

# MONTHLY BULLETIN NOVEMBER



# EUROSYSTEM







In 2009 all ECB publications feature a motif taken from the €200 banknote.

# MONTHLY BULLETIN NOVEMBER 2009

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#### Address

Kaiserstrasse 29 60311 Frankfurt am Main Germany

#### Postal address

Postfach 16 03 19 60066 Frankfurt am Main Germany

# Telephone

+49 69 1344 0

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

**Fax** +49 69 1344 6000

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# **ABBREVIATIONS**

COUNTRIES		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 Rev. 1	Statistical classification of economic activities in the European Community
NCB	national central bank
OECD	Organisation for Economic Co-operation and Development
PPI	Producer Price Index
SITC Rev. 4	Standard International Trade Classification (revision 4)
ULCM	unit labour costs in manufacturing
ULCT	unit labour costs in the total economy

In accordance with Community practice, the EU countries are listed in this Bulletin using the alphabetical order of the country names in the national languages.



# **EDITORIAL**

On the basis of its regular economic and monetary analyses, the Governing Council decided at its meeting on 5 November 2009 to leave the key ECB interest rates unchanged. The current rates remain appropriate. The incoming information and analyses that have become available since the meeting on 8 October have confirmed the Governing Council's expectations. While annual HICP inflation was -0.1% in October, according to Eurostat's flash estimate, it is expected to turn positive again in the coming months and to remain at moderately positive rates over the policy-relevant horizon. At the same time, the latest information continues to signal an improvement in economic activity in the second half of this year. The Governing Council expects the euro area economy in 2010 to recover at a gradual pace, recognising that the outlook remains subject to high uncertainty. Medium to longer-term inflation expectations remain firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term. The outcome of the monetary analysis confirms the assessment of low inflationary pressure over the medium term, as money and credit growth continues to slow down. Against this background, the Governing Council expects price stability to be maintained over the medium term, thereby supporting the purchasing power of euro area households.

With regard to the economic analysis, available data and survey-based indicators continue to signal an improvement in economic activity in the second half of this year. In particular, the euro area should benefit from the inventory cycle and a recovery in exports, as well as from the significant macroeconomic stimulus under way and the measures adopted to restore the functioning of the financial system. Taking into account all available information, in the second half of this year, quarterly real GDP growth rates could be back in positive territory. However, uncertainty remains high as a number of the supporting factors are of a temporary nature. Looking through the volatility of incoming data, the euro area economy is expected to recover at a gradual pace in 2010, as it is likely to be affected over the medium term by the process of ongoing

balance sheet adjustment in the financial and the non-financial sector, both inside and outside the euro area.

In the view of the Governing Council, the risks to this outlook remain broadly balanced. On the upside, there may be stronger than anticipated effects stemming from the extensive macroeconomic stimulus being provided and from other policy measures taken. Confidence may also improve more quickly, the labour market deterioration may be less marked than previously expected and foreign demand may prove to be stronger than projected. On the downside, concerns remain relating to a stronger or more protracted negative feedback loop between the real economy and the financial sector, renewed increases in oil and other commodity prices, the intensification of protectionist pressures and the possibility of a disorderly correction of global imbalances.

With regard to price developments, annual HICP inflation stood at -0.1% in October, according to Eurostat's flash estimate, compared with -0.3% in September. The current negative inflation rates are in line with previous expectations and reflect mainly movements in global commodity prices over the last year. In the coming months, annual inflation rates are projected to turn positive again, also relating to base effects. Thereafter, over the policy-relevant horizon, inflation is expected to remain positive, with overall price and cost developments staying subdued reflecting ongoing sluggish demand in the euro area and elsewhere. In this context, it is important to re-emphasise that inflation expectations over the medium to longer term remain 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 this outlook remain broadly balanced. They relate, in particular, to the outlook for economic activity and to the evolution of commodity prices. Furthermore, increases in indirect taxation and administered prices may be stronger than currently expected owing to the need for fiscal consolidation in the coming years. Turning to the monetary analysis, the annual growth rates of M3 and loans to the private sector declined further in September, to 1.8% and -0.3% respectively. These concurrent declines support the assessment of a moderate underlying pace of monetary expansion and low inflationary pressures over the medium term.

In the next few months, the annual growth rates of monetary aggregates will most likely be affected downwards by base effects that are associated with the intensification of the financial turmoil one year ago. More fundamentally, however, the growth of M1 and M3 continues to reflect the current constellation of interest rates. While the narrow spread between the rates on different short-term deposits fosters shifts in the allocation of funds to the most liquid assets contained in M1, the steep slope of the yield curve also encourages such shifts from M3 to longer-term deposits and securities outside M3.

The annual growth rate of bank loans to the non-financial private sector turned slightly negative in September, with annual loan growth to both non-financial corporations and households declining further and being negative. At the same time, the monthly flows of loans to households remained positive and even increased, while those of loans to non-financial corporations were negative. In the case of households, the latest data provide further confirmation of a levellingoff at low rates. In the case of non-financial corporations, the subdued levels of production and trade, as well as the ongoing uncertainty surrounding the business outlook, continue to dampen firms' demand for bank financing, a tendency which is likely to prevail in the coming months. In this respect, it is worthwhile to note that the growth of loans to enterprises typically only picks up with some lag compared with the cycle in economic activity. At the same time, the ongoing improvement in financing conditions should support the demand for credit in the period ahead. Against the background of highly demanding challenges, banks should take appropriate measures to strengthen further their capital bases and, where necessary, take full advantage of government measures to support

the financial sector, particularly as regards recapitalisation.

To sum up, the current rates remain appropriate. The incoming information and analyses that have become available since the meeting on 8 October have confirmed the Governing Council's expectations. While annual HICP inflation was -0.1% in October, according to Eurostat's flash estimate, it is expected to turn positive again in the coming months and to remain at moderately positive rates over the policy-relevant horizon. At the same time, the latest information continues to signal an improvement in economic activity in the second half of this year. The Governing Council expects the euro area economy in 2010 to recover at a gradual pace, recognising that the outlook remains subject to high uncertainty. Medium to longer-term inflation expectations remain firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term. Cross-checking the outcome of the economic analysis with that of the monetary analysis confirms the assessment of low inflationary pressure over the medium term, as money and credit growth continues to slow down. Against this background, the Governing Council expects price stability to be maintained over the medium term, thereby supporting the purchasing power of euro area households.

As the transmission of monetary policy works with lags, the Governing Council expects that its policy action will progressively feed through to the economy. Hence, with all the measures taken, monetary policy has been supporting the availability of liquidity and the recovery of the euro area economy. Looking ahead, and taking into account the improved conditions in financial markets, not all liquidity measures will be needed to the same extent as in the past. Accordingly, the Governing Council will make sure that the extraordinary liquidity measures taken are phased out in a timely and gradual fashion and that the liquidity provided is absorbed in order to counter effectively any threat to price stability over the medium to longer term. By so doing,



the Governing Council will continue to ensure a firm anchoring of medium-term inflation expectations. Such anchoring is indispensable to supporting sustainable growth and employment and contributing to financial stability. Accordingly, the Governing Council will continue to monitor very closely all developments over the period ahead.

As regards fiscal policies, many euro area governments are faced with high and sharply rising fiscal imbalances. If not addressed by a clear and credible exit strategy, this could seriously risk undermining public confidence in the sustainability of public finances and the economic recovery. The very large government borrowing requirements carry the risk of triggering rapid changes in market sentiment, leading to less favourable medium and long-term interest rates. This in turn would dampen private investment and thereby weaken the foundations for a return to sustained growth. Moreover, high public deficits and debts may complicate the task of the single monetary policy to maintain price stability. The Governing Council therefore calls upon governments to communicate and implement in a timely fashion ambitious fiscal exit and consolidation strategies based on realistic growth assumptions, with a strong focus on expenditure reforms. Tax cuts should only be considered over the medium term, when countries have regained sufficient room for budgetary manoeuvre. In this regard, the recent ECOFIN Council conclusions, which call for consolidation to start in 2011 at the latest and to go well beyond the structural benchmark of 0.5% of GDP per annum, represent the minimum requirement for all euro area countries. The success of fiscal adjustment strategies will also depend crucially on the transparency of the budgetary procedures and the reliability and completeness of government finance statistics. This is an area in which quick and decisive progress is indispensable for the countries concerned and for the euro area as a whole.

Turning to structural reforms, in all countries more efforts are crucial to support sustainable growth and employment as it is likely that the financial crisis has affected the productive capacity of the euro area economies. Moderate wage-setting, sufficient labour market flexibility and effective incentives to work are required in order to avoid significantly higher structural unemployment over the coming years. Policies that enhance competition and innovation are also urgently needed to speed up restructuring and investment and to create new business opportunities. An appropriate restructuring of the banking sector should also play an important role. Sound balance sheets, effective risk management, and transparent as well as robust business models are key to strengthening banks' resilience to shocks, thereby laying the foundations for sustainable economic growth and financial stability.

This issue of the Monthly Bulletin contains three articles. The first article discusses the role of central bank communication in periods of heightened uncertainty. The second article examines monetary analysis in an environment of financial turmoil. The third article puts the latest euro area recession into a historical context.

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ECONOMIC AND MONETARY DEVELOPMENTS

# I THE EXTERNAL ENVIRONMENT OF THE EURO AREA

Latest indicators reinforce the view that the significant contraction in global economic activity has come to an end and that the world economy has started growing again. At the same time, global inflation rates have remained slightly negative, owing to base effects related to commodity prices and substantial spare capacity. While uncertainty remains high, risks to the global economic outlook are viewed to be broadly balanced.

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

Latest indicators reinforce the view that the significant contraction in global economic activity has come to an end and that the world economy has started growing again. In October the global Purchasing Managers' Index (PMI) of output in the manufacturing sector recorded the highest value in more than three years and signalled that activity had picked up at a significantly higher pace than in previous months. According to the PMI, global activity in the manufacturing sector has expanded for five consecutive months. The expansion in activity in October was rather broad-based and was particularly strong in a number of advanced economies.

Global inflation rates have remained slightly negative, owing to base effects related to commodity prices and elevated spare capacity. The headline CPI in OECD countries fell by





0.3% in the year to September, the same rate as in August. Excluding food and energy, annual CPI inflation was 1.5% in September (see Chart 1). The global PMI of manufacturing input prices highlighted marked increases in global purchasing prices in October, following the acceleration recorded in September, partly owing to the recent increases in commodity prices.

#### **UNITED STATES**

In the United States, economic activity expanded in the third quarter of 2009 after the sharp downturn in the previous quarters. According to advance estimates by the Bureau of Economic Analysis, real GDP increased by 3.5% in annualised terms in the third quarter of 2009, following four quarters of negative growth. The pick-up in activity reflects gains in consumer spending. Government stimulus measures temporarily supported private demand, particularly for motor vehicle sales. The pace of decline in business investment moderated from the previous quarter, while residential investment posted its first increase since late 2005, in line with recent signs of stabilisation in housing markets. Inventories and government expenditure contributed positively to GDP growth. Net trade recorded a negative contribution of 0.5 percentage point as the rebound in imports outweighed the rise in exports. The federal budget deficit increased to almost 10% of GDP in the fiscal year that ended in September 2009, compared with 3.2% in the previous fiscal year. The external environment of the euro area As regards price developments, the US consumer price index declined by 1.3% in the year to September. This followed a decrease of 1.5% in the year to August. The negative headline inflation continues to be driven, for the most part, by the decline in energy prices compared with the previous year. The annual rate of inflation, excluding food and energy, stood at 1.5% in September, up from 1.4% in August. Looking ahead, base effects related to energy prices will be gradually reversed over the months to come and headline inflation rates are likely to return to positive territory. However, economic slack is expected to limit the upward pressure on prices.

On 4 November 2009 the US Federal Open Market Committee (FOMC) decided to keep its target for the federal funds rate unchanged within a range of 0% to 0.25%. While acknowledging recent improvements in economic activity, the FOMC continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period.

#### JAPAN

In Japan, economic activity has recovered since the second quarter of 2009, while consumer prices have continued to decline. The recovery has mainly been driven by an upturn in exports, reflecting, in part, the strong recovery in other Asian economies. In September industrial production rose for a seventh consecutive month, by 1.4% month on month. Domestic private demand, however, has remained relatively weak in the light of subdued developments in corporate profits, employment and income.

Inflation rates have remained negative over recent months owing to base effects related to petroleum products and considerable economic slack. While annual CPI inflation remained unchanged at -2.2% in September, annual CPI inflation excluding food and energy fell to -1.0% from -0.9% in August.

At its meeting on 30 October 2009, 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, according to preliminary estimates, real GDP contracted slightly further in the third quarter, by 0.4% quarter on quarter, following the decline of 0.6% in the second quarter.





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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Economic activity in the third quarter was significantly below market expectations. Overall, activity and housing market indicators suggest that the economic situation may improve in the months ahead. In particular, the Halifax house price index grew by 2.8% quarter on quarter in the third quarter, in spite of weak mortgage lending. At the same time, however, renewed weakness in industrial production – evidenced by the 2.5% decline month on month in August – suggests that the improvement in the economic situation might be rather limited. Annual HICP inflation decreased from 1.6% in August to 1.1% in September. On 5 November the Monetary Policy Committee decided to maintain the official Bank Rate paid on commercial bank reserves at 0.5%. The Committee also decided to increase the size of the Bank of England's asset purchase programme by GBP 25 billion to GBP 200 billion.

#### **OTHER EUROPEAN COUNTRIES**

The economic situation also seems to have improved in most other non-euro area EU countries in recent months, with the pace of decline in GDP moderating in most countries and some countries registering positive growth rates in the second quarter of 2009. In Sweden, real GDP increased by 0.2% quarter on quarter in the second quarter of 2009, a noticeable improvement compared with the 0.9% decline in the first quarter. In Denmark, however, output contracted by 2.6% quarter on quarter in the second quarter of factors. In recent months, annual HICP inflation has decreased in both countries, standing at 1.4% in Sweden and 0.5% in Denmark in September.

In the largest central and eastern European EU Member States, recent indicators suggest some improvement in economic activity. Real GDP contracted at a slower pace in Hungary and Romania in the second quarter, at 2.0% and 1.1% quarter on quarter respectively, while it actually increased by 0.1% in the Czech Republic and by 0.5% in Poland. On balance, recent confidence indicators and industrial production and trade data point to a further improvement in activity in the third quarter. At the same time, significant downside risks remain, as illustrated by rising unemployment. In September annual HICP inflation was negative at -0.3% in the Czech Republic, mainly reflecting the base effects of previous indirect tax increases and slower growth in administered prices. By contrast, in Romania, Hungary and Poland, annual HICP inflation remained at higher levels, at 4.9%, 4.8% and 4.0% respectively. On 19 October 2009 the Magyar Nemzeti Bank decided to decrease its main policy rate by 50 basis points to 7%.

#### **EMERGING ASIA**

The recovery has continued in emerging Asia. In addition to fiscal stimuli and accommodative monetary policy, higher asset prices have supported domestic demand. The most recent labour market data indicate that unemployment – which had risen in the wake of the global slowdown – has begun to decline in some countries. The rebound in foreign trade, however, has been lagging behind the economic recovery. Inflation is gradually picking up, even though annual changes in consumer prices are still negative in some countries.

In China, annual real GDP growth remained robust, accelerating to 8.9% in the third quarter of 2009. Overall, in the first three quarters of 2009, GDP increased at an average rate of 7.7% year on year. Growth continued to be largely dependent on the fiscal stimulus, with stimulus-driven fixed investment contributing 7.3 percentage points to annual GDP growth in the first three quarters of 2009. The contribution from consumption remained robust at 4.0 percentage points over the same period. Owing to weak exports, the trade surplus continued to be accommodative and credit growth has remained buoyant. Recently, monthly changes in consumer prices have become positive and annual inflation reached -0.8% in September, up from -1.2% in August.

#### LATIN AMERICA

In Latin America, the latest developments in economic activity have remained heterogeneous across the major economies. In Brazil, industrial production declined at an annual rate of 7.8% in September, after falling by 7.2% in August. Annual CPI inflation stood at 4.2% in September, 0.1 percentage point lower than in the previous month. In Argentina, economic activity showed some signs of improvement, with industrial production remaining unchanged in September compared with a year ago, following a decline of 1.4% year on year in August. At the same time, inflationary pressures have picked up somewhat, with annual CPI inflation reaching 6.2% in September, up almost 1.0 percentage point from the five-year low recorded in June. Economic activity in Mexico showed renewed signs of weakness in August, with industrial production declining by 7.7% year on year and retail sales falling by 10.3%. Annual inflation declined somewhat from 5.1% in August to 4.9% in September.

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

Oil prices were between USD 70 and USD 75 per barrel for most of October, before posting a notable increase towards the end of the month (see Chart 3). Brent crude oil prices stood at USD 76.2 per barrel on 4 November, almost twice the level recorded at the beginning of 2009. Looking ahead, market participants expect higher oil prices in the medium term, with futures contracts for December 2011 trading at around USD 88.

Looking at fundamentals, oil demand is expected to increase and the International Energy Agency has repeatedly revised its 2009 and 2010 demand projections upwards, especially for North America and Asia. Chinese trade data also point to robust growth in oil demand, which may

have added momentum to rising prices. On the supply side, a moderate decrease in non-OPEC oil production was offset by increased output by OPEC countries.

The prices of non-energy commodities also increased in October. Food prices posted some increases, led, in particular, by maize and cocoa prices. Metal prices, especially copper and zinc, rose based on expectations of restocking taking place in OECD countries and gold prices also surged. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was about 23% higher at the end of October than at the beginning of the year.

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

Leading indicators suggest that global economic activity is recovering. In August the OECD's composite leading indicators (CLIs) pointed to a broad economic recovery in most OECD countries (see Chart 4). For emerging economies,



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the CLIs also increased, albeit by less than in previous months. Furthermore, the most recent data indicate that world trade is likely to have returned to positive growth in the third quarter, supporting the short-term prospects for foreign demand for euro area goods and services.

Although global economic prospects remain subject to high uncertainty, the risks to global activity remain broadly balanced. On the upside, there may be stronger than anticipated effects stemming from the extensive macroeconomic stimulus being provided as well as from other policy measures taken. Confidence may also improve more quickly. On the downside, concerns remain relating to a stronger or more protracted negative feedback loop between the real economy and the financial sector, renewed increases in oil and other commodity prices, the intensification of protectionist pressures and 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 September monetary data indicate that the annual growth rates of M3 and loans to the private sector continued to decline in parallel. Those data point to an underlying rate of monetary growth that implies low inflationary pressures over the medium term. While the annual growth rate of lending to the private sector turned negative in September, it remained positive when adjusted for securitisation, and loans expanded somewhat on a monthly basis. Thus far, the pattern of growth in loans to households and non-financial corporations has remained consistent with historical regularities observed over the business cycle. The deleveraging process in the banking sector resumed in September, with MFIs substantially reducing their positions vis-à-vis one another and scaling back their exposures vis-à-vis the rest of the world.

#### THE BROAD MONETARY AGGREGATE M3

The annual growth rate of M3 declined further to stand at 1.8% in September, down from 2.6% in August (see Chart 5). This reflects the subdued shorter-term growth rate of M3 (-0.1% month on month in September, down from 0.1% in the previous month). The weak monetary dynamics continue to largely reflect the influence of the current interest rate configuration. The particularly steep yield curve is prompting flows from monetary assets to less liquid and potentially riskier assets. As a result, the decline in M3 growth is overstating the moderation in underlying monetary growth.

At the same time, the current interest rate configuration implies that the opportunity cost of holding overnight deposits as opposed to shortterm time deposits and marketable instruments is particularly low. This has underpinned the strengthening recorded in M1 in recent months (although a moderation was observed in its annual



growth rate in September). In the months ahead base effects will have a downward impact on the annual growth rate of M3, leading to very low growth rates, as the strong flows into monetary assets (and M1 in particular) in the fourth quarter of 2008 drop out of the calculation.

The annual growth rate of MFI loans to the private sector turned negative in September. However, this still reflects, in part, the impact of the earlier intense derecognition of loans (i.e. their removal from MFI balance sheets) in the context of securitisation activity, particularly at the end of 2008. This continues to dampen the annual growth rate of MFI loans to the private sector, despite the moderation of securitisation activity in recent months. When adjusted for such derecognition of loans, the annual growth rate of loans to the private sector remained slightly positive in September. Moreover, the monthly flow of MFI lending to the private sector turned negative in September was accounted for by loans to non-financial corporations. Historical regularities suggest that loans to non-financial corporations can be expected to weaken further for a few quarters once economic activity has stabilised.

Monetary and financial developments

Overall, these considerations suggest that the negative annual growth rate of loans to the private sector recorded in September should be put into perspective and, in part, still reflects the lagged impact of the earlier sharp deterioration in activity. It also reflects the high degree of uncertainty that continues to surround business, income and housing market prospects. This reduces demand for loans and has a bearing both on banks' assessment of borrowers' creditworthiness and on banks' willingness to lend. Thus, a negative annual growth rate of loans should not, in itself, be interpreted as signalling a general unavailability of MFI credit. Indeed, the results of the October 2009 bank lending survey for the euro area point to a considerable further decline in the net percentage of banks reporting a tightening of credit standards (see Box 2).

Euro area MFIs' deleveraging process resumed in September, with MFIs strongly reducing their main assets. This was due mainly to a reduction in MFIs' positions vis-à-vis one another, mirroring the situation on the funding side, where credit institutions' recourse to Eurosystem financing has declined following the peak linked to the first one-year liquidity-providing operation in June.

#### MAIN COMPONENTS OF M3

The decline observed in September in the annual growth rate of M3 was driven by continued monthly outflows from short-term time deposits other than overnight deposits (i.e. M2-M1), while a monthly inflow was recorded for marketable instruments (i.e. M3-M2).

The annual growth rate of M1 declined somewhat in September to stand at 12.8%, down from 13.6% in the previous month (see Table 1). This decline reflected a very modest monthly inflow for overnight deposits compared with previous months, while the annual growth of currency in circulation decelerated as it ceased to be affected by the relatively strong increase observed in September 2008. Over the next few months base effects will have a downward impact on the annual

Table I Summary table of monetary variables							
(quarterly figures are averages; adjusted for seasonal and calendar effects)							
	Outstanding	Annual growth rates					
	amount as a	2008	2009	2009	2009	2009	2009
	percentage of M3 <sup>1)</sup>	Q4	Q1	Q2	Q3	Aug.	Sep.
M1	46.8	2.7	5.3	8.0	12.3	13.6	12.8
Currency in circulation	7.9	12.4	13.6	13.2	12.8	13.2	12.5
Overnight deposits	38.8	0.8	3.7	7.0	12.2	13.7	12.8
M2 - M1 (= other short-term deposits)	40.2	15.8	9.3	3.0	-3.1	-4.1	-5.3
Deposits with an agreed maturity							
of up to two years	21.5	29.0	13.0	-0.7	-13.1	-15.2	-17.8
Deposits redeemable at notice							
of up to three months	18.7	-0.5	4.5	8.6	12.8	13.6	14.9
M2	87.0	8.9	7.3	5.5	4.5	4.6	3.6
M3 - M2 (= marketable instruments)	13.0	4.1	-0.7	-2.5	-7.5	-9.3	-8.8
M3	100.0	8.2	6.1	4.4	2.8	2.6	1.8
Credit to euro area residents		7.4	5.9	4.3	3.3	2.8	3.1
Credit to general government		1.7	5.6	8.4	11.5	11.5	13.6
Loans to general government		2.9	2.3	1.5	2.7	3.6	1.6
Credit to the private sector		8.6	5.9	3.5	1.6	1.1	1.1
Loans to the private sector		7.3	4.6	2.1	0.4	0.1	-0.3
Loans to the private sector adjusted							
for sales and securitisation		8.4	6.1	3.6	1.6	1.3	0.9
Longer-term financial liabilities							
(excluding capital and reserves)		1.1	1.7	2.6	3.6	3.8	4.7

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



growth rates of these two components as the strong inflows associated with the intensification of the financial turmoil one year ago drop out of the calculation.

The annual growth rate of short-term deposits other than overnight deposits declined further to stand at -5.3% in September, down from -4.1% in August. The large outflows from deposits with an agreed maturity of up to two years (i.e. short-term time deposits) persisted in September, some of which continued to be directed towards deposits redeemable at notice of up to three months (i.e. short-term savings deposits). These developments in the various types of short-term deposit are consistent with the respective interest rates paid on these deposits. In this respect, the continued inflows for short-term savings deposits can be explained by the fact that they are currently better remunerated than short-term time deposits. Although the monthly flows into overnight deposits were muted in September, the opportunity cost of holding this type of deposit as opposed to other monetary assets remains low. At the same time, funds continued to be allocated to financial assets outside M3, which have become more attractive in the context of a steep yield curve and a recovery in a broad range of asset markets over the last few months.

The annual rate of growth of marketable instruments was somewhat less negative in September, standing at -8.8%, up from -9.3% in August. The largest sub-component of marketable instruments – money market fund shares/units – registered a small positive flow, while the bulk of the improvement came from a positive flow for repurchase agreements. At the same time, the money-holding sector continued to reduce its holdings of MFI debt securities with a maturity of up to two years, albeit at a slower pace than in previous months.

The annual growth rate of M3 deposits – which comprise short-term deposits and repurchase agreements and represent the broadest group of monetary assets for which a sectoral breakdown is reported – continued to decline in September, falling to 2.4%, down from 3.1% in August. This reflects a decline in the contribution made by the M3 deposits of the household sector, the annual growth rate of which was nevertheless higher than that of total M3 deposits. By contrast, the contribution made by non-financial corporations has turned slightly positive in recent months, and this was the only sector to record a positive flow in September. This development is in line with the cyclical nature of the money holdings of non-financial corporations, as their liquidity buffers tend to be supported by improving cash-flow positions in the early stages of a recovery. It is a typical feature of the business cycle that the pick-up in non-financial corporations' holdings of monetary assets precedes or coincides with the turning point in economic activity, while MFI lending to non-financial corporations lags it.

### MAIN COUNTERPARTS OF M3

Turning to the counterparts of M3, the annual growth rate of total MFI credit to euro area residents, which includes purchases of securities, as well as the granting of loans, increased to 3.1% in September, up from 2.8% in August (see Table 1), reflecting the stronger annual growth of credit to the general government sector. The annual growth rate of credit to the private sector remained unchanged, although a positive monthly flow was recorded in September.

The annual growth rate of MFI loans to the private sector, the largest component of credit to the private sector, declined further to stand at -0.3% in September, down from 0.1% in the previous month. Nonetheless, the monthly flow of MFI loans to the private sector was positive in September, reflecting an increase in lending to households and financial intermediaries.

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True-sale securitisation has been subdued in recent months, following a period of intense activity, particularly at the end of 2008, in which originating credit institutions sold loans and acquired the securities issued for use as collateral in Eurosystem credit operations. This reduced securitisation activity could be attributable to an easing of credit institutions' demand for additional central bank liquidity following the one-year longer-term refinancing operations conducted by the Eurosystem. In fact, the monthly flow of derecognised loans became negative in September, implying that repayments for previously derecognised loans outweighed the flow of newly derecognised loans. However, the effect of the earlier derecognition remained prevalent in annual growth rates, with the difference between the corrected and uncorrected annual series standing at 1.2 percentage points in September, a figure that has remained broadly unchanged over the past four months.

The annual growth rate of MFI loans to non-financial corporations declined further, standing at -0.1% in September, down from 0.7% in August (see Table 2). The September data confirm that the flow of loans with a longer maturity (i.e. over five years) has, on balance, remained positive – despite being somewhat weaker than in August – and has partly offset the contractions observed for short and medium-term loans. The combination of subdued developments for short-term loans and continued positive flows for loans with longer maturities could reflect a substitution process whereby firms are replacing short-term bank loans with long-term loans in order to lock in the low level of long-term interest rates. This is also consistent with the increases observed in securities issuance, which could indicate that firms – especially large firms – have replaced maturing loans with market-based funding. The declining spreads between market-based rates and those applied to bank loans have made it more attractive for firms to obtain such market-based financing.

The annual growth rate of loans to households declined to -0.3% in September, down from -0.2% in August. However, the monthly flow was positive and larger than in August, continuing a trend that began in May. The declining annual growth rate of loans to households continued to be driven by loans for house purchase, the annual growth rate of which declined to -0.6% in September, down from -0.4% in August, largely reflecting the moderate house price dynamics in many euro area countries. This notwithstanding, developments in recent months confirm that there has been a

#### Table 2 MFI loans to the private sector

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

	Outstanding amount	Annual growth rates					
	as a percentage of the	2008 2009		2009	2009	2009	2009
	total <sup>1)</sup>	Q4	Q1	Q2	Q3	Aug.	Sep.
Non-financial corporations	44.2	11.2	8.1	4.6	1.2	0.7	-0.1
Up to one year	26.2	9.0	4.0	-2.6	-8.6	-9.3	-9.7
Over one and up to five years	20.1	15.9	12.4	9.8	4.7	3.7	2.1
Over five years	53.7	10.8	8.8	6.8	5.3	5.2	4.5
Households <sup>2)</sup>	45.6	2.8	0.9	0.0	-0.1	-0.2	-0.3
Consumer credit <sup>3)</sup>	12.8	3.1	1.2	-0.4	-1.0	-1.0	-1.1
Lending for house purchase 3)	71.5	2.9	0.7	-0.2	-0.3	-0.4	-0.6
Other lending	15.7	2.2	1.7	1.5	1.4	1.3	1.5
Insurance corporations and pension funds	0.9	-6.7	-6.2	-2.9	-5.4	-8.5	-6.5
Other non-monetary financial intermediaries	9.3	14.4	8.0	1.4	-0.0	-0.7	-0.3

Source: ECB.

Notes: MFI sector including the Eurosystem; sectoral classification based on the ESA 95. For further details, see the relevant technical notes. 1) As at the end of the last month available. Sector loans as a percentage of total MFI loans to the private sector; maturity breakdown and breakdown by purpose as a percentage of MFI loans to the respective sector. Figures may not add up due to rounding. 2) As defined in the ESA 95.

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

levelling off in the downward momentum of loans to households, which is in line with the current stage of the economic cycle.

Turning to the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities excluding capital and reserves increased further in September, reaching 4.6%, up from 3.8% in August. In particular, longer-term deposits (i.e. those with an agreed maturity of over two years and those redeemable at notice of over three months) have benefited from the steep yield curve and have attracted at least some of the funds that have been flowing out of short-term time deposits. The annual growth rate of capital and reserves declined further to stand at 8.5% in September, down from 10.7% in August.

Finally, the net external asset position of the MFI sector declined by  $\notin 8$  billion in September, following two months of positive flows, reducing the annual inflow to  $\notin 153$  billion (see Chart 6). The positive annual flow for the net external asset position reflects the fact that gross external liabilities have been reduced faster than gross external assets. To some extent, this parallel reduction of assets and liabilities is the result



of the global scaling down of interbank cross-border positions in the context of deleveraging. For a discussion of developments in gross external assets and liabilities from the perspective of instruments, counterpart sectors and geographical regions, see Box 1.

To sum up, the monetary data for September confirm the deceleration in the growth of both M3 and loans to the private sector and continue to point to a pace of underlying monetary growth that implies low inflationary pressures over the medium term. Lending to the non-financial private sector, while positive on the basis of monthly flows, remained subdued on account of the high degree of uncertainty that continues to surround business, income and housing market prospects. This uncertainty is dampening lending growth both by limiting demand for MFI loans and by affecting credit institutions' willingness and capacity to lend. The balance sheet adjustment in the MFI sector resumed in September, with MFIs substantially reducing their main assets, mainly by cutting back their positions vis-à-vis one another.

Box 3 at the end of Section 2 presents an overview of the modernised framework for the collection of statistical information by the ECB. Box 4 briefly reviews the integrated euro area accounts for the second quarter of 2009.

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#### THE ROLE OF MFI EXTERNAL ASSETS AND LIABILITIES IN THE RECENT DELEVERAGING PROCESS

Positions vis-à-vis non-residents (henceforth "external" positions) have played an important role in the balance sheet developments of euro area MFIs in recent years.<sup>1</sup> This holds both for the period of strong leveraging from 2005 to 2007 and for the subsequent period of deleveraging from early 2008 onwards. Indeed, around half of the recent slowdown in MFIs' asset accumulation has been accounted for by a reduction in external assets (see Chart A). Against this background, this box looks at MFI external assets and liabilities from the perspective of instruments, counterpart sectors and geographical regions.

#### The instrument perspective

Traditionally, euro area MFIs' transactions with the rest of the world have, on the asset side, involved the granting of loans or the purchasing of securities, while liabilities have been incurred mainly in the form of deposits. These assets and liabilities often result from transactions with the rest of the world conducted by MFIs on behalf of the euro area money-holding sector.

1 For further analysis, see the article entitled "The external dimension of monetary analysis" in the August 2008 issue of the Monthly Bulletin



Source: ECB.

Notes: MFI sector excluding the Eurosystem. "Total assets" exclude remaining and fixed assets.

#### Notes: MFI sector excluding the Eurosystem "Other assets" comprise MFIs' holdings of investment fund shares issued in the rest of the world and non-euro currency holdings

1,250

1,000

750 500

250 0

-250

-500

-750

-1,000

2009

From 2004 to late 2006 the annual flow into external assets had a relatively stable level and composition in terms of instruments (see Chart B). In the period directly preceding the onset of the financial turmoil the volume of loans to the rest of the world then increased significantly. At the same time, purchases of debt securities, despite also increasing, played a more limited role. On the liability side, the annual flow of deposits from the rest of the world displayed a pattern similar to that of loans and accounted for the bulk of funding received from the rest of the world.

