112.7	106.1	96.4	110.6	133.4	107.0	97.5
Q3	-17.5	-15.9	119.0	115.4	116.0	126.7	115.9	107.1	96.5	114.3	135.5	109.9	95.3
Q4	-6.0	-7.9	123.8	119.8	121.8	133.5	120.7	110.8	102.1	115.1	137.9	114.1	95.4
2010 Q1	11.3	4.0	129.7	125.5	123.3	138.1	126.1	115.2	106.2	121.5	140.1	121.1	94.9
2009 Dec.	1.0	-2.7	125.3	121.5	126.5	132.2	122.5	112.1	102.4	118.5	140.0	115.3	94.3
2010 Jan.	3.5	-3.2	124.6	121.8	111.3	134.1	119.8	111.4	104.1	116.9	138.0	117.5	95.2
Feb.	8.9	1.6	127.4	123.7	121.5	134.7	121.9	112.5	104.1	115.9	136.2	117.5	87.7
Mar.	20.1	13.3	137.2	131.0	137.3	145.4	136.5	121.9	110.4	131.9	146.2	128.3	101.8
Apr.	12.5	8.1	131.8	128.6	126.2	138.7	128.9	115.6	106.6	120.6	136.2	121.9	92.6
May	•		•	•	•			•		•			•

## 2. Prices 2)

(annual percentage changes, unless otherwise indicated)

		Indus	trial producer	export p	rices (f.o.b.	) 3)				Industrial im	port price	es (c.i.f.)		
	Total (index:			Total			Memo item:	Total (index:			Total			Memo item:
	2005 = 100)		Intermediate goods	Capital goods	Consumer goods	Energy	Manufac- turing	2005 = 100)		Intermediate goods	Capital goods	Consumer goods	Energy	Manufac- turing
% of total	100.0	100.0	32.2	46.3	17.7	3.8	99.4	100.0	100.0	28.4	27.9	22.1	21.6	81.1
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2008 2009	103.5 100.9	1.6 -2.5	1.5 -4.1	-0.4 0.6	2.4 0.5	25.2 -26.5	1.5 -2.5	112.7 102.2	6.5 -9.4	0.2 -5.8	-3.4 -0.8	2.4 0.2	28.2 -26.5	0.8 -3.8
2009 Q4 2010 Q1 Q2	100.6 102.5 104.9	-2.0 1.3 3.9	-5.2 -0.3 5.0	-1.1 -0.2 0.8	-0.5 0.7 2.4	6.8 37.8	-1.9 1.4 4.0	103.4 107.6	-3.3 6.1	-4.9 2.5	-2.1 -1.1 0.7	-2.9 -0.9	-2.9 26.7	-3.2 1.5
2010 Jan. Feb. Mar. Apr. May	101.8 102.6 103.3 104.3 105.2	0.4 1.2 2.3 3.5 4.3	-1.7 -0.5 1.3 3.6 5.4	-0.7 -0.1 0.3 0.2 0.9	0.4 0.4 1.1 1.6 2.7	32.2 36.5 44.4 47.9 35.3	0.5 1.3 2.4 3.6 4.3	106.2 107.3 109.3 112.0 112.9	4.6 5.5 8.1 11.4 11.7	0.5 2.0 5.0 8.5 11.4	-1.4 -1.1 -0.8 -0.5 0.9	-1.3 -1.2 -0.3 0.7 2.9	22.9 25.3 31.8 41.4 33.6	0.4 1.1 2.9 4.6 6.4
June	105.2	4.0	5.9	1.3	2.9		4.0				1.8			

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

2) 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.

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

UR billions, unless otherwise indicated; seasona

## 3. Geographical breakdown

	Total	EU Mem	ber States	outside the o	euro area	Russia	Switzer-	Turkey	United States		Asia		Africa	Latin America	Other
		Denmark	Sweden	United Kingdom	Other EU countries				States	[	China	Japan			
	1	2	3	4	5	6	7	8 (a,b)	9	10	11	12	13	14	15
							Exports (	1.0.0.)					100.0		
2008 2009	1,561.7 1,275.6	35.1 27.5	53.9 41.1	220.4 174.7	233.7 177.3	78.5 49.4	86.7 78.7	42.7 34.4	187.2 152.3	309.5 282.2	65.7 68.0	33.7 28.7	100.2 91.5	68.1 53.9	145.5 112.8
2008 Q4	362.6	8.1	11.5	48.6	52.6	17.8	21.2	8.4	44.3	74.1	15.8	8.1	24.9	17.2	33.9
2009 Q1	316.4	7.3	10.0	42.7	43.7	12.6	20.2	7.7	39.5	66.6	15.2	7.1	23.3	13.0	29.8
Q2 03	310.1	6.7	9.8	42.7	42.8	12.2	19.1	8.3	38.3 36.4	69.5 70.0	16.8	7.0	22.6	12.5	25.8
04 04	330.3	6.7	10.5	44.8	45.9	12.1	20.1	9.3	38.1	75.2	18.6	7.4	22.4	14.0	27.8
2010 Q1	353.7	6.9	11.7	46.5	47.8	13.4	21.4	10.7	41.5	81.5	22.2	8.0	24.9	16.7	30.8
2009 Dec.	112.2	2.2	3.6	15.3	15.3	4.2	6.7	3.2	12.9	26.1	6.2	2.6	7.8	4.9	9.9
2010 Jan.	112.3	2.2	3.7	15.3	15.4	4.1	7.0	3.4	12.8	25.7	6.9	2.6	7.9	4.8	9.9
Feb.	115.9	2.3	3.8	14.8	15.6	4.2	6.9	3.5	12.8	26.7	7.4	2.7	8.4	5.8	11.0
Mar.	125.5	2.4	4.1	16.4	16.8	5.1	7.4	3.8	15.8	29.0	7.9	2.8	8.6	6.1	9.8
Apr. May	121.0	2.4	4.1	15.7	10.5	5.1	7.4	3.8 3.5	14.0	27.9	7.5	2.8	8.0 8.4	5./	9.9
inay	125.0	•	· ·	•		Percen	taae share	of total ern	orte	20.0	7.0	2.9	0.1	0.5	· ·
2009	100.0	2.2	3 2	13.7	13.0	30	62	27	110	22.1	53	23	7.2	12	8.8
2009	100.0	2.2	5.2	15.7	15.9	5.9	Imports (	2.7	11.9	22.1	5.5	2.5	1.2	4.2	0.0
2008	1 (10 5	20.7	52.2	164.9	104.0	122.0	70.0	22.4	125.0	490.0	105 5	57.4	141.2	017	114.0
2008	1,010.5	30.7 26.5	52.2 37.8	164.8	184.9	122.0 81.4	70.0 64.9	32.4 26.2	135.8	480.0 376.1	185.5	57.4 42.9	93.6	81./ 59.1	88.5
2008 04	373.5	7.4	11.5	36.6	102.5	24.8	17.5	7.1	33.2	113.0	137.3	13.3	30.0	20.2	27.4
2008 Q4	220.2	6.0	0.5	21.4	20.0	17.0	16.7	6.6	21.0	07.0	41.6	11.5	22.0	14.7	27.4
2009 Q1 Q2	320.3 304 5	6.9 6.5	9.5	31.4 30.7	39.0 39.4	17.8	16.7	6.0 6.3	31.8 30.1	97.0	41.0 39.3	10.1	23.8 22.9	14.7	25.1 19.2
Q3	313.1	6.8	9.7	31.8	41.1	21.8	16.1	6.6	26.0	93.1	39.0	10.7	22.6	14.8	22.6
Q4	320.8	6.4	9.6	32.2	42.9	23.7	16.0	6.8	28.0	93.8	39.4	10.6	24.3	15.5	21.5
2010 Q1	349.8	6.4	10.4	34.9	44.9	24.4	17.1	7.4	28.9	108.9	46.3	11.7	26.8	16.5	23.1
2009 Dec.	109.3	2.1	3.4	11.0	14.5	7.9	5.5	2.1	9.5	31.8	13.7	3.5	8.5	5.3	7.7
2010 Jan.	111.1	2.1	3.2	11.4	14.5	8.2	5.6	2.5	9.6	34.0	13.4	3.8	8.2	5.2	6.6
Feb.	113.5	2.1	3.3	11.5	14.9	7.3	5.7	2.3	9.4	34.2	14.3	3.6	8.9	5.4	8.6
Mar. Apr	125.1	2.3	3.9	12.0	15.4 15.3	8.9 8.7	5.9	2.6	9.9	40.7	18./	4.2	9.7	5.9 5.8	8.0 7.0
May	126.5					9.8	6.3	2.4	9.8	40.3	17.4	4.1	9.7	5.8	
						Percen	tage share d	of total imp	orts						
2009	100.0	2.1	3.0	10.0	12.9	6.5	5.2	2.1	9.2	29.9	12.7	3.4	7.4	4.7	7.0
							Balan	ce							
2008	-48.8	4.4	1.7	55.7	48.8	-43.5	16.8	10.4	51.4	-170.5	-119.8	-23.6	-41.0	-13.6	30.6
2009	17.0	0.9	3.3	48.6	15.0	-32.0	13.8	8.1	36.3	-93.9	-91.3	-14.2	-2.2	-5.3	24.3
2008 Q4	-10.9	0.7	0.0	12.0	9.5	-7.1	3.7	1.3	11.1	-39.7	-31.9	-5.2	-6.0	-2.9	6.5
2009 Q1	-3.9	0.4	0.4	11.3	4.8	-5.1	3.5	1.1	7.6	-30.4	-26.3	-4.4	-0.5	-1.7	4.7
Q2	5.6	0.2	0.8	12.0	3.4	-5.9	3.0	2.0	8.2	-22.7	-22.5	-3.1	-0.3	-1.7	6.5
Q3 04	5.8 9.5	0.1	0.8	12.8	3.8 3.0	-9.7	3.2 4.1	2.5	10.4	-22.1	-21.6	-3.0	-0.2	-0.8	5.2 7.9
2010 Q1	4.0	0.5	1.3	11.6	2.9	-11.0	4.3	3.3	12.6	-27.4	-24.1	-3.6	-1.9	0.2	7.6
2009 Dec.	2.8	0,1	0.3	4.3	0.8	-3.7	1.2	1.1	3,3	-5.7	-7.5	-0.9	-0.7	-0.4	2.2
2010 Jan	12	0.2	0.5	3.8	0.9	-4.1	1.5	0.9	3.2	-8.3	-6.4	-1.2	-0.3	-0.4	3.4
Feb.	2.4	0.2	0.5	3.3	0.7	-3.1	1.3	1.2	3.4	-7.5	-6.9	-1.0	-0.5	0.4	2.4
Mar.	0.3	0.1	0.3	4.4	1.3	-3.8	1.6	1.2	6.0	-11.6	-10.8	-1.4	-1.1	0.3	1.8
Apr.	0.1	0.3	0.5	4.2	1.0	-3.6	1.4	1.3	4.7	-11.0	-8.9	-1.2	-1.4	0.0	2.9
way	-3.0	•	•	•	•	-4./	1.2	1.1	4.5	-11.5	-9.0	-1.2	-1.3	0.5	·

Source: Eurostat.





## **EXCHANGE RATES**

# 8.1 Effective exchange rates I) (period averages; index: 1999 Q1=100)

			<b>EER-21</b>				<b>EER-41</b>	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
2007	106.2	106.8	105.2	102.6	106.8	100.8	112.0	104.2
2007	110.5	110.8	105.2	102.0	112.6	100.8	118.0	104.2
2009	111.7	110.6	105.9	106.3	119.1	106.9	120.6	107.8
2009 Q2	111.1	110.2	105.3	106.0	120.1	106.3	119.8	107.4
Q3	112.1	110.9	106.2	106.8	118.9	106.8	121.0	108.1
Q4	113.8	112.2	107.3	107.5	120.2	109.4	122.5	108.8
2010 Q1	108.7	106.9	102.3	102.4	114.5	104.1	116.9	103.2
Q2	103.1	101.8	97.5	•	•		110.4	97.5
2009 July	111.6	110.5	105.8	-	-	-	120.5	107.7
Aug.	111.7	110.6	106.0	-	-	-	120.6	107.8
Sep.	112.9	111.6	106.9	-	-	-	122.0	108.7
Oct.	114.3	112.8	108.2	-	-	-	123.0	109.5
Nov.	114.0	112.5	107.6	-	-	-	122.9	109.2
Dec.	113.0	111.2	106.2	-	-	-	121.7	107.8
2010 Jan.	110.8	108.9	104.1	-	-	-	119.1	105.4
Feb.	108.0	106.1	101.6	-	-	-	116.2	102.5
Mar.	107.4	105.7	101.1	-	-	-	115.2	101.8
Apr.	106.1	104.5	100.1	-	-	-	113.5	100.3
May	102.8	101.4	97.0	-	-	-	109.9	97.1
June	100.7	99.4	95.3	-	-	-	107.7	95.2
July	102.5	101.2	97.2	-	-	-	109.9	97.1
			Percentage change	versus previous mon	th			
2010 July	1.8	1.8	2.0	-	-	-	2.1	2.0
			Percentage change	versus previous yea	r			
2010 July	-8.2	-8.5	-8.2	-	-	-	-8.8	-9.8