Since late 2008 the euro area MFI sector (excluding the Eurosystem) has sharply reduced all external assets and liabilities. This holds in particular for the volume of loans granted to non-euro area residents, although this contraction has been less pronounced than that observed for external deposits. At the same time, the reduction observed in MFIs' holdings of debt securities issued in the rest of the world has been more moderate than would have been expected on the basis of historical regularities. Those euro area money market funds that traditionally invest their proceeds in foreign debt securities and are marketed in the rest of the world have also recorded redemptions since late 2008. These redemptions have, however, been more limited than those observed for credit institutions' deposits. Comparing the redemptions of these money market funds with the reduction in MFIs' holdings of debt securities issued by non-residents indicates that a significant percentage of this decline has resulted from sales by credit institutions.

#### The counterpart sector perspective

In general, transactions undertaken by euro area credit institutions on their own behalf should result in symmetrical changes on the two sides of the MFI balance sheet, whereas transactions settled on behalf of non-residents and the money-holding sector will lead to asymmetrical changes in terms of the asset and liability positions concerned.<sup>2</sup>

Chart C suggests that the strong co-movement in asset/liability positions vis-à-vis non-resident banks largely reflects business conducted between banks - either with their own affiliates abroad or with other bank counterparts. This holds for both the increase in external assets in the period preceding the financial turmoil and the period of unwinding observed since 2008. The retrenchment in cross-border interbank lending represents an attempt to adjust the size of banks' balance sheets and refocus on core lending activity. At the same time, this reduction possibly reflects the drying up of activity in global financial markets following the collapse of







2 For a conceptual explanation of the relationship between gross and net external asset developments, see the box entitled "Developments in MFIs' gross external assets and liabilities" in the July 2007 issue of the Monthly Bulletin and the box entitled "MFI net external assets and their impact on monetary developments" in the 2007 Annual Report.

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Lehman Brothers. Taken together, these developments indicate a reduction in euro area credit institutions' activities through international financial centres. In the period since late 2008 euro area MFIs (excluding the Eurosystem) have also continued to increase their holdings of foreign government assets, while considerably reducing their financing of private non-banks resident in the rest of the world. Developments in the "non-allocatable" position mainly capture the reduction in non-residents' holdings of short-term marketable instruments issued by euro area MFIs on the liability side of the balance sheet.

### The geographical perspective

Chart D provides an estimated breakdown of external assets and liabilities held vis-à-vis residents of both EU countries outside the euro area and the rest of the world (excluding the EU). The United Kingdom has typically played a major role in euro area MFIs' external transactions, particularly as regards transactions with non-resident banks, reflecting the role of the City of London as a financial centre. Transaction volumes with the rest of the world (excluding the EU) are also very large and are much less likely to have a bank counterpart. The EU countries of central and eastern Europe play a secondary role for euro area MFIs' external position, although they may have played a more important role for the MFI sectors of individual Member States.

In the period from 2004 to early 2006 borrowers resident in the United Kingdom appear to have been the principal counterparts of euro area MFIs' lending to the rest of the world, while funding of euro area MFIs originating from the United Kingdom was much more limited.

From mid-2006 until the onset of the financial turmoil increases in cross-border lending resulted largely from transactions with the rest of the world (excluding the EU). By contrast, the subsequent contraction in lending predominantly reflected a reduction in assets vis-à-vis UK residents. Turning to external liabilities, the recent outflows can be attributed mainly to withdrawals by non-EU residents.

The various perspectives help to shed some light on the driving forces behind recent developments in external positions. After significant increases in external assets (and liabilities) between 2004 and early 2008, the euro area MFI sector has considerably reduced its assets and liabilities vis-à-vis the rest of the world following the intensification of the financial turmoil. The evidence from the various perspectives suggests that this reduction in international transactions - which mainly reflects declines in loans granted and deposits received - has predominantly taken place vis-à-vis non-resident banks located in major financial centres, particularly the



Notes: MFI sector excluding the Eurosystem. Liabilities are shown with the opposite sign. "Geographically non-allocatable" shown with the opposite sign. "Geographically non-allocatable" external liabilities consist of money market fund shares/units and short-term MFI debt securities purchased by non-residents, for which no geographical breakdown is available.





United Kingdom. By contrast with a number of previous international financial crises, in the current episode it has been banks' exposures to other industrialised countries that have deteriorated most. Overall, the implications that the reduction of the external position has for the funding of the euro area real economy and the integration of global financial markets will need to be monitored closely.

#### Box 2

#### THE RESULTS OF THE OCTOBER 2009 BANK LENDING SURVEY FOR THE EURO AREA

This box describes the main results of the October 2009 bank lending survey for the euro area conducted by the Eurosystem.<sup>1</sup> In the third quarter of 2009 the net percentage<sup>2</sup> of banks reporting a tightening of credit standards applied to loans and credit lines to enterprises declined considerably further, bringing the net tightening close to a halt. This development thus further confirms the indications of a turning-point in the tightening trend observed at the time of the April 2009 survey. At the same time, it needs to be kept in mind that the cumulated net tightening observed during the financial turmoil has not yet started to reverse. Respondent banks also reported a decline in the net tightening of credit standards for loans to households for house purchase and for consumer credit in the third quarter of 2009. For the fourth quarter of 2009 banks expected a slight net easing of credit standards for loans to enterprises and a further decline in net tightening for loans to households. Regarding loan demand, banks noted that net demand<sup>3</sup> for loans to enterprises remained negative, but to a lower extent than in the second quarter, whereas net demand for housing loans increased further in the third quarter.

#### Loans or credit lines to enterprises

**Credit standards:** In the third quarter of 2009 the net percentage of banks reporting a tightening of credit standards applied to loans and credit lines to enterprises declined considerably further, to 8%, compared with 21% in the second quarter and 43% in the first quarter (see Chart A). The net tightening was broadly equal for large firms (11%) and small and medium-sized enterprises (SMEs; 12%). All of the factors contributed to the decline in the net tightening of credit standards. The most important forces driving the net tightening in the euro area continued to be the industry or firm-specific outlook (a net percentage of 38%, after 47% in the second quarter) and expectations regarding general economic activity (a net percentage of 26%, after 46% in the second quarter). For both, however, the net tightening continued to decline considerably in the third quarter of 2009. Importantly, some of the supply-side factors, namely banks' access to market financing (-3%) and banks' liquidity position (-9%), contributed to an easing of credit standards for loans to enterprises.

<sup>1</sup> The cut-off date for the receipt of data from the responding banks was 2 October 2009. A comprehensive assessment of the results of the October 2009 bank lending survey for the euro area was published on 28 October 2009 on the ECB's website.

<sup>2</sup> 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").

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

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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.

The net tightening of the price and non-price terms and conditions applied to loans to enterprises decreased significantly in the third quarter of 2009 (see Chart B). In particular, the net tightening of the margins on average and riskier loans was reduced significantly further, to 13% (from 35% in the second quarter) and 31% (from 56%), respectively. The degree of net tightening also declined for the non-price terms and conditions.

With respect to expectations, the banks expect a slight net easing of credit standards applied to loans to enterprises for the fourth quarter of 2009 (-1%; see Chart A).







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

**Loan demand:** Net demand for loans by enterprises declined further, albeit more moderately, in the third quarter of 2009, reaching a net percentage level of -20% (after -29% in the second quarter; see Chart C). The net demand was significantly more negative for large firms (-27%) than for SMEs (-17%). Fixed investment and mergers and acquisitions and corporate restructuring were the two most important factors contributing to negative net demand (-52% and -33% respectively), with their impact remaining broadly unchanged compared with the second quarter. Market-based financing, in particular via the issuance of debt securities by enterprises (-12%, after -7% in the second quarter), also contributed negatively to the net demand for loans, indicating improved market financing conditions.

As regards expectations for the fourth quarter of 2009, net demand for loans by enterprises is expected to be slightly positive (1%), unchanged from the expectations in the previous quarter (see Chart C).

### Loans to households for house purchase

**Credit standards:** In the third quarter of 2009 the net percentage of banks reporting a tightening of credit standards for loans to households for house purchase decreased further to 14% (from 22% in the second quarter and 28% in the first quarter; see Chart D). The decline in the net tightening for housing loans was driven by a lower perception of risks by banks regarding general economic activity (19%, after 29%) and housing market prospects (14%, after 22%).

As regards the terms and conditions for loans for house purchase, the net tightening of margins declined further in the third quarter on average loans (6%, after 10% in the second quarter) and on riskier loans (23%, after 35%). After non-price terms and conditions had remained broadly



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unchanged in the second quarter, the net tightening of collateral requirements and loan-to-value ratios decreased considerably in the third quarter.

Looking ahead to the fourth quarter of 2009, banks expect the net tightening of credit standards applied to loans to households for house purchase to remain in positive territory, but to weaken further (to 5%; see Chart D).



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.

**Loan demand:** The net percentage of banks reporting an increase in demand for housing loans increased further, to 10% in the third quarter of 2009, from 4% in the second quarter (see Chart E). The increase in the net demand for housing loans was driven in particular by a considerably less negative assessment of housing market prospects and of consumer confidence compared with the second quarter. For the fourth quarter of 2009 net demand for housing loans is expected to remain positive (9%).

#### Consumer credit and other lending to households

**Credit standards:** In the third quarter of 2009 the net percentage of banks reporting a tightening of credit standards for consumer credit and other lending to households decreased further to 13% (from 21% in the second quarter of 2009; see Chart F). The main factor behind the net tightening was banks' perception of risk, mainly related to expectations regarding general economic activity and the creditworthiness of consumers.

For the fourth quarter of 2009 banks expect the net tightening of credit standards applied to consumer credit and other lending to households to decline further (to 9%; see Chart F).

**Loan demand:** The net demand for consumer credit and other lending to households continued to decline in the third quarter of 2009 (-9%), albeit to a considerably lower extent than in the second quarter (-26%; see Chart E). The main factor dampening demand continued to be consumer confidence (-20%, after -29% in the second quarter), whereas the negative impact related to spending on durable consumer goods declined considerably (-6%, after -28%). Regarding expectations, net demand for consumer credit and other lending to households is expected to remain unchanged (0%) in the fourth quarter of 2009 (see Chart E).



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

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### Ad hoc questions on the financial turmoil

In line with the previous survey rounds, the October 2009 survey contained a set of ad hoc questions addressing the impact of the financial market tensions experienced since the second half of 2007.

For the third quarter of 2009 banks reported that their access to wholesale funding was less impaired than in the second quarter in all markets and categories shown in Chart G. For the access to funding in the very short-term and short-term money markets, 15% and 32%, respectively, of the responding banks indicated that market access was hampered as a result of the financial turmoil. While the percentages of banks reporting a hampered access to short-term and medium to long-term debt securities markets (35% and 44% respectively) were more elevated than for the funding via money markets, these percentages were considerably lower than in the second quarter. With respect to securitisation, there was some improvement in market access. This notwithstanding, access to securitisation continued to be hampered according to 68-76% of the responding banks, depending on the type of securitisation. Over the next three months banks expect a further improvement in the access to financial markets, in particular to medium to long-term debt securities markets and securitisation, where the situation is still regarded as more difficult compared with short-term debt securities and money markets.

According to the responding banks, governments' announcements and introduction of recapitalisation support and state guarantees for debt securities issued by banks continued to contribute to improving banks' access to wholesale funding in the third quarter of 2009. 55% of the responding banks (after 60% in the second quarter) reported "some" or a "considerable" impact from the government support schemes on their access to funding.



Notes: Figures indicate the percentage of banks reporting that access to particular sources of wholesale funding have been hampered. The figure for each column is calculated as the number of banks indicating that particular source as a percentage of the number of banks not replying "not applicable" in response to this question. These totals are weighted averages of country results.

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Broadly in line with the improved access to wholesale financial markets, banks reported that the impact on bank lending, as regards margins and quantities, resulting from hampered market access declined somewhat further in the third quarter of 2009. The impact continued to be stronger for margins than for the amount of loans granted to borrowers. As regards the impact from the hampered access to securitisation on bank lending, banks also reported a somewhat lower impact on the amount of loans granted and on margins demanded compared with the previous quarter.

### 2.2 SECURITIES ISSUANCE

Overall debt securities issuance growth remained buoyant in August 2009, albeit moderating slightly further from the robust pace recorded in previous months. Debt securities issuance by non-financial corporations in the euro area remained strong in August 2009, driven largely by long-term debt securities issuance. Developments in debt securities issuance by the corporate sector most likely reflect improved capital market conditions and substitution of market-based financing for bank financing, given the more rapid decline in the cost of market-based debt than in bank lending rates and the continued tightening of bank credit standards. Issuance of quoted shares by euro area residents likewise continued its moderate upward trend in August 2009.

#### **DEBT SECURITIES**

The annual growth rate of debt securities issued by euro area residents declined to 11.0% in August 2009, from 11.8% in the previous month (see Table 3), thereby confirming a slight moderation in the growth of debt securities issuance, albeit at a high level. This is also reflected in the seasonally adjusted six-month annualised growth rate of debt securities issuance, which has been signalling a slight moderation in the ongoing robust growth of overall debt securities issued in recent months (see Chart 7). The overall figure, however, conceals some differences in behaviour across different maturities and types of issuer.

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

	Amount outstanding (EUR billions)	Annual growth rates <sup>1)</sup>					
	2009	2008	2008	2009	2009	2008	2009
Issuing sector	August	Q3	Q4	Q1	Q2	July	August
Debt securities	14,090	7.3	7.8	10.6	12.0	11.8	11.0
MFIs	5,439	8.2	5.7	5.9	5.9	4.3	3.6
Non-monetary financial corporations	2,156	22.9	23.7	31.1	32.7	31.0	27.6
Non-financial corporations	763	4.1	5.1	7.8	10.3	13.1	12.6
General government	5,731	2.4	5.6	9.6	12.1	13.2	13.0
of which:							
Central government	5,377	2.4	5.7	9.9	12.3	13.5	13.3
Other general government	354	3.0	2.9	5.9	9.6	9.5	9.0
Quoted shares	4,044	0.6	0.8	1.2	1.9	2.7	2.7
MFIs	572	2.8	4.9	7.2	8.7	9.5	9.4
Non-monetary financial corporations	301	2.6	2.6	3.1	3.4	3.9	3.6
Non-financial corporations	3,171	0.0	-0.1	0.0	0.7	1.6	1.7

Source: ECB

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



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Regarding maturities, the annual growth rate of issuance of short-term debt securities, while still high, continued to decline rapidly, falling to 14.0% in August 2009 from 18.7% in the previous month. At the same time, the annual growth rate of issuance of long-term debt securities remained strong, standing at 10.6% in August 2009. Issuance of longer-term debt securities may be broken down further into securities at floating and fixed rates. In recent months, issuers have clearly favoured the issuance of fixed rate long-term debt securities, which represent almost 70% of the outstanding amount of long-term debt securities issued. The annual growth rate of fixed rate long-term debt securities issuance surged from 5.4% at the beginning of the year to 10.6% in August 2009. At the same time, the annual growth rate of floating rate long-term debt securities issuance kept on decreasing, falling to 10.9%.



Regarding sectoral issuance, the annual growth rate of debt securities issued by non-financial

corporations remained broadly unchanged at 12.6% in August 2009. The sustained growth in debt securities issuance was mainly driven by long-term securities, whereas the annual growth rate of issuance by non-financial corporations of short-term debt securities was strongly negative throughout the year up until August 2009. Euro area companies are currently taking advantage of the strong decline in the relative cost of market-based debt financing in order to secure long-term financing. Indeed, the real cost of market-based debt financing dropped much more rapidly than corresponding MFI lending rates between November 2008 and August 2009. This reflected improvements in funding conditions in capital markets, with corporate bond spreads returning to levels below those observed immediately prior to the intensification of the financial crisis in September 2008, but still being somewhat above their pre-crisis (i.e. July 2007) levels, notwithstanding a concomitant rise in corporate default rates.

At the same time, the momentum of debt issuance by non-financial corporations could in part also reflect the deterioration of the availability of bank financing through a tightening of terms and conditions on bank loans (see Box 2 presenting the results of the October 2009 bank lending survey for the euro area). The subdued level of merger and acquisition activity, which is one of the main traditional determinants of debt securities issuance, supports the view that firms, and especially large ones, may have turned to the capital markets so as to circumvent tighter bank lending standards. In the October 2009 bank lending survey, an increasing number of banks reported that competition from market-based financing contributed to a slowdown in demand for bank credit.

Turning to the financial sector, there was a further decline in the annual growth rate of debt securities issuance by MFIs, to 3.6% in August 2009 from 4.2% in the previous month. This development was driven by a rapid decline in the annual growth rate of short-term debt securities issued, down to -4.2% in August 2009 from 1.7% in the month before, whereas the growth of long-term debt securities issuance by MFIs remained broadly unchanged at 4.9%. Likewise, there was a decline

in the annual growth rate of debt securities issued by non-monetary financial corporations, to 27.6% in August 2009, i.e. around 3 percentage points lower than the level observed in the previous month. The seasonally adjusted six-month annualised growth rate also moderated in August 2009, compared with the month before. The issuance activity of non-monetary financial corporations, as for other types of issuers, continued to focus on longer-term maturities.

Finally, the annual growth rate of debt securities issued by the general government sector remained strong at 13.0% in August 2009. The strong momentum in the issuance of government debt securities reflects the continued substantial funding needs of the euro area public sector and it is notable that a very strong growth rate was observed for short-term government debt securities issuance.

# Chart 8 Sectoral breakdown of quoted shares issued by euro area residents (annual percentage changes) total ····· monetary financial institutions ---- non-monetary financial corporations non-financial corporations 12 12 10 10 8 8 6 4 2 0 0 -2 -2 -4 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 Source: ECB

#### **QUOTED SHARES**

The annual growth rate of quoted shares issued by euro area residents remained unchanged at 2.7% in August 2009 (see Chart 8). The annual

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

growth rate of equity issuance by MFIs remained high at 9.4%, reflecting continued efforts of many euro area banks to strengthen their balance sheets by bolstering their capital bases. Another notable feature is the rise in the annual growth rate of quoted shares issued by non-financial corporations, to 1.7% in August 2009, its highest level since May 2001, possibly fostered by positive stock market developments in recent months and companies' continued needs to strengthen their balance sheets.

#### 2.3 MONEY MARKET INTEREST RATES

Both unsecured and secured money market interest rates remained relatively stable in October 2009, broadly unchanged from the previous month. Liquidity conditions in the euro area remained ample following the allotment of the first two one-year longer-term refinancing operations on 24 June and 30 September 2009. This was reflected in the declining demand observed in the main refinancing operations and the other longer-term refinancing operations, all of which were conducted by means of fixed rate tender procedures with full allotment. Furthermore, the Eurosystem continued to conduct outright purchases of covered bonds in the context of the covered bond purchase programme that began on 6 July 2009.

Unsecured money market rates remained stable in October 2009. On 4 November the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.43%, 0.72%, 1.00% and 1.24% respectively, broadly unchanged from the levels observed on 7 October. The slope of the money market yield curve steepened slightly, with the spread between the twelve-month and one-month



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EURIBOR standing at 81 basis points on 4 November – up 2 basis points from the level observed on 7 October, with the two rates moving in opposite directions (see Chart 9).

Secured money market rates derived from the EONIA swap index decreased slightly. The decline in the three-month swap rate was less marked than that observed in the corresponding EURIBOR, resulting in a moderate decrease in the spread between the unsecured and secured rates. This spread stood at 26 basis points on 4 November – i.e. 1 basis point higher than the level observed on 7 October.

The interest rates implied by the prices of three-month EURIBOR futures maturing in December 2009 and March 2010 declined by 3 basis points between 7 October and 4 November, standing at 0.760% and 0.935% respectively on the latter date, while the rate implied by the contract maturing in June 2010 increased by 4 basis points to stand at 1.265%.

The EONIA was broadly stable in October, standing at levels around 10 basis points above the deposit facility rate of 0.25% (see Chart 10). The sole exception was 13 October, the final day of the ninth maintenance period of the year, when the EONIA rose to 0.57% as a result of the Eurosystem conducting a liquidity-absorbing fine-tuning operation. That operation, conducted by means of a variable rate tender procedure, absorbed €169.7 billion with a maximum rate of 1.00%, a marginal rate of 0.80% and a weighted average rate of 0.74%.

The volume of outstanding open market operations – having temporarily risen to around  $\notin$ 743 billion following the settlement of the second one-year longer-term refinancing operation (LTRO) on 30 September – resumed its decline, standing at  $\notin$ 685.2 billion on 4 November. Since the beginning of October demand for liquidity in the main and longerterm refinancing operations – and thus, given the Eurosystem's current full allotment tender procedure, the liquidity provided in those operations – has consistently been lower than



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

#### (percentages per annum; daily data)





the corresponding maturing amounts. This trend has been more pronounced for the longer-term operations, which have been affected most by the one-year LTROs. Nevertheless, the liquidity term structure has lengthened further overall, with main refinancing operations now accounting for only around 7% of total outstanding liquidity, compared with around 50% in June prior to the settlement of the first one-year LTRO.

In the main refinancing operations conducted on 6, 13, 20 and 27 October the ECB allotted  $\notin 62.6$  billion,  $\notin 61.6$  billion,  $\notin 49.8$  billion and  $\notin 48.7$  billion respectively. As regards longer-term operations, the ECB conducted three special LTROs with maturities of one, three and six months in October, as well as one regular three-month LTRO. The ECB allotted  $\notin 7.7$  billion in the special one-month LTRO on 13 October, and  $\notin 1.1$  billion and  $\notin 2.4$  billion respectively in the special three and six-month LTROs on 7 October. In the regular three-month LTRO on 29 October the ECB allotted  $\notin 3.3$  billion.

The liquidity surplus in the euro area money market was absorbed mainly by recourse to the deposit facility, which remained elevated at  $\notin$ 91.5 billion on 4 November – albeit lower than the average daily recourse of  $\notin$ 109.6 billion observed in the previous maintenance period, which ended on 13 October.

On 6 October, in accordance with the Governing Council's decision of 24 September, the Eurosystem, using its reciprocal currency arrangements (swap lines) with the Federal Reserve, conducted the final US dollar liquidity-providing operation with a maturity of 84 days. The Eurosystem continued, however, to provide US dollar funding through one-week operations against collateral eligible for Eurosystem operations. Similarly, the Eurosystem, on the basis of an agreement with the Swiss National Bank, continued to provide Swiss franc funding through one-week swap operations.

Finally, the Eurosystem has continued to purchase eligible covered bonds under the programme that began on 6 July. The value of covered bonds purchased between 6 July and 4 November was around  $\notin$ 21 billion, with the total value of such direct purchases set to reach  $\notin$ 60 billion by the end of June 2010.

### 2.4 BOND MARKETS

Euro area long-term government bond yields increased slightly in October, partly reflecting the large volume of issuance during this month, as well as the further improvement in macroeconomic data. US long-term government bond yields increased somewhat more over the same period. Implied euro area and US bond market volatility rose slightly in October. Inflation expectations derived from inflation-linked bonds in the euro area continue to suggest that inflation expectations remain well anchored. Euro area corporate bond spreads narrowed further in October, returning to levels similar to those observed before the intensification of the financial crisis in September 2008.

Compared with the end of September, ten-year government bond yields in the euro area increased by around 10 basis points to stand at around 3.6% on 4 November. In the United States, ten-year bond yields increased somewhat more, by about 20 basis points to stand at around 3.6% on the same date (see Chart 11). Accordingly, the ten-year nominal interest rate differential between US and euro area government bonds narrowed to zero basis points. The increase in euro area long-term government bond

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yields may be partly explained by the large volume of issuance in October, as well as an improving macroeconomic outlook. The increase in US ten-year government bond yields reflects better than expected data releases and revisions to market expectations about the future path of policy rates in the United States following remarks made by the chairman of the Federal Reserve in the third week of the month. Towards the end of October, the large volume of issuance of US government bonds was met with robust demand in the context of a correction in stock markets and upward pressure on the US dollar exchange rate, with yields down slightly compared with mid-month values. Euro area and US bond market implied volatility increased slightly overall in October.

A decline in most ten-year credit default swap spreads across euro area countries has been matched by a decrease in euro area sovereign bond spreads vis-à-vis Germany. A notable exception was Greece, which experienced a slight widening of the spread.

Compared with the end of September, yields on euro area five-year inflation-linked government bonds remained broadly unchanged, standing at 0.8% on 4 November, while ten-year real yields rose by 20 basis points to stand at 1.6% on the same date (see Chart 12). Consequently, the five-year forward real yield five years ahead increased by 30 basis points to stand at 2.3%. These developments reflect the ongoing but incomplete normalisation of liquidity conditions in the inflation-linked government bond market.

Financial market data continue to suggest that inflation expectations remain well anchored. On 4 November the five and ten-year spot break-even inflation rates stood at 1.8% and 2.1% respectively, down slightly from the levels observed at the end of September (see Chart 13). The implied five-year forward break-even inflation rate five years ahead declined by 20 basis points

to stand at 2.4%. The recently high volatility of long-term forward break-even inflation rates and inflation-linked swap rates appears, however, to be related to technical factors, namely the ongoing but incomplete normalisation of liquidity conditions across the maturity spectrum in the wake of the financial crisis, as well as to increased demand for bonds offering inflation protection. Looking ahead, the expected increase in the supply of inflation-linked bonds should contribute to improving liquidity conditions across the whole break-even inflation rate curve.

The term structure of forward rates in the euro area shows how the overall behaviour of euro area long-term yields can be decomposed into changes in interest rate expectations (and related risk premia) at different horizons (see Chart 14). The implied forward overnight interest rate curve for euro area government bonds steepened slightly in October compared with the end of September, which is likely to be associated with a slight increase in term premia following the slightly more volatile conditions in bond markets.

As regards corporate bond markets, the narrowing of corporate bond spreads for lower-rated investment-grade financial bonds and speculative-grade bonds continued. This has been further reflected in strong debt issuance from the corporate sector, which continued to suggest some substitution of bank financing by market-based financing. In the current environment of improving expectations regarding the economic outlook, the recent steep decline in corporate bond spreads (despite rising corporate default rates in the wake of the sharp cyclical downturn) is likely to mainly reflect the normalisation of conditions in these markets, which returned to levels prevailing prior to



Chart 14 Implied forward euro area overnight interest rates

(percentages per annum; daily data)





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

Notes: The implied forward yield curve, which is derived from the term structure of interest rates observed in the market, reflects market expectations of future levels for short-term interest rates. The method used to calculate these implied forward yield curves is outlined in the "Euro area yield curve" section of the ECB's website. The data used in the estimate are euro area AAA-rated government bond yields.

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the intensification of the financial crisis last autumn, while remaining somewhat above historical long-run values.

#### 2.5 INTEREST RATES ON LOANS AND DEPOSITS

In September 2009 further declines were recorded for most MFI interest rates on new loans to and deposits from households and non-financial corporations. The downward trend observed in MFI interest rates since November 2008 is consistent with the reductions in key ECB interest rates and the declines in money market rates and bond yields over this period. It shows a degree of pass-through which is broadly in line with past regularities.

In September 2009 most short-term MFI interest rates on new loans and deposits were lower compared with the previous month, reflecting the gradual pass-through of the substantial declines observed in money market rates since November 2008 (see Chart 15). Short-term MFI interest rates on small loans to non-financial corporations decreased by 6 basis points in September 2009, while MFI interest

# Chart 15 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
- 10.0 10.0 9.0 90 8.0 8.0 7.0 7.0 6.0 6.0 5.0 5.0 4.0 4.0 3.0 3.0 2.0 2.0 1.0 1.0 0.0 0.0 2003 2004 2005 2006 2007 2008 2009 Source: ECB.

rates on large short-term loans to non-financial corporations decreased by 23 basis points over the same period. Likewise, short-term rates on loans to households for house purchase declined by 19 basis points in September 2009. At the same time, MFI interest rates on overdrafts granted to non-financial corporations and to households remained unchanged and slightly increased, respectively.

Overall, the decreases observed in short-term lending rates in September 2009 were generally more pronounced than in corresponding money market rates. For example, the three-month EURIBOR declined by 9 basis points. Consequently, although the spreads between short-term MFI interest rates and short-term money market rates remain wide, they declined in September 2009 and are expected to narrow somewhat further as changes in market rates are eventually passed on (see Chart 16).

From a longer-term perspective, the short-term interest rates charged on loans to households for house purchase declined by 299 basis points between October 2008 and September 2009. Equivalent rates on small and large loans to non-financial corporations declined by 298 and 353 basis points, respectively. This compares with a 425 basis point decrease in the three-month EURIBOR. Notwithstanding concerns regarding the outlook for borrowers' balance sheets and uncertainty surrounding borrowers' income and ability to service their debts, which are raising credit risk premia, reductions in policy rates appear to have been feeding through to retail lending and deposit rates with a degree of inertia broadly similar to that observed in the past (see also the article entitled


"Recent developments in the bank interest rate pass-through in the euro area" in the August 2009 issue of the Monthly Bulletin).

In September 2009 a large majority of medium to long-term lending rates decreased against the backdrop of lower government bond yields (see Chart 17). MFI interest rates on small and large loans to non-financial corporations with an initial rate fixation of over five years fell by 8 and 21 basis points, respectively. Similarly, MFI interest rates on loans to households for house purchase with an initial rate fixation of between five and ten years and with an initial rate fixation of over ten years declined by 6 and 4 basis points, respectively. Over the same period, the yield on seven-year government bonds decreased by 8 basis points.

Adopting a longer-term perspective, the declines observed between August 2008 and September 2009 for long-term MFI interest rates on loans to households were typically only around half of the 152 basis point decline seen for seven-year government bond yields over that period. While these developments may primarily reflect the typically sluggish adjustment of retail bank interest rates to changes in market rates, they may also point to an increase in credit risk premia. By contrast, long-term MFI interest rates on small loans to non-financial corporations declined by 136 basis points between August 2008 and September 2009, whereas long-term MFI interest rates on large loans to non-financial corporations fell by 211 basis points. Hence, overall, the declines in longer-term non-financial corporate lending rates have been similar to or larger than the fall in long-term market rates over this period.

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Euro area banks' profitability depends, among other things, on loan-deposit margins on outstanding amounts and new business rates. Both measures remained broadly unchanged at a low level throughout the year to September. This tends to confirm that banks have passed on the recent reductions in policy rates to their retail lending and deposit rates to a broadly similar degree.

#### 2.6 EQUITY MARKETS

Euro area and US stock prices continued to increase through most of October before experiencing a downturn in the final days of the month more than undoing the initial gains. At the same time, implied stock market volatility increased towards the end of the month. In the euro area, expected growth in earnings per share 12 months ahead improved further in October, and for the first time in more than a year reflected improvements in both the financial and non-financial sectors. Overall, through most of October euro area stock prices were supported by the release of some positive economic news and upward revisions to earnings expectations. Towards the end of the month, profit-taking and continued market uncertainty surrounding the economic outlook weighed on stock price developments.

Stock price indices in the euro area and the United States displayed an upward trend for most of October before experiencing a downward adjustment towards the end of the month, primarily reflecting profit-taking activities by market participants. This pattern was observed for both financial



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.





Source: Bloomberg. Notes: The implied volatility series reflects the expected standard deviation of percentage changes in stock prices over a period of up to three months, as implied in the prices of options on stock price indices. The equity indices to which the implied volatilities refer are the Dow Jones EURO STOXX 50 for the euro area, the Standard & Poor's 500 for the United States and the Nikkei 225 for Japan. and non-financial stocks. Euro area stock prices, as measured by the broad-based Dow Jones EURO STOXX index, and US stock prices, as measured by the Standard & Poor's 500 index, declined by 3.6% and 1.0% respectively between the end of September and 4 November (see Chart 18). Over the same period, stock prices in Japan, as measured by the Nikkei 225 index, decreased by about 2.9%. At the same time, short-term stock market uncertainty, as measured by implied volatility, remained broadly unchanged for most of the month, but increased towards the end of the month in the euro area and the United States (see Chart 19).

Upward movements in euro area stock prices in the first half of October reflected the release of better than expected macroeconomic data, which prompted some market participants to further revise upwards the growth prospects for the euro area and the rest of the world economy. Over recent months, developments in US and euro area stock prices have been following a very similar pattern, with the correlation of returns on stocks being well above historical averages. This reflects the fact that markets view the crisis as global, and therefore the recovery of national economies as relying heavily on the recovery of the world economy. The upward revision of the assessment of both the euro area and the US banking sectors by major market participants in October and positive news on earnings contributed further to increasing investor confidence. Despite these positive developments, stock prices remain well below the high levels reached in the second quarter of 2007.

Actual earnings growth for euro area listed companies remained depressed in October. Actual annual earnings-per-share growth for the firms included in the Dow Jones EURO STOXX index remained unchanged at -41%. However, the expected growth of earnings per share 12 months ahead improved further to 18.0%, compared with 11.5% in September. The improvement in expected earnings has been sustained since the beginning of the third quarter of 2009, and in October for the first time in more than a year reflected improvements in both the financial and non-financial sectors.

Overall, developments in stock prices in October were shaped by counterbalancing factors. Through most of the month, the release of positive economic news and upward revisions to earnings expectations continued to provide impetus to stock prices, in a context of recovering risk appetite, low interest rates and ample liquidity conditions. However, towards the end of the month, profit-taking and market uncertainty regarding the timing of future monetary policy decisions, and in particular the exit from non-standard policy measures, also weighed on stock price developments.

#### Box 3

#### A MODERNISED LEGAL FRAMEWORK FOR THE COLLECTION OF STATISTICAL INFORMATION BY THE ECB

Article 5 of the Statute of the ESCB and of the ECB assigns to the ECB, assisted by the NCBs, the competence to collect statistical information necessary to fulfil the tasks of the ESCB. Moreover, it allocates to the Council of the European Union the competence to "define the natural and legal persons subject to reporting requirements, the confidentiality regime and the appropriate provisions for enforcement". Accordingly, in 1998, the Council adopted the Regulation (EC) No 2533/98 on the collection of statistical information by the ECB. This Regulation has been a key legal instrument for the collection of statistical information by the ECB since the start of European Monetary Union. However, the developments in financial markets over the past decade, as well as the trend in statistical production processes towards more integrated data

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collection systems, triggered the need to amend the legal act. In addition, the close cooperation between the ESCB and the European Statistical System (ESS), which comprises Eurostat and the national statistical institutes, merited an explicit acknowledgment. Hence, following an ECB Recommendation of 3 October 2008, the Council adopted, on 9 October 2009, the Regulation (EC) No 951/09 amending the Council Regulation of 1998.

This framework Regulation does not automatically impose statistical reporting obligations on the reporting agents, but instead: (i) defines the potential reporting population (called the "reference reporting population") to which the ECB can address mandatory reporting requirements; (ii) provides the scope of information that the ESCB can collect by means of these reporting requirements; (iii) defines the confidentiality regime; and (iv) outlines the broad governance for the development, production and dissemination of European statistics by the ESCB.

The main amendments introduced by this amending Regulation are the following:

1) Reporting population and purposes for which data are collected: The amendment has widened the reference reporting population to cover the entire financial corporations' sector. Until now, the ECB did not have the legal power to address mandatory reporting requirements to insurance corporations and pension funds, although these represent a large part of the euro area financial sector in terms of total assets, and their importance as financial market players has increased substantially in the last decade. Growing interlinkages among different types of financial intermediaries and the increasing complexity of financial markets may well imply future needs for a comparable, frequent and timely collection of information for all significant actors in the financial sector. Furthermore, the amended legal framework allows the ECB to collect information from reporting agents for all tasks of the ESCB, including for financial stability, payments and payment systems purposes. Before the amendment, the Regulation limited the scope of the collection of statistical information from certain reporting agents to specific purposes, such as for money and banking statistics or balance of payments statistics. Such a one-to-one link is, however, no longer suitable for modern integrated statistical production processes. At the same time and with a view to minimising reporting requirements, an additional provision has been added that the merits and costs of the collection of new or substantially enhanced statistical information are assessed before the ECB adopts regulations on new statistics – a practice already followed by the ECB since 2000.

2) *Confidentiality*: The ESCB attaches utmost importance to a strict protection of confidential statistical information (essentially information allowing for direct or indirect identification of reporting entities) and implements all necessary measures to ensure the protection of such data. At the same time, adequate provisions are required to regulate the transmission of confidential statistical information in cases where this is necessary and admissible following specifically designed procedures. The amended legal act reflects all these considerations. The basic principle of the collection of confidential statistical information from individual reporting agents and transmit it in aggregated form to the ECB. However, the amended Regulation foresees that confidential statistical information collected can be exchanged among members of the ESCB, if that is needed to improve the quality of statistics. A simple example illustrates the need for such a data transmission: NCBs that provide the national contribution to euro area balance of payments statistics should make sure that a large intra-euro area cross-border operation. Without the exchange

of confidential statistical information between both national authorities compiling the data, the timing, valuation and classification of this transaction may be recorded quite differently, which would in turn cause an error in the euro area balance of payments. This is also one of the reasons why the amended legal framework provides for the exchange of confidential statistical information between the ESCB and the ESS, because in a few EU Member States national statistical institutes are responsible for producing balance of payments statistics.

3) Governance of European statistics produced by the ESCB: The amendment has introduced a definition of the concept of "European statistics", in order to better identify the scope of the statistics collected and compiled by the ESCB. In this Regulation, European statistics means statistics that are: (i) necessary to undertake the ESCB's tasks as referred to in the Treaty; (ii) determined in the ESCB statistical work programme; and (iii) developed, produced and disseminated in conformity with the statistical principles. The Regulation explicitly enumerates these statistical principles, which comprise impartiality, objectivity, professional independence, cost-effectiveness, statistical confidentiality, minimisation of the reporting burden and high output quality (including reliability). The definitions of these principles are published on the ECB's website in the form of a "Public Commitment on European Statistics by the ESCB".

4) *Cooperation between the ESCB and the ESS*: Finally, over the past decade the statistical work in the European Union has benefited from a close cooperation between the ECB and Eurostat,<sup>1</sup> thus facilitating an efficient division of labour between the two institutions and ensuring that there are no overlaps in the information base needed for European policy-making. In this vein, the amended Regulation confirms the importance of a close cooperation between the ESCB and the ESS.

With this amended Council Regulation, the ESCB can now utilise an enhanced legal framework suited to the collection and compilation of statistics that are needed for the execution of its tasks in the next decade.

1 The ECB is primarily responsible for monetary, financial institutions and financial market statistics, as well as statistics on international reserves, effective exchange rates and quarterly financial accounts, while Eurostat is primarily responsible for general economic statistics and for all non-economic statistics. The two institutions have shared responsibility for external statistics (the balance of payments and international investment position), for the European non-financial sector accounts and for the statistical infrastructure.

#### Box 4

#### INTEGRATED EURO AREA ACCOUNTS FOR THE SECOND QUARTER OF 20091

The integrated euro area accounts for the second quarter of 2009 released on 29 October 2009 offer comprehensive and consistent information on the income, spending, financing and portfolio decisions of all sectors of the euro area economy.

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

In the second quarter, the yearly growth rate in nominal disposable income continued deteriorating, with government income and to some extent households' income bearing most of

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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the brunt. Gross disposable income in the euro area fell by 3.5% year on year in nominal terms in the second quarter of 2009 (after -3.2% in the first quarter and -0.2% in the fourth quarter of 2008) (see Chart A).

The decline in gross saving for the euro area as a whole decelerated somewhat in the second quarter of 2009, to -14.8% year on year. Gross capital formation contracted more rapidly in the second quarter of 2009, by a sizeable -17.7% year on year. Reflecting these developments, net lending/net borrowing of the euro area improved slightly, to a deficit of 1.5% of GDP in the second quarter of 2009 on a four-quarter moving sum basis.<sup>2</sup> From a sectoral viewpoint, the improvement in euro area net lending/net borrowing reflects the sharp increase in net lending of households and financial corporations, which - together with a substantial contraction in the net borrowing of non-financial corporations (NFCs) - exceeded the massive increase in government net borrowing (see Chart B).

This slight reduction in the euro area net borrowing is also the mirror image of a reduced euro area current and capital account deficit, which resulted from a lower property income deficit as well as from a higher trade surplus. The euro area as a whole thus continued to exhibit a net financing requirement in the year to the second quarter of 2009. The fallout from the global financial crisis continued to dampen gross cross-border transactions, with large redemptions of cross-border deposits. The vanishing net inflows in deposits (which even turned into net outflows in the year to the second quarter of 2009) were compensated for by accelerated annual net inflows in debt securities. In addition, euro area annual net outflows in loans fell markedly in the second quarter of 2009.

2 The net lending/net borrowing of a sector is the balance of its capital account, i.e. measuring the excess of saving and net capital transfers received over capital investments (net lending) or the reverse (net borrowing). It is also the balance of the financial accounts, measuring the difference between transactions in financial assets and transactions in liabilities



#### **Behaviour of institutional sectors**

In the second quarter of 2009, *household* nominal income growth slowed to a standstill. Declining compensation of employees in a context of deteriorating labour markets and reduced self-employment income, together with a steep fall in dividends earned, exceeded the increasingly supportive impact of net social transfers received and of reduced taxes paid (see Chart C). Real disposable income growth continued to be supported by favourable disinflation dynamics and real consumption recovered somewhat from the deeper retrenchment of previous quarters (to -0.9% year on year in the second quarter of 2009). In a context of worsening employment prospects, continued housing market weakness and accumulated past losses on shares, savings continued increasing, though at a slower pace. The household saving ratio increased again to 15.4% in the second quarter of 2009 (on a four-quarter moving sum basis), 1.3 percentage points up on the year before, thereby passing the peak seen in 2002-03. Coupled with falling household investment (mainly housing), this resulted in a further large rise in net lending, in conjunction with continued loan borrowing moderation. On the asset side, the preference for liquidity abated somewhat with a resumption of equity purchases and a stabilisation of acquisitions of insurance technical reserves, as confidence and asset markets started to recover (see Chart D).

As a result of the sharp downturn in activity and of pressures on margins, the year-on-year contraction in nominal value added of *non-financial corporations* increased. The gross operating surplus fell even more strongly, as NFCs could not reduce as fast compensation of employees. However, income and saving recovered on the back of considerably lower net interest and taxes paid as well as distributed dividends. Against the backdrop of weak global demand, low capacity utilisation and tight though easing financial conditions, the annual growth of NFCs' fixed capital formation contracted further by 17.1%, and extensive





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destocking took place (-€15 billion in the first half of 2009, against stocking of €18 billion a year earlier). As a result, NFCs' net borrowing declined substantially in the second quarter of 2009. The annual growth rate of external financing of NFCs slowed further, and its composition continued showing deep changes driven by substitution effects, with market financing exceeding MFI financing. Net additions to loan financing shrank to a very small amount in the second quarter of 2009 (notably due to contracting short-term MFI loans on the back of lower working capital needs, arising notably from destocking), while issuance of market instruments (debt securities as well as quoted shares) accelerated further (see Chart E). Separately, trade credit receivables and loans granted by NFCs (which are mostly intra sector), though decelerating, remained relatively resilient compared with nominal GDP, suggesting a buffering role that alleviates the adverse impact of restrained bank financing (see Chart F). NFCs reduced again their purchases of quoted equity in the second quarter of 2009, while continuing to draw down their liquidity buffers overall (with some rebalancing towards deposits).

The further deterioration of *general government* accounts largely reflected the impact of automatic stabilisers, but also some additional stimulus measures, with a further increase in social benefits expenditure growth, a decline in social contributions growth (which turned negative), falling indirect taxes, and substantial contractions in direct taxes. Treasuries continued stepping up debt issuance considerably in the second quarter of 2009, to finance actual deficits and large purchases of financial assets (loans, debt securities and unquoted equity) in the context of financial rescues, as well as to fund extensive cash accumulation. The increasing net debt securities issuance was again absorbed by additional MFI purchases,



Chart F NFCs' loans granted and trade credit receivables and payables

(four-quarter moving sum in EUR billions; annual percentage changes)

- trade credit receivables (left-hand scale)
  trade credit payables (left-hand scale)
- loans granted by NFCs (left-hand scale)
- annual growth rate of GDP (right-hand scale)



Trade credit receivables and payables are estimated by the

Sources: Eurostat and ECB

ECB based on partial information.

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

Source: ECB.

seeking safe placements and benefiting from profitable "carry trades", alongside larger purchases by non-residents.

The disposable income of *financial corporations* rebounded despite reduced net interest earned, on the back of a solid gross operating surplus (the latter reflecting increased bank margins and falling compensation of employees) and deep cuts in dividends paid. Despite ongoing pressures to deleverage, their balance sheets continued to expand though at a subdued rate (at less than  $\in 100$  billion per quarter since the fourth quarter of 2008, against up to  $\in 1$  trillion during the preceding leverage boom). This was accompanied by a marked shift towards safer assets, with financial corporations acquiring in particular government securities, while shedding cross-border exposures and limiting loan origination.

#### Financing of non-financial sectors and the financial markets

Growth in total financing of the non-financial sectors stabilised, as dynamic market financing compensated for restrained bank financing, amidst massive government debt securities issuance and strong recourse to market funding by NFCs.

Viewed in terms of individual instruments, the market for debt securities saw a further significant increase in net issuance by governments. MFIs were large net purchasers of debt securities, notably from government, while their (consolidated) net issuance remained negative. The rest of the world continued their large net purchases, while the purchases of households and insurance corporations and pension funds slowed. In the market for mutual funds, net issuance of non-money market mutual fund shares resumed, as insurers became large buyers. In the market for quoted shares, net issuance by NFCs and financial corporations accelerated. NFCs slowed down again their purchases, while households resumed purchases and MFIs' disposals slowed.

#### **Balance sheet dynamics**

The rebound in global equity prices attenuated the negative impact on the net financial wealth of households of previous losses, to a still elevated  $\notin 0.6$  trillion of cumulated losses in the year to the second quarter of 2009. Valuation changes (and other elements of other flows) constitute the most volatile component of the change in household net financial worth, amounting to 12.3% of their annual disposable income in the year to the second quarter of 2009. At the same time, the increase in prices of government bonds translated into substantial holding gains, which helped offset the holding losses on the "toxic" assets held by financial corporations.<sup>3</sup>

3 It should be noted that, in the case of loans, which are valued at nominal value in the euro area accounts, impairment has only an impact on the financial wealth of creditors at the time when they are actually written off, i.e. with a considerable delay.

Prices and costs

## **3 PRICES AND COSTS**

According to Eurostat's flash estimate, annual HICP inflation stood at -0.1% in October, up from -0.3% in September. The current slightly negative inflation rates are in line with previous expectations and reflect mainly movements in global commodity prices over the past year. The fluctuation in annual HICP inflation rates in recent months largely responds to the interaction of upward base effects stemming from the drop in these prices in the second half of 2008 with current movements in global commodity prices. Also on account of these upward base effects, annual inflation rates are projected to turn positive again in the coming months. Thereafter, inflation is expected to remain positive, with overall price and cost developments remaining subdued in an environment of sluggish demand both in the euro area and elsewhere. Risks to the inflation outlook remain broadly balanced.

### **3.1 CONSUMER PRICES**

Euro area annual HICP inflation stood at -0.1% in October, up from -0.3% in September, according to Eurostat's flash estimate (see Table 4). Official estimates of the breakdown of the October HICP have not yet been published, but it is known that the October outcome was affected by an upward base effect in the energy component that stemmed from the drop in global oil prices twelve months before.

For September, the breakdown shows that all HICP components, with the exception of services, contributed to the slightly larger decline in overall HICP inflation following the rate of -0.2% recorded in August. As in previous months, the contribution of the energy price component to overall annual HICP developments was particularly negative. The annual rate of change in the energy component of the HICP decreased to -11.0% in September, from -10.2% in August, despite a small upward base effect stemming from the decline in oil prices 12 months earlier. Falling prices of liquid fuels for transport and heating were the main drivers of a significant month-on-month decrease in energy prices, while the annual growth rates of electricity and gas prices continued to decline, following last year's developments in oil prices with a lag.

lable 4 Price developme	nts							
(annual narcantaga changas unlass	otherwise indic	ated)						
(annual percentage changes, uness	otherwise mulea	ateu)						
	2007	2008	2009	2009	2009	2009	2009	2009
			May	June	July	Aug.	Sep.	Oct.
HICP and its components								
Overall index 1)	2.1	3.3	0.0	-0.1	-0.7	-0.2	-0.3	-0.1
Energy	2.6	10.3	-11.6	-11.7	-14.4	-10.2	-11.0	
Unprocessed food	3.0	3.5	0.7	0.0	-1.1	-1.2	-1.3	
Processed food	2.8	6.1	1.0	1.1	0.8	0.6	0.5	
Non-energy industrial goods	1.0	0.8	0.8	0.6	0.5	0.6	0.5	
Services	2.5	2.6	2.1	2.0	1.9	1.8	1.8	
Other price indicators								
Industrial producer prices	2.7	6.1	-5.9	-6.5	-8.4	-7.5	-7.7	
Oil prices (EUR per barrel)	52.8	65.9	42.8	49.5	46.5	51.1	46.9	49.8
Non-energy commodity prices	7.5	2.0	-24.5	-23.6	-22.9	-16.2	-16.8	-6.1

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 October 2009 refers to Eurostat's flash estimate.



The annual rate of change in the unprocessed food component of the euro area HICP decreased further in September, to -1.3%. Looking beyond the volatile development of fruit and vegetable prices, which are influenced by weather conditions, the considerable decrease in the rate of change in unprocessed food prices reflects, in particular, the continuous fall in the annual rate of change in meat prices, following the reversal of last year's food price shock on global markets. The annual rate of change in processed food prices declined slightly to 0.5% in September, falling to its lowest rate since 1999. This was due mainly to further decreases in the growth rates of the prices of cereals, dairy products and oils, which can be explained by downward pressure from strong competition in food retailing against a background of weak consumer demand and lower food commodity prices.

Excluding all food and energy items, amounting to some 30% of the HICP basket, HICP inflation decreased by 0.1 percentage point to 1.2% in September. This reflects a decline in the annual rate of change in non-energy industrial goods prices, while services price inflation remained unchanged.

The annual rate of change in non-energy industrial goods prices decreased slightly to 0.5% in September, from 0.6% in August. Looking beyond a distortion due to the pattern of seasonal discounting in clothing prices, the annual rate of change in the prices of this component has thus continued the slight downward trend observed over the past year. This has been driven primarily by the durable goods sub-component – mainly cars – and to a lesser extent by the semi-durable goods sub-component, which mirrors mainly movements in the prices of clothing and footwear.

Services price inflation remained unchanged at 1.8% in September. The decline in the inflation rate of holiday-related services (restaurants, accommodation and air transport) continued during the month, which is most probably explained by weak consumer demand and subdued cost pressures.



Prices and costs

National governments can have a direct impact on consumer price developments through administered prices and indirect taxes. Measuring the size of this impact is useful in order to assess the role of the government sector in influencing inflationary developments. Eurostat has recently published a new HICP index at constant tax rates. Box 5 below provides a brief introduction to the characteristics and interpretation of the newly published index.

#### Box 5

#### NEW STATISTICAL SERIES MEASURING THE IMPACT OF INDIRECT TAXES ON HICP INFLATION

Two key channels through which national governments can have a direct impact on consumer price developments are those of administered prices and indirect taxes. In order to assess the role of the government sector in influencing inflation developments, it is therefore useful to properly measure the size of these effects.

In the case of administered prices, the ECB has published an experimental index since April 2007. This index is a sub-index of the HICP, which includes only those products whose prices are influenced by government.<sup>1</sup>

With regard to indirect taxes, Eurostat has recently published a new experimental HICP index at constant tax rates (HICP-CT).<sup>2</sup> For reasons of simplicity, this new index, developed by Eurostat in consultation with the ECB, eliminates the "mechanical" impact of changes in taxes on consumer price inflation on the assumption that these changes are immediately and fully passed through to consumer prices. The HICP-CTs have been published for all EU countries, with the exception of Ireland, with the series for most countries starting in December 2002. The aim of this box is to provide a brief introduction to the attributes and interpretation of the newly published HICP-CT.

The taxes that fall within the scope of the HICP-CT are taxes on products that are part of final consumption expenditure. These are mainly VAT and excise duties, particularly on alcoholic beverages, tobacco and energy items (fuel, heating oil, etc.), as well as taxes on some specific items such as cars, insurance and entertainment.<sup>3</sup> In principle, all taxes covered by the HICP-CT ought to be kept constant. However, for simplicity, taxes which generate very small revenues may be ignored in the calculation of the HICP-CT, in the sense that they are not kept constant, but change as recorded in the headline HICP.<sup>4</sup>

The HICP-CT is calculated using the same weights, index formulae and structure of aggregation as the headline HICP. The key difference is the treatment of taxes applied to the different products. In the HICP-CT, the tax rates are kept constant with their level for December of the previous year. In a given month, the current tax rates are removed from the consumer price and the tax rates from the previous December are applied instead. If all tax rates in a given

3 Subsidies directly related to final consumption are not considered within HICP-CT for the time being.

<sup>1</sup> Administered prices cover all goods and services with prices fully set or mainly influenced by government. See also the box entitled "Measuring and assessing the impact of administered prices on HICP inflation" in the May 2007 issue of the Monthly Bulletin.

<sup>2</sup> See http://epp.eurostat.ec.europa.eu/portal/hicp/methodology/hicp\_constant\_tax\_rates.

<sup>4</sup> Any individual tax which accounts for less than 2% of total tax revenue does not need be taken into account for the HICP-CT calculation, as long as the sum of all taxes which are kept constant in the index reaches a minimum level of 90% of the total tax revenue.

year have remained unchanged since December of the previous year, the HICP and the HICP-CT will show exactly the same monthly rates of change. Any differences in the developments between the HICP and the HICP-CT provide the upper bound for the realised impact of tax changes. Moreover, this impact is concentrated at the point in time when the change in the tax rate becomes effective. This is due to the fact that the methodology described above implicitly incorporates the mechanical assumption of a full and immediate pass through of tax changes to consumer prices. Although in reality the pass through is slower, for statistical purposes there is no practical alternative to assuming a full and immediate pass-through given that the index must be compiled on a monthly and timely basis.

In the period from December 2003 to August 2009, for the euro area, an average of 0.15 percentage point of the overall annual inflation can be attributed to changes in indirect tax rates. The mechanical effect of such changes in tax rates on inflation varies significantly over time. In fact, the largest difference (0.5 percentage point) was observed in 2007. This was mainly accounted for by the increase in the standard rate of VAT in Germany, which rose from 16% to 19% in January 2007. The tax rate changes between December 2002 and December 2007 had an impact on overall annual inflation on average of 0.21 percentage point. After December 2007 there are no significant differences between the HICP and the HICP-CT inflation rates, as there have been no major tax rate changes since then at the euro area level.

The case of the German VAT increase in 2007 illustrates the difference between the mechanical impact of changes in indirect taxation and the realised impact. This is captured by the difference in the annual growth rates of the HICP and the HICP-CT, which amounts to about 0.5 percentage point for the euro area (see chart). In practice, as the German VAT increase was announced well in advance, some of the increase was already anticipated in the last months of 2006. With the introduction of the change in January 2007, there was indeed a sharp increase in consumer prices, but the full pass-through was only realised with a lag by the end of 2007. According to estimates by the Deutsche Bundesbank, just under 30% of the total impact was



#### Impact of indirect tax changes on euro area HICP inflation

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anticipated in 2006, roughly one-third came at the beginning of 2007 and the remainder was accounted for by adjustments during the rest of 2007.<sup>5</sup>

This case study illustrates that, at the time of implementation of changes in tax rates, making use of the HICP-CT may lead to an overestimation of their realised impact, since the pass-through is assumed to be full and instantaneous. To the extent that the tax rate increase eventually passes through in full, this simply suggests that the timing and pace of the realised impact may differ from the mechanical ones implied by the HICP-CT. The overall realised impact may, however, also be smaller than the mechanically calculated one, depending on firms' pricing strategies. Still, the availability of the new euro area index and the data for its country correspondents will make it possible to pinpoint exactly when tax changes are implemented and their possible long-run impact on inflation.<sup>6</sup>

Together with the index for administered prices, the HICP-CT will permit a better and more transparent assessment of the impact of government measures on HICP inflation. Overall, the impact of both indirect taxation and administered prices on euro area inflation has not been negligible. Developments in such measures thus need to be taken into account when assessing overall inflationary pressures. Notably, indirect taxes limit the extent to which wages and profits may contribute to inflation without endangering price stability. The new HICP-CT index comes at a time when several euro area countries are discussing changes in indirect taxation and may therefore facilitate a better evaluation and anticipation of the possible impacts of such measures on inflation developments.

5 See the article entitled "Price and volume effects of VAT increase on 1 January 2007" in the Deutsche Bundesbank's April 2008 Monthly Report.

6 Eurostat will initially only publish the HICP-CT for the overall index without breakdowns for HICP components and with an additional one month delay vis-à-vis the headline HICP (i.e. around 45 days after the reference month, rather than 15). However, the eventual aim is to produce indices with the full breakdown for HICP components and the same timeliness as the HICP.

#### **3.2 INDUSTRIAL PRODUCER PRICES**

Supply chain price pressures remain very subdued. In September, the annual rate of change in industrial producer prices (excluding construction) diminished – to -7.7%, from -7.5% in August. This development was largely driven by the energy component. Despite an upward base effect, the annual rate of change in the energy component declined to -17.6% in September, from -16.7% in August, on account of a month-on-month decline in energy prices at the producer level. Excluding energy (and construction), annual producer price inflation decreased slightly to -4.3% in September, from -4.2% in the previous month, with the sub-components presenting a mixed picture. The annual rate of change in intermediate goods prices increased to -7.3%, from -7.4% in August. By contrast, at the later stages of the production chain, the annual rates of change in capital goods and consumer goods prices declined further to -0.5% and -2.7% respectively (see Chart 21).

Survey data on the price-setting behaviour of firms over recent months have indicated that downward price pressures are moderating (see Chart 22). With regard to the Purchasing Managers' Index (PMI), the input price index for manufacturing increased to a level above 50 in October, indicating rising input prices for the first time in 12 months. This development is possibly linked to higher commodity prices. The index for the services sector also rose but remained slightly below 50, signalling broadly stable costs for services providers. Likewise, indices of prices charged



in the manufacturing and services sectors rose but remained below 50. These developments indicate that, while companies are still offering discounts to stimulate sales of goods and services in the face of weak underlying demand, downward pressures on prices are moderating.

#### 3.3 LABOUR COST INDICATORS

Little new information on labour cost has become available since the previous issue of the Monthly Bulletin. On the whole, labour cost growth, which had peaked at the end of 2008, continued to decline in the second quarter of 2009, reflecting both lower wage growth per hour and fewer hours worked. Developments in these two variables have caused some differences in the behaviour of the annual rates of growth in negotiated wages, compensation per employee and hourly labour costs (see Chart 23 and Table 5).

The annual rate of growth in negotiated wages in the euro area dropped from 3.2% in the first quarter of 2009 to 2.8% in the second quarter. This substantial fall is likely to have reflected workers' reduced bargaining power as a consequence of the sharp downturn in economic





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#### Table 5 Labour cost indicators

(annual percentage changes; unless otherwise indicated	)						
	2007	2008	2008	2008	2008	2009	2009
			Q2	Q3	Q4	Q1	Q2
Negotiated wages	2.1	3.2	2.9	3.4	3.6	3.2	2.8
Total hourly labour costs	2.5	3.4	2.5	3.6	4.2	3.6	4.0
Compensation per employee	2.5	3.2	3.1	3.5	2.9	1.8	1.6
Memo items:							
Labour productivity	1.0	-0.1	0.3	0.0	-1.7	-3.7	-3.1
Unit labour costs	1.5	3.2	2.8	3.5	4.6	5.8	4.8

Sources: Eurostat, national data and ECB calculations.

activity, the large increase in unemployment and the significant drop in inflation. As negotiated wages capture agreed wage increases through collective agreements, this indicator tends to react to changes in economic conditions with a lag. Available information signals that the annual rate of growth in negotiated wages may have slowed further in the third quarter of 2009.

The annual growth rate of compensation per employee declined further to 1.6% in the second quarter of 2009, from 1.8% in the first quarter. The further moderation in the annual growth rate of this indicator resulted from lower wage growth, shorter working hours and cuts in flexible pay elements. The sectoral decomposition indicates that the slowdown in compensation per employee growth in the second quarter of 2009 was driven predominantly by developments in industry (excluding construction) and non-market services (see Chart 24).

The annual growth rate of hourly labour costs in the euro area remained high at 4.0% in the second quarter of 2009, rebounding somewhat from the weaker rate recorded in the first quarter of the year. The persistently strong growth in hourly labour costs is apparently still being driven by the impact of the various measures taken in several euro area economies to reduce the number of hours worked per employee, as the reduction in hours worked is often accompanied by a less than proportional



Note: CPE stands for "compensation per employee" and LCI stands for "labour cost index".

decrease in remuneration.<sup>1</sup> Owing to the fact that the industrial sector is most strongly affected by such adjustment measures, the year-on-year increase in hourly labour costs was highest in this sector in the second quarter of 2009. Moreover, the fact that Easter fell in the second quarter of 2009 (after falling in the first quarter in 2008) also contibuted to a year-on-year reduction in hours worked, which boosted hourly labour costs in the second quarter of 2009.

Annual productivity in terms of output per employee fell less in the second quarter of 2009 (3.1%) than in the first quarter (3.7%). This more moderate decline in productivity, combined with the slowdown in the annual rate of growth in compensation per employee, helped to ease somewhat the annual growth in unit labour costs to 4.8% in the second quarter of 2009, from 5.8% in the first quarter. Considering that its average level since the start of EMU is 1.8%, annual unit labour cost growth nevertheless remains very high.

Despite the very high rates of growth in unit labour costs in the first two quarters of the year, the euro area GDP deflator, a summary indicator of domestic price pressures, declined over the same period, largely on account of a sharp contraction in profits. Against this background, Box 6 discusses developments in profit margins.

1 See also the box entitled "Labour market adjustments during the current contraction of economic activity" in the June 2009 issue of the Monthly Bulletin.

#### Box 6

#### **DEVELOPMENTS IN PROFIT MARGINS**

One important determinant of changes in inflation is the gap between the prices charged by businesses and the costs that they face, the so-called "mark-up". A rough proxy at the macro-level of such a mark-up is the profit margin indicator, calculated as the difference between the GDP deflator at factor cost and the unit labour cost. This box discusses developments in the profit margin indicator.

Chart A shows that the evolution of the profit margin indicator broadly matches profits measured in terms of gross operating surplus, a widely used indicator available from national accounts data.<sup>1</sup> The contraction in the profit margin indicator, which started in the first quarter of 2008, intensified progressively until the first quarter of 2009 before stabilising in the second quarter of 2009. Annual growth in the profit margin indicator for the euro area was about  $-3\frac{1}{2}\%$  in the first half of 2009, its lowest level since the ESA 95-based data series started in 1996. The sharp contraction in profit margins took place despite the fact that raw materials prices (including energy prices), which are important non-labour input costs, sharply declined from their peak levels of mid-2008.

Changes in profit margins affect price developments. Indeed, the moderation in the euro area GDP deflator – a summary indicator of unit labour cost and profit developments – observed since the beginning of 2009 is characterised predominantly by a contraction in profits due to an easing of demand conditions.<sup>2</sup> The fall in profit margins has offset the effects of higher labour costs

1 For an overview and a discussion of the caveats associated with the measurement of profit in the euro area, see the article entitled "Measuring and analysing profit developments in the euro area" in the January 2004 issue of the Monthly Bulletin.

<sup>2</sup> See also the box entitled "Recent trends in the HICP excluding food and energy" in the October 2009 issue of the Monthly Bulletin.

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Sources: Eurostat and ECB calculations. 1) GDP deflator at factor cost minus the unit labour cost. 2) Gross operating surplus.

on the GDP deflator (see Chart B). Unit labour cost growth has risen sharply in recent quarters, reflecting labour hoarding policies adopted by many companies at a time of a severe economic downturn.

Profit mark-up developments depend, inter alia, on competition factors and on the relative speed of the adjustment of selling prices relative to labour and non-labour costs. The speed of the adjustment of prices is thought to be linked to demand conditions, particularly economic slack, which can be represented by measures of the output gap. However, as the output gap is not an observable variable and as its estimation is surrounded by a high degree of uncertainty, the capacity utilisation rate in the manufacturing industry is often used as a proxy for economic slack. In fact, past experience shows that a rise in the capacity utilisation rate is associated with an increase in the profit margin indicator and vice versa (see Chart C).<sup>3</sup> Available data for the capacity utilisation rate for the second half of 2009 point to a slight reduction in economic slack.





3 Economic theory cannot unambiguously determine how profit margins and mark-ups change with demand conditions. For a discussion, see C. Macallan and M. Parker, "How do mark-ups vary with demand", Bank of England, *Quarterly Bulletin*, second quarter 2008.

This is likely to be consistent with the decline in profit margins having bottomed out in the first half of this year.

Looking ahead, in the coming quarters the labour market is likely to continue to deteriorate, even though demand has already started to pick up. These developments should push productivity up, which, in turn, should benefit profit margins. In addition, profit margins should benefit from restructuring measures implemented during the recent downturn.

#### 3.4 THE OUTLOOK FOR INFLATION

Over the short term, the outlook for annual HICP inflation will continue to be shaped mainly by upward base effects relating to the drop in energy prices in the second half of 2008. Also relating to these base effects, annual inflation rates are projected to turn positive in the coming months. Looking further ahead, inflation is expected to remain positive, with overall price and cost developments remaining subdued in an environment of sluggish demand in the euro area and elsewhere.

The latest ECB Survey of Professional Forecasters (see Box 7) shows that short-term inflation expectations have been revised slightly downwards for 2009 and slightly upwards for 2010, and lie within the ranges published in the ECB staff macroeconomic projections of September 2009. The long-term inflation expectations have been revised marginally downwards, to 1.92%, from 1.98% in the previous survey round.

Risks to the outlook for price developments remain broadly balanced. They relate, in particular, to the outlook for economic activity and to the evolution of commodity prices. Furthermore, increases in indirect taxation and administered prices may be stronger than currently expected owing to the need for fiscal consolidation in the coming years.