# **C37 Effective exchange rates** (monthly averages; index: 1999 Q1=100)



# **C38 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 krone	Swedish krona	Pound sterling	US dollar	Japanese yen	Swiss Sout	h Korean won	Hong Kong dollar	Singapore dollar	Canadian dollar	Norwegian krone	Australian dollar
	1	2	3	4	5	6	7	8	9	10	11	12
2007 2008 2009	7.4506 7.4560 7.4462	9.2501 9.6152 10.6191	0.68434 0.79628 0.89094	1.3705 1.4708 1.3948	161.25 152.45 130.34	1.6427 1.5874 1.5100	1,272.99 1,606.09 1,772.90	10.6912 11.4541 10.8114	2.0636 2.0762 2.0241	1.4678 1.5594 1.5850	8.0165 8.2237 8.7278	1.6348 1.7416 1.7727
2009 Q4 2010 Q1 Q2	7.4424 7.4426 7.4416	10.3509 9.9464 9.6313	0.90483 0.88760 0.85239	1.4779 1.3829 1.2708	132.69 125.48 117.15	1.5088 1.4632 1.4086	1,725.91 1,581.41 1,481.01	11.4555 10.7364 9.8857	2.0604 1.9395 1.7674	1.5604 1.4383 1.3054	8.3932 8.1020 7.9093	1.6250 1.5293 1.4403
2010 Jan. Feb. Mar. Apr. May June July	7.4424 7.4440 7.4416 7.4428 7.4413 7.4409 7.4522	10.1939 9.9505 9.7277 9.6617 9.6641 9.5723 9.4954	0.88305 0.87604 0.90160 0.87456 0.85714 0.82771 0.83566	1.4272 1.3686 1.3569 1.3406 1.2565 1.2209 1.2770	130.34 123.46 123.03 125.33 115.83 110.99 111.73	1.4765 1.4671 1.4482 1.4337 1.4181 1.3767 1.3460	1,624.76 1,582.70 1,542.59 1,494.53 1,465.81 1,483.22 1,538.85	11.0783 10.6305 10.5313 10.4065 9.7843 9.5091 9.9308	1.9930 1.9326 1.8990 1.8505 1.7503 1.7081 1.7588	1.4879 1.4454 1.3889 1.3467 1.3060 1.2674 1.3322	8.1817 8.0971 8.0369 7.9323 7.8907 7.9062 8.0201	$1.5624 \\ 1.5434 \\ 1.4882 \\ 1.4463 \\ 1.4463 \\ 1.4436 \\ 1.4315 \\ 1.4586$
					Percentage c	hange versus p	revious mor	nth				
2010 July	0.2	-0.8	1.0	4.6	0.7	-2.2	3.8	4.4	3.0	5.1	1.4	1.9
					Percentage	change versus	previous yea	ır				
2010 July	0.1	-12.3	-2.9	-9.4	-16.1	-11.5	-13.5	-9.0	-13.9	-15.8	-10.4	-16.7
	Cz koru	ech E ina 13	stonian kroon 14	Latvian lats	Lithuanian litas 16	Hungarian forint 17	Polis zlot	sh Bulga ty .8	rian N lev 19	ew Roma- nian leu 20	Croatian kuna 21	New Turkish lira 22
2007 2008 2009	Cz kor 27. 24.9 26.4	ech         E           13         13           766         1           946         1           135         1	<b>stonian</b> <b>kroon</b> 14 5.6466 5.6466 5.6466	Latvian lats 15 0.7001 0.7027 0.7057	Lithuanian litas 16 3.4528 3.4528 3.4528 3.4528	Hungarian forint 17 251.35 251.51 280.33	Polis zlor 3.783 3.512 4.327	Bulga           8           7         1.9           1         1.9           6         1.9	rian N lev 19 2558 2558 2558	ew Roma- nian leu 20 3.3353 3.6826 4.2399	Croatian kuna 21 7.3376 7.2239 7.3400	New Turkish lira 22 1.7865 1.9064 2.1631
2007 2008 2009 2009 Q4 2010 Q1 Q2	27.5 24.5 26.4 25.5 25.5	ech ina         E           13         766         1           946         1         35         1           923         1         368         1           591         1         1         1	stonian kroon 14 5.6466 5.6466 5.6466 5.6466 5.6466 5.6466	Latvian lats 15 0.7001 0.7027 0.7057 0.7084 0.7087 0.7078	Lithuanian litas 16 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528	Hungarian forint 17 251.35 251.51 280.33 270.88 268.52 274.85	Polis zlov 3.783 3.512 4.327 4.174 3.986 4.017	Bulga           8           7         1.9           1         1.9           6         1.9           5         1.9           9         1.9           1         1.9	rian lev 19 558 558 558 558 558 558 558	ew Roma- nian leu 20 3.3353 3.6826 4.2399 4.2680 4.1135 4.1854	Croatian kuna 21 7.3376 7.2239 7.3400 7.2756 7.2849 7.2477	New Turkish lira 22 1.7865 1.9064 2.1631 2.2029 2.0866 1.9560
2007 2008 2009 2009 Q4 2010 Q1 Q2 2010 Jan. Feb. Mar. Apr. May June July	Cz kort 27.7 24.9 26.6 25.9 25.9 25.9 25.9 25.9 25.9 25.9 25.9	ech         E           13         766         1           766         1         1           766         1         1           763         1         1           766         1         1           766         1         1           766         1         1           768         1         1           768         1         1           768         1         1           782         1         1	stonian         kroon           14         14           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466	Latvian lats 15 0.7001 0.7057 0.7057 0.7078 0.7084 0.7087 0.7078 0.7088 0.7090 0.7088 0.7090 0.7088 0.7076 0.7075 0.7075 0.7082 0.7090	Lithuanian litas 16 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528	Hungarian forint 17 251.35 251.51 280.33 270.88 268.52 274.85 269.43 271.21 265.40 265.53 276.78 281.49 283.75	Polis zlor 1 3.783 3.512 4.327 4.174 3.986 4.017 4.070 4.014 3.890 3.878 4.056 4.105 4.081	Bulga           Bulga           8           7         1.9           1         1.9           5         1.9           9         1.9           1         1.9           3         1.9           4         1.9           2         1.9           77         1.9           4         1.9           5         1.9           4         1.9           5         1.9           4         1.9           5         1.9           4         1.9	rian         N           19         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558	ew Roma- nian leu 20 3.3353 3.6826 4.2399 4.2680 4.1135 4.1854 4.1383 4.1196 4.0866 4.1306 4.1306 4.1306	Croatian kuna 21 7.3376 7.2239 7.3400 7.2756 7.2849 7.2477 7.2938 7.3029 7.2616 7.2594 7.2630 7.2255 7.2198	New Turkish lira 22 1.7865 1.9064 2.1631 2.2029 2.0866 1.9560 2.1028 2.0756 2.0821 1.9983 1.9459 1.9274 1.9669