#### Box 7

#### **RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE FOURTH QUARTER OF 2009**

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the fourth quarter of 2009. The survey was conducted between 15 and 19 October 2009. There were 56 responses from forecasters. The SPF collects information on expectations for euro area inflation, 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 2009, 2010 and 2011

Compared with the previous round conducted in July, SPF participants revised their inflation expectations downwards by 0.1 percentage point to 0.3% for 2009 and upwards by 0.1 percentage point to 1.2% for 2010 (see the table below).<sup>2</sup> Inflation expectations for 2011

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



Prices and costs

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

(annual percentage changes, unless otherwise indicated)

		Survey horizon						
HICP inflation	2009	September 2010	2010	September 2011	2011	Longer-term <sup>2)</sup>		
SPF Q4 2009	0.3	1.3	1.2	1.7	1.6	1.9		
Previous SPF (Q3 2009)	0.4	-	1.1	-	1.6	2.0		
ECB staff macroeconomic projections	0.2 - 0.6	-	0.8 - 1.6	-	-	-		
Consensus Economics (Oct. 2009)	0.3	-	1.2	-	1.5	2.0		
Euro Zone Barometer (Oct. 2009)	0.3	-	1.1	-	1.5	2.2		
Real GDP growth	2009	Q2 2010	2010	Q2 2011	2011	Longer-term <sup>2)</sup>		
SPF Q4 2009	-3.9	1.2	1.0	1.6	1.6	1.9		
Previous SPF (Q3 2009)	-4.5	-	0.3	-	1.5	1.9		
ECB staff macroeconomic projections	-4.43.8	-	-0.5 - 0.9	-	-	-		
Consensus Economics (Oct. 2009)	-3.9	-	1.1	-	1.5	1.9		
Euro Zone Barometer (Oct. 2009)	-3.9	-	1.2	-	1.6	2.2		
Unemployment rate <sup>1)</sup>	2009	August 2010	2010	August 2011	2011	Longer-term <sup>2)</sup>		
SPF Q4 2009	9.5	10.7	10.6	10.4	10.4	8.5		
Previous SPF (Q3 2009)	9.7	-	10.9	-	10.6	8.5		
Consensus Economics (Oct. 2009)	9.5	-	10.7	-	-	-		
Euro Zone Barometer (Oct. 2009)	9.5	-	10.7	-	10.4	9.1		

1) As a percentage of the labour force.

2) Longer-term inflation expectations refer to 2014 in the SPF and Consensus Economics and to 2013 in the Euro Zone Barometer.

remained unchanged at 1.6%. In their comments, many respondents reported that the large output gap and capacity underutilisation would exert downward pressures on inflation, which is expected to remain below 2% in the medium term. Most respondents commented that the main upward risks to inflation were increases in oil and commodity prices.

The SPF inflation expectations for 2009 and 2010 are within the ranges reported in the September 2009 ECB staff macroeconomic projections for the euro area. They are also broadly in line with the projections of the October issues of Consensus Economics and the Euro Zone Barometer for the years 2009, 2010 and 2011.

SPF participants were also asked to assess the probability of the future outcome for inflation falling within specific intervals. For 2009 the SPF respondents assigned a 71% probability that inflation might be between 0.0% and 0.4%. The probability distribution for 2010 is concentrated more clearly within the 0.5% and 1.9% interval compared with the previous SPF round and for 2011 it has slightly shifted towards lower outcomes (see Chart A). Based on the individual probability distributions, the balance of risks to these forecasts is assessed by respondents to be on the downside (there are more respondents with a point estimate above the mean of their probability distribution than respondents with the point estimate below the mean).

#### Indicators of longer-term inflation expectations

Longer-term inflation expectations (for the year 2014) have been revised downwards to 1.92%, from 1.98% in the previous SPF round. The average point estimate is below the long-term inflation projections provided by Consensus Economics (at 2.0%) and the Euro Zone Barometer (at 2.2%), published in October 2009.

The downward revision of the average point estimate to 1.92% in this SPF round is combined with a broadly stable standard deviation of the point estimates. At the same time, a bi-modality of



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

the cross-sectional distribution, which was visible in the early years of the SPF, can be observed once again in the SPF round relating to the fourth quarter of 2009: there are more respondents reporting a point estimate of 1.8% and 2.0% than of 1.9% (see Chart B). Finally, the probability assigned to longer-term inflation standing at 2% or above decreased to 44%, from 48% in the previous SPF round (see Chart C).

These survey results can be compared with the break-even inflation rate, an indicator of longerterm inflation expectations among financial market participants, calculated as the yield spread between nominal and inflation-linked bonds.<sup>3</sup> Overall, expectations derived from financial markets (e.g. the seasonally adjusted, implied five-year forward break-even inflation rate five years ahead) have slightly exceeded measures available from the surveys and have been much more volatile (see Chart C). However, a direct comparison of financial and survey measures of inflation expectations is not straightforward. The break-even inflation rate, for example, encompasses the overall inflation compensation requested by financial market participants, which consists of both the expected level of inflation and a premium to compensate for inflation risks. Although disentangling both these components is not easy, findings suggest that inflation risk premia in the euro area are typically the main driver of fluctuations in the long-term break-even inflation rates.<sup>4</sup> In addition, against the background of the financial market crisis, financial market-based inflation expectations have been somewhat erratic and may have been distorted by investors' efforts to reduce risk and leverage and their strong preference for more secure and liquid assets.<sup>5</sup>

<sup>3</sup> See also the article entitled "Measures of inflation expectations in the euro area" in the July 2006 issue of the Monthly Bulletin.

<sup>4</sup> Hördahl, P. and O. Tristani (2007), "Inflation risk premia in the term structure of interest rates", ECB Working Paper Series No 734.

<sup>5</sup> For a further discussion of 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" in the November 2008 issue of the Monthly Bulletin.

Prices and costs



Source: ECB.



#### **Real GDP growth expectations**

SPF respondents have revised their growth expectations for 2009 significantly upwards since the last survey, by 0.6 percentage points, and now expect euro area real GDP to contract by 3.9% in 2009. Growth expectations for 2010 and 2011 have also been revised upwards (by 0.7 and 0.1 percentage points, respectively) and now stand at 1.0% and 1.6%, respectively. In their comments, the respondents generally referred to the recovery of global trade (led by emerging markets), as well as the positive contribution from inventories and the effects of the policy measures taken by governments and the ECB as the main factors shaping the euro area activity outlook. Several factors were mentioned that might hinder euro area real GDP growth: (i) tight lending standards and low capacity utilisation negatively affecting investment; (ii) an appreciation of the euro hampering exports; and (iii) the deteriorating labour market outlook in terms of high unemployment, and further deceleration of wage growth, lowering real income and consumption. Some respondents noted that growth could lose some momentum in the first half of 2010, as the various economic stimulus packages are phased out.

The SPF growth expectations for 2009 are close to the upper limit of the range reported in the September 2009 ECB staff macroeconomic projections for the euro area, while those for 2010 are above the range. The SPF growth expectations for 2009, 2010 and 2011 are broadly in line with the latest Consensus Economics and the Euro Zone Barometer forecasts.

In line with the significant upward revision of expected real GDP growth, the aggregate probability distribution for 2009 has shifted towards higher outcomes. The respondents have assigned a 51% probability that real GDP growth will be in the range from -4.0% to -3.6%.

74

70

66

62

58

54

50

46

42

38

34



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

The aggregate probability distribution for 2010 has also shifted towards higher outcomes, while that for 2011 has remained broadly unchanged (see Chart D).

Uncertainty, as measured by the standard deviation of the aggregate probability distribution, surrounding the one-year-ahead and two-year-ahead real GDP forecasts has increased since the beginning of 2008, reaching its highest level in the second quarter of 2009, and somewhat declining in the fourth quarter of 2009, but remaining at a high level. According to SPF forecasters, the balance of risks for 2009 appears to be on the upside, while it is assessed to be on the downside for 2010 and 2011.

Longer-term growth expectations (for 2014) have remained unchanged at 1.9%. They are in line with those provided by Consensus Economics and slightly below those of the Euro Zone Barometer, published in October. Based on the individual probability distributions, the respondents assess the balance of risks as being on the downside.

#### Expectations for the euro area unemployment rate

Unemployment rate expectations were revised downwards by 0.2 and 0.3 percentage points for 2009 and 2010 and now stand at 9.5% and 10.6%, respectively. Respondents, on average, expect the unemployment rate to be at 10.4% in 2011 (a downward revision of 0.2 percentage points). The balance of risks to short and medium-term expectations is assessed to be on the upside for 2009, on the downside for 2010 and slightly on the upside for 2011. Longer-term unemployment rate expectations (for 2014) are unchanged at 8.5% and the balance of risks to the longer-term outlook is assessed to be on the upside.



Output, demand and the labour market

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

The latest survey indicators and hard data signal that real GDP growth could be back in positive territory in the second half of this year. In particular, economic growth should benefit from a positive contribution from inventories, stronger exports, as well as from the significant macroeconomic stimulus under way and the measures adopted to restore the functioning of the financial system. However, uncertainty remains high as a number of the supporting factors are of a temporary nature. Looking through the volatility of incoming data, the euro area economy is expected to recover at a gradual pace in 2010, as it is likely to be affected over the medium term by the process of ongoing balance sheet adjustments in the financial and the non-financial sectors, both inside and outside the euro area. The risks to this outlook remain broadly balanced.

#### 4.1 REAL GDP AND DEMAND COMPONENTS

The pace of contraction in euro area activity slowed markedly in the second quarter of 2009. According to Eurostat's second estimate, euro area real GDP fell by -0.2% (quarter on quarter) in the period between April and June of 2009, following a decline of 2.5% in the first quarter of 2009.

Eurostat's second estimate confirmed that the fall in second quarter real GDP growth was driven by a large negative contribution from inventories and a slightly negative contribution from domestic demand, which were largely offset by a positive contribution from net trade (see Chart 25). The second quarter release marks the first improvement in euro area quarterly GDP growth since the beginning of 2008 and confirms the view that economic activity in the euro area tended to stabilise in the spring, following the declines recorded in the previous four quarters.

Private consumption growth returned to positive territory in the second quarter of 2009, after contracting sharply in the previous two quarters. According to Eurostat's second estimate, private consumption grew by 0.1% (quarter on quarter) in the second quarter.

Incoming surveys and hard data over the past month signal a somewhat mixed picture for household spending in the second half of 2009. On the one hand, surveys with a bearing on consumption suggest a gradual improvement. For instance, the European Commission indicator of euro area consumer confidence continued to increase in October for the seventh consecutive month. On the other hand, retail sales (including sales of fuels) contracted by 0.7% (quarter on quarter) in the third quarter of 2009, from -0.4% in the previous quarter.

Government-sponsored subsidies to encourage consumers to scrap old cars and buy new ones continued to buttress demand in the third quarter of 2009, but the support was much lower compared with the strong impact these subsidies



had in the first half of the year. Seasonally adjusted monthly data on new car registrations for September showed a small decline compared with the registrations recorded in August. On a quarterly basis, car registrations increased by 1.4% in the third quarter following a 12.2% increase in the second quarter.

All in all, while recent dynamics in consumer surveys point to improved consumer sentiment, the latest data on retail trade and car registrations are consistent with the assessment of relatively subdued consumer spending in the latter part of 2009.

In line with the pattern observed in previous periods of economic recession, gross fixed capital formation has been one of the main drivers of the current slowdown in economic activity. In the second quarter of 2009, gross fixed capital formation declined by 1.5% quarter on quarter. This decline was, however, much less pronounced than those seen in the fourth quarter of 2008 and the first quarter of 2009,



when investment dropped by 3.5% and 5.4%, respectively. As regards recent published indicators on investment, euro area industrial new orders rose slightly in August, while construction production declined marginally in the same month.

Investment growth is expected to improve gradually but to remain in negative territory in the second half of 2009. Subdued final demand and a low level of capacity utilisation are expected to dampen investment decisions. At the same time, declining profits will probably also exert downward pressure on investment. However, the expected decline in investment growth may be partly outweighed by the recently declining cost of finance and some signs of an improved export environment.

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

Eurostat's second estimate of real value added in the second quarter of 2009 showed a further contraction in the industrial sector, while the quarterly growth rate of the services sector returned to positive territory, after declining in two consecutive quarters.

Available industrial production data for the third quarter of 2009 confirm a return to expansion in industrial activity in the third quarter of 2009. Industrial production grew by 1.6% in July and August compared with the second quarter. However, production still remains at a very low level. It is important to note that indicators of short-term industrial production developments during turbulent periods may be subject to large revisions and the outcomes should, therefore, be interpreted with more caution than is normally the case.

Output, demand and the labour market



Business surveys released in October also point towards an ongoing improvement in industrial activity, albeit from a low level (see Chart 28). The Purchasing Managers' Index (PMI) for the manufacturing sector continued to improve in October, reaching a level slightly above 50 (a value above 50 indicating an increase in production and a value below 50 indicating that production is contracting). The PMI also indicated that the pace of inventory destocking is slowing down. This development, all other things being equal, implies that inventories should contribute positively to GDP growth in the second half of the year. Other business surveys, such as the European Commission's business surveys, confirm the improved sentiment shown in the PMI data.

#### LABOUR MARKET

Conditions in euro area labour markets have continued to deteriorate in recent months. Eurostat's second estimate confirmed that euro area employment decreased by 0.5% (quarter on quarter) in the second quarter of 2009, compared with the 0.7% decline observed in the first quarter (see Table 6). This development suggests that the pace of contraction in employment may have begun to slow down. The unemployment rate in the euro area rose to 9.7% in September (see Chart 31), an increase of 0.1 percentage point compared with the previous month.

The latest reading of business surveys suggests that employment growth should continue to contract in the third quarter of 2009, albeit at a slower pace (see Chart 29). In October, employment intentions reported in the PMI survey increased marginally for both the industrial and

#### Table 6 Employment growth

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

	Annual rates		Quarterly rates				
	2007	2008	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2
Whole economy of which:	1.8	0.8	0.1	-0.3	-0.3	-0.7	-0.5
Agriculture and fishing	-1.5	-1.4	-1.1	-0.6	0.3	-0.7	-0.8
Industry	1.4	-0.8	-0.3	-1.0	-1.3	-1.7	-1.5
Excluding construction	0.3	-0.2	-0.1	-0.6	-1.0	-1.5	-1.5
Construction	3.9	-2.2	-0.9	-2.0	-2.1	-2.1	-1.5
Services	2.1	1.4	0.3	0.0	0.0	-0.4	-0.1
Trade and transport	2.0	1.3	0.1	-0.2	-0.4	-0.8	-0.5
Finance and business	4.1	2.2	0.0	0.0	-0.4	-0.8	-0.6
Public administration 1)	1.2	1.1	0.6	0.1	0.6	0.1	0.5

Sources: Eurostat and ECB calculations.

1) Also includes education, health and other services

the services sectors. However, the levels are still hovering well below the 50 threshold, implying that employment is still contracting in the two sectors. In the same vein, surveys on employment intentions conducted by the European Commission also increased slightly in October, but the prevailing levels remain low from a historical perspective.

Despite the past few quarters of contraction, it should be emphasised that euro area employment has been relatively resilient throughout the turmoil, when considering the significant fall observed in economic activity. In that context, labour productivity (in terms of output per employee) continued



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to contract in the second quarter of 2009, falling by 3.1% year on year (see Chart 30). Looking ahead, productivity is expected to recover gradually in the latter part of 2009, driven by a combination of a further deterioration in employment and a gradual strengthening in economic activity.

#### **4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY**

Following the strong negative growth rates observed around the turn of the year, according to Eurostat's second estimate, economic activity in the euro area declined only slightly in the second quarter of 2009, i.e. by 0.2% compared with the previous quarter.

The latest survey indicators and hard data signal that real GDP growth could be back in positive territory by the second half of this year. In particular, economic growth should benefit from a positive contribution from inventories, improved exports, as well as from the significant macroeconomic stimulus under way and the measures adopted to restore the functioning of the financial system. However, uncertainty remains high as a number of the supporting factors are of a temporary nature. Looking through the volatility of incoming data, the euro area economy is expected to recover at a gradual pace in 2010, as it is likely to be affected over the medium term by the process of ongoing balance sheet adjustments in the financial and the non-financial sectors, both inside and outside the euro area.

The latest ECB Survey of Professional Forecasters (SPF) for the fourth quarter of 2009 shows upward revisions to near-term euro area growth prospects (see Box 7). SPF respondents have revised their growth expectations for 2009 significantly upwards since the last survey, by 0.6 percentage points, and now expect euro area real GDP to contract by 3.9% in 2009. Growth expectations for 2010 and 2011 have also been revised upwards (by 0.7 and 0.1 percentage points, respectively) and now stand at 1.0% and 1.6%, respectively.



The risks to the outlook for economic activity remain broadly balanced. On the upside, there may be stronger than anticipated effects stemming from the extensive macroeconomic stimulus being provided as well as from other policy measures taken. Confidence may also improve more quickly, the labour market deterioration may be less marked than previously expected, and foreign demand may prove to be stronger than projected. On the downside, concerns remain relating to a stronger or more protracted negative feedback loop between the real economy and the financial sector, renewed increases in oil and other commodity prices, the intensification of protectionist pressures and the possibility of a disorderly correction of global imbalances.



Exchange rate and balance of payments developments

### 5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

#### **5.I EXCHANGE RATES**

The euro exchange rate has continued to strengthen in nominal effective terms over the past three months, reaching levels close to its 2008 peak. Since the end of July the strengthening of the euro has mainly reflected its appreciation vis-à-vis the US dollar, the pound sterling and the major Asian currencies linked to the US dollar.

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

Following some stabilisation in August, the nominal effective exchange rate of the euro as measured against the currencies of 21 of the euro area's most important trading partners resumed its appreciation in September and October. Towards the end of October it stood close to its 2008 peak, but moderated thereafter. On 4 November the nominal effective exchange rate of the euro was 2.6% stronger than at the end of July and 2.7% stronger than its average 2008 level. Over the last three months the appreciation has primarily been driven by the developments in the bilateral euro rates vis-à-vis the US dollar, the pound sterling and the major Asian currencies linked to the US dollar (see Chart 32).

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

While in August the USD/EUR exchange rate remained broadly stable, in September and most of October the euro strengthened again vis-à-vis the US dollar. This reflected a rather broad-based depreciation of the US dollar against a larger set of currencies, reportedly as a result of the low US interest rates and declining global risk perceptions (see Chart 33). Over the last three months the implied volatility of the USD/EUR exchange rate has remained at close to its average value over the past ten years. On 4 November the euro was trading at USD 1.48, 4.4% higher than at the end of July and 0.3% above its 2008 average.

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

Over the last three months the bilateral exchange rate of the euro vis-à-vis the Japanese yen has



 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).
 Contributions to EER-21 changes are displayed individually

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 euro area in the EER-21 index. Changes are calculated using the corresponding overall trade weights in the EER-21 index.



fluctuated between JPY 130 and JPY 138. It has reportedly been affected by changes in the overall risk perception in financial markets and market considerations regarding Japanese exchange rate policy. In the same period the implied volatility of the JPY/EUR exchange rate has continued to decrease, but has remained above its historical average. On 4 November the euro stood at JPY 134, 0.8% lower than at the end of July and 11.8% weaker than its 2008 average.

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

Over the three months to 4 November most currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates (see Chart 34). The Latvian lats, however, depreciated against the euro in September and thereafter remained close to the weak side of the  $\pm 1\%$  unilaterally set fluctuation band.



Source: LCD. 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.



Exchange rate and balance of payments developments

As regards the currencies of the EU Member States not participating in ERM II, the euro strengthened considerably against the pound sterling over the three months to 4 November amid increases in the implied volatility of the bilateral GBP/EUR exchange rate. On 4 November the euro was 4.4% stronger vis-à-vis the pound sterling than at the end of July and 12.1% stronger than its 2008 average. The recent developments in the bilateral GBP/EUR exchange rate have reportedly been affected by weaker than expected economic data and market uncertainty over the economic outlook in the United Kingdom. Over the last three months the euro has also appreciated against the Hungarian forint, the Polish zloty and the Czech koruna, by 4.0%, 2.7% and 2.0% respectively, following an almost uninterrupted depreciation that started in early March. The euro also strengthened vis-à-vis the Swedish krona, by 1.0%.

#### **OTHER CURRENCIES**

Over the three months to 4 November the euro weakened by 1.3% against the Swiss franc amid some fluctuations. Over the same period the bilateral euro exchange rates vis-à-vis the Chinese renminbi and the Hong Kong dollar closely followed the developments in the USD/EUR exchange rate. As a result the euro appreciated vis-à-vis the Chinese renminbi and the Hong Kong dollar, by 4.3% and 4.4% respectively.

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

Extra-euro area exports of goods rose in the three-month period to August, while the contraction in goods imports continued to moderate. Consequently, the 12-month cumulated current account deficit of the euro area narrowed to  $\epsilon$ 98.5 billion in the year to August (1.1% of GDP). In the financial account, the euro area recorded strong net inflows in equity securities and moderate net outflows in bonds and notes in the three-month period to August. This reflected a partial reversal of euro area residents' repatriation of funds and a shift in non-residents' investment in the euro area from debt securities to equities.

#### TRADE AND THE CURRENT ACCOUNT

Extra-euro area exports of goods rose in the threemonth period to August, while the contraction in goods imports continued to moderate. Supported by strengthening foreign demand and a gradual reactivation of international supply chains, extraeuro area exports of goods grew by 2.0% in the three-month period to August compared with the previous three-month period (see Chart 35). Over the same period the pace of the decline in goods imports slowed to -3.4%. However, the stabilisation of goods imports continued to lag behind that observed for exports, reflecting the weakness in euro area domestic demand as well as destocking. In parallel, both imports and exports of services contracted further (see Table 7). This is in line with the fact that global activity has recently rebounded more slowly in the services sector than in the manufacturing sector.

#### Chart 35 Extra-euro area trade in good

(three-month-on-three-month percentage changes; EUR billions; three-month moving averages; monthly data; working day and seasonally adjusted)





Reflecting these developments in extra-euro area trade, the surplus in the 12-month cumulated goods balance increased further in August, having returned to positive territory in July (see Chart 36). Together with lower deficits in the income account and current transfers, this contributed to a further narrowing of the euro area current account deficit, to  $\notin$ 98.5 billion (about 1.1% of GDP) in 12-month cumulated terms in August. However, the deficit in August was still higher than a year earlier owing to a smaller surplus in services trade.

The geographical breakdown of extra-euro area export values of goods – based on Eurostat's External Trade Statistics – indicates that export developments have lately been markedly less uniform across destinations than at around the turn of the year. On the one hand, exports to the OPEC countries, the United States and central and eastern European countries declined significantly in the three-month period to August compared with the previous three-month period. On the other hand, exports to non-euro area EU Member States edged closer to positive growth and exports to Asia, albeit less buoyant than in previous months, continued to grow.

Available indicators suggest that the gradual rebound in extra-euro area exports of goods will continue in the near term. In October the Purchasing Managers' Index (PMI) of new export orders in the euro area manufacturing sector posted its eighth consecutive increase, standing above the expansion/contraction threshold of 50 (see Chart 37). In the light of the sizeable import content of euro area exports, the improved outlook for exports is also likely to support extra-euro area imports. However, given the high volatility in monthly trade data, some fluctuations in the growth of extra-euro area trade in the months ahead cannot be ruled out.



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(seasonally adjusted data, unless otherwise indicated)									
				Three-mont	12-month cumulated				
	2009	2000	2008	2000	2000	2000	2008	2000	
	July	2007 Ang.	Nov.	Eeb.	May	Ang.	2000 Ang.	200) Ang.	
	ouij	El	UR billions	1001		. Tugi	. rug.		
Current account	4.9	-0.1	-13.6	-13.8	-6.6	1.2	-93.7	-98.5	
Goods balance	9.4	6.0	-0.2	-3.3	0.8	6.5	3.9	11.5	
Exports	108.4	105.5	128.4	109.5	104.5	106.7	1.586.2	1 347 3	
Imports	99.0	99.5	128.6	112.8	103.7	100.1	1.582.3	1.335.8	
Services balance	3.1	1.8	1.9	2.7	2.2	1.8	47.3	25.8	
Exports	38.1	38.6	42.6	40.2	39.1	37.9	509.1	479.6	
Imports	35.0	36.8	40.8	37.5	36.9	36.1	461.8	453.7	
Income balance	-1.4	-0.7	-7.0	-4.8	-1.9	-1.2	-49.3	-44.8	
Current transfers balance	-6.2	-7.2	-8.3	-8.3	-7.7	-6.0	-95.6	-91.0	
Financial account <sup>1)</sup>	-9.7	0.2	16.4	19.7	11.4	-6.9	107.7	121.8	
Combined net direct and portfolio									
investment	5.5	57.3	52.0	8.3	37.2	31.1	28.1	385.9	
Net direct investment	8.5	3.8	-26.6	-12.5	-4.5	0.3	-107.6	-129.8	
Net portfolio investment	-3.0	53.4	78.6	20.8	41.7	30.8	135.6	515.7	
Equities	27.4	40.7	-22.2	-11.9	6.2	31.2	96.0	9.8	
Debt instruments	-30.4	12.7	100.8	32.7	35.5	-0.3	39.7	505.9	
Bonds and notes	-45.2	1.3	18.7	30.0	24.8	-10.8	103.9	188.3	
Money market instruments	14.8	11.5	82.1	2.6	10.7	10.5	-64.2	317.6	
	Perc	entage chan	nges from pre	vious period					
Goods and Services									
Exports	2.4	-1.7	-3.4	-12.5	-4.0	0.6	6.6	-12.8	
Imports	-3.1	1.7	-3.3	-11.3	-6.4	-3.2	9.4	-12.5	
Goods									
Exports	2.1	-2.7	-4.6	-14.7	-4.6	2.0	6.3	-15.1	
Imports	-2.9	0.5	-5.6	-12.3	-8.1	-3.4	9.9	-15.6	
Services									
Exports	3.1	1.1	0.6	-5.8	-2.6	-3.1	7.7	-5.8	
Imports	-3.7	5.1	4.6	-8.0	-1.5	-2.4	7.7	-1.7	

Source: ECB.

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

#### **FINANCIAL ACCOUNT**

In the three months to August euro area residents continued to increase their net purchases of both foreign debt securities and equities. Hence, the repatriation of funds that occurred during the financial turmoil, at around the turn of the year, was partially reversed, pointing to a smaller home bias in financial investment. Improved financial market conditions, subsiding risk aversion and the more favourable global economic outlook are likely to have been the main drivers of this development. At the same time non-residents' investment in the euro area shifted from debt securities to equities, adding to signs of renewed risk appetite on the part of investors amid rising stock markets in the period under consideration.

These developments resulted in strong net inflows in equity securities and moderate net outflows in bonds and notes in the three-month period to August (see Chart 38). While the net inflows in equities have been supported by improvements in euro area firms' expected earnings growth over the past few months, the net outflows in bonds and notes are noteworthy given that returns on euro area bonds have improved recently with respect to those on bonds in other major economies (e.g. the United States). This reinforces the view that the main factors driving the net outflows in bonds and



notes appear to have been the shift in foreign investors' demand between asset classes – i.e. from debt securities to equities – and euro area residents' increased demand for a broad set of foreign securities. Notably, these developments have also led to a break from the close co-movement of assets and liabilities in bonds and notes observed between late 2006 and early 2009. While foreign investment in euro area bonds and notes has decreased since early 2009, turning negative in July (in terms of three-month moving averages), euro area investment in foreign bonds and notes has gradually increased, shifting from negative to positive territory in June.

Turning to the other items of the financial account, the euro area continued to record net inflows in money market instruments in August (in terms of three-month moving averages), although they remained well below the peak levels observed last year. Furthermore, direct investment flows were virtually balanced on average, as both euro area direct investment abroad and foreign direct investment in the euro area remained subdued.

Overall, mainly driven by strong inflows in equities, the euro area recorded a slight increase in the average net inflows in combined direct and portfolio investment in August compared with July (in terms of three-month moving averages). In 12-month cumulated terms, net inflows in combined direct and portfolio investment reached €385.9 billion in August, compared with €28.1 billion a year earlier.

As regards the euro area international investment position (i.i.p.), the net liabilities of the euro area vis-à-vis the rest of the world at the end of the second quarter of 2009 were lower than at the end of the previous quarter, amounting to  $\notin$ 1.6 trillion (about 17% of GDP). It should be noted that these data include significant revisions – from 2004 onwards – stemming from an improvement in the compilation method used for the euro area i.i.p. and balance of payments.

### ARTICLES

### CENTRAL BANK COMMUNICATION IN PERIODS OF HEIGHTENED UNCERTAINTY



Communication on, and transparency in, monetary policy – its mandate, strategy and decisionmaking – have become key elements of modern central banking. Communication is an essential tool for managing the expectations of the private sector. In doing so, it makes a significant contribution to enhancing the effectiveness and credibility of monetary policy. This is of particular importance in periods of heightened uncertainty where it is vital that the general public and participants in financial markets are given clear information on the central bank's primary mandate of ensuring price stability, the state of the economy and the rationale behind monetary policy decisions. With this in mind, the recent period of financial crisis and the associated economic downturn are a powerful illustration of the importance of appropriate communication. Since the start of the crisis in August 2007, the ECB has significantly intensified its communication with the general public and specialised audiences, explaining in detail the need for, and the workings of, its enhanced credit support measures. Furthermore, during these difficult times, the ECB has had to communicate clearly that the exceptional policy measures it has taken were fully consistent with its mandate of maintaining price stability and entailed a firm commitment to their being unwound once risks to price stability emerge and economic and financial conditions normalise. The ECB's additional communication efforts, coupled with long-standing transparency in its monetary policy framework, have supported the private sector's understanding of the ECB's monetary policy response to the financial crisis and economic downturn, both in terms of conventional interest rate policy action and in terms of liquidity management. Moreover, this combination has helped to keep long-term inflation expectations firmly anchored at levels consistent with the ECB's definition of price stability.

#### **I** INTRODUCTION

Over the last few decades, central banks worldwide have become increasingly transparent about their monetary policy-making processes. Part of the reason for this development has been the trend towards central bank independence and the corresponding increase in the reporting obligations. However, most central banks have gone far beyond strict legal requirements in their openness and transparency. The additional communication efforts can largely be attributed to an increasing awareness that transparency and communication contribute significantly to the effectiveness of monetary policy by reducing uncertainty and by influencing private sector expectations.1 Since long-term interest rates ignoring possible term and liquidity premia reflect current and expected future short-term rates, monetary policy can increase its leverage over long-term rates by providing guidance to the private sector by means of a transparent and credible monetary policy framework.

Effective communication becomes even more necessary in periods of heightened uncertainty when the general public is confronted with

a loss of confidence in the economy and the functioning of markets becomes severely impaired. The recent economic history has shown a few episodes in which financial distress has quickly affected the state of confidence and the real economy more broadly: the aftermath of the Asian crisis in the late 1990s, the bursting of the "dot-com bubble", the geopolitical tensions that followed the tragic events of 11 September 2001 and, most prominently, the recent episode of global financial crisis. While such situations may pose unprecedented communication challenges to central banks, this article shows that in these circumstances central bank communication, coupled with a stable and clear monetary policy strategy, plays a pivotal role in restoring trust and preserving confidence among participants in the financial markets. The focus is therefore on communication with expert audiences in financial markets, despite the fact that central banks worldwide have - as has the ECB - intensified their communication efforts with the general

See e.g. the article entitled "Expectations and the conduct of monetary policy" in the May 2009 issue of the Monthly Bulletin.
public as well, in particular since the start of the financial crisis in August 2007. Section 2 discusses the role of central bank communication in periods of heightened uncertainty from a conceptual perspective. Section 3 reviews the ECB's key external communications during the recent financial crisis. Section 4 offers some selected empirical evidence on the impact of ECB communications on the financial markets during this period, and Section 5 summarises the article and draws conclusions.

### 2 THE ROLE OF CENTRAL BANK COMMUNICATION IN PERIODS OF STRESS

In normal times, central banks utilise a variety of communication channels to familiarise the public, and in particular financial market participants and media representatives, with the way they think and operate. Most central banks carefully explain their mandate and the strategy with which they intend to achieve their policy objective. Being clear on its objectives and how it will pursue them helps a central bank to ensure that monetary policy and its systematic response to economic shocks is better understood by the private sector. Together with the frequent disclosure of the central bank's views on the state of the economy and how it is likely to develop, and the assessment of the monetary policy stance, transparency in the monetary policy strategy is instrumental in fostering credibility and in increasing the predictability of monetary policy actions.<sup>2</sup> As a consequence, transparency and effective communication can help to align market expectations with the views of the central bank and can facilitate the central bank's task of maintaining price stability.

The capacity of central bank communication to serve as a focal point for private expectations can become particularly valuable in the event of major shocks and market disruptions. In periods of stress when uncertainty about the economic outlook rises and markets may become disorientated, effective central bank communication is particularly important for a realignment of expectations regarding the future course of monetary policy and for conveying a sense of direction. For example, empirical evidence shows that additional information supplied by the central bank appears to help participants in financial markets primarily in times of considerable uncertainty, i.e. when there is a high degree of noise surrounding information held by market participants.<sup>3</sup> One of the reasons behind the recently increased interest in central bank assessments and communication on the part of market participants is the sharp increase in uncertainty and the abrupt drop in confidence that financial markets have experienced since the start of the financial crisis in August 2007. Uncertainty about the solvency and the health of financial institutions not only brought interbank trading to a virtual halt in the midst of the crisis in autumn 2008, but also seems to have led to a widespread increase in the value attached to information released by the central bank (see the box below).