2007 2008 2009 2009 Q4 2010 Q1 Q2 2010 Jan. Feb. Mar. Apr. May June July	Cz kort 27.7 24.9 26.4 25.9 25.3 25.3 25.3 25.5 25.5 25.5 25.5 25.5	ech         E           13         766         1           766         1         1           766         1         1           763         1         1           868         1         1           991         1         1           133         1         1           779         1         1           963         1         1           868         1         1           863         1         1           828         1         1	stonian         kroon           14         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466	Latvian lats 15 0.7001 0.7057 0.7057 0.7084 0.7088 0.7088 0.7090 0.7083 0.7076 0.7075 0.7075 0.7075	Lithuanian litas 16 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528	Hungarian forint 17 251.35 251.51 280.33 270.88 268.52 274.85 269.43 271.21 265.40 265.53 276.78 281.49 283.75	Polis zlor 1 3.783 3.512 4.327 4.174 3.986 4.017 4.070 4.014 3.890 3.878 4.056 4.105 4.081 revious mor	Bulga           8           7         1.9           1         1.9           5         1.9           9         1.9           1         1.9           3         1.9           4         1.9           7         1.9           5         1.9           9         1.9           3         1.9           4         1.9           7         1.9           5         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9	rian         N           19         19           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558	ew Roma- nian leu 20 3.3353 3.6826 4.2399 4.2680 4.1135 4.1854 4.1383 4.1196 4.0866 4.1306 4.1306 4.1767 4.2434 4.2608	Croatian kuna 21 7.3376 7.2239 7.3400 7.2756 7.2849 7.2477 7.2938 7.3029 7.2616 7.2594 7.2630 7.2616 7.2594 7.2639 7.2198	New Turkish lira 22 1.7865 1.9064 2.1631 2.2029 2.0866 1.9560 2.1028 2.0756 2.0821 1.9983 1.9459 1.9274 1.9669
2007 2008 2009 2009 Q4 2010 Q1 Q2 2010 Jan. Feb. Mar. Apr. May June July 2010 July	Cz kort 27.7 24.9 26.4 25.9 25.3 25.3 25.3 25.5 25.3 25.5 25.5 25.5	ech         E           13         766         1           766         1         1           766         1         1           768         1         1           868         1         1           991         1         1           133         1         1           779         1         1           963         1         1           868         1         1           808         1         1           328         1         1           1.8         1         1	stonian         kroon           14         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466	Latvian 15 0.7001 0.7027 0.7057 0.7084 0.7088 0.7088 0.7088 0.7083 0.7076 0.7075 0.7075 0.7082 0.7090	Lithuanian litas 16 3.4528 3.4	Hungarian forint 17 251.35 251.51 280.33 270.88 268.52 274.85 269.43 271.21 265.40 265.53 276.78 281.49 283.75 :hange versus p 0.8	Polis zlor 1 3.783 3.512 4.327 4.174 3.986 4.017 4.070 4.014 3.890 3.878 4.056 4.105 4.081 revious mor -0.	Bulga           8           7         1.9           1         1.9           5         1.9           9         1.9           1         1.9           3         1.9           4         1.9           5         1.9           9         1.9           1         1.9           3         1.9           4         1.9           5         1.9           4         1.9           5         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9	rian         N           19         558           5558         558           5558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558	ew Roma- nian leu 20 3.3353 3.6826 4.2399 4.2680 4.1135 4.1854 4.1383 4.1196 4.0866 4.1306 4.1306 4.1306 4.1306 4.1306 4.1767 4.2434 4.2608	Croatian kuna 21 7.3376 7.2239 7.3400 7.2756 7.2849 7.2477 7.2938 7.3029 7.2616 7.2594 7.2630 7.2616 7.2594 7.2630 7.2255 7.2198	New Turkish lira 22 1.7865 1.9064 2.1631 2.2029 2.0866 1.9560 2.1028 2.0756 2.0821 1.9983 1.9459 1.9274 1.9669 
2007 2008 2009 2009 Q4 2010 Q1 Q2 2010 Jan. Feb. Mar. Apr. May June July 2010 July	Cz kort 27.7 24.9 26.6 25.9 25.3 25.5 25.5 25.5 25.5 25.5 25.5 25.5	ech         E           13         766         1           766         1         1           766         1         1           763         1         1           769         1         1           768         1         1           768         1         1           768         1         1           763         1         1           7641         1         1           763         1         1           763         1         1           780         1         1           782         1         1           783         1         1           744         1         1           744         1         1           759         1         1           763         1         1           780         1         1           780         1         1           71         1         1           71         1         1           71         1         1           723         1         1         1	stonian         kroon           14         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466           5.6466         5.6466	Latvian lats 15 0.7001 0.7027 0.7057 0.7084 0.7088 0.7078 0.7088 0.7090 0.7083 0.7076 0.7075 0.7075 0.7075 0.7082 0.7090	Lithuanian litas 16 3.4528	Hungarian forint 17 251.35 251.51 280.33 270.88 268.52 274.85 269.43 271.21 265.40 265.53 276.78 281.49 283.75 :hange versus p 0.8 change versus j	Polis zlov 1 3.783 3.512 4.327 4.174 3.986 4.017 4.070 4.014 3.890 3.878 4.056 4.105 4.081 revious mor -0. previous year	bh         Bulga           8         -           7         1.9           1         1.9           5         1.9           9         1.9           1         1.9           3         1.9           4         1.9           7         1.9           5         1.9           9         1.9           3         1.9           4         1.9           5         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9           4         1.9	rian         N           19         558           5558         558           5558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558           558         558	ew Roma- nian leu 20 3.3353 3.6826 4.2399 4.2680 4.1135 4.1854 4.1383 4.1196 4.0866 4.1306 4.1306 4.1306 4.1306 4.1306 4.1306 4.2434 4.2608	Croatian kuna 21 7.3376 7.2239 7.3400 7.2756 7.2849 7.2477 7.2938 7.3029 7.2616 7.2594 7.2630 7.2616 7.2594 7.2630 7.2255 7.2198	New Turkish lira 22 1.7865 1.9064 2.1631 2.2029 2.0866 1.9560 2.1028 2.0756 2.0821 1.9983 1.9459 1.9274 1.9669 2.1