<sup>2</sup> See e.g. T. Blattner, M. Catenaro, M. Ehrmann, R. Strauch and J. Turunen, "The predictability of monetary policy", *Occasional Paper Series*, No 83, ECB, March 2008, and A. S. Blinder, M. Ehrmann, M. Fratzscher, J. De Haan and D. Jansen, "Central bank communication and monetary policy: A survey of theory and evidence", *Journal of Economic Literature*, 46(4), 2008, pp. 910-945.

<sup>3</sup> See M. Ehrmann and M. Fratzscher, "Social value of public information: testing the limits to transparency", *Working Paper Series*, No 821, ECB, October 2007.

Central bank communication in periods of heightened uncertainty

#### Box

### FINANCIAL MARKET RESPONSE TO THE ECB'S COMMUNICATION DURING THE FINANCIAL CRISIS

The financial turmoil is a telling illustration of the increasing value that market participants may attach to the coordinating role of central bank communication in periods of heightened uncertainty. To demonstrate this, the chart compares the differences in financial markets' responses to the ECB's press conferences before and after the start of the financial turmoil in August 2007.1 To this end, the absolute average daily changes in three-month EURIBOR futures were calculated for the two years preceding the financial crisis and for the two years since the eruption of the crisis in August 2007. Using the absolute daily change implies that the aim is only to quantify the difference in the magnitude of the response to communication, and not its desired impact. The absolute daily change is calculated as the difference between the closing values of two consecutive days.<sup>2</sup>





Sources: Reuters and ECB calculations. Note: Difference between the mean absolute daily return in the periods from August 2005 to July 2007 and from August 2007 to July 2009.

The absolute daily change approximates, to a certain extent, the volatility of financial markets. To distinguish between a general increase in the movements of financial markets since the advent of the crisis and an increase in market movements related to the ECB's press conference, the changes were calculated for the days on which an interest rate-setting meeting of the Governing Council was held, then for all other Thursdays to control for weekday effects, and thereafter for all days.

Three interesting findings emerge from the analysis presented in the chart. First, financial market movements after the start of the crisis in August 2007 have generally been more pronounced than before. This can be seen from the fact that the bars referring to "all days" are in positive territory. Second, the size of the response of three-month EURIBOR futures to the ECB's monthly press conference has risen considerably more markedly than the general increase in market volatility since August 2007, which can be seen in the height of the bars indicating "days with Governing Council meetings".<sup>3</sup> This is particularly true for maturities over the three-month horizon

<sup>1</sup> For a more detailed discussion of the impact of the ECB's press conference on financial markets, see M. Ehrmann and M. Fratzscher, "Explaining monetary policy in press conferences", *International Journal of Central Banking*, 5, 2009, pp. 41-84.

<sup>2</sup> As the analysis is not based on intraday data, the results may contain financial market pricing responses to news not related to the ECB's press conference. In total, there were 59 other euro area-related statistical reports that were released on Governing Council meeting days in the period under review. For 49 of them, a Bloomberg survey capturing the mean expected value was available. It is possible to use this to measure the surprise component of each of these releases. Based on this measure of expectations, markets were surprised on four occasions during this period. However, a look at the intraday volatility on these days shows that no extraordinary trading activity surrounded these releases.

<sup>3</sup> To some extent, the noticeable response of markets to the Governing Council meetings at which interest rates are set may also be related to the simultaneous announcement of non-standard policy measures, such as supplementary longer-term refinancing operations or the purchases of covered bonds. See Section 4 of this article for a more detailed analysis of the financial market response to the ECB's communication on selected non-standard policy measures.

where uncertainty is generally highest. The large difference in the financial market response to the ECB's press conference before and after the start of the crisis suggests that markets have assigned more weight than before to the Governing Council's view on the economic outlook and risk assessment in the period after the onset of the financial turmoil. Moreover, the large market movements on Governing Council meeting days indicate that participants in financial markets have indeed received considerable amounts of relevant information from the central bank during this period. Finally, this difference in the financial market response is lowest for the EURIBOR futures that are closest to expiry (i.e. will expire in one or two months). These futures are usually prone to changes when markets are uncertain about the next interest rate decisions. However, the fact that markets have reacted to the ECB's announcements in a relatively similar manner before and after the start of the crisis in these segments suggests that the high degree of predictability in the ECB's interest rate decisions has remained virtually unchanged during the crisis.<sup>4</sup>

4 This result is confirmed when comparing the average surprise element as calculated from the difference between the Reuters poll and the actual decision for the two-year period before and after the onset of the financial crisis. The difference is marginal and accounts for 0.0184 basis points. See also the article entitled "The predictability of the ECB's monetary policy" in the January 2006 issue of the Monthly Bulletin.

Timely and precise central bank communication is crucial in these circumstances. In the same way that market participants have to, policy-makers need to conduct their analyses and communicate their reasoning and intentions under highly uncertain conditions in which historical regularities may not hold and increased volatility may cloud the information coming from the markets. The central bank has to emphasise the considerable degree of uncertainty that surrounds its own assessment of the economic outlook in such testing circumstances. It is essential that the institution recognises the limitations of its analytical tools in these periods so as to avoid creating markets' over-reliance on its assessment of the direction of the economy. At the same time, given that financial markets react almost in real time to central bank announcements, policy-makers have to make a careful choice as to the type and scope of information they wish to convey to market participants.4

There are two key aspects to communication under such circumstances. The first relates to the central bank's own intentions. Periods of high stress and uncertainty may require exceptional policy responses that need to be communicated and explained to market participants in a timely and coherent manner. In the absence of such communications, markets may be unclear about the rationale underlying exceptional policy actions. In an economic environment characterised by a large degree of uncertainty, the central bank should not add another layer of uncertainty by introducing potential ambiguity in the monetary policy measures it implements in response to the extraordinary economic developments. Therefore, in difficult times the central bank needs to be very clear and convincing in the way it explains the need for, and the workings of, exceptional policy measures. This is in contrast to normal times, when consistent behaviour on the part of the central bank over time is key to maintaining a high degree of credibility. In periods of uncertainty, credibility

4 Morris and Shin, as well as Amato et al., argue that central bank communication can also be welfare-reducing when market participants assign too much weight to public information to the detriment of private information. In particular, noisy or premature information can lead markets away from fundamentals and towards an inferior equilibrium. (See S. Morris and H.S. Shin, "Social Value of Public Information", American Economic Review, 92(5), 2002, pp. 1521-1534, and J.D. Amato, S. Morris, and H.S. Shin, "Communication and Monetary Policy", Oxford Review of Economic Policy, 18(4), 2002, pp. 495-503). However, taking the same model as Morris and Shin, Svensson argues that central bank transparency is almost always beneficial because the signal-to-noise ratio of central bank information is bound to be relatively high (see L.E.O. Svensson, "Social Value of Public Information: Morris and Shin (2002) Is Actually Pro Transparency, Not Con", American Economic Review, 96(1), 2006, pp. 448-451).

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also depends on the way policy-makers explain the rationale underlying their bold policy actions. Clarity in the central bank's intentions and objectives provides a first anchor of stability and an important sense of direction for economic agents. This is particularly true for periods of heightened uncertainty.

The second aspect of key importance in difficult times is the unequivocal reiteration by the central bank of both its commitment to the primary objective of maintaining price stability over the medium term and its determination to unwind exceptional policy measures once conditions return to normal. There are a number of reasons why communication of the central bank's unwavering adherence to its medium-term objective is of particular importance in times when market expectations concerning the future course of monetary policy might become disorientated. One of them is that volatile expectations may be an independent source of macroeconomic instability. In the event that medium-term inflation expectations become "de-anchored" from the central bank's objective as a result of a major adverse shock, inflationary or deflationary risks are likely to increase. For example, an expected increase in the general level of prices tomorrow can exert upward pressure on prices today through a variety of channels, including higher wage claims or the revaluation of asset prices. Once inflationary expectations become entrenched in agents' perceptions, they can become self-reinforcing until some event or policy action succeeds in breaking the impasse. In fact, empirical evidence suggests that the "Great Inflation" in the United States during the 1970s occurred primarily because an accommodative monetary policy led to self-fulfilling increases in expected inflation.5 In a similar vein, well-anchored medium to long-term inflation expectations become crucial in the face of persistent downside risks to price stability, especially with short-term nominal interest rates at very low levels. There is already a large body of research highlighting the effectiveness of an open and credible commitment

to the price stability objective in preventing a self-reinforcing deflationary spiral.<sup>6</sup>

Therefore, the communication of the central bank's commitment to achieving its price-stability objective becomes a powerful instrument to prevent private sector expectations from diverging from that objective in periods of high uncertainty. In particular, the announcement of a precise numerical target or a quantitative definition of the central bank's price-stability objective provides a focal point for the general public's long-term inflation expectations and helps economic agents to form their expectations more efficiently and accurately than they could in the absence of such a quantified objective. In this way, a credible quantitative objective ensures predictability even in times when markets are characterised by increased volatility and nervousness, and can serve as an anchor of stability in periods of disorientation and stress. In fact, there is compelling empirical evidence which demonstrates that announcing a precise quantitative objective reduces the degree to which inflation persists, lowers the responsiveness of expectations to other macroeconomic news and helps to anchor them at levels consistent with the central bank's objective.7

- 6 See e.g. G.B. Eggertsson and M. Woodford, "The zero bound on interest rates and optimal monetary policy", *Brookings Papers* on Economic Activity, Vol. 34, Issue 1, 2003, pp.139-235, and K. Adam, and R. Billi, "Discretionary monetary policy and the zero lower bound on nominal interest rates", *Journal of Monetary Economics*, Vol. 54, Issue 3, 2007, pp. 728-752.
- 7 A.T. Levin, F.M. Natalucci and J.M. Piger, "Explicit inflation objectives and macroeconomic outcomes", Working Paper Series, No 383, ECB, August 2004. See also D. Johnson, "The effect of inflation targeting on the behaviour of expected inflation: evidence from an 11 country panel", Journal of Monetary Economics, Vol. 49, Issue 8, November 2002, pp. 1521-1538, and L. Benati, "Investigating inflation persistence across monetary regimes", Quarterly Journal of Economics, 123:3, August 2008, pp. 1005-1060.

<sup>5</sup> See e.g. S. Leduc, K. Sill and T. Stark, "Self-fulfilling expectations and the inflation of the 1970s: Evidence from the Livingston Survey", *Journal of Monetary Economics*, Vol. 54, Issue 2, 2007, pp. 433-459.

### 3 THE ECB'S COMMUNICATION SINCE THE ONSET OF FINANCIAL TURMOIL

The profound changes in the economic and financial environment experienced over the past two years have called for determined policy responses supported by timely and well-crafted communication. In close cooperation with the NCBs of the Eurosystem, the ECB has intensified its communication with specialised audiences and the public at large with a view to supporting the effectiveness and efficiency of monetary policy in times of heightened uncertainty.

The ECB's long-standing transparency with regard to its monetary policy framework has been helpful in structuring the external communication during the crisis. In particular, communication concerning the assessment of risks to price stability under the two pillars of the monetary policy strategy has been more useful than ever in keeping inflation expectations firmly anchored<sup>8</sup> and in providing an in-depth explanation of policy decisions. The economic analysis has been instrumental in communicating the swift reversal in the inflationary trend for the euro area amid heightened uncertainty regarding the outlook for economic growth as a result of the intensification of the financial turmoil and its spillover to the real economy. The monetary analysis has helped to maintain a medium-term perspective. It has also helped to improve the understanding of and explain developments in monetary aggregates, banks' balance sheets, asset prices and credit flows, all of which have been of crucial interest, given the financial origin of the economic downturn.9

# COMMUNICATION ON STANDARD AND NON-STANDARD POLICY MEASURES

The implementation of non-standard measures in response to the tensions in financial markets brought new communication challenges. Normally, communication on the Eurosystem's open market operations is mainly addressed to technical and specialised audiences. When the financial turmoil erupted in the summer of 2007 and the ECB reacted decisively to the strains in money markets by conducting a series of additional refinancing operations, there was a clear need to inform the general public and, in particular, financial market participants about the exceptional operations in a more systematic and comprehensive way. To this end, the ECB's website was continually updated and enhanced, and a host of other communication channels were employed to make sure that the measures taken by the Eurosystem to contain the macroeconomic effects of the crisis were well understood. In particular, at a time when upward risks to price stability were still prevailing in the euro area, it was important to convey that the measures taken to alleviate the strains in money markets did not imply an easing of the policy stance and were fully consistent with the pursuit of price stability. These communication tools included frequent mass media interviews and speeches by members of the Governing Council, as well as frequent announcements of monetary policy operations in real time. An increase in the number of visits to the relevant pages of the ECB's website indicated that the demand for information on these topics was indeed increasing at a rapid pace.

Since the intensification of the financial crisis in September 2008, and in a context of a rapid moderation of inflationary pressures, the rate on the main refinancing operations was lowered by 325 basis points. In parallel, the ECB entered into a non-standard policy mode. These measures were taken to enhance the flow of credit above and beyond what could be achieved through policy interest rate reductions alone. To facilitate communication, the ECB defined the range of non-standard measures taken as its "enhanced credit support" approach.10 This approach comprises five main building blocks: (i) a fixed rate tender procedure with full allotment against collateral for all main refinancing operations and longer-term refinancing operations since October 2008;

See, in particular, the speeches by the President of the ECB on 13 July 2009 in Munich, on 22 August 2009 in Jackson Hole and on 4 September 2009 in Frankfurt.

<sup>8</sup> See the box entitled "Results of the ECB Survey of Professional Forecasters for the fourth quarter of 2009" in this issue of the Monthly Bulletin.

See the article entitled "Monetary analysis in an environment of financial turmoil" in this issue of the Monthly Bulletin.

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(ii) the temporary expansion of the list of assets eligible for use as collateral in Eurosystem refinancing operations since October 2008; (iii) the lengthening of the maturities of the ECB's refinancing operations to up to one year; (iv) the provision of liquidity in foreign currencies, particularly in US dollars; and (v) the outright purchase of euro-denominated covered bonds since July 2009 to revitalise a segment of the market that was particularly affected by the financial turmoil. In addition, the ECB emphasised the clear distinction between its policy actions and the government support measures, while stressing their complementarities in alleviating the strains in financial markets.

Two key messages were strongly emphasised in the ECB's communication with financial markets and the general public. The first message stressed that all measures were designed to ensure the effective transmission of monetary policy and to provide enhanced support for credit provision to households and companies in the euro area at reasonable rates with a view to preserving price stability over the medium term. The second message concerned the resolution mechanism. In view of the importance of the banking channel in providing credit to the euro area economy, the ECB's policy response so far has been tailored to the specific nature of the euro area's financial architecture. Unlike in some advanced economies where a more market-based financial system prevails, securing a high degree of refinancing possibilities for banks is critical for ensuring the flow of credit to the non-financial sector.

### COMMUNICATION ON THE EXIT STRATEGY

While intensified communication on the economic outlook and expected price developments contributed to a firm anchoring of inflation expectations over the course of the crisis, the risk of a possible de-coupling of private expectations also arose from the manifold measures taken to alleviate the strains in financial markets. In an environment of extremely low interest rates and abundant liquidity, markets need to be reassured of the central bank's commitment to unwind the non-standard measures once conditions return to normal. Retaining an accommodative policy for too long risks unleashing inflationary pressures in the future, and paves the way for future imbalances in the financial markets.

important element of the ECB's An communication strategy since the announcement of its "enhanced credit support" approach has therefore been to convey to the public that preparing an exit strategy is an integral part of the ECB's crisis management, thereby stressing the central bank's commitment and determination to preserve price stability over the medium term. The possibility of unwinding the extraordinary monetary stimulus had been anticipated - and to a certain degree - built into the design of non-standard measures. The operational framework is well-equipped to facilitate this unwinding with a varied and flexible set of instruments. At the same time, to avoid premature expectations of an exit, communication stressed that having an exit strategy in place was not to be confused with activating this exit.

### **COMMUNICATION AND INFLATION EXPECTATIONS**

Taken together, the ECB's communication efforts and its actual actions since the onset of the financial turmoil in August 2007 have largely contributed to keeping longer-term inflation expectations in the euro area firmly anchored at levels consistent with the ECB's definition of price stability. In this respect, a particular communication challenge arose as inflation rates were expected to turn temporarily negative in the summer of 2009, owing mainly to base effects related to developments in energy prices. To contain an unwarranted downward adjustment of the medium to longer-term inflation expectations to a falling inflation rate, the ECB publicly highlighted the need to distinguish between disinflation and deflation. In this context, the ECB made clear that episodes of disinflation are welcome, if triggered by a fall in commodity prices, for instance, which can be associated with costsaving gains on the supply side. A deflationary

process, by contrast, is a generalised, persistent and self-reinforcing decline in a broad set of prices with adverse consequences on output and prices. By emphasising – already in early 2009 – that the temporarily negative inflation rates expected for the summer of 2009 should not be confused with outright deflation, the Governing Council ensured that long-term inflation expectations remained firmly anchored at levels consistent with price stability.

### 4 THE IMPACT OF THE ECB'S COMMUNICATION ON SELECTED NON-STANDARD POLICY MEASURES

The intensification of the ECB's external communication since the onset of the crisis in August 2007 has had a discernible impact on financial markets. As illustrated in Section 2, markets seem to have been more responsive to the ECB's press conferences during the crisis than appears to have been the case before. This section of the article illustrates the impact and effectiveness of the ECB's communication on the announcements of the additional longer-term refinancing operations.

Since August 2007, the ECB has launched a series of additional longer-term refinancing operations that were aimed at supporting the normalisation of the functioning of euro money markets. In a first step, the ECB lengthened the maturities of these operations, and eventually announced its decision on 7 May 2009 to conduct longer-term refinancing operations with a maturity of one year. These operations were typically announced via a press release prior to their execution. The time-lag between the announcement and implementation makes it possible to identify the reactions of the financial market to the two events. If markets were to respond to the announcement of the additional refinancing operations, they should, on average, move more on these days than on days without such announcements. Indeed, Chart 1 suggests that the announcements of the additional operations had a significant impact on the euro money markets, over and above the impact of the ECB's communication on its standard monetary policy actions. Chart 1 shows the absolute average daily change in three-month EURIBOR futures on selected days since August 2007. Money market movements were significantly more pronounced on days with announcements of monetary policy actions, including both standard and non-standard than on days without such measures, communications.11 This holds true for the entire maturity spectrum. Moreover, the EURIBOR futures market seems to have been even more strongly reactive on the days when the ECB announced its additional longer-term refinancing operations, in particular for horizons from six to ten months.12

In general, the objective of any additional longer-term refinancing operation is to alleviate the tensions in the money market that have led to overly high interest rates. In other words, if successful, additional longer-term refinancing operations should help in bringing down interest rates along the maturity spectrum to a level that is consistent with the normal transmission of the ECB's monetary policy stance.<sup>13</sup> Timely and credible announcements of such operations can support this objective by frontloading part of the envisaged adjustment, thereby making the impact more effective. Chart 2 shows that this was indeed the case. Using the relative change,

- 11 In total, the ECB announced additional refinancing operations on 12 occasions. Five of them occurred on days with a Governing Council meeting. To isolate the effects of the ECB's announcements of additional longer-term refinancing operations, the category "days with only LTRO announcement" considers solely the seven days on which an additional longer-term refinancing operation alone was announced. The decision to conduct longer-term refinancing operations with a maturity of one year was announced on the day of a Governing Council meeting.
- 12 As the analysis is not based on intraday data, the results may contain financial markets' pricing responses to news not related to announcements by the ECB. On days with announcements of longer-term refinancing operations, markets have been surprised on only one occasion (22 August 2007). However, the intraday volatility on that day showed that there was no extraordinary trading activity surrounding this release. See footnote 2 in the box for a description of the calculation of the surprise element.
- 13 This is not, however, the only criterion for success: in the first place, and fully in line with the objective underlying the enhanced credit support policy, the operations aimed to lengthen the liquidity horizon of banks, thereby encouraging a continuous flow of bank credit to the economy.

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## Chart I Average absolute daily change in three-month EURIBOR futures

#### (percentage points)



Notes: Average over selected days in the period from 1 August 2007 to 9 October 2009. "LTRO" stands for longer-term refinancing operation.

rather than the absolute daily change, reveals that the ECB's communication on the decision to conduct additional longer-term refinancing operations has helped to ease conditions in money markets over the entire maturity spectrum and has made the implementation of such operations more effective. Contrary to days without announcements on additional operations, markets on average priced in a decline in the EURIBOR futures on days with announcements of such operations.

### **5** CONCLUSIONS

The ECB's communication strategy and the transparency of its monetary policy-making have proved particularly useful in the current period of financial distress and heightened uncertainty. Timely and precise communication concerning the changes to the monetary policy framework is key and has to be well understood by participants in the financial markets. In addition to the policy actions themselves, communication has

### Chart 2 Average daily change in three-month EURIBOR futures

#### (percentage points)

x-axis: number of months to expiry



Notes: Average over selected days in the period from 1 August 2007 to 9 October 2009. "LTRO" stands for longer-term refinancing operation.

become all the more important in contributing to anchoring medium to longer-term inflation expectations at levels consistent with the ECB's definition of price stability.

The combination of the ECB's additional communication efforts since the onset of the financial turmoil in August 2007 and the ECB's long-standing transparency with respect to its monetary policy are likely to have supported the private sector's swift understanding of both the non-standard actions taken in response to the intensification of the financial tensions in autumn 2008 and its determination to remain firmly committed to the achievement of its price-stability objective.

### MONETARY ANALYSIS IN AN ENVIRONMENT OF FINANCIAL TURMOIL

The ECB's monetary policy strategy assigns a prominent role to monetary analysis, reflecting the robust relationship between money and prices over the medium to longer term. Monetary analysis helps the central bank not to lose sight of longer-term nominal developments, for which monetary policy is ultimately responsible – a role particularly relevant in a period of financial turmoil, when short-term, volatile developments could overwhelm the appropriate medium-term perspective of monetary policy. The turmoil in financial markets that began in the summer of 2007 has posed considerable analytical challenges. The ECB's real-time monetary analysis combines model-based information with detailed institutional knowledge. The latter has been particularly useful in the last two years in addressing key questions on the robustness of monetary trends, financing conditions over the business cycle and adjustments taking place in the banking sector.

With regard to these questions, the conclusions of monetary analysis during the turmoil have been that, first, monetary trends point to subdued inflationary pressures, but not to a deflationary outcome; second, loan growth has predominantly been of a genuine nature; and third, banks adjusted the size and composition of their balance sheets mainly through asset reductions vis-à-vis other resident and non-resident credit institutions. Monetary analysis has thereby provided information that goes beyond what can be derived purely from financial surveys and the analysis of interest rates and yields.

1

### **I** INTRODUCTION

The role of monetary analysis in the ECB's monetary policy strategy is founded on the robust relationship between money and prices in the medium to long run. This relationship has been found to hold true across countries and monetary policy regimes, suggesting that this feature is "hardwired" into the deep structure of the economy.<sup>1</sup> Monetary analysis thereby helps the central bank not to lose sight of longer-term nominal developments, for which monetary policy is ultimately responsible. This role is particularly relevant in a period of financial turmoil, when short-term, volatile developments could overwhelm the appropriate medium-term perspective of monetary policy.

The rapid changes in the economic environment brought on by the financial market turmoil have posed additional analytical challenges to monetary and economic analysis alike. The ECB's approach to conducting monetary analysis complements model-based information with a detailed institutional analysis. The latter has been at a premium in addressing key questions arising over the last two years. A major question for monetary analysis has been whether the usually slow-moving underlying monetary trend that is linked to medium to long-term price developments has seen a shift. The analysis presented in this article suggests that, while such a shift cannot be excluded altogether, the moderation in underlying money growth is most likely to have been less pronounced and abrupt than that in observed monetary dynamics.

In addition, the turmoil in financial markets that began in the summer of 2007 has spurred an interest in monetary developments that goes beyond the medium to longer-term link with price developments. In an environment of financial turmoil, the detailed analysis of quantitative developments in money and credit has also proven particularly useful in addressing questions on topics of a more cyclical or temporary nature, such as financing conditions over the business cycle and adjustments taking place in the banking sector. This article shows that

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See L. Benati (2009), "Long-run evidence on money growth and inflation", ECB Working Paper, No 1027. This feature does not preclude the possibility that the intensity of the relationship is a "functional of government policies"; see, for instance, T. Sargent and P. Surico (2008), "Monetary policies and low-frequency manifestations of the quantity theory", Bank of England External MPC Unit Discussion Paper, No 26.

banks have adjusted the size and composition of their balance sheets mainly through asset reductions vis-à-vis other resident and non-resident credit institutions. This adjustment has thus far not upset the historical regularities of loan developments over the business cycle. In this respect, the examination of financial quantities, such as liquidity buffers and lending volumes, has provided insight which goes beyond the information that can be derived from an analysis based exclusively on interest rates, yields and financial surveys.

After a short description of monetary developments during the financial turmoil in Section 2, the article addresses these topics in turn. Section 3 evaluates monetary developments – in particular from a sectoral perspective – with a view to arriving at an assessment regarding the possibility of a "break" in the underlying pace of monetary expansion. Section 4 discusses the interpretation of loan and credit data in view of the impact of the financial turmoil. Section 5 illustrates some insights from monetary analysis that were used to address questions regarding the condition of the banking sector. Section 6 briefly concludes.

### 2 MONETARY DEVELOPMENTS SINCE THE ONSET OF THE TURMOIL IN FINANCIAL MARKETS

Monetary dynamics have fluctuated substantially since early 2007.<sup>2</sup> In the period leading up to the outbreak of the financial turmoil in August 2007, monetary dynamics strengthened substantially to reach historically high levels.<sup>3</sup> This is illustrated by the annual growth rates of M3 and loans to the private sector, which, at the end of July 2007, stood at around 12% and 11% respectively (see Chart 1). Given that loans are one of the main counterparts of money, this joint strengthening signalled a strong pace of underlying monetary growth. However, the analysis also suggested that, owing to the boosting impact of the flat shape of the yield curve, the actual growth of M3 at the time overstated the underlying rate of monetary expansion.

# Chart I M3 and MFI loans to the private sector

(annual percentage changes; adjusted for seasonal and calendar effects)



turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

In the initial months following the onset of the turmoil in August 2007, aggregate monetary dynamics were largely unperturbed.<sup>4</sup> By mid-2008, broad money and credit growth were gradually moderating, reflecting slower economic growth and the lagged impact of higher interest rates and tighter financing conditions, although their growth was still vigorous at the time. However, the direct impact of the financial turmoil was only visible in a few individual components and counterparts of M3, such as money market fund shares/units or loans to other non-monetary financial intermediaries except insurance corporations and pension funds (OFIs).

Following the collapse of Lehman Brothers and the intensification of the financial turmoil in September 2008, the annual growth rate of broad money declined from 9.1% in the third quarter of 2008 to 4.3% in the second quarter of 2009, while that of loans to the private sector

- 2 The latest observations for monetary data used in this article relate to the second quarter of 2009.
- 3 For an analysis of monetary developments between mid-2004 and the first quarter of 2007, see the article entitled "Interpreting monetary developments since mid-2004" in the July 2007 issue of the Monthly Bulletin.
- 4 See the box entitled "The impact of financial market tensions on monetary developments" in the ECB's Annual Report 2008.

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decreased from 9.1% to 2.2%. This joint decline pointed to a stronger deceleration in the pace of underlying monetary expansion than before. Moreover, the direct impact of the turmoil became discernible in additional components and counterparts, such as MFI debt securities and MFI holdings of debt securities.

When exploring whether the intensification of the financial turmoil marked a break in the pace of actual – and, ultimately, underlying – monetary expansion, the inherently backward-looking nature of annual growth rates may not provide a timely description of the relevant dynamics.<sup>5</sup> Under such circumstances, it may also be useful to analyse the shorter-term dynamics as illustrated, for instance, by the annualised three-month growth rate. Chart 2 shows that, while the annual growth rate of M3 continued to decline in a more steady fashion, the shorter-term dynamics slowed sharply after the intensification of the turmoil. Since November 2008, the month-on-month growth





Source: ECB.

Note: The vertical dashed black line denotes the intensification of the financial market turmoil following the collapse of Lehman Brothers. rates have fluctuated rather erratically around zero, indicating, on balance, a standstill in monetary expansion, which has persisted up to mid-2009. The three-month annualised growth rate averages out some of this volatility, illustrating more clearly that the pace of monetary expansion was lower than before the Lehman incident.

### 3 ANALYSING MONETARY DEVELOPMENTS DURING THE FINANCIAL TURMOIL

### 3.1 OBSERVED AND UNDERLYING MONETARY DYNAMICS IN A PERIOD OF FINANCIAL TURMOIL

The intensification of the financial turmoil in September 2008 raised the possibility of a watershed in monetary dynamics. Monetary analysis was faced with the need to monitor and assess in real time whether the sharp movements in monetary developments signalled a short-lived episode or a longer-lasting regime shift to a deflationary outcome. Chart 3 illustrates this challenge at a conceptual level. In "normal" times, the underlying rate of monetary growth, which provides the relevant signal for risks to price stability, is slow-moving, thereby facilitating the extraction of the signal. In a pronounced boom/bust episode, it is more difficult to draw inference from past historical regularities. On the basis of the information available at each point in time, monetary analysis needs to distinguish whether the unusually large movements in observed money growth constitute a "break" in underlying monetary growth - reflecting an aggressive and lasting balance sheet adjustment by banks, firms and households – or an episode that, possibly also owing to the impact of government interventions and endogenous stabilising forces, will be short-lived and will not affect underlying

<sup>5</sup> In a rapidly changing environment, an annual growth rate may be considered a somewhat backward-looking measure of developments as it compares a current observation with that of a year ago, thereby aggregating recent and past changes with equal weight. Being restricted to the recent past, measures of shorter-term dynamics do not suffer from this problem, but may be subject to much more "noise".





monetary growth. Ultimately, such an assessment is needed in order to establish whether or not such a development has an impact on the real economy and prices.

The notion of underlying monetary expansion looks beyond money holdings resulting from temporary considerations related to income, the interest rate configuration and uncertainty. The additional uncertainty prevailing in a period of financial turmoil raises, for instance, the important analytical consideration of whether extraordinary portfolio shifts into or out of money have occurred, as, in this case, the information provided by observed monetary dynamics regarding price developments would temporarily be blurred. A detailed monetary analysis that looks at the individual components and sectors of broad money plays a particularly crucial role in such a situation because the impact of uncertainty and of changes in interest rates is typically reflected very differently across components and sectors. For instance, in the period of large uncertainty-related portfolio shifts between 2001 and 2003, marketable instruments within M3 absorbed a large part of these shifts and they were thus given a lower weight when gauging the strength of underlying monetary growth from M3 developments. Similarly, from the sectoral perspective, the money holdings of corporations typically display stronger cyclical

behaviour than those of households, which suggests that the latter may be given a higher weight when gauging the strength of underlying monetary growth from M3 developments. A detailed monetary analysis should therefore take into consideration various different perspectives in order to arrive at an assessment of underlying money growth.

### 3.2 THE SECTORAL PERSPECTIVE ON MONETARY DEVELOPMENTS IN A PERIOD OF FINANCIAL TURMOIL

In this section, the breakdown into the individual sectoral money holdings of aggregate monetary developments is used to illustrate how the sectoral perspective can provide a richer understanding of the relative strength of forces driving overall M3 and thus aids an assessment of underlying monetary dynamics. The sectoral analysis may be particularly informative in the context of the recent financial turmoil, as the normal differences in sectoral money demand will most likely have been exacerbated by the rapidly evolving environment. Chart 4 illustrates the substantial differences in individual sectoral monetary dynamics. Non-monetary financial intermediaries contributed significantly and disproportionately to the slowdown in M3 growth, while the household sector continued to accumulate monetary assets, albeit at a moderating pace. Around the turn of the year, non-financial corporations shed monetary assets after having scaled back the build-up of liquidity buffers from early 2008 onwards.

The different behaviour across sectors reflects the difference in the relative importance of the main determinants of money holdings, namely economic activity, interest rate developments and uncertainty.<sup>6</sup> This implies differences in the speed and size of the adjustment to changes in the determinants. Typically, the household sector adjusts its money holdings to the economic situation in a slow and persistent

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<sup>6</sup> See the article entitled "Sectoral money holding: determinants and recent developments" in the August 2006 issue of the Monthly Bulletin.

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### Chart 4 Breakdown by sector of month-onmonth M3 growth rate

(percentage changes, contributions in percentage points; adjusted for seasonal and calendar effects)



Note: The vertical dashed black line denotes the intensification of the financial market turmoil following the collapse of Lehman Brothers

manner, while non-monetary financial intermediaries' holdings are much more sensitive to the business cycle and changes in relative rates of return.7 As the non-financial corporation sector includes both large firms with cash management practices similar to those of financial firms, and smaller firms that are akin to households in terms of their financial sophistication, the sector's money-holding behaviour lies in between the polar cases. In order to analyse the different sectoral monetary dynamics in more detail, an examination of money holdings according to their key determinants seems warranted.