	Brazilian real <sup>1)</sup>	Chinese yuan renminbi	Icelandic krona <sup>2)</sup>	Indian rupee <sup>3)</sup>	Indonesian rupiah	Malaysian ringgit	Mexican peso 1)	New Zealand dollar	Philippine peso	Russian rouble	South African rand	Thai baht
	23	24	25	26	27	28	29	30	31	32	33	34
2007	2.6633	10.4178	87.63	56.4186	12,528.33	4.7076	14.9743	1.8627	63.026	35.0183	9.6596	44.214
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
2009 Q4	2.5703	10.0905	-	68.9088	13,999.42	5.0275	19.3003	2.0297	69.080	43.5740	11.0757	49.221
2010 Q1	2.4917	9.4417	-	63.4796	12,809.32	4.6590	17.6555	1.9510	63.593	41.2697	10.3852	45.472
Q2	2.2762	8.6717	-	57.9879	11,581.24	4.1172	15.9583	1.8145	57.848	38.5027	9.5974	41.152
2010 Jan.	2.5383	9.7436	-	65.5361	13,263.60	4.8170	18.2820	1.9646	65.702	42.5749	10.6492	47.150
Feb.	2.5237	9.3462	-	63.4291	12,786.05	4.6743	17.7154	1.9615	63.317	41.2845	10.4964	45.360
Mar.	2.4233	9.2623	-	61.7352	12,434.53	4.5083	17.0587	1.9301	61.999	40.1219	10.0589	44.111
Apr.	2.3550	9.1505	-	59.6203	12,101.70	4.2935	16.3957	1.8814	59.788	39.1335	9.8658	43.279
May	2.2750	8.5794	-	57.6166	11,517.01	4.0874	15.9856	1.8010	57.315	38.2707	9.6117	40.714
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
				Per	centage chang	e versus previo	us month					
2010 July	2.5	4.0	-	5.2	3.4	2.7	5.4	1.5	4.4	2.6	3.2	4.1
				Pe	rcentage chan	ge versus previo	ous year					
2010 July	-17.0	-10.1	-	-12.3	-18.9	-18.1	-13.0	-18.0	-12.8	-11.8	-14.0	-14.0

Source: ECB.

Source: ECB.
 For these currencies the ECB computes and publishes euro reference exchange rates as from 1 January 2008. Previous data are indicative.
 The most recent rate for the Icelandic krona refers to 3 December 2008.
 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 In other EU Member States (annual percentage changes, unless otherwise in

1. Economic a	nd financia Bulgaria	l developm Czech	ents Denmark	Estonia	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United
	_	Republic									Kingdom
	1	2	3	4	5 HICP	6	7	8	9	10	11
2008	12.0	6.3	3.6	10.6	15.3	11.1	6.0	4.2	7.9	3.3	3.6
2009	2.5	0.6	1.1	0.2	-3.9	-0.4	4.0	4.0	2.6	2.7	3.3
Q2	2.9	0.9	2.0	2.9	-2.3	0.5	5.0	2.5	4.3	1.8	3.4
2010 Apr. May	3.0 3.0	0.9 1.0	2.4 1.9	2.5 2.8	-2.8 -2.4	0.2 0.5	5.7 4.9	2.7 2.3	4.2 4.4	2.1 1.9	3.7 3.4
June	2.5	1.0	1.7	3.4	-1.6	0.9	5.0	2.4	4.3	1.6	3.2
2007	0.1	-0.7	4 8	2 6	-0.3	s(+) as a perc	entage of GDP	_1 9	-2.5	3.8	_28
2008	1.8	-2.7	3.4	-2.7	-4.1	-3.3	-3.8	-3.7	-5.4	2.5	-4.9
2009	-3.9	-5.9	-2.7 G	-1./	-9.0 hent gross debt	-8.9 as a percentag	-4.0 re of GDP	-/.1	-8.3	-0.5	-11.5
2007	18.2	29.0	27.4	3.8	9.0	16.9	65.9	45.0	12.6	40.8	44.7
2008 2009	14.1 14.8	30.0 35.4	34.2 41.6	4.6 7.2	19.5 36.1	15.6 29.3	72.9 78.3	47.2 51.0	13.3 23.7	38.3 42.3	52.0 68.1
			Long-term g	overnment bond	d yield as a pero	centage per an	num; period av	erage			
2010 Jan.	6.65	4.28	3.57	-	13.76	8.15	7.62	6.13	9.05	3.37	4.01
Mar.	5.82	4.55	3.50 3.40	-	13.62	5.15	7.16	5.72	7.92	3.28 3.20	4.02
Apr. May	5.94 6.13	3.84 4.10	3.34 2.93	-	10.13 10.13	5.15 5.15	6.57 7.07	5.57 5.74	6.97 7 27	3.14 2.73	3.96 3.60
June	6.21	4.26	2.70	-	10.12	5.15	7.60	5.83	7.10	2.61	3.14
			3-moi	th interest rate	as a percentage	e per annum; p	period average		0.54	0.10	0.64
2010 Jan. Feb.	4.44 4.27	1.55 1.52	1.46 1.39	2.74 2.12	4.77	3.07	6.78 6.59	4.24 4.17	8.56 6.93	0.48 0.48	0.61 0.63
Mar.	4.21	1.43	1.37	1.86	2.33	1.87	6.65	4.13	6.01	0.49	0.65
Apr. May	4.21 4.19	1.42	1.28	1.79	2.14 2.26	1.57	6.14	3.85	6.38	0.52	0.66
June	4.18	1.24	1.15	1.47	2.09	1.64	5.43	3.86	6.60	0.70	0.73
2008	60	2.5	-0.9	-36	_4 2	28	0.6	5.1	73	-0.4	-0.1
2009	-5.0	-4.1	-4.7	-14.1	-18.0	-14.8	-6.3	1.8	-7.1	-5.1	-4.9
2009 Q4 2010 Q1	-5.9 -3.6	-3.2	-2.9 -0.6	-9.5 -2.0	-16.8 -5.1	-12.5	-4.6 -0.9	2.8 2.8	-6.5 -2.6	-1.5 3.0	-2.9
Q2						1.1				3.6	
2000	22.2		Cur	rent and capital	account balanc	e as a percent	age of GDP	2.0			
2008 2009	-23.2 -8.0	0.2	2.0 3.9	-8.4 7.4	-11.6 12.0	-10.1 7.2	-5.9	-3.9	-11.1 -4.0	9.2 7.3	-1.3 -1.1
2009 Q3	3.0	-2.0	5.4	10.9	11.9	8.0	2.8	-0.9	-2.8	7.0	-1.6
2010 Q1	-7.1	2.1	2.7	4.3	12.6	3.2	2.2	-1.2 0.2	-6.1	8.2	-0.2
				Gross exter	rnal debt as a po	ercentage of C	BDP				
2007 2008	100.4 108.8	44.5 50.0	170.3 178.4	111.0 118.5	127.6 129.2	71.9 71.6	115.1 155.0	48.4 56.5	50.9 56.0	176.2 203.8	399.6 432.2
2009 Q3	107.8	46.7	190.8	124.0	147.9	82.9	170.0	60.2	66.7	203.2	412.2
Q4 2010 Q1	111.3 109.8	50.8 49.0	189.6 200.4	126.7 124.7	156.6 161.8	86.5	164.4 169.8	59.6 58.4	69.0 71.7	203.8 205.5	405.9
					Unit labour c	costs					
2008 2009	16.2 10.6	5.1 3.6	6.5 4.5	14.1 1.7	22.0 -7.1	9.3 0.9	4.5 0.9	6.8 2.3	14.5 5.1	2.6 4.8	2.3 5.5
2009 Q3	10.2	2.9	4.8	1.5	-12.9	-6.5	-	4.5	-	5.3	4.3
Q4 2010 Q1	3.7 6.6	2.2 -2.7	-1.6 0.9	-7.5 -8.9	-20.2 -19.8	-11.4 -12.6	-	-3.5	-	0.2	4.6 3.3
			Standard	ised unemployi	ment rate as a p	ercentage of 1	abour force (s.a	.)			
2008	5.6	4.4	3.3	5.5 13.8	7.5 17.1	5.9 13.7	7.8	7.2	5.8	6.2 8 3	5.7
2010 Q1	9.3	7.8	7.1	19.0	20.0	17.3	11.2	9.7	7.4	8.8	7.9
2010 Apr.	9.7	7.6	7.0	-	. 22.5		10.0	9.8		. 9.1	7.8
May June	9.7 9.7	7.5 7.4	6.7 6.6	-			10.4 10.4	9.7 9.6	•	8.8	•