### THE ROLE OF ECONOMIC ACTIVITY

The financial turmoil was accompanied by a slowdown in euro area economic activity, which is also reflected in the moderation in the growth of monetary assets. This effect is particularly visible in the annual growth of M3 holdings by non-financial corporations (see Chart 5), which



Sources: ECB estimates and Eurostat. Notes: The estimated M3 holdings by sector have been demeaned over the period 1999-2009 for presentational purposes. The vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

tends to be driven by the cyclical part of general economic activity, as measured, for instance, by gross value added. Households' M3 holdings continued to increase at a robust pace, in line with an inert adjustment to economic conditions that may be a result of the typically more stable developments in disposable income compared with general economic activity.

### THE ROLE OF THE INTEREST RATE CONFIGURATION

The intensification of the turmoil and the decisive policy reaction triggered a sharp change in interest rates and steepened the slope of the yield curve (see Chart 6). The ensuing change in

For a comparative analysis of sectoral monetary demand, see J. von Landesberger (2007), "Sectoral money demand models for the euro area based on a common set of determinants", ECB Working Paper, No 741; P. Jain and C.-G. Moon (1994), "Sectoral money demand: a co-integration approach", *Review* of *Economics and Statistics*, pp. 196-201; and A. Brigden, A. Chrystal and P. Mizen (2000), "Money, lending and spending: a study of the UK non-financial corporate sector and households", Bank of England Quarterly Bulletin, May, pp. 159-167.



Chart 6 Short and long-term interest rates

Sources: ECB and Reuters

Note: The vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

the opportunity cost of holding money induced portfolio reallocations into non-monetary assets, thereby dampening M3 growth. In particular, financial intermediaries' money growth, which, by and large, is governed by the liquidity, return and risk characteristics of a broad spectrum of assets, was strongly affected by this reconfiguration of interest rates.<sup>8</sup>

In addition, interest rates on short-term deposits have reacted much more quickly in recent months to the decline in short-term money market interest rates than rates on short-term loans. As a result, some non-financial corporations that, in the past, had found it attractive to park in monetary assets part of the funds they had borrowed, thus building up liquidity buffers, have reacted to the new rate constellation by using these liquidity buffers to reduce their MFI loans.<sup>9</sup> Lastly, the money holdings of the household sector reacted in a sluggish manner to the observed changes in opportunity costs.

### THE ROLE OF UNCERTAINTY

The determinants of money demand analysed above may only partially explain households' M3 holding behaviour, as precautionary holdings of money could also be significant. The financial turmoil has increased households' uncertainty regarding future financial and economic developments, potentially increasing money holdings over and above the level consistent with income and interest rate developments.<sup>10</sup> Measures that are helpful in assessing the level of household uncertainty with regard to the economic environment include the level of unemployment as well as consumer confidence, which fell sharply in the euro area after the collapse of Lehman Brothers.

With regard to the relative importance of these determinants for monetary dynamics, analysis of the period before the onset of the financial turmoil in August 2007 suggests that the stimulative impact of interest rates caused observed M3 growth to overstate the pace of underlying monetary growth.<sup>11</sup> In the period following the onset of the turmoil in August 2007 until the end of the third quarter of 2008, monetary dynamics were strongly affected by portfolio reallocations into money, which were motivated by the interest rate configuration, rather than by extraordinary portfolio shifts triggered by increased uncertainty.<sup>12</sup> However,

- 8 The decline in M3 holdings of non-monetary financial intermediaries in January 2009 was affected by a purely financial transaction relating to the change in the structure of the funding vehicles of a large euro area banking group, which resulted in a reduction of time deposits of OFIs included in M3 and a commensurate increase in longer-term OFI deposits not included in M3. Adjusting for the effect of this transaction would reduce the decline, but an exceptional shedding of monetary assets by this sector would still be discernible.
- 9 For a more detailed analysis, see the box entitled "Some considerations regarding the driving forces behind non-financial corporations' M3 deposit holdings" in the July 2009 issue of the Monthly Bulletin.
- 10 On the general relationship between money holdings and uncertainty, see the article entitled "Money demand and uncertainty" in the October 2005 issue of the Monthly Bulletin.
- 11 For an assessment of the forces impacting monetary developments in the run-up to the financial turmoil, see the article entitled "Interpreting monetary developments since mid-2004" in the July 2007 issue of the Monthly Bulletin.
- 12 For details of the analysis, see the box entitled "Tracking extraordinary portfolio shifts into money during the period of financial turmoil" in the January 2009 issue of the Monthly Bulletin.

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given that both effects would have influenced monetary growth in the same direction during this period, their impact is difficult to disentangle. For the period after the intensification of the financial market turmoil at the end of the third quarter of 2008, analysis tends to suggest that there was a more significant confidence-related impact on households' M3 holdings, visible, inter alia, in the strong one-off increase in currency in circulation. This analysis also suggests, however, that this possible boosting impact was more than offset by the considerably stronger downward effect stemming from the interest rate configuration, discernible in the large outflows from short-term time deposits.<sup>13</sup> All in all, over the course of the financial turmoil, sectoral money holdings have adjusted as would be expected on the basis of the evolution of their main determinants and historical regularities.

### 3.3 OVERALL ASSESSMENT OF MONETARY DYNAMICS

During the period of financial turmoil, the deceleration in aggregate M3 growth is likely to have overstated the decline in the underlying rate of monetary expansion. The detailed analysis of sectoral money holdings has shown that the decline was driven by the financial and non-financial corporate sectors, which have been disproportionately affected by the financial turmoil. At the same time, holdings of M3 by households – which have a stronger and more immediate link with consumer price inflation than corporate sector M3 holdings – continue to exhibit more resilient growth.

Aggregating monetary developments across different sectors or across different components means that idiosyncratic elements are downplayed, with substitution effects being internalised, so that the monetary trend providing the signal for medium to longer-term risks to price stability can come to the fore. The analysis presented in this article suggests that, while a "break" cannot be excluded altogether, the moderation in the monetary trend is most likely to have been less pronounced and abrupt than that in observed monetary dynamics. The analysis of monetary dynamics, therefore, currently points to subdued inflationary pressures, but not to a deflationary outcome.

An additional consideration in assessing the possible deflationary implications of the strong decline in observed M3 growth relates to the level of monetary liquidity that has been accumulated over recent years. In this respect it should be noted that a protracted period of low or even negative money growth would be required in order to unwind the excess monetary balances. Barring such an unwinding, the existing liquidity accumulation in the euro area would still be available when the economy and financial markets recover and may then lead to rebounding pressures on both consumer and asset prices.

### 4 INTERPRETING LOAN AND CREDIT AGGREGATES DURING THE FINANCIAL TURMOIL

Over the period of financial turmoil, money and credit developments at cyclical and higher frequencies have provided useful insights into the availability of credit to households and firms, and more specifically, regarding the question of whether the turmoil has hampered the availability of bank credit to the non-financial sectors over and above a tightening of financing conditions that would have been expected owing to the movement of the economy along the business cycle. In the initial phase of the financial turmoil, the observed credit data did not suggest such a hampering, as the annual growth of loans to the non-financial private sector, and in particular non-financial corporations, remained robust. However, a number of economic and statistical factors were seen as potentially

<sup>13</sup> Estimates suggest that if consumer confidence had remained unchanged from the level of the third quarter of 2008, the flow of household M3 during this period would have been around 15% lower. By contrast, the same framework indicates that if the interest rate configuration had remained unchanged, it would have increased the flow of household M3 during this period by around 45%.

masking the effect of the financial market turmoil on the availability of financing to the non-financial sectors.

The broad-based monetary analysis conducted at the ECB made it possible to assess the extent to which such factors were material in the euro area after the start of the financial turmoil. For instance, in the initial phase of the turmoil, the continued buoyancy of lending to the non-financial private sector in the euro area was argued by some financial market commentators to have resulted from the supposed reduction in the availability of market-based financing to non-financial corporations, compensated for by additional borrowing from banks - partly through an increased drawdown of credit lines. As a result, the data on MFI lending to firms was seen as being upwardly affected by a substitution effect, while the total new financing available to non-financial corporations had, in fact, stalled. A comprehensive analysis of the amount of financing made available to non-financial corporations provided evidence against this argument. More specifically, the

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data at the euro area level pointed to some limited moderation in the flow of financing to non-financial corporations stemming from developments in the issuance of debt securities and equity, which did not, however, provide scope for material substitution effects.

A further hypothesis given consideration suggested that the strength of MFI lending the non-financial private sector was to misleading because it resulted from "re-intermediation" effects. Chart 7 provides a stylised representation of the different positions on the MFI balance sheet that may have had to accommodate such effects. For instance, the hypothesis suggested that, owing to the dryingup of the asset-backed commercial paper market, credit institutions would have to provide support to issuers of such paper - such as "structured investment vehicles" (SIVs), classified as OFIs. The support provided could take the form of either outright loans or the absorption of SIV assets that had previously been securitised. On the MFI balance sheet, it would in principle be reflected in the positions for either loans to



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OFIs, MFI holdings of debt securities or external assets, but the actual data suggested that the impact was, at best, marginal.

In addition, the loan data may possibly have been distorted by the inability of banks to shift loans off their balance sheets, given the effective closure of the securitisation market.14 As a result, these loans had to be retained on banks' balance sheets and thus boosted the lending figures. The detailed institutional examination conducted in the context of monetary analysis revealed, however, that owing to the use of International Financial Reporting Standards for statistical reporting purposes in some euro area countries where true-sale securitisation had been particularly prevalent, most of the loans sold in the context of such transactions remained, in practice, on the originating credit institutions' balance sheets.<sup>15</sup> In those countries where accounting standards allowed for the derecognition of loans, the flow of loans derecognised after August 2007 was positive, in part also owing to "retained securitisation", whereby the securities issued in the context of the securitisation transaction are purchased by the MFIs themselves. Taking both cases together, this hypothesis could not explain the robustness of lending to the non-financial private sector, which was assessed to be of a "genuine" nature.

After the intensification of the financial turmoil, the decline in the annual growth rate of loans to the non-financial private sector steepened and by mid-2009 was low by historical standards. In assessing this decline, it should be borne in mind that there has also been an exceptional decline in economic activity, which would have dampened the demand for loans in any case. In this respect, notwithstanding the pressures experienced by MFIs during the turmoil, the developments observed thus far in sectoral loans have proven to be consistent with historical regularities over the business cycle.<sup>16</sup> At the same time, pressures on the balance sheet situation of credit institutions are likely to have contributed to the evolution of lending during the period of financial turmoil.

From policy а monetary perspective, disentangling the different driving forces impacting on aggregate loan developments facilitates the identification of required monetary policy measures, given that the appropriate policy response to a lower demand for loans, a deterioration in borrowers' balance sheets and strains related to banks' balance sheets and cost of funds may differ substantially. While reductions in policy rates might be warranted in cases related to the borrowers' condition, the provision of a sufficient amount of liquidity, potentially complemented by further governmental measures, such as guarantees on bank debt and capital injections, would be crucial to counteract a severe impairment of lenders' balance sheets.

A particular challenge lies in gauging the importance of developments in general economic activity for overall MFI lending related to the demand for loans and borrowers' creditworthiness on the one hand and banks' imminent strains as regards their balance sheets and cost of funds on the other. As all of these drivers are closely related and interdependent, a clear-cut distinction is not feasible. For instance, changes in economic activity also impact banks' balance sheets and funding costs, which may affect their ability and willingness to lend. This, in turn, might be reflected in less favourable lending conditions, inducing a corresponding decrease in the

- 14 For an explanation of the potential effect of securitisation on MFI loan data, see the box entitled "The impact of MFI loan securitisation on monetary analysis in the euro area" in the September 2005 issue of the Monthly Bulletin.
- 15 According to the relevant accounting standard (IAS 39, Financial instruments: recognition and measurement), a number of specific conditions need to be met for an asset to be derecognised from a reporting entity's balance sheet, including the transfer of substantially all risks and rewards linked to the asset. In practice, in true-sale securitisation transactions, these criteria are seldom met as the originator typically maintains some continued involvement, for instance by retaining the equity tranche of the issued securities. See also the box entitled "The importance of accounting standards for interpreting MFI loan statistics" in the March 2008 issue of the Monthly Bulletin.
- 16 See also the boxes entitled "The cyclical pattern of loans to households and non-financial corporations in the euro area" in the June 2007 issue of the Monthly Bulletin and "Loans to the non-financial private sector over the business cycle in the euro area" in the October 2009 issue of the Monthly Bulletin.

demand for loans. Given these endogenous links between the different drivers of bank lending activity, empirical approaches to disentangling them can only serve as rough approximations.17

#### 5 **INSIGHTS PROVIDED BY MONETARY** ANALYSIS REGARDING THE BEHAVIOUR OF THE BANKING SECTOR

In order to gain a comprehensive understanding of the forces impacting on bank credit, it is useful to place the analysis in a broader context, also taking into consideration available detailed information regarding both the funding and the deleveraging of credit institutions from the MFI balance sheet, which is examined regularly as part of monetary analysis. The section looks at these two issues in turn.

### THE FUNDING OF CREDIT INSTITUTIONS

In order to monitor the funding of credit institutions, as explained in the box entitled "The aggregated versus the consolidated view of the MFI balance sheet in the context of the financial turmoil", the aggregated view of the MFI balance sheet is informative as it makes it possible to identify the positions MFIs hold vis-à-vis each other. This detailed analysis goes well beyond the monitoring of monetary aggregates, but forms an integral part of regular broad-based monetary analysis.

Credit institutions fund their balance sheets in a stratified manner, starting with base financing through capital and reserves. Deposits and long-term debt securities held by the money-holding sector and non-residents to the extent that they are a "stable" or long-term source of funding - form the next layer. A last source of funds comprises various shorter-term liabilities, such as short-term debt securities and deposits from non-monetary financial intermediaries, which are incurred in a dynamic manner to cover rapidly arising cash-flow needs and tend to be "volatile". Chart 8 shows the development of these funding sources and illustrates that, before the outbreak of the turmoil,

## Chart 8 Main liabilities of euro area credit institutions

(three-month flows in EUR billions: adjusted for seasonal and calendar effects)





Sources: ECB and ECB estimates. Notes: The reporting sector is MFIs excluding the Eurosystem. Stable funding sources include deposits of the non-financial sectors excluding central government, longer-term deposits of non-monetary financial intermediaries, deposits of non-resident non-banks and MFI debt securities with a maturity of more than one year. Volatile funding sources include deposits of MFIs excluding the Eurosystem, short-term deposits of non-monetary financial intermediaries, deposits of central governments, deposits of non-resident banks and MFI debt securities with a maturity of up to one year. The vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

the volatile sources had come to play a dominant role. For instance, the turmoil adversely impacted the predictability of cash flows, which in turn generated additional funding needs. In the initial phase of the turmoil, this additional demand seems to have been met by increased recourse to short-term funding sources. While the funding from stable sources seems to have held up fairly well after the collapse of Lehman Brothers, it could not be expanded sufficiently to offset the withdrawals from the short-term sources, prompting the Eurosystem to step in and provide the required immediate funding.

An additional option to cover funding needs is to liquidate existing assets rather than incur additional liabilities. In the period before the onset of the financial turmoil, asset sales and

<sup>17</sup> For a thorough discussion of loan supply from a monetary policy perspective, see the article entitled "Monetary policy and loan supply in the euro area" in the October 2009 issue of the Monthly Bulletin

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# Chart 9 Securitisation activity in the euro area





Source: ECB.

Notes: The proxy for loan securitisation comprises loan derecognition and time deposits with a maturity of more than one year held by OFIs. The latter typically host the counter-booking to securitisation transactions that have not been derecognised. The vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

### Chart 10 Issuance and purchases of short-term MFI debt securities

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

MFI holdings covered by government guarantee (inverted) MFI holdings not covered by government guarantee (inverted) issuance covered by government guarantee issuance without government guarantee net sales to non-MFIs 100 100 75 75 50 50 25 25 0 0 -25 -25 -50 -50 -75 -75

-100

Mar

2007

Note: The vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

Mar

2008

Sep. 2008

-100

Mar

2009

securitisations had become an increasingly important source of funding. The financial market turmoil resulted in the closure of these markets. However, information from the MFI balance sheet statistics indicates that credit institutions continued to securitise assets in order to store collateral that could be used in Eurosystem operations, leading to "retained securitisation". The significant funding provided by the Eurosystem also replaced, in part, funding otherwise obtained by MFIs through marketbased securitisation transactions. The monetary analysis identified the evolving character of these transactions.<sup>18</sup> This change is reflected in the fact that, during the period of financial market turmoil, MFI purchases of securities issued by OFIs have very closely tracked a proxy measure of securitisation activity, while in the preceding period when markets were still open, there was a visible discrepancy, with MFI purchases being smaller than the securitisation flow (see Chart 9).

18 See the box entitled "The impact of traditional true-sale securitisation on recent MFI loan developments" in the September 2008 issue of the Monthly Bulletin.

# Chart II Issuance and purchases of longer-term MFI debt securities

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

- MFI holdings covered by government guarantee (inverted) MFI holdings not covered by government
- guarantee (inverted) issuance covered by government guarantee
- issuance without government guarantee
- money-holding sector holdings



Note: The vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

Sep. 2007 Sources: ECB and ECB estimates.

After the intensification of the turmoil, the funding of credit institutions was also facilitated by measures taken by euro area governments, which. inter alia, established guarantee programmes for MFI debt securities.19 Charts 10 and 11 show that the introduction of government guarantees on bank debt securities has supported the issuance of debt securities by credit institutions, both for short-term and long-term paper. Some of these securities have been purchased by the MFIs themselves, while non-MFIs - both euro area residents and non-residents - have been running down their holdings of these securities. This would suggest that a subset of institutions has benefited from the introduction of this measure. However, over the period since October 2008, the funding of the euro area credit institution sector through the issuance of short-term MFI debt securities to non-MFIs has been negative, and only slightly positive for longer-term debt securities.

Overall, credit institutions have faced significant challenges in funding their large balance sheets as the volatile market-based and financial sector sources of funds have dried up. At the same time, more stable sources of funds in the form of deposits from households and non-financial corporations have continued to support lending to the euro area economy.

### Box

# THE AGGREGATED VERSUS THE CONSOLIDATED VIEW OF THE MFI BALANCE SHEET IN THE CONTEXT OF THE FINANCIAL TURMOIL

The ECB's monetary analysis is based on euro area MFI balance sheet statistics. Two presentations of the MFI balance sheet monitored as part of the ECB's monetary analysis, the consolidated and the aggregated balance sheet of the MFI sector, have proved informative and will be presented in this box.

The consolidated balance sheet of the MFI sector nets out positions between MFIs from the sum of the balance sheets of all euro area MFIs in order to focus on the total lending to non-MFIs and the funding received from non-MFIs. In the context of the financial turmoil, it is, however, precisely the positions between MFIs that have been of analytical interest, and this has led to a stronger focus on the aggregated balance sheet of the MFI sector.

In order to illustrate the intermediation role of the euro area MFI sector, the chart presents – using the consolidated balance sheet of the MFI sector – the net lending (as measured by the difference between loans granted and

### Net lending position of euro area MFIs vis-à-vis main economic sectors

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



Source: ECB calculations.

Notes: "Securities business" represents the net position between securities held and issued by credit institutions, excluding capital and reserves. Non-monetary financial intermediaries comprise insurance corporations, pension funds and other non-monetary financial intermediaries. The vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

<sup>19</sup> See the box entitled "How are government measures to support the financial system reflected on the balance sheets of euro area credit institutions?" in the April 2009 issue of the Monthly Bulletin.

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deposits received) of the MFI sector vis-à-vis its main counterparts. The chart shows that the euro area MFI sector mainly lends to the non-financial private sector and funds this business through deposits received from non-monetary financial intermediaries and the general government, as well as from the issuance of capital and reserves. Borrowing from the rest of the world and net lending in securities (holdings minus issuance) tend to act as balancing elements.

Recent analysis by Shin<sup>1</sup> has highlighted the relevance of the two balance sheet presentations for understanding, at a conceptual level, the mechanisms driving banks' credit supply to the non-financial sector. This analysis stresses the interaction of three features of the banking system. The first is the distribution throughout the banking system of equity. The second is the distribution of leverage (defined as total assets to equity). Total lending to the non-financial sector increases with higher equity and more leverage. The third determining feature of banks' credit supply, as discussed in this analysis, is the structure of interlinkages resulting from inter-MFI positions, as the claim of one bank will represent a liability of another bank. Given the reciprocity of interbank claims, for the banking system to lend more to non-banks on aggregate, it has to borrow more from non-banks.

It is important to note that individual banks' leverage ratios can jointly increase (or decrease) without changing the leverage ratio of the banking sector as a whole. Indeed, banks' balance sheets can inflate or contract to the extent that banks adjust their interbank borrowing and lending exposures, but this will not change the leverage ratio at the consolidated level, nor alter the relationship between borrowing from and lending to non-MFIs. However, the emergence of constraints in interbank borrowing for banks that are net lenders to non-MFIs will hamper the efficient redistribution through the banking system of funding received by other banks from non-MFIs.

Following the intensification of the turmoil, developments observed in the aggregate balance sheet of euro area MFIs suggest that mainly positions vis-à-vis euro area MFIs (see Chart 12) and vis-à-vis non-resident banks (see Chart 13) have been divested. From a consolidated perspective, an important aspect is the fact that the balance sheet expansion is determined by the volume of MFI liabilities held by non-banks, of which the broad monetary aggregate M3 has accounted for a stable 30%.<sup>2</sup> "Traditional" monetary analysis focusing on developments in M3 may thus provide valuable insights with respect to leverage developments in the banking system, as discussed in the more recent literature on this subject.

1 H. Shin (2009), "Securitisation and financial stability", *The Economic Journal*, 199, March, pp. 309-332.

2 This ratio is calculated as M3 minus currency in circulation and money market funds shares/units to total liabilities (abstracting from remaining liabilities) of credit institutions.

### THE DELEVERAGING PROCESS OF CREDIT INSTITUTIONS

A major element of the financial turmoil has been the pressure it has implied for credit institutions' capital positions, for instance owing to adverse movements in asset prices and credit losses. In conjunction with the funding pressures, the strains on capital positions have warranted some "deleveraging", at least for some institutions. Such a process can comprise a range of strategies targeting both the assets and the liabilities sides of the bank balance sheet.

On the liabilities side, these strategies can entail, inter alia, capital increases. This is reflected in Chart 8 in the increased flows into the capital and reserves position. Euro area governments have supported the recapitalisation of banks through capital injections. At the same time, evidence indicates that euro area credit institutions have been able to increase capital and reserves over and above the government capital injections, either by raising capital from non-banks or through continued profitability.

On the assets side, deleveraging strategies include the disposal of non-core assets and the dilution of concentrated exposures to risky assets. Credit institutions are likely to implement any deleveraging necessary by going through a "pecking order" of assets.20 According to the pecking order view, short-term assets are liquidated first, followed by loans to foreign banks, while long-term assets are liquidated last.<sup>21</sup> As loans are rather illiquid assets, particularly with the securitisation and syndication markets at a standstill, even if banks wanted to, there would be little scope for shedding loans from their balance sheets. Any reduction of credit institutions' holdings of loans would thus mainly result from not granting new loans and the repayment of existing loans.

The banking model in the euro area has some features which may impart additional inertia to lending dynamics. In this respect, an important feature is relationship lending, as credit institutions will take into account long-term client relationships when considering whether to downsize their lending business.

In the initial phase of the financial turmoil, an overall moderation in the pace at which credit institutions accumulated asset holdings was observed (see Chart 12), with the growth of lending to the euro area non-MFI sector declining following its peak in the third quarter of 2007, but remaining at a relatively robust level. Credit institutions, inter alia, also scaled back the expansion of their external asset holdings.<sup>22</sup> From the fourth quarter of 2008, following the intensification of the turmoil, balance sheet adjustments were more pronounced. Borrowing by the euro area non-MFI sector slowed down appreciably. The decline in the flow of loans

### Chart 12 Main assets of euro area credit institutions

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

#### total

- loans to euro area non-MFIs
- securities other than shares issued by euro area non-MFIs
- shares and other equities of non-MFIs
- loans to euro area MFIs
- securities other than shares issued by euro area MFIs shares of euro area MFIs

external assets



Sources: ECB and ECB estimates. Note: The vertical lines denote the start of the financial market

turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

to euro area non-MFIs illustrated in Chart 12 is, however, overstated as credit institutions strongly derecognised loans from their balance sheets in the context of securitisation transactions (see Chart 9), which were retained and thus reflected in higher flows of credit institutions' holdings of debt securities issued by non-MFIs.

- 20 On the "pecking order" of the liquidation of assets, see F. Allen and D. Gale (2000), "Financial contagion", *Journal of Political Economy*, Vol. 108, No 1, pp. 1-33. The notion of a pecking order is also implicit in bank lending channel literature, which treats assets on bank balance sheets as imperfect substitutes; see, for instance, B. Bernanke and A. Blinder (1988), "Credit, money, and aggregate demand", *American Economic Review*, Vol. 78, No 2, pp. 435-439.
- 21 For a discussion on the costs of premature liquidation, see A. Shleifer and R. Vishny (1992), "Liquidation values and debt capacity: a market equilibrium approach", *Journal of Finance*, Vol. 47, September, pp. 1343-66 and F. Allen and D. Gale (1998), "Optimal financial crises", *Journal of Finance*, Vol. 53, August, pp. 1245-84.
- 22 For an analysis of credit institutions' balance sheet developments from the start of the turmoil up to the third quarter of 2008, see the box entitled "Recent developments in the balance sheets of euro area credit institutions" in the December 2008 issue of the Monthly Bulletin.

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### Chart 13 Assets of euro area credit institutions vis-à-vis other MFIs

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



Note: The vertical lines denote the start of the financial market turmoil (black line) and its intensification following the collapse of Lehman Brothers (dashed black line).

Furthermore, MFIs have purchased sizeable amounts of bonds issued by governments. These purchases were boosted by specific interest rate and risk considerations linked to the financial turmoil.<sup>23</sup> The most pronounced evidence of the adjustment is the considerable reduction in external assets, which largely reflects the reduction in holdings vis-à-vis non-resident banks located in major financial centres.

Lending to resident MFIs by credit institutions, which tends to be largely of a short-term maturity, also contracted sharply.<sup>24</sup> However, this decline is understated in Chart 12 owing to the large increase in the claims of euro area credit institutions vis-à-vis the Eurosystem, which are also included in this position. The increase accompanied the significant provision of liquidity by the Eurosystem, as some banks hoarded liquidity on their accounts with the Eurosystem.<sup>25</sup> This effect is visible in Chart 13, which provides a breakdown of credit institutions' transactions with resident MFIs and non-resident banks. The chart also

illustrates the broad-based reduction across asset classes and residency of claims on other banks.<sup>26</sup> This contraction in asset holdings is the most visible sign of a balance sheet downsizing by euro area banks.

Overall, the deceleration observed thus far in loans to households and non-financial corporations has proved to be consistent with historical regularities over the business cycle, reflecting the sharp slowdown in economic activity. At the same time, the factors related to banks' funding and capital positions are forcing them to adjust the size and composition of their balance sheets, which has, however, mainly been visible in asset reductions vis-à-vis other resident and non-resident credit institutions.

### **6** CONCLUSIONS

The analytical challenges posed by the financial turmoil have emphasised the merit of a monetary analysis that complements model-based information with institutional knowledge. The latter is based on a thorough understanding of the different developments in the MFI balance sheet and is necessary in order to assess properly the dynamics of broad money and credit aggregates and their implications for macroeconomic outcomes in real time. In the context of the financial turmoil, many of the monetary developments that are typically treated as "noise" in the data, because they have no immediate link with risks to price stability, have been found to provide relevant information on the questions relating to the detection of breaks

- 23 For a detailed analysis, see the box entitled "Recent developments in MFIs' purchases of debt securities issued by the euro area general government sector" in the June 2009 issue of the Monthly Bulletin.
- 24 For evidence on the maturity structure of the euro area money market, see ECB (2008), "Euro money market survey", September.
- 25 The operational framework of the Eurosystem ensures that a liquidity injection is reflected in the claims of credit institutions vis-à-vis the Eurosystem; see the box entitled "The impact of the first one-year longer-term refinancing operation" in the August 2009 issue of the Monthly Bulletin.
- 26 The purchases of MFI debt securities include both government guaranteed and non-guaranteed bonds; for a breakdown, see Charts 10 and 11.

in monetary trends, the changes in financing conditions over the business cycle and the adjustments taking place in the banking sector.

With regard to these questions, the conclusions of monetary analysis during the turmoil have been that, first, while a "break" cannot be excluded altogether, the moderation in the monetary trend has been less pronounced than that of actual M3 growth and points to subdued inflationary pressures, but not to a deflationary outcome; second, loan growth has predominantly been of a genuine nature; and third, banks have adjusted the size and composition of their balance sheets mainly through asset reductions vis-à-vis other resident and non-resident credit institutions. Gaining these additional insights did not require a change in the way monetary analysis was conducted, but simply a fuller exploitation of all the information that is regularly generated.

The necessity of generating a broader set of insights will remain a prevalent feature of monetary analysis, as was the case, for instance, during the period of extraordinary portfolio shifts into M3 between 2001 and 2003 and more recently during the financial turmoil. In this respect, once the financial turmoil has subsided, it will be necessary to assess whether the behaviour of banks, as well as households and firms, has changed as a result of either their recent experience or any potential changes in the regulatory framework or corporate governance. The detailed institutional analysis embodied in the ECB's monetary analysis will help identify these behavioural changes and their consequences for the relationship between money and credit aggregates on the one hand and consumer prices, asset prices and economic activity on the other.

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# THE LATEST EURO AREA RECESSION IN A HISTORICAL CONTEXT

The latest downturn has been the most severe in the euro area since the Great Depression in the 1930s. Given that the latest recession has been characterised by a period of financial distress, it differs from more "standard" recessions. This article summarises the key features of this recession in the euro area, and then examines the evolution during past recessions of key macroeconomic variables for both a synthetic euro area aggregate and OECD economies since 1970 (a period for which a complete dataset is widely available). Past experience of financial crises and also the global nature of the latest downturn suggest that the euro area economy is likely to recover only gradually. However, uncertainty is likely to remain high along the path to economic recovery.

### I INTRODUCTION

In 2008 the euro area entered a particularly deep recession, which has become the most severe in the area or, before 1999, for a synthetic euro area aggregate, since the Great Depression in the 1930s. Indeed, the deterioration in euro area real GDP growth has been by far the sharpest and deepest since 1970 - a period for which a complete dataset is widely available (see Chart 1). The factors leading to this recession are many, but one key distinguishing feature has been the continuing financial crisis, following a series of excesses in asset markets around the globe. This crisis undoubtedly contributed strongly to the rapid onset of a broad-based



Sources: ECB calculations based on Eurostat data/ECB's area-wide model database from G. Fagan, J. Henry and R. Mestre, "An area-wide model (AWM) for the euro area", *Economic Modelling*, vol. 22 (1), January 2005, pp. 39-59. Note: Areas shaded red reflect euro area recessions as defined by the Euro Area Business Cycle Dating Committee of the Centre for Economic Policy Reseach (CEPR).

downswing, in both geographical and sectoral terms. Given the size of the contraction in activity, there has been considerable uncertainty regarding the likely future trajectory of euro area activity. In such a context, it is useful to examine how the current situation compares with previous recessions and how recoveries have historically tended to take shape.<sup>1</sup>

This article summarises the key features of the latest euro area recession, and then examines the evolution during past recessions of key macroeconomic variables for both a synthetic euro area aggregate and OECD economies since 1970. In examining these past episodes, the article differentiates between recessions that can be characterised as involving financial crises and more standard cyclical downturns. Financial crises are periods in which financial institutions and corporations face great difficulties in meeting their financial obligations on time, possibly accompanied by a large number of defaults.

The patterns observed in these historical episodes may provide a useful reference for understanding the evolution of macroeconomic indicators in periods of recovery. Although these patterns may be illustrative, there are several limitations to this analysis. Foremost among these limitations is the fact that history is unlikely to ever fully repeat itself, given the unique character of past recessions and recoveries. Indeed, structural changes over time, along with differing shocks to the economy, mean that the most recent downturn has many special features not shared with previous historical episodes. That said, drawing empirical regularities from the behaviour of various macroeconomic

1 This article is based on the data available up to 15 October 2009.

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The latest euro area recession in a historical context aggregates during past recoveries can provide some context, and even some guidance, for the shape that a recovery might take.

The article is organised as follows. First, the characteristics of the most recent euro area recession are presented in the following section, highlighting widespread difficulties in foreseeing its intensity. Second, the latest euro area downturn is compared with past recessions, both for a synthetic euro area aggregate and for OECD economies (identifying specific periods of distress in these economies), going back to the 1970s. On the basis of these comparisons, some broad conclusions are drawn on the likely shape of the recovery.

### 2 ANALYSING THE LATEST EURO AREA RECESSION

The latest euro area recession has been particularly marked in terms of the speed and depth of the downturn in economic activity. These features, however, have not been exclusive to the euro area – in fact, by many measures, the world economy has faced its most severe crisis since the Great Depression in the 1930s. Several forces have contributed to this marked contraction in euro area and global activity. Notably it has involved a combination of macroeconomic factors, developments in financial markets and significant deficiencies in the regulatory and supervisory architecture, which prepared the ground for a financial crisis. The financial system as it worked over the decade leading up to the crisis – with its inappropriate incentives and overly complex products, and with global imbalances as its macroeconomic backdrop – involved an excessive degree of risk-taking. Following a housing boom in most industrialised economies, house prices declined sharply, several weaknesses were exposed and investors suddenly lost confidence, as a wave of panic spread. After years of exceptional risk appetite and high profits, the pendulum swung the other way, as markets became extremely sensitive to financial risk, affecting prices across all asset classes.