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



## 9.2 In the United States and Japan

### 1. Economic and financial developments

	Consumer price index	Unit labour costs 1)	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money <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						
2006	3.2	2.8	2.7	2.7	4.6	5.3	5.20 5.30	5.26 4.81	1.2556	-2.2	47.8 48.4
2008 2009	3.8 -0.4	1.0 -1.9	0.0	-4.4 -10.9	5.8 9.3	7.1 7.8	2.93 0.69	2.70 4.17	1.4708 1.3948	-6.5 -11.1	56.3 67.6
2009 Q2 Q3 Q4 2010 Q1	-1.2 -1.6 1.4 2.4	0.4 -2.7 -5.2 -4.2	-4.1 -2.7 0.2 2.4	-14.7 -10.0 -3.7 3.9	9.3 9.6 10.0 9.7	8.9 7.8 5.1 1.9	0.84 0.41 0.27 0.26	3.95 3.61 4.17 4.01	1.3632 1.4303 1.4779 1.3829	-11.6 -11.6 -11.1 -10.9	62.7 65.8 67.6 70.7
Q2 2010 Mar	1.8		3.2	8.4	9.7	1.7	0.44	3.13	1.2708		
Apr. May June	2.2 2.0 1.1	- -	-	7.2 9.0 8.9	9.9 9.7 9.5	1.6 1.7 1.8	0.31 0.46 0.54	3.84 3.52 3.13	1.3406 1.2565 1.2209	-	-
July	· ·		-	· ·	Japan		0.51	5.05	1.2770		
2006 2007 2008 2009	0.2 0.1 1.4 -1.4	-0.5 -1.0 2.6 0.4	2.0 2.3 -1.2 -5.3	4.5 2.8 -3.4 -21.9	4.1 3.8 4.0 5.1	1.0 1.6 2.1 2.7	0.30 0.79 0.93 0.47	1.85 1.70 1.21 1.42	146.02 161.25 152.45 130.34	-1.6 -2.4 -2.1	159.9 156.3 162.2
2009 Q2 Q3 Q4 2010 Q1 Q2	-1.0 -2.2 -2.0 -1.2 -0.9	0.9 1.0 -4.0	-6.0 -4.9 -1.4 4.2	-27.4 -19.4 -4.2 27.6 20.9	5.1 5.4 5.2 4.9	2.6 2.8 3.3 2.8 3.0	0.53 0.40 0.31 0.25 0.24	1.41 1.45 1.42 1.48 1.18	132.59 133.82 132.69 125.48 117.15	:	- - - - -
2010 Mar. Apr. May June	-1.1 -1.2 -0.9 -0.7	- - -	- - -	31.9 25.9 20.4 17.1	5.0 5.1 5.2	2.7 2.9 3.1 2.9	0.25 0.24 0.24 0.24	1.48 1.37 1.37 1.18	123.03 125.33 115.83 110.99	- - -	- - -
July		-	-				0.24	1.13	111.73	-	-

## C39 Real gross domestic product







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. Period averages; M2 for the United States, M2+CDs for Japan. Percentages per annum. For further information on the three-month interbank deposit rate, see Section 4.6. 2) 3)

- 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) 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) 
$$a_t = \begin{pmatrix} I_t \\ I_{t-12} \end{pmatrix} \times 100$$

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index 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) 
$$a_t^{\mathrm{M}} = \begin{pmatrix} I_t \\ I_{t-1} \end{pmatrix} \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as  $(a_{t+1} + a_t + a_{t-1})/3$ , where  $a_t$  is defined as in f) or g) above.

# CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If  $F_t^Q$  and  $L_{t-3}$  are defined as above, the index  $I_t$  of adjusted outstanding amounts for the quarter ending in month t is defined as:

i) 
$$I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}}\right)$$

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 '

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 and 3.2 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).
- 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 worth (wealth) are calculated as changes in net worth (wealth) due to savings and capital transfers plus other changes in net financial worth (wealth). They currently exclude other changes in non-financial assets owing to the unavailability of data.

Net financial worth (wealth) is calculated as total financial assets minus total liabilities, whereas changes in net financial worth (wealth) are equal to the sum of changes in net financial worth (wealth) due to transactions (lending/net borrowing from the financial account) and other changes in net financial worth (wealth).

Finally, changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities, and other changes in net financial worth (wealth) are calculated as total other changes in financial assets minus total other changes in liabilities.

## 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<sub>t</sub> he level outstanding at the end of month t, the index I<sub>t</sub> of notional stocks in month t is defined as:

j) 
$$I_t = I_{t-1} \times \left(1 + \frac{N_t}{L_{t-1}}\right)$$

As a base, the index is set equal to 100 in December 2001. The growth rate  $a_i$  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)  

$$a_{t} = \left[\prod_{i=0}^{11} \left(1 + \frac{N_{t-i}^{M}}{L_{t-1-i}}\right) - 1\right] \times 100$$
l)  

$$a_{t} = \left(\frac{I_{t}}{I_{t-12}} - 1\right) \times 100$$

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) 
$$\left(\frac{0.5I_{t} + \sum_{i=1}^{2} I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^{2} I_{t-i-12} + 0.5I_{t-15}} - 1\right) \times 100$$

where  $I_t$  is the index of notional stocks as at month t. Likewise, for the year ending in month t, the average growth rate is calculated as:

n) 
$$\left(\frac{0.5I_{t} + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1\right) \times 100$$

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values, and the 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) 
$$a_{t} = \left[\prod_{i=0}^{5} \left(1 + \frac{N_{t-i}^{M}}{L_{t-1-i}}\right) - 1\right] \times 100$$
  
p)  $a_{t} = \left(\frac{I_{t}}{I_{t-6}} - 1\right) \times 100$ 

## 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 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.

<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).

**Technical Notes** 

## 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 (see footnote 2 on page S78). The raw data for goods, services and income are preadjusted to take a working day effect into account. The working day adjustment in goods and services is corrected for national public holidays. The seasonal adjustment of these items is carried out using these preadjusted 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). This allows userfriendly 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.

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 4 August 2010.

Unless otherwise indicated, all data series including observations for 2009 and beyond relate to the Euro 16 (the euro area including Slovakia) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), statistical series refer to the changing composition of the euro area (see below for details). Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for the respective year of entry into the euro area of Greece (2001), Slovenia (2007), Cyprus (2008), Malta (2008) and Slovakia (2009), calculated from bases covering the year prior to the year of entry, use a series in which the impact of these countries' joining the euro area is taken into account.

The statistical series referring to the changing composition of the euro area are based on the euro area composition at the time to which the statistics relate. Thus, data prior to 2001 refer to the Euro 11, i.e. the following 11 EU Member States: Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Data from 2001 to 2006 refer to the Euro 12, i.e. the Euro 11 plus Greece. Data for 2007 refer to the Euro 13, i.e. the Euro 12 plus Slovenia. Data for 2008 refer to the Euro 15, i.e. the Euro 13 plus Cyprus and Malta, and data as of 2009 refer to the Euro 16, i.e. the Euro 15 plus Slovakia.

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, Estonia, 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

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).



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 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 liquidityproviding 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).

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### 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

2 OJ L 15, 20.01.2009, p.14.

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 on current prices are displayed for the last available quarter, following a simplified sequence of accounts in accordance with the methodological framework of the European System of Accounts 1995.

In short, the sequence of accounts (transactions) comprises: (1) the generation of income account, which shows how production activity translates into various categories of income; (2) the allocation of primary income account, which records receipts and expenses relating to various forms of property income (for the economy as a

whole; the balancing item of the primary income account is 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 for the 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>.

<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.

Spreads between the ten-year rates and the threemonth 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.

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 20076. 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.

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.

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 20038. 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 vehicles and motorcycles), except automotive fuel. New passenger car registrations cover registrations of both private and commercial passenger cars. The euro area series excludes Cyprus and Malta.

Qualitative business and consumer survey data (Table 5 in Section 5.2) draw on the European Commission Business and Consumer Surveys.

Unemployment rates (Table 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 20009 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

- 8 OJ L 169, 8.7.2003, p. 37.
- 9 OJ L 172, 12.7.2000, p. 3.

<sup>7</sup> OJ L 69, 13.3.2003, p. 1.

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 guarterly 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)12. 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), 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). 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,

11 OJ L 354, 30.11.2004, p. 34.

<sup>10</sup> OJ L 179, 9.7.2002, p. 1.

<sup>12</sup> OJ L 159, 20.6.2007, p. 48.
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. 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'

#### **II JANUARY AND 8 FEBRUARY 2007**

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.50%, 4.50% and 2.50% respectively.

#### 8 MARCH 2007

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.75%, starting from the operation to be settled on 14 March 2007. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.75% and 2.75%, both with effect from 14 March 2007.

#### 12 APRIL AND 10 MAY 2007

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

#### 6 JUNE 2007

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4%, starting from the operation to be settled on 13 June 2007. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5% and 3% respectively, with effect from 13 June 2007.



## 5 JULY, 2 AUGUST, 6 SEPTEMBER, 4 OCTOBER, 8 NOVEMBER AND 6 DECEMBER 2007, AND 10 JANUARY, 7 FEBRUARY, 6 MARCH, 10 APRIL, 8 MAY AND 5 JUNE 2008

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.00%, 5.00% and 3.00% respectively.

#### 3 JULY 2008

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4.25%, starting from the operation to be settled on 9 July 2008. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5.25% and 3.25% respectively, with effect from 9 July 2008.

## 7 AUGUST, 4 SEPTEMBER AND 2 OCTOBER 2008

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.25%, 5.25% and 3.25% respectively.

#### **8 OCTOBER 2008**

The Governing Council of the ECB decides to decrease the minimum bid rate on the main refinancing operations by 50 basis points to 3.75%, starting from the operations to be settled on 15 October 2008. In addition, it decides to decrease by 50 basis points the interest rates on

1 The chronology of monetary policy measures taken by the Eurosystem between 1999 and 2006 can be found in the ECB's Annual Report for the respective years.

both the marginal lending facility and the deposit facility, to 4.75% and 2.75% respectively, with immediate effect. Moreover, the Governing Council decides that, as from the operation settled on 15 October, the weekly main refinancing operations will be carried out through a fixedrate tender procedure with full allotment at the interest rate on the main refinancing operation. Furthermore, as of 9 October, the ECB will reduce the corridor of standing facilities from 200 basis points to 100 basis points around the interest rate on the main refinancing operation. The two measures will remain in place for as long as needed, and at least until the end of the first maintenance period of 2009, on 20 January.