Activity in the euro area had grown strongly over the period 2005-07. By the middle of 2009, however, euro area real GDP was about 5% below its peak at the beginning of 2008.<sup>2</sup> Initially the downturn was stronger in the United States, where it was triggered by the need for a correction of the excesses in the US housing market. However, the euro area macroeconomic indicators were also already signalling some slowing in activity when the financial turmoil started in August 2007. In the event, the euro area cycle largely followed that of the United States, broadly in line with past experience (see Box 1).

2 Defining and dating recessions is not straightforward. For example, the Euro Area Business Cycle Dating Committee of the Centre for Economic Policy Research (CEPR) judged in early 2009 that the latest euro area recession had started in January 2008. Euro area real GDP, however, started to decline only in the second quarter of 2008, a development which appeared at the time to partly reflect some correction of the strong growth in the preceding quarter.

#### Box I

### LINKING THE CYCLICAL DYNAMICS OF THE EURO AREA TO THOSE OF THE UNITED STATES: HISTORICAL REGULARITIES DRAWN FROM COMPARISONS WITH PAST CYCLES

This box reviews some empirical research on the economic linkages between the United States and the euro area. Overall, there is strong evidence that economic activity in the US and euro area economies have been highly interrelated over the last 40 years. Comparisons with past cycles suggest some historical regularities that characterise the cyclical dynamics of both economic

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areas. First, while activity in the United States and that in the euro area generally co-move, euro area cycles tend to lag those of the United States. Second, despite strong co-movements, the adjustment dynamics are different in these two areas: the US economy tends to recover quickly after being hit by sharp cuts in demand, while the euro area countries have historically had milder downturns and slower rebounds. Third, US shocks have tended to become global over time, being transmitted to the rest of the world in general and to the euro area in particular. These three key empirical regularities identified by economic research are elaborated in more detail below.

### **Co-movements**, leads and lags

Economic activity in the United States and that in the euro area (measured in terms of GDP per capita) have been co-moving over the last 40 years (see Chart A). Descriptive evidence suggests that the US business cycle leads that of the euro area and that fluctuations in these two economies take place around a common trend. These two stylised facts have been confirmed by economic research.

First, using a parsimonious bivariate VAR model for US and euro area GDP, Giannone and Reichlin (2006) show that there have been systematic linkages since 1970 between economic activity in these two economies, with GDP in the euro area generally lagging behind its US counterpart by around four quarters.<sup>1</sup> Dees and Vansteenkiste (2007) also show that the US cycle leads that of the euro area, but find that US downturns are transmitted faster to the euro area than upturns.<sup>2</sup> On average, it takes two quarters for a downturn in the United States

See D. Giannone and L. Reichlin, "Trends and cycles in the euro area: how much heterogeneity and should we worry about it?", ECB 1 Working Paper No 595, 2006.

2 See S. Dees and I. Vansteenkiste, "The transmission of US cyclical developments to the rest of the world", ECB Working Paper No 798, 2007.



Chart B Gap between GDP per capita in the United States and in the euro area



Solves: The chart reports the difference between the log levels of GDP per capita in the United States and in the euro area in the period 1970-2006.

to be transmitted to the euro area, whereas it takes six quarters for an upturn to spill over. These estimates have held on average in the past, but each recession episode is of course somewhat different in terms of its lags, depth and length.

Second, Giannone and Reichlin (2005) and Giannone et al. (2009) show that real GDP per capita in the United States and in the euro area share a common trend.<sup>3</sup> The level of euro area real GDP per capita has been on average about 30% lower than its US counterpart and the gap between the two areas has been mean-reverting around such a value (see Chart B). Granger causality tests also provide evidence that the gap in the growth rates does not drive future US growth but helps explain growth in the euro area. This confirms the apparent "unilateral" nature of the relationship.

### Real cycle correlation and cyclical adjustment differences

The two stylised facts mentioned above suggest that when GDP in the euro area and the United States deviate from the long-run relationship, adjustment occurs more rapidly in the United States, while the euro area catches up more slowly. This is confirmed by Duval et al.

(2007), who find that in euro area countries the initial impact of common shocks on the output gap is smaller, but output gaps are more persistent, than in the United States (see Chart C).<sup>4</sup> Therefore, the US economy tends to recover quickly after being hit by sharp decreases in demand, while the euro area countries have historically had milder downturns and slower rebounds.

Overall, while there is also evidence of a specific component to the business cycle of each economic area,<sup>5</sup> the US and euro area real cycles nonetheless remain highly correlated. In fact, co-movements also occur between US activity and a measure of rest of the world activity. These co-movements do not necessarily simply reflect the transmission of US idiosyncratic shocks and might instead represent the impact of shocks that are more global in nature. Globalisation forces have contributed to such an increase in business cycle synchronisation.

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Source: European Commission (AMECO). Notes: The euro area series refers to the 12 countries belonging to the euro area in 2005. The 2009 figures for the euro area and the United States are European Commission forecasts.

- 3 See D. Giannone and L. Reichlin, "Euro area and US recessions, 1970-2003", in L. Reichlin (ed.) Euro area business cycle: stylized facts and measurement issues, CEPR, 2005 and D. Giannone, M. Lenza, and L. Reichlin, "Business cycles in the euro area", ECB Working Paper No 1010, 2009.
- 4 See R. Duval, J. Elmeskov and L. Vogel, "Structural Policies and Economic Resilience to Shocks", OECD Economics Department Working Paper No 567, 2007.
- 5 For instance, Stock and Watson (2005) provide evidence of the emergence of two cyclical groups, namely the euro area and English-speaking countries. See J. Stock and M. Watson, "Understanding Changes in International Business Cycle Dynamics", *Journal of the European Economic Association*, 3(5), 2005, pp. 908-1006.

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### Globalisation and the transmission of cyclical dynamics

Increased trade and financial integration has led to international business cycle synchronisation in the post-war period. Several studies show an increase in synchronisation over time, indicating that globalisation promotes international economic linkages and heightened business cycle correlations.<sup>6</sup>

Dees and Saint-Guilhem (2009) find evidence that US cyclical developments have become more global and increasingly persistent over time.<sup>7</sup> This might be partly explained by the increasing role of indirect effects – either via third countries or through further transmission within each economy – that make US cyclical developments more global.

In particular, recessions that originate from the United States tend to be severe and often accompanied by a synchronised and protracted global downturn. Moreover, globally synchronised recessions last longer and result in higher output losses than unsynchronised ones.<sup>8</sup> Finally, it appears that global trade flows tend to fall significantly when the United States is also in recession.

8 See IMF, "From Recession to Recovery; How Soon and How Strong?", World Economic Outlook, April 2009, Chapter 3.

More generally, the slowdown quickly became global in scope. Contributing to this was the fact that, despite the financial crisis, oil prices rose to historical highs in mid-2008, significantly dampening macroeconomic activity. The situation worsened markedly in the summer of 2008, when governments were forced to provide substantial aid to several financial institutions in the United States and in the euro area. It escalated even further in September 2008. In the aftermath of the collapse of Lehman Brothers, financial markets seized up, interbank lending froze, credit spreads spiked and confidence collapsed. Given the growing integration among economies, these effects spread rapidly around the globe, amplifying an already marked deceleration

in the pace of activity. Confidence worsened abruptly across virtually all sectors and regions in what appeared to be a generalised panic. As expectations about future economic activity were scaled down severely, aggregate demand declined strongly, triggered by a massive destocking and a fall in investment spending, which contributed to an unusually large contraction in global trade (see Box 2). In parallel, household saving ratios rose as households reacted to both lower asset values and a more uncertain environment. Eventually, with its high degree of openness and sizeable manufacturing sector, the euro area economy was hit particularly hard. Within the euro area, countries which had experienced a pronounced housing boom suffered particularly acutely.

<sup>6</sup> See, for instance, M.A. Kose, C. Otrok and C.H. Whiteman "International Business Cycles: World, Region and Country-Specific Factors", *American Economic Review*, 93 (4), 2003, 1216-1239 and M.J. Artis, and T. Okubo "Globalization and Business Cycle Transmission", CEPR Discussion Papers 7041, 2008.

<sup>7</sup> See S. Dees and A. Saint-Guilhem "The role of the United States in the global economy and its evolution over time", ECB Working Paper No 1034, 2009.

### Box 2

### FACTORS UNDERLYING THE GLOBALLY SYNCHRONISED NATURE OF THE LATEST DOWNTURN

Prior to the onset of the latest global downturn, a widely held view was that the global economy could "decouple" from the downturn in the United States, given the specific US nature of the shock. Indeed, at the beginning of the financial crisis in mid-2007, emerging markets did not seem to be strongly affected. However, subsequently, the global economic recession became very severe and the global cyclical dynamics became highly synchronised with those of the United States. While the shock initially originated from the United States, it has acted as a trigger for vulnerabilities that were common across countries and regions, including high levels of leverage and an under-pricing of risk. The shock was, therefore, global in nature and its transmission triggered a synchronised downturn. Several factors had been fostering such a development. This box attempts to provide an account of four particularly important factors: the synchronised fall in manufacturing output and world trade; international supply chains and the contraction in world trade; synchronisation and financial markets; and confidence linkages.

### The synchronised fall in manufacturing output and world trade

There was an exceptionally strong correction in industrial activity (see Chart A) in the latest recession. The combination of housing market corrections, households' balance sheet adjustments and difficulties in short-term financing all contributed to the collapse of demand for durable goods (particularly in the car industry), which account for a large share of manufacturing output. The worldwide inventory adjustment process further aggravated the dynamics of the downturn, leading to a severe and synchronised contraction in industrial production.



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This also led to a very strong trade adjustment, with the fall in world trade occurring at a pace without precedent since the Second World War (see Chart B). World trade fell by 17% between October 2008 and May 2009, returning to 2005 levels within the span of a few months.

### International supply chains and the contraction in world trade

Although the sharp contraction in world trade at the end of 2008 and at the beginning of 2009 was partly related to special factors, such as the shortage of trade finance, the increased presence of global supply chains in international trade may have acted as an additional propagation mechanism. In the event of shocks with a large global content, increasingly complex international supply chains can magnify the impact on activity through a sharper contraction in trade, as goods are now manufactured via complex, international networks, so that countries have increasingly become nodes in international supply chains.

Supply chains might have actually aggravated the recent trade collapse. With access to finance drying up, buyers generally seem to have become more restrictive in providing finance along the supply chain. In doing so, they may have caused interruptions or bottlenecks in the supply chain, thereby also harming the production, cash flow, financial plans and exports of downstream producers. Furthermore, the downsizing of production by (or even bankruptcy of) some large global players, which are often monopsonist buyers of specialised products, may have left smaller and less diversified suppliers of such products in a difficult situation.<sup>1</sup>

### Synchronisation and financial markets

Financial markets have also become more interlinked over time, as indicated by an increase in the gross volume of capital flows and in the diversity of their composition along with the increasing correlation of equity markets (see Chart C). In the current episode in particular, financial innovation allowed US mortgages to be converted through securitisation into asset-backed securities, which were partly sold to international investors, without the ratings of these products fully reflecting their inherent risks. This allowed US-specific risks to be spread globally, leading to a particularly strong transmission of US mortgage-related credit problems to the rest of the world.<sup>2</sup>





1 For instance, a fall in car sales in Germany is accompanied by a 2.2 times larger fall in purchases of inputs from many other sectors (see Deutsche Bundesbank, "The macroeconomic repercussions of a decline in demand for cars, taking into account the inter-sectoral integration of production", Monthly Report, February 2009).

2 See M. Hoffmann and T. Nitschka, "Securitization of Mortgage Debt, Asset Prices and International Risk Sharing", Institute for Empirical Research in Economics Working Paper No 376, 2008.

### **Confidence linkages**

Finally, as shown in Chart D for the United States and the euro area, confidence linkages across economies may also have become stronger over time: the correlation between euro area and US consumer confidence increased from 0.68 for the period 1985-99 to 0.90 in the period from January 2000 to April 2009.<sup>3</sup> The high and increasing degree of synchronisation could to some extent reflect the fact that news spreads faster across the globe than in the past, with negative news abroad more strongly affecting domestic confidence. Together with increased trade and financial integration, confidence linkages may have led to higher business cycle synchronisation across economies and greater sensitivity to common shocks (see Box 1).



3 For further analysis of this increasing correlation between euro area and US business and consumer confidence, 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 and also R. Anderton, F. di Mauro and F. Moneta, "Understanding the impact of the external dimension on the euro area: trade, capital, flows and other international economic linkages", ECB Occasional Paper No 12, 2004.

The swift and dramatic deceleration in the pace of economic activity meant that most forecasters



#### Barometer and Consensus Economics. Note: The x-axis shows the release dates of the various estimates.

made unusually large projection errors, with the 2009 forecast having steadily deteriorated from an outlook of growth in the vicinity of 2% at the beginning of 2008 to an outlook of a large contraction of between 4% and 5% by the middle of 2009 (see Chart 2).3 Two factors, in particular, contributed strongly to the magnitude of the forecast errors over this period. First, uncertainty rose to previously unseen levels as most of the indicators monitored entered uncharted territory. Corporations and households adjusted their behaviour accordingly in an unprecedentedly abrupt manner that was not captured by standard tools based on past relationships or linear approximations of economic behaviour.

Second, the fairly close historical relationship between high-frequency survey indicators and national accounts data appears to have broken

<sup>3</sup> This continued unusually heightened uncertainty for the near-term euro area outlook is detailed in the box entitled "Uncertainty and the economic prospects for the euro area" in the August 2009 issue of the Monthly Bulletin.

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down over the crisis period, as illustrated in Chart 3 by the large gap between the Purchasing Managers' Index (PMI) composite output series and the real GDP data between the last quarter of 2008 and the first quarter of 2009. Survey indicators such as the PMI that are constructed as balance indicators generally indicate how widespread changes in activity are, but are not necessarily a good indicator of their depth. Since some sectors were hit particularly strongly by the crisis, notably the capital goods sector, the linear mapping between surveys and activity underlying most forecast tools no longer provided a good approximation.

The strength and severity of the financial tensions and the changes in the balance of risks to price stability have elicited strong macroeconomic policy responses. When liquidity in money markets became severely hampered in August 2007, the Eurosystem reacted swiftly to ensure that liquidity risk did not lead to a major systemic financial crisis. It reacted mainly by amending the timing and maturity of its liquidity-providing operations to accommodate the funding needs of banks.

Later on, in response to the heightened financial market uncertainties that emerged in autumn 2008, the Governing Council of the ECB adopted a number of non-standard measures to support the transmission of its interest rate decisions and enhance the flow of credit to households and corporations. Through its enhanced credit support, the Governing Council, in particular, extended the opportunities for the banks to borrow from the Eurosystem.

In parallel to taking these non-standard measures, the Governing Council also lowered the official interest rates swiftly. Given the changes in the assessment of risks to price stability emerging from economic and monetary developments, between October 2008 and May 2009 the Governing Council of the ECB cut the key interest rates by 325 basis points to levels not seen since at least the Second World War in the countries forming the euro area. At the same time, there was also a large fiscal expansion in the euro area. This reflected discretionary fiscal stimulus measures in the context of the European Economic Recovery Plan and - more importantly - the operation of automatic fiscal stabilisers and the underlying momentum of spending growth. Finally, governments implemented a series of measures to stabilise the financial system, which are mainly reflected in higher government gross debt ratios and large contingent fiscal liabilities.4

### 3 COMPARING THE LATEST DOWNTURN WITH PREVIOUS RECESSIONS

Notwithstanding the features unique to the latest euro area economic downturn, a historical comparison of past periods of recession and recovery can shed some light on the average historical trajectory of economic activity around cyclical turning-points. To this end, this section examines the evolution of aggregate real economic activity, as well as the expenditure breakdown of the main components of private demand, comparing it with the behaviour recorded in other

4 For further details of euro area fiscal policy responses to the financial crisis, see the article entitled "The impact of government support to the banking sector on euro area public finances" in the July 2009 issue of the Monthly Bulletin.

recessions since 1970, in both the euro area and, more generally, across OECD economies.

Given the financial nature of the latest euro area downturn, the section also singles out past periods of heightened financial distress in OECD economies to highlight adjustment profiles in such exceptional circumstances. Specifically, "standard" recessions are differentiated from "systemic" and "nonsystemic" financial crises in the OECD.<sup>5</sup> While these historical comparisons shed some light on the typical dynamics of past recessions and recoveries, several limitations must be kept in mind, notably the unique nature of each episode despite a number of common features.6 In particular, the financial turmoil since 2007 can be thought of as largely unique in the period since the Second World War on account of its global scale. At the same time, there have been important differences in macroeconomic policy-making compared with earlier episodes.

### **3.I OVERALL ACTIVITY**

The contraction witnessed in the latest euro area recession is without precedent since the 1970s. Specifically, the decline in real activity has exceeded that in previous recessions for a synthetic euro area aggregate since 1970 (see Chart 4). This recession is also among the most severe of all OECD recessions over the same period (see Chart 5).

Examining the average recovery profile, it would appear that, historically, the depth and duration of downturns in standard recessions have differed from those in financial crises. In standard cycles and non-systemic crises, a sharp decline in activity has tended to be followed by a swift recovery, thereby displaying a "V" shape. In systemic crisis cycles, the recession period is more protracted so that the cycle displays a "U" shape.<sup>7</sup> The latest contraction in euro area real activity is not only associated with a region-specific financial crisis, but also with a global crisis that is the most severe in OECD economies since 1970. In this context, past relationships would suggest that



Note: T represents the peak of activity prior to the respective recessions. The dates of the euro area peaks are the third quarter of 1974, the first quarter of 1980, the first quarter of 1992 and the first quarter of 2008.

the latest contraction in euro area real activity is likely to be associated with a gradual recovery.<sup>8</sup> Factors leading to relatively more sluggish economic recoveries following financial crises are likely to include a broad-based balance

- 5 Five periods of financial crisis are singled out as having been particularly severe, and are referred to as "systemic": Spain (1978-79), Finland (1989-93), Sweden (1990-93), Norway (1988), and Japan (1993); all other financial crises in this article are referred to as "non-systemic". For a complete listing of episodes characterised as systemic and non-systemic crises, see Chapter 3 of the April 2009 IMF World Economic Outlook.
- 6 Indeed, the latest financial crisis differs in many respects from the selected group of previous crises examined – see, for instance, S. Cecchetti, M. Kohler and C. Upper "Financial Crises and Economic Activity", Paper for the Federal Reserve Bank of Kansas City's symposium at Jackson Hole, Wyoming, August 2009.
- 7 This is consistent with the finding that recessions associated with credit crunches and house price busts in OECD countries have tended to be deeper and longer than other recessions over the last 50 years (see S. Claessens, M. Kose and M. Terrones, "What Happens During Recessions, Crunches and Busts?", IMF Working Paper No 274, 2008).
- International evidence suggests that past financial crises have been characterised by substantially and persistently depressed output during subsequent recoveries – see Chapter 4 of the October 2009 IMF World Economic Outlook. Indeed, the effects of the latest financial crisis may have lowered euro area potential output, as discussed in the box entitled "Potential output estimates for the euro area" in the July 2009 issue of the Monthly Bulletin.

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sheet overhang across institutional sectors, leading to weak private demand in a context of restricted credit flows. In terms of composition, the recovery from a financial crisis typically involves a more prolonged adjustment in investment. In addition, households increase their savings in an attempt to repair balance sheets affected by losses in housing and financial wealth, with the result that private consumption is even weaker than the level entailed by the strong rise in unemployment. In such circumstances, the impetus to growth from external demand is a considerably more important driver of the recovery. When the financial crisis is specific to a small open economy, it is typically accompanied by a significant depreciation of the exchange rate and the likelihood of an export-led recovery is much higher. In contrast to most past financial



crises, a characteristic of the latest crisis is that it

has affected the global financial system and the

developed economies simultaneously. Finally,

as financial crises are typically accompanied by

The decline in euro area real economic activity outlined above has had a clear counterpart in the adjustment of the various expenditure components of demand, but its effect has been most visible, by far, in the adjustment of international trade - particularly euro area exports. The contraction in export volumes in the latest downturn has been far in excess



Sources: ECB calculations based on Eurostat data/ECB's area-wide model database (see Fagan et al., 2005) and OECD Main Economic Indicators

Notes: Trepresents the peak GDP level prior to recession. 1) The cycle range for OECD recessions is derived as the upper quartile less the lower quartile of all OECD recessions since 1970. 2) Average real GDP growth during the "five severe" financial crises since 1970, labelled as "systemic", which occurred in Series Diverse the Diverged March 2010 and 201 Spain, Finland, Sweden, Norway and Japan.
Average real GDP growth during all other financial crises in selected OECD countries since 1970.
Average real GDP growth during all recessions in OECD

countries not categorised as crises.



T+12

Note: See notes to Chart 5

15

10

5

0

-5

-10

-15

-20

T+16
of those in previous downturns and financial crises (see Chart 6). The decline in imports, while considerable, was smaller than that of exports, so that net trade was a sizeable drag on euro area growth, from mid-2008 to early 2009. While the precipitous global decline in trade remains difficult to explain on the basis of past empirical regularities, the globally synchronised nature of the downturn may have been exacerbated by the worldwide integration of global production over the last decade, as well as other factors leading to increasingly synchronised trade developments (see Box 2). Neither past standard recessions in the OECD economies nor past crises have involved such pronounced movements in export volumes.

## 3.3 PRIVATE INVESTMENT SPENDING

While real private investment spending in the latest recession has fared worse than on average in previous recessions in OECD economies, the contrast compared with previous episodes has not been nearly as stark as in international trade (see Chart 7). It is likely that a large part of the ongoing dampening of investment spending is accounted for by the reduction in overall

demand, although financing may also have played a role in restraining investment.9 The contraction in total private investment to date has not been dissimilar to that in the worst OECD recessions and in systemic crises in the past. Historical evidence suggests that private investment exhibits protracted weakness following systemic crises. On average, financial crises in the OECD have involved an unusually prolonged adjustment in private investment spending compared with other recessions, and particularly in housing investment (see Chart 8). Recoveries in housing investment following systemic crises have tended to be very weak compared with standard recessions in OECD economies, as well as non-systemic crises, possibly reflecting balance sheet adjustments in non-financial and financial sectors. the associated with a dampening in both credit demand and credit supply.

In past crises, part of the evolution of private investment spending, as well as of consumer spending, can be attributed to the impact of

9 See the box entitled "Euro area investment in the current downturn" in the July 2009 issue of the Monthly Bulletin.





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these crises on the banking sector. As indicated in Box 3, experience of past crises shows that associated weaknesses in the banking sector tend to be long lasting, so that pertinent developments and their macroeconomic impact need to be closely monitored.

#### Box 3

### THE BANKING SECTOR DURING SYSTEMIC CRISES: LESSONS FROM THE PAST

The banking sector has been at the epicentre of the continuing global financial and economic crisis. In particular, huge losses on banks' exposures to the impaired structured credit markets, as well as write-downs on their loan books in the context of the deepening recession, have been threatening the viability of the banking sector and its crucial role in the provision of financial services to the economy. Governments and central banks have reacted to these severe challenges with resolute action on a huge scale to restore stability and health to the banking sector and thus to the economy as a whole. In order to assess the extent of the latest financial crisis and the success of the various support measures taken by public authorities, this box compares the developments in the euro area and US banking sectors during the latest crisis with developments during past financial crises and recessions in OECD countries.

A comparison is made of the average evolution of indicators relating to (i) the capitalisation of the banking system, (ii) bank lending activity, (iii) international banking activity and (iv) the size of the banking system, within a time frame around financial crises and recessions (see Charts A to D). With regard to financial crises, episodes that have taken place in OECD countries since 1979 are considered.<sup>1</sup>

Each chart reports the average evolution of a specific indicator for all banking crises for which data are available (line denoted "banking crises") and for the most severe crises (line denoted "big 4 crises"). The quarter when the crisis starts is denoted "T" and is assumed to be the first quarter of the year in which the crisis unfolds.<sup>2</sup> The charts also display the evolution of the indicators during normal business cycle recessions in OECD countries that were not accompanied by systemic distress in the financial system (line denoted "Normal cycle"). In this case, quarter "T" refers to the quarter in which GDP reached a peak. Finally, the charts report the evolution of the indicators in the latest financial crisis for the United States (line denoted "United States (latest)") and the euro area (line denoted "euro area (latest)"), quarter "T" being the first quarter of 2008.

The leverage ratio (i.e. the ratio of total assets to capital and reserves), reported in Chart A, typically increases during financial crises, as the decrease in total assets does not fully offset the decrease in capital that mainly stems from reported losses. By contrast, in normal business cycle recessions,

<sup>1</sup> The crises considered here are different from those considered in the main text, owing to issues of data availability. Specifically, the following cases are included: Norway 1987, United States 1988, Finland 1991, Sweden 1991, Japan 1992, Iceland 1993, Korea 1997, Slovakia 1998, Norway 1987, Finland 1991, Sweden 1991 and Japan 1992. The latter four crises are referred to as "big 4 crises". Indeed, some observers argue that these crises are very similar to the current episode in terms of the imbalances observed in the build-up to and in the severity of the initial phase.

<sup>2</sup> According to the relevant literature, this is typically the year in which a large number of banking institutions went bankrupt or the government was forced to undertake large-scale interventions in order to avoid bankruptcies and the collapse of the banking sector. Unlike the main text, the box defines time "T" as the moment when the crisis starts. The banking indicators analysed in the box react quickly to the crisis, so that defining "T" as the moment when the crisis unfolds helps to clearly distinguish between the evolution of the indicators during the build-up to the crisis and during its unfolding.



leverage either stays broadly constant or decreases. Interestingly, despite the severity of the latest global financial crisis, the evolution of leverage in the US and euro area banking sectors has been broadly in line with "normal" recessions. This finding suggests that recapitalisation policies and government guarantees may have mitigated the impact of the latest financial crisis.<sup>3</sup>

The size of banks' loan portfolios, in real terms (see Chart B), typically stagnates for a very protracted period after systemic financial crises. In the four most severe crises, it declined on average for four years. In the latest crisis, the initial phase has been more similar to normal business cycle recessions in both the United States and the euro area.

International banking activity (measured here as the sum of international bank assets and liabilities, (see Chart C) declines after financial crises and then stagnates for several years. The recovery comes on average after eight years. By contrast, normal business cycle recessions typically have no observable consequences for international banking activity. During the latest financial crisis this indicator has evolved in the United States and in the euro area broadly in line with past financial crises.

Total banking assets, in real terms (see Chart D), display a slight and short-lived decline after systemic financial crises. In the four most severe crises, total assets declined for a period ranging from three to four years. Normal business cycle recessions typically have no observable consequences for total assets. In the build-up to the latest financial crisis, real total assets in the United States and in the euro area grew faster than in past financial crises.

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<sup>3</sup> The deterioration of bank profitability in banking crises is much more severe than in normal cycles (not reported in the charts) as financial crises lead to systemic losses. In the most severe crises, losses last for four years on average. The strong deterioration of bank profitability is an important determinant of the low level of bank capitalisation in the years following the crisis.

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# Chart C Banks' real foreign assets and liabilities in local currency

(index; quarter T-12=100)



Sources: BIS and IMF. Notes: Foreign assets and liabilities are translated into local currency and deflated using the CPI. "Euro area (latest)" is the sum of international assets and liabilities for the 12 euro area countries for which data are available at the BIS since the first quarter of 2005 (Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, Netherlands, Austria, Portugal and Finland). See also notes to Chart A.



Sources: OECD, IMF, ECB and Federal Reserve System. Notes: Assets are deflated by the CPI. Data for past crises are annual data from OECD banking statistics. They have been converted into quarterly data. See also notes to Chart A

Keeping in mind the caveat that the typical past financial crisis is obtained by averaging across a range of heterogeneous episodes and countries with different economic and financial structures, the evidence presented in the box suggests that policy interventions may have mitigated the impact of the financial crisis to some extent. This notwithstanding, the financial health of the banking sector still needs to be closely monitored as experience of past crises suggests that weaknesses in the banking system tend to be persistent.

# 3.4 PRIVATE CONSUMPTION SPENDING AND THE LABOUR MARKET

Euro area private consumption spending has weakened considerably in the latest euro area recession. This appears to be consistent with the experience in past crises, when household consumption has also tended to be weaker than in standard recessions (see Chart 9). Two factors are behind the weakness in private consumption spending. First, the moderation in consumption in part reflects a rise in the household saving ratio, as households increase precautionary savings to finance unexpected losses in income or increase life-cycle savings to repair balance sheet losses.10 Indeed, an unusually high degree of uncertainty, along with generally depressed asset prices, contributed to

an abrupt rise in the euro area household saving ratio from the third quarter of 2008. Second, private consumption spending has also been adversely affected by the decline in household income associated with the recession. In particular, employment growth has dropped sharply, as in past financial crises (see Chart 10). In past systemic crises, employment has remained very subdued well after the trough in economic activity implying an unemployment rate which subsequently remained considerably above pre-crisis levels. In the latest downturn,

<sup>10</sup> While the rise in value of asset holdings may have been important as a substitute for traditional household savings with a life-cycle motive in recent years, this factor appears to have been more pronounced in the United States than in large euro area economies – see, for instance, P. Hiebert, "Household Saving and Asset Valuations in Selected Industrialised Countries", Reserve Bank of Australia Research Discussion Paper No 7, 2006.



the employment adjustment has been dampened by a reduction in working hours per employee, with firms hoarding labour. While this may contain the employment adjustment in the short term, experience of past crises suggests that large employment corrections tend to follow a financial crisis, especially if this is accompanied by a build-up of excess capacity in certain sectors (such as the construction and financial sectors in the current episode).

The deceleration in real compensation of employees has so far been more moderate in the latest recession compared with past episodes (see Chart 11). This is partly a result of the less pronounced adjustment in employment, along with the decline in inflation, which has helped support real wages. It also reflects the fact that many wage settlements were agreed in 2008, at a time when the economic outlook was more positive and inflation was higher. In the past, the decline in real compensation growth has been much larger in recessions following a financial crisis, with real compensation showing pronounced falls for several years.

Examining the general trends in private consumption spending in past recoveries, it would appear that a recovery in household spending has helped underpin a return to economic growth in standard recessions, as well as in non-systemic crises. In contrast, systemic crises have been associated with far more protracted household spending weakness, which has displayed similar dynamics to those of private investment spending. These dynamics



#### Chart II Real compensation of employees



probably stem from common underlying factors, such as balance sheet adjustment and restricted credit flows.

### **4 CONCLUSIONS**

This article has sought to put the latest euro area recession into a historical context, examining the experience of the euro area - or of a synthetic euro area aggregate prior to 1999 - and other OECD economies since 1970, following both recessions and crises. While the profiles of recession and recovery associated with these episodes have many unique features, some empirical regularities can nonetheless be identified. In particular, the behaviour of macroeconomic aggregates during the latest euro area downturn resembles in many ways the behaviour witnessed during past financial crises in OECD economies. One factor aggravating the severity of the latest downturn, however, has been the sharp contraction in global trade, in addition to the more traditional significant declines in private consumption and investment spending associated with past crisis episodes in OECD economies. The precipitous fall in trade volumes has far exceeded the past declines witnessed in OECD economies, reflecting not only the global nature of the latest recession, but also the increase in cross-regional linkages in recent vears, as well as some impairment in trade finance associated with the crisis.

At the same time, the scale and scope of the financial crisis has elicited a very strong macroeconomic policy response. The Eurosystem has reacted swiftly to mitigate the effects of the financial crisis, and has provided considerable support for households and corporations. Government measures have also provided key support to economic activity and financial stability.

Looking ahead, the profile of recoveries following past periods of financial distress suggests that the recovery of the euro area economy will probably be gradual. However, uncertainty is likely to remain high along the path to economic recovery. Indeed, the latest financial crisis has given rise to a need for fundamental adjustments in the balance sheets of both the financial and non-financial sectors, a process which dampens demand and which typically takes some time to complete. Finally, as financial crises are typically accompanied by strong fiscal expansion, there is generally a need in the subsequent period for fiscal consolidation.