#### **15 OCTOBER 2008**

The Governing Council of the ECB decides to further expand the collateral framework and enhance the provision of liquidity. To do so, the Governing Council decides: (i) to expand the list of assets eligible as collateral in Eurosystem credit operations, with this expansion remaining in force until the end of 2009, (ii) to enhance the provision of longer-term refinancing, with effect from 30 October 2008 and until the end of the first quarter of 2009, and (iii) to provide US dollar liquidity through foreign exchange swaps.

## 6 NOVEMBER 2008

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 50 basis points to 3.25%, starting from the operations to be settled on 12 November 2008. In addition, it decides to decrease by 50 basis points the interest rates on both the marginal lending facility and the deposit facility, to 3.75% and 2.75% respectively, with effect from 12 November 2008.

#### 4 DECEMBER 2008

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing

operations of the Eurosystem by 75 basis points to 2.50%, starting from the operations to be settled on 10 December 2008. In addition, it decides to decrease by 75 basis points the interest rates on both the marginal lending and the deposit facility to 3.00% and 2.00% respectively, with effect from 10 December 2008.

#### **18 DECEMBER 2008**

The Governing Council of the ECB decides that the main refinancing operations will continue to be carried out through a fixed rate tender procedure with full allotment beyond the maintenance period ending on 20 January 2009. This measure will be in place for as long as needed, and at least until the last allotment of the third maintenance period in 2009 on 31 March. Moreover, as of 21 January 2009, the corridor of standing facility rates, which on 9 October 2008 was reduced to 100 basis points around the prevailing interest rate of the main refinancing operation, will be re-widened symmetrically to 200 basis points.

#### **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 longerterm 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.

## 2 JULY, 6 AUGUST, 3 SEPTEMBER, 8 OCTOBER, 5 NOVEMBER AND 3 DECEMBER 2009, AND 14 JANUARY, 4 FEBRUARY, 4 MARCH, 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).

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## 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.

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# DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE 2009

This list is designed to inform readers about selected documents published by the European Central Bank since January 2009. For Working Papers, which as of January 2009 (from Working Paper No 989 onwards) are available online only, the list only refers to publications released between May and July 2010. As of November 2009 (from Legal Working Paper No 9 onwards) Legal Working Papers are also available online only. Unless otherwise indicated, hard copies can be obtained or subscribed to free of charge, stock permitting, by contacting info@ecb.europa.eu.

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## **CONVERGENCE REPORT**

"Convergence Report 2010", May 2010.

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"Foreign asset accumulation by authorities in emerging markets", January 2009.

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"The external financing of households and non-financial corporations: a comparison of the euro area and the United States", April 2009.

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"Five years of EU membership", May 2009.

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# GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website (www.ecb.europa.eu/home/glossary/html/index.en.html).

**Autonomous liquidity factors:** liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

**Balance of payments (b.o.p.):** a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

**Bank lending survey (BLS):** a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

Borrowing requirement (general government): net incurrence of debt by the general government.

**Break-even inflation rate:** the spread between the yield on a nominal bond and that on an inflationlinked 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.

**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 which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at an NCB.

**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 two groups of trading partners: the EER-21 (comprising the 11 non-euro area EU Member States and 10 trading partners outside the EU) and the EER-41 (composed of the EER-21 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. They comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

**ERM II (exchange rate mechanism II):** the exchange rate arrangement that provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

**EURIBOR (euro interbank offered rate):** the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

**Euro area:** the area formed by those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty 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 that have already adopted the euro.

**Eurozone Purchasing Managers' Surveys:** surveys of business conditions in manufacturing and in services industries conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers' Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers' delivery times and stocks of purchases. The services sector survey asks questions on business activity, expectations of future business activity, the amount of business outstanding, incoming new business, employment, input prices and prices charged. The Eurozone Composite Index is calculated by combining the results from the manufacturing and services sector surveys.

**External trade in goods:** exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

**Financial account:** a b.o.p. account that covers 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.

**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 specified by the central bank 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.

**General government:** a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

**Gross domestic product (GDP):** the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

**Harmonised Index of Consumer Prices (HICP):** a measure of 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.

**International investment position (i.i.p.):** the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world.

**International reserves:** external assets readily available to and controlled by monetary authorities for directly financing or regulating the magnitude of payments imbalances through intervention in exchange markets. The international reserves of the euro area comprise non-euro denominated claims on non-euro area residents, gold, special drawing rights 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.

**Longer-term refinancing operations:** credit operations with a maturity of more than one week that are executed by the Eurosystem in the form of reverse transactions. The regular monthly operations are conducted with 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:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

**Marginal lending facility:** a standing facility of the Eurosystem which counterparties may use to receive overnight credit from an NCB at a pre-specified interest rate against eligible assets.

**MFI credit to euro area residents:** MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

**MFI interest rates:** the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

**MFI longer-term financial liabilities:** deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

**MFI net external assets:** the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

**MFIs (monetary financial institutions):** financial institutions which together form the moneyissuing 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.

**Other investment:** an item in the b.o.p. and the i.i.p. that covers the financial transactions/positions with non-residents in trade credits, deposits and loans, and other accounts receivable and payable.

**Portfolio investment:** euro area residents' net transactions and/or positions in securities issued by non-residents of the euro area ("assets") and non-residents' net transactions and/or positions in securities issued by euro area residents ("liabilities"). Included are equity securities and debt securities (bonds and notes, and money market instruments). Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the ordinary shares or voting power.

**Price stability:** the maintenance of price stability is the primary objective of the Eurosystem. The Governing Council defines price stability as a year-on-year increase in the HICP for the euro area



of below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

**Purchasing power parity (PPP):** the rate at which one currency is converted into another so as to equalise the purchasing power of the two currencies by eliminating the differences in the price levels prevailing in the countries concerned. In their simplest form, PPPs show the ratio of the prices in national currency of the same good or service in different countries.

**Reference value for M3 growth:** the annual growth rate of M3 over the medium term that is consistent with the maintenance of price stability. At present, the reference value for annual M3 growth is  $4\frac{1}{2}\%$ .

**Reserve requirement:** the minimum amount of reserves a credit institution is required to hold with the Eurosystem over a predefined 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.

**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.