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The latest euro area recession in a historical context

EURO AREA STATISTICS





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

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# ENLARGEMENT OF THE EURO AREA ON I JANUARY 2009 TO INCLUDE SLOVAKIA

Unless otherwise indicated, all data series covering observations for 2009 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), the statistical series relating to the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate. Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for 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. Historical data referring to the euro area before the entry of Slovakia are available on the ECB's website at http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html

## Conventions used in the tables

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





# **EURO AREA OVERVIEW**

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

	M1 <sup>2)</sup>	M2 <sup>2)</sup>	M3 <sup>2), 3)</sup>	M3 <sup>2), 3)</sup> 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government <sup>2)</sup>	Securities other than shares issued in euro by non-MFI corporations <sup>2)</sup>	3-month interest rate (EURIBOR, % per annum, period averages)	10-year spot rate (% per annum, end-of- period) <sup>4)</sup>
	1	2	3	4	5	6	7	8
2007 2008	6.5 2.4	9.9 9.6	11.2 9.7	-	10.8 9.5	18.6 18.8	4.28 4.64	4.38 3.69
2008 Q4 2009 Q1 Q2	2.7 5.3 8.0	8.9 7.3 5.5	8.2 6.1 4.4	- - -	7.3 4.6 2.1	20.1 26.2 27.9	4.24 2.01 1.31	3.69 3.77 3.99
2009 May June July Aug	8.0 9.4 12.2 13.6	4.5 5.1 4.9 4.7 4.6	2.8 3.8 3.6 3.0 2.6	4.1 3.5 3.1 2.5	1.8 1.4 0.6 0.1	28.0 26.1 27.0 24.4	1.28 1.23 0.97 0.86	3.64 4.18 3.99 3.74 3.68
Sep. Oct.	12.8	3.6	1.8		-0.3		0.77 0.74	3.64 3.68

# 2. Prices, output, demand and labour markets<sup>5)</sup>

	HICP <sup>1)</sup>	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (percentages)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2007	2.1	2.7	2.5	2.8	3.7	84.1	1.8	7.5
2008	3.3	6.1	3.4	0.7	-1.7	81.8	0.8	7.5
2009 Q1	1.0	-2.0	3.6	-4.9	-18.5	72.5	-1.2	8.8
Q2	0.2	-5.7	4.0	-4.8	-18.6	70.0	-1.8	9.3
Q3	-0.4	-7.9				70.1		9.6
2009 May	0.0	-5.9	-	-	-17.7	-	-	9.3
June	-0.1	-6.5	-	-	-16.7	-	-	9.4
July	-0.7	-8.4	-	-	-15.9	69.6	-	9.5
Aug.	-0.2	-7.5	-	-	-15.2	-	-	9.6
Sep.	-0.3	-7.7	-	-		-	-	9.7
Oct	-0.1					70.7		

### 3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balar	nce of payments (	(net transactions)		Reserve assets (end-of-period	Effective exchar the euro: EF	USD/EUR exchange rate	
	Current and		Direct	Portfolio	positions)	(index, 1999 Q1 = 100)		_
	capital accounts	accounts	investment	-	Nominal Real (CPI)			
	1	2	3	4	5	6	7	8
2007	15.7	46.0	-72.9	151.3	347.2	107.9	109.0	1.3705
2008	-133.3	-11.4	-189.0	350.5	374.2	113.0	113.6	1.4708
2008 Q4	-30.5	-1.9	-61.1	152.7	374.2	109.1	109.6	1.3180
2009 Q1	-36.6	-7.7	-58.8	129.9	395.7	111.9	112.2	1.3029
Q2	-17.4	12.5	-0.6	98.1	381.5	113.2	113.4	1.3632
Q3					430.8	114.3	114.2	1.4303
2009 May	-13.0	2.0	6.0	37.9	392.2	113.0	113.2	1.3650
June	3.8	6.5	-11.4	42.0	381.5	114.0	114.2	1.4016
July	10.7	12.6	8.5	-3.0	386.5	113.8	113.7	1.4088
Aug.	-3.5	-0.6	3.8	53.4	428.0	113.9	113.9	1.4268
Sep.					430.8	115.2	115.0	1.4562
Oct						116.6	1163	1 4816

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

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

Based on AAA-rated euro area central government bond yield curves. For further information, see section 4.7. Unless otherwise indicated, data refer to Euro 16. For the definition of the trading partner groups and other information, please refer to the General notes. 4)

5)

6)





# **MONETARY POLICY STATISTICS**

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

# 1. Assets

	2009 9 October	2009 16 October	2009 23 October	2009 30 October
Gold and gold receivables	238,167	238,168	238,169	238,169
Claims on non-euro area residents in foreign currency	193,681	194,322	195,007	194,720
Claims on euro area residents in foreign currency	48,937	47,732	44,109	43,030
Claims on non-euro area residents in euro	15,418	15,007	15,313	16,430
Lending to euro area credit institutions in euro	694,579	691,350	679,583	672,303
Main refinancing operations	62,620	62,265	50,503	49,360
Longer-term refinancing operations	631,850	628,967	628,964	622,749
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	85	94	79	139
Credits related to margin calls	25	24	38	56
Other claims on euro area credit institutions in euro	23,969	22,176	21,115	19,860
Securities of euro area residents in euro	322,880	324,173	325,438	323,540
Securities held for monetary policy purposes	17,353	18,299	19,746	20,641
Other securities	305,527	305,874	305,692	302,899
General government debt in euro	36,204	36,205	36,205	36,195
Other assets	228,907	232,255	231,184	234,753
Total assets	1,802,742	1,801,388	1,786,122	1,779,000

# 2. Liabilities

	2009 9 October	2009 16 October	2009 23 October	2009 30 October
Banknotes in circulation	772,263	770,871	768,735	771,610
Liabilities to euro area credit institutions in euro	321,317	321,978	300,265	277,334
Current accounts (covering the minimum reserve system)	176,524	253,982	219,566	189,499
Deposit facility	144,784	67,995	80,697	87,833
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	9	1	1	1
Other liabilities to euro area credit institutions in euro	169	312	368	412
Debt certificates issued	0	0	0	0
Liabilities to other euro area residents in euro	152,328	158,272	167,352	182,279
Liabilities to non-euro area residents in euro	78,874	70,877	69,651	65,750
Liabilities to euro area residents in foreign currency	4,551	3,959	2,456	4,532
Liabilities to non-euro area residents in foreign currency	8,133	9,323	11,043	8,127
Counterpart of special drawing rights allocated by the IMF	50,906	50,906	50,906	50,906
Other liabilities	148,991	149,679	150,135	152,838
Revaluation accounts	192,254	192,254	192,254	192,254
Capital and reserves	72,957	72,957	72,957	72,957
Total liabilities	1,802,742	1,801,388	1,786,122	1,779,000

Source: ECB.



# I.2 Key ECB interest rates

With effect from <sup>1)</sup> Deposit facility		Ma	in refinancing operatio	Marginal lending facility			
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
	Level	Change	Level	Level	Change	Level	Change
	1	2	3	4	5	6	- 7
1999 1 Jan. 4 <sup>2)</sup> 22 9 Apr. 5 Nov.	2.00 2.75 2.00 1.50 2.00	0.75 -0.75 -0.50 0.50	3.00 3.00 3.00 2.50 3.00	- - - -		4.50 3.25 4.50 3.50 4.00	-1.25 1.25 -1.00 0.50
2000 4 Feb. 17 Mar. 28 Apr. 9 June 28 <sup>3)</sup> 1 Sep. 6 Oct.	2.25 2.50 2.75 3.25 3.25 3.50 3.75	0.25 0.25 0.25 0.50  0.25 0.25	3.25 3.50 3.75 4.25	4.25 4.50 4.75	0.25 0.25 0.25 0.50  0.25 0.25 0.25	4.25 4.50 4.75 5.25 5.25 5.50 5.75	0.25 0.25 0.25 0.50  0.25 0.25
2001 11 May 31 Aug. 18 Sep. 9 Nov.	3.50 3.25 2.75 2.25	-0.25 -0.25 -0.50 -0.50		4.50 4.25 3.75 3.25	-0.25 -0.25 -0.50 -0.50	5.50 5.25 4.75 4.25	-0.25 -0.25 -0.50 -0.50
2002 6 Dec.	1.75	-0.50	-	2.75	-0.50	3.75	-0.50
2003 7 Mar. 6 June	1.50 1.00	-0.25 -0.50	-	2.50 2.00	-0.25 -0.50	3.50 3.00	-0.25 -0.50
2005 6 Dec.	1.25	0.25	-	2.25	0.25	3.25	0.25
2006 8 Mar. 15 June 9 Aug. 11 Oct. 13 Dec.	1.50 1.75 2.00 2.25 2.50	0.25 0.25 0.25 0.25 0.25 0.25	- - - -	2.50 2.75 3.00 3.25 3.50	0.25 0.25 0.25 0.25 0.25 0.25	3.50 3.75 4.00 4.25 4.50	0.25 0.25 0.25 0.25 0.25 0.25
2007 14 Mar. 13 June	2.75 3.00	0.25 0.25	-	3.75 4.00	0.25 0.25	4.75 5.00	0.25 0.25
2008 9 July 8 Oct. 9 <sup>4)</sup> 15 <sup>5)</sup> 12 Nov. 10 Dec.	3.25 2.75 3.25 3.25 2.75 2.75 2.00	0.25 -0.50 0.50 -0.50 -0.50 -0.75	3.75 3.25 2.50	4.25	0.25 -0.50 -0.50 -0.75	5.25 4.75 4.25 4.25 3.75 3.00	0.25 -0.50 -0.50  -0.50 -0.75
2009 21 Jan. 11 Mar. 8 Apr. 13 May	1.00 0.50 0.25 0.25	-1.00 -0.50 -0.25 	2.00 1.50 1.25 1.00	-	-0.50 -0.50 -0.25 -0.25	3.00 2.50 2.25 1.75	-0.50 -0.25 -0.50

Source: ECB.

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

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

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.

fine standing relations was restored to 200 basis points as of 21 bandary 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) 5) to cut by 50 basis points the minimum bid rate on the main refinancing operations conducted as variable rate tenders.

# 1.3 Eurosystem monetary policy operations allotted through tenders $^{(1), 2)}$

### 1. Main and longer-term refinancing operations<sup>3), 4)</sup>

Date of settlement	f Bids Number of Allotment (amount) participants (amount)			Fixed rate tenders	Fixed rate tenders Variable rate tenders				
	()	rr	()	Fixed rate	Minimum bid rate	Marginal rate <sup>5)</sup>	Weighted average rate	(,,	
	1	2	3	4	5	6	7	8	
	1	2	Main refin	ancing operations	5	0	,	0	
2009 8 July	106 406	397	106 406	1.00	_	_	_	7	
15	100 294	389	100,294	1.00			_	. 7	
22	88.272	396	88.272	1.00	-	-	-	7	
$\bar{29}$	94,780	382	94,780	1.00	-	-	-	7	
5 Aug.	80,785	348	80,785	1.00	-	-	-	7	
12	73,596	320	73,596	1.00	-	-	-	7	
19	76.056	330	76.056	1.00	-	-	-	7	
26	77,530	325	77,530	1.00	-	-	-	7	
2 Sep.	72,086	286	72,086	1.00	-	-	-	7	
9	93,285	311	93,285	1.00	-	-	-	7	
16	87,800	318	87,800	1.00	-	-	-	7	
23	85,004	332	85,004	1.00	-	-	-	7	
30	66,767	244	66,767	1.00	-	-	-	7	
7 Oct.	62,620	224	62,620	1.00	-	-	-	7	
14	61,565	218	61,565	1.00	-	-	-	7	
21	49,803	224	49,803	1.00	-	-	-	7	
28	48,660	188	48,660	1.00	-	-	-	7	
4 Nov.	46,201	170	46,201	1.00	-	-	-	7	
			Longer-term r	efinancing operations					
2009 12 Aug.	30,686	90	30,686	1.00	-	-	-	28	
13	13,024	20	13,024	1.00	-	-	-	91	
13	11,875	53	11,875	1.00	-	-	-	182	
27	8,321	35	8,321	1.00	-	-	-	91	
9 Sep.	10,627	45	10,627	1.00	-	-	-	35	
10	3,686	23	3,686	1.00	-	-	-	182	
10	3,161	14	3,161	1.00	-	-	-	91	
1 Oct.	2,769	19	2,769	1.00	-	-	-	77	
1	75,241	589	75,241	1.00	-	-	-	364	
8	1,128	8	1,128	1.00	-	-	-	98	
8	2,368	22	2,368	1.00	-	-	-	182	
14	7,741	19	7,741	1.00	-	-	-	28	
29	3,284	25	3,284	1.00	-	-	-	91	

### 2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for () days	
					Fixed rate	Minimum bid rate	Maximum bid rate	Marginal rate <sup>5)</sup>	Weighted average rate	
	1	2	3	4	5	6	7	8	9	10
2008 6 Oct.	Collection of fixed-term deposits	171,947	111	171,947	4.25	-	-	-	-	1
7	Collection of fixed-term deposits	147,491	97	147,491	4.25	-	-	-	-	1
9	Reverse transaction	24,682	99	24,682	3.75	-	-	-	-	6
11 Nov.	Collection of fixed-term deposits	149,656	117	79,940	-	-	3.75	3.60	3.51	1
9 Dec.	Collection of fixed-term deposits	152,655	95	137,456	-	-	3.25	3.05	2.94	1
2009 20 Jan.	Collection of fixed-term deposits	143,835	103	140,013	-	-	2.50	2.30	2.15	1
10 Feb.	Collection of fixed-term deposits	130,435	119	129,135	-	-	2.00	1.80	1.36	1
10 Mar.	Collection of fixed-term deposits	111,502	119	110,832	-	-	2.00	1.80	1.52	1
7 Apr.	Collection of fixed-term deposits	105,486	114	103,876	-	-	1.50	1.30	1.12	1
12 May	Collection of fixed-term deposits	109,091	128	108,056	-	-	1.25	1.05	0.93	1
9 June	Collection of fixed-term deposits	91,551	101	57,912	-	-	1.00	0.80	0.77	1
7 July	Collection of fixed-term deposits	279,477	165	275,986	-	-	1.00	0.80	0.64	1
11 Aug.	Collection of fixed-term deposits	238,847	159	238,345	-	-	1.00	0.80	0.70	1
8 Sep.	Collection of fixed-term deposits	196,299	157	195,099	-	-	1.00	0.80	0.73	1
13 Oct.	Collection of fixed-term deposits	170,131	160	169,680	-	-	1.00	0.80	0.74	1

Source: ECB.

The amounts shown may differ slightly from those in Section 1.1 due to operations allotted but not settled. 1)

2) With effect from April 2002, split tender operations, i.e. operations with one-week maturity conducted as standard tenders in parallel with a main refinancing operation, are classified as main refinancing operations. For split tender operations conducted before this month, see Table 2 in Section 1.3.

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

variable rate tenders. 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, 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.

In liquidity-providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted. 5)



# 1.4 Minimum reserve and liquidity statistics

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

Reserve base	Total	Liabilities to which a 2% res	serve coefficient is applied	Liabilities to which a 0% reserve coefficient is applied				
as at <sup>1)</sup>		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity		
	1	2	3	4	5	6		
2007	17,394.7	9,438.8	815.0	2,143.1	1,364.0	3,633.9		
2008	18,169.6	10,056.8	848.7	2,376.9	1,243.5	3,643.7		
2009 Apr.	18,447.1	10,085.4	846.1	2,452.5	1,253.3	3,809.8		
May	18,487.3	9,972.0	854.6	2,404.7	1,224.1	4,031.9		
June	18,518.3	10,003.9	818.8	2,432.6	1,207.0	4,056.0		
July	18,432.9	9,891.2	818.9	2,436.0	1,204.6	4,082.1		
Aug.	18,319.0	9,817.8	799.7	2,427.1	1,172.3	4,102.1		

## 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
2007 2008	195.9 217.2	196.8 218.7	1.0 1.5	0.0 0.0	4.17 3.25
2009 9 June 7 July 11 Aug. 8 Sep. 13 Oct.	216.7 218.1 216.0 215.9 213.7	217.9 219.2 216.9 216.9 214.7	1.2 1.1 0.9 1.0 1.1	0.0 0.0 0.0 0.0 0.0 0.0	1.00 1.00 1.00 1.00 1.00
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# 3. Liquidity

Maintenance period	r	Liquidity	-providing fact	ors	no of the Fund	oriotom	Liquidi		Credit institutions'	Base money		
ending on:			Monetary po	ncy operatio	ins of the Euro	system					accounts	
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity- providing operations <sup>2)</sup>	Deposit facility	Other liquidity- absorbing operations <sup>3)</sup>	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	1	2	3	4	5	6	7	8	9	10	11	12
2007 2008	327.5 580.5	173.0 337.3	278.6 457.2	0.3 2.7	0.0 0.0	0.4 200.9	2.2 4.9	644.6 731.1	61.9 107.8	-126.6 114.3	196.8 218.7	841.9 1,150.7
2009 12 May 9 June 7 July 11 Aug. 8 Sep. 13 Oct.	512.4 487.9 457.1 433.6 427.6 421.4	239.7 238.8 221.4 94.1 74.8 79.1	426.9 400.6 504.9 694.0 645.4 616.9	0.7 0.7 1.3 0.3 0.3 0.3	$0.0 \\ 0.0 \\ 0.0 \\ 2.8 \\ 8.4 \\ 14.3$	42.7 22.3 119.7 185.1 136.7 109.6	3.1 2.1 9.9 22.1 18.5 12.9	757.5 759.8 763.1 770.8 769.1 768.8	141.9 141.7 137.9 133.9 125.7 139.0	13.7 -15.8 -65.1 -103.9 -110.4 -113.1	220.8 217.9 219.2 216.9 216.9 214.7	1,021.0 1,000.0 1,102.0 1,172.8 1,122.7 1,093.1

Source: ECB.
End of period.
Includes liquidity provided under the Eurosystem's covered bond purchase programme.
Includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations. For more information, please see http://www.ecb.europa.eu/mopo/liq/html/index.en.html.





# MONEY, BANKING AND INVESTMENT FUNDS

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

### 1. Assets

	Total	I Loans to euro area residents Total General Other MF government euro area			ts	Holdi shares i	ngs of securi ssued by eu	ities other ( ro area resi	than 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							
2007	2,046.2	1,031.7	17.8	0.6	1,013.3	268.6	225.1	1.9	41.6	-	17.4	395.3	15.2	318.0
2008	2,982.9	1,809.4	18.6	0.6	1,790.1	350.8	308.0	2.4	40.3	-	14.4	476.7	15.7	316.1
2009 Q1	2,783.6	1,555.3	18.7	0.7	1,535.9	374.1	322.7	2.5	48.9	-	13.9	490.3	15.7	334.2
2009 Apr.	2,710.2	1,479.4	18.1	0.7	1,460.7	378.1	326.5	2.4	49.2	-	14.7	487.5	15.8	334.7
May	2,678.1	1,452.0	18.1	0.7	1,433.2	375.6	322.9	2.5	50.2	-	15.0	488.8	15.8	330.9
June	2,893.4	1,671.5	17.7	0.7	1,653.1	385.4	327.0	2.7	55.7	-	15.0	480.8	16.4	324.4
July	2,734.4	1,500.7	17.7	0.7	1,482.4	391.8	327.8	3.0	60.9	-	15.3	483.7	16.5	326.5
Aug.	2,723.7	1,451.3	17.6	0.7	1,433.1	400.6	332.1	3.3	65.3	-	15.7	518.5	16.4	321.2
Sep. (9)	2,746.8	1,465.9	17.6	0.7	1,447.7	408.4	336.0	3.3	69.2	-	16.1	517.6	16.6	322.2
						MFIs exc	luding the Eu	ırosystem						
2007	29,440.2	16,893.2	954.5	10,144.4	5,794.2	3,890.6	1,197.1	953.2	1,740.4	93.5	1,293.8	4,878.7	205.7	2,184.7
2008	31,837.2	18,052.0	967.7	10,771.7	6,312.6	4,630.9	1,244.7	1,406.7	1,979.5	98.7	1,199.5	4,754.3	211.5	2,890.1
2009 Q1	31,752.2	17,913.7	970.6	10,815.0	6,128.1	4,920.1	1,387.3	1,446.9	2,085.8	104.1	1,185.5	4,545.7	215.1	2,867.9
2009 Apr.	31.863.3	17,912,4	982.4	10.811.9	6.118.1	4,993,8	1,405,1	1.473.1	2.115.6	104.0	1.217.7	4.610.6	214.0	2,810.9
May	31,532.7	17,864.5	974.7	10,809.4	6,080.4	5,042.6	1,422.0	1,477.4	2,143.2	102.6	1,214.7	4,476.7	214.5	2,617.2
June	31,813.5	18,051.1	998.2	10,836.2	6,216.7	5,081.3	1,466.2	1,491.6	2,123.5	95.6	1,198.9	4,431.3	215.2	2,740.2
July	31,715.7	17,945.9	998.9	10,799.5	6,147.6	5,106.0	1,475.8	1,489.4	2,140.8	95.3	1,204.8	4,390.3	215.8	2,757.5
Aug.	31,498.2	17,783.0	1,003.8	10,734.8	6,044.4	5,104.0	1,475.6	1,492.8	2,135.6	94.8	1,212.8	4,343.4	215.9	2,744.3
Sep. (p)	31,269.8	17,666.0	994.0	10,774.9	5,897.0	5,111.0	1,501.6	1,491.4	2,118.0	90.6	1,223.0	4,265.3	216.3	2,697.6

# 2. Liabilities

	Total	Currency		Deposits of eur	o area residents		Money	Debt	Capital	External	Remaining
		circulation	Total	Central government	Other general government/ other euro area residents	MFIs	fund shares/ units <sup>3)</sup>	issued <sup>4)</sup>	reserves	naointes	nabilities
	1	2	3	4	5	6	7	8	9	10	11
					Eurosystem						
2007 2008	2,046.2 2,982.9	697.0 784.7	714.7 1,217.5	23.9 68.8	19.1 16.6	671.8 1,132.1	-	0.1 0.1	238.0 273.8	113.9 377.8	282.5 329.0
2009 Q1	2,783.6	768.9	1,114.9	135.6	23.3	956.0	-	0.1	296.4	296.0	307.4
2009 Apr. May June July Aug. Sep <sup>(p)</sup>	2,710.2 2,678.1 2,893.4 2,734.4 2,723.7 2,746.8	781.0 783.4 785.9 795.1 790.0 789.7	1,046.9 1,053.1 1,257.5 1,106.7 1,097.0 1,149.0	140.3 137.2 125.1 128.2 124.0 138.4	21.5 19.0 23.6 20.2 21.7 23.0	885.1 897.0 1,108.7 958.2 951.3 987.6		0.1 0.1 0.1 0.1 0.1 0.1	293.2 291.5 283.3 286.7 288.6 292.7	269.3 243.6 202.6 187.1 177.2 154.1	319.7 306.3 364.0 358.8 370.8 361.2
~- <u>F</u>			-,	MFIs	excluding the Eu	rosystem					
2007 2008	29,440.2 31,837.2	-	15,082.1 16,741.8	126.9 190.8	8,867.5 9,689.8	6,087.7 6,861.2	754.1 825.1	4,631.0 4,848.3	1,683.6 1,767.3	4,538.2 4,402.7	2,751.1 3,251.9
2009 Q1	31,752.2	-	16,597.4	216.2	9,772.1	6,609.1	885.2	4,936.1	1,778.3	4,349.8	3,205.2
2009 Apr. May June July	31,863.3 31,532.7 31,813.5 31,715,7	-	16,630.2 16,553.3 16,768.0 16 601 4	197.2 194.4 227.1 170.0	9,852.4 9,859.9 9,913.1 9,883.5	6,580.6 6,499.0 6,627.8 6,547.8	886.1 874.5 837.5 853.6	4,976.7 5,001.4 4,985.0 5,009.0	1,790.6 1,802.3 1,840.0 1 854 3	4,404.8 4,273.0 4,236.8 4 198 5	3,175.0 3,028.3 3,146.1 3,199.0
Aug. Sep. <sup>(p)</sup>	31,498.2 31,269.8	-	16,444.2 16,350.0	148.9 156.8	9,873.2 9,905.4	6,422.2 6,287.8	854.4 829.3	5,004.5 4,961.2	1,875.2 1,881.0	4,133.4 4,081.8	3,186.4 3,166.5

Source: ECB.

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 Namounts held by euro area residents.
 Amounts issued with maturity up to two years held by non-euro area residents are included in external l

Amounts issued by euro area residents. Amounts issued by non-euro area residents are included in external assets. Amounts held by euro area residents. Amounts issued with maturity up to two years held by non-euro area residents are included in external liabilities.



# **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	Total Loans to euro area residents Total General Other		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					
2007	22,316.2	11,117.4	972.3	10,145.1	2,377.3	1,422.2	955.1	882.2	5,274.0	220.9	2,444.3
2008	24,109.4	11,758.6	986.3	10,772.3	2,961.8	1,552.7	1,409.1	786.1	5,231.1	227.2	3,144.4
2009 Q1	24,154.5	11,804.9	989.3	10,815.6	3,159.5	1,710.1	1,449.4	770.0	5,036.0	230.8	3,153.2
2009 Apr.	24,237.2	11,813.0	1,000.5	10,812.5	3,207.0	1,731.6	1,475.4	795.5	5,098.1	229.8	3,093.8
May	23,913.1	11,802.9	992.8	10,810.1	3,224.8	1,744.9	1,479.9	792.9	4,965.5	230.2	2,896.7
June	24,078.2	11,852.7	1,015.9	10,836.8	3,287.6	1,793.2	1,494.4	780.7	4,912.0	231.5	3,013.6
July	24,031.1	11,816.7	1,016.6	10,800.1	3,296.1	1,803.7	1,492.4	777.7	4,874.0	232.3	3,034.4
Aug.	23,945.5	11,756.8	1,021.4	10,735.4	3,303.8	1,807.7	1,496.0	774.1	4,861.9	232.4	3,016.6
Sep. <sup>(p)</sup>	23,896.6	11,787.1	1,011.6	10,775.5	3,332.3	1,837.6	1,494.7	790.7	4,782.9	232.9	2,970.7
					Tran	sactions					
2007	2,572.1	1,014.6	-9.9	1,024.5	232.2	-46.3	278.5	55.5	806.4	-0.5	464.4
2008	1,599.7	597.7	12.4	585.3	372.5	58.1	314.5	-56.1	-81.2	-2.1	769.4
2009 Q2	-228.6	68.4	27.0	41.4	139.7	89.3	50.3	6.0	-63.6	0.6	-380.6
Q3 <sup>(p)</sup>	-147.8	-44.5	-4.2	-40.4	37.2	39.8	-2.6	-5.7	-91.0	1.7	-45.2
2009 Apr.	56.5	7.3	11.3	-4.0	48.2	21.2	27.0	21.2	41.2	-1.1	-60.3
May	-217.3	6.6	-7.4	13.9	29.0	20.7	8.3	-3.3	-52.8	0.4	-198.2
June	-67.8	54.6	23.1	31.5	62.5	47.5	15.1	-11.9	-52.1	1.2	-122.1
July	-51.7	-29.3	0.7	-30.0	3.2	6.2	-3.1	-7.4	-38.7	1.0	19.5
Aug.	-96.6	-56.8	4.8	-61.7	6.3	3.5	2.9	-6.9	-22.3	0.1	-17.1
Sep <sup>(p)</sup>	0.5	41.6	-9.7	51.2	27.7	30 1	-2.4	8 7	-30.1	0.6	-47.6

# 2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units <sup>2)</sup>	Debt securities issued <sup>3)</sup>	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter- MFI liabilities
	1	2	3	4	5	6	7	8	9	10
				0	utstanding amou	nts				
2007	22,316.2	638.6	150.8	8,886.6	660.4	2,849.2	1,492.7	4,652.1	3,033.6	-48.0
2008	24,109.4	722.9	259.6	9,706.5	726.1	2,828.6	1,613.4	4,780.5	3,580.9	-109.5
2009 Q1	24,154.5	719.9	351.8	9,795.4	780.8	2,801.4	1,645.2	4,645.9	3,512.6	-98.9
2009 Apr.	24,237.2	729.2	337.5	9,873.9	781.8	2,811.9	$1,646.9 \\ 1,657.1 \\ 1,690.1 \\ 1,698.6 \\ 1,709.4 \\ 1,725.4$	4,674.1	3,494.7	-113.1
May	23,913.1	732.0	331.5	9,878.9	771.6	2,808.1		4,516.6	3,334.7	-117.6
June	24,078.2	735.0	352.3	9,936.7	741.7	2,806.0		4,439.4	3,510.1	-133.3
July	24,031.1	745.5	298.2	9,903.8	758.0	2,807.4		4,385.5	3,557.8	-123.9
Aug.	23,945.5	741.2	272.8	9,894.9	759.3	2,803.8		4,310.6	3,557.2	-104.0
Sep. <sup>(p)</sup>	23,896.6	740.6	295.2	9,928.3	738.4	2,774.1		4,235.9	3,527.7	-69.3
					Transactions					
2007	2,572.1	45.8	-13.4	838.7	54.5	269.4	150.2	822.4	474.8	-70.4
2008	1,599.7	83.2	106.1	603.9	29.8	-30.2	142.2	81.4	609.1	-25.8
2009 Q2	-228.6	15.0	0.5	149.5	-20.0	18.4	53.3	-169.6	-238.4	-37.3
Q3 <sup>(p)</sup>	-147.8	5.7	-45.6	5.0	-2.7	-15.1	18.0	-133.8	-44.5	65.2
2009 Apr.	56.5	9.3	-14.0	75.5	2.3	5.5	4.5	7.0	-19.8	-13.7
May	-217.3	2.8	-5.9	17.0	0.6	15.3	11.1	-84.1	-163.3	-11.0
June	-67.8	3.0	20.5	56.9	-22.9	-2.4	37.7	-92.5	-55.4	-12.6
July	-51.7	10.5	-54.1	-32.6	16.0	0.4	2.7	-51.3	41.4	15.3
Aug.	-96.6	-4.3	-14.0	-6.4	1.1	2.2	6.3	-52.7	-46.0	17.3
Sep. <sup>(p)</sup>	0.5	-0.5	22.4	44.0	-19.7	-17.6	9.0	-29.7	-39.8	32.5

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

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

	M3			M3 Longer-term 3-month financial		Credit to	Credi	Credit to other euro area residents				
		M2		M3-M2		moving	liabilities	government		Loans	Memo item: Loans adjusted	assets 3)
	M1	M2-M1				(centred)					for sales and securitisation <sup>4)</sup>	
	1	2	3	4	5	6	7	8	9	10	11	12
						Outstandi	ng amounts					
2007	3,830.5	3,509.8	7,340.3	1,305.8	8,646.1	-	5,968.3	2,416.4	12,009.8	10,162.0	-	596.2
2008	3,974.2	4,035.5	8,009.7	1,376.8	9,386.5	-	6,294.2	2,562.3	12,989.5	10,788.1	-	423.5
2009 Q1	4,118.8	3,956.5	8,075.3	1,310.9	9,386.2	-	6,443.5	2,687.5	13,034.1	10,813.5	-	390.0
2009 Apr.	4,193.5	3,951.9	8,145.4	1,312.9	9,458.3	-	6,468.8	2,712.8	13,013.6	10,797.2	-	453.5
May	4,186.9	3,928.3	8,115.2	1,277.8	9,393.0	-	6,501.1	2,721.9	13,025.1	10,798.9	-	498.9
June	4,236.8	3,894.5	8,131.3	1,275.5	9,406.8	-	6,546.5	2,792.5	13,073.3	10,810.1	-	474.1
July	4,332.6	3,847.0	8,179.5	1,250.0	9,429.5	-	6,572.9	2,815.3	13,044.4	10,767.3	-	488.5
Sep. (p)	4,399.1	3,823.2 3,784.1	8,222.3 8,187.7	1,214.8 1.227.3	9,437.1	_	6,652.2	2,845.0	13,055.5	10,761.4	-	553.0
1				,		Trans	actions	,	,	,		
2007	148.8	529.7	678.4	221.5	900.0	-	469.0	-59.6	1.361.8	1.028.4	1,119.7	-17.8
2008	125.3	484.8	610.1	46.4	656.5	-	169.1	70.4	839.1	584.0	745.9	-164.0
2009 Q2	137.6	-71.6	66.0	-17.9	48.1	-	124.8	111.6	60.3	16.8	35.9	107.5
Q3 <sup>(p)</sup>	168.3	-101.0	67.3	-48.4	18.9	-	108.5	69.7	13.2	-22.0	-17.6	47.3
2009 Apr.	90.6	-20.3	70.3	2.9	73.2	-	20.3	25.1	-24.4	-17.3	-6.7	63.9
May	-3.1	-16.9	-19.9	-26.1	-46.1	-	55.8	16.7	31.0	18.1	23.9	51.7
June	50.1	-34.4	15.7	5.3	20.9	-	48.7	69.8	53.8	16.0	18.8	-8.1
July	95.7	-47.2	48.5	-26.7	21.8	-	20.7	18.6	-27.8	-36.1	-34.5	11.3
Aug.	07.5	-22.9	44.4	-35.4	9.0	-	03.0	29.2	9.9	-2.9	2.5	44.4
Sep. v	5.5	-30.9	-23.0	15.7	-11.9	- Grow	th rates	21.9	51.1	17.0	14.3	-0.4
2007 D	1.0	17.0	10.0	20.2	11.6	11.0		2.6	10.0	11.0	10.1	17.0
2007 Dec. 2008 Dec	4.0	17.9	8.3	20.2	11.6	7.1	8.0	-2.6	12.8	11.2	12.1	-17.8
2000 Dec.	6.0	6.5	6.2	1.1	5.1	5.3	4.2	7.6	4.6	3.1	4.7	145.7
2009 Mai	0.0	0.5	0.2	-1.1	3.1	5.5	4.2	7.0	4.0	3.1	4.7	-145.7
2009 Apr. May	8.4	3.5	6.0 5 1	-1.2	4.9	4.6	4.1	7.9	3.0	2.3	5.8	-31.2
Intay	0.0 9.4	0.4	5.1 4 9	-3.7	5.8 3.6	4.1	4.0	8.2 10.7	5.1 2 Q	1.8	3.3 2.7	110.5
July	12.2	-27	4.9	-5.9	3.0	3.5	5.1	10.7	1.9	0.6	2.7	131.5
Aug.	13.6	-4.1	4.6	-9.3	2.6	2.5	5.5	11.5	1.1	0.0	1.3	173.1
Sep. (p)	12.8	-5.3	3.6	-8.8	1.8		5.6	13.6	1.1	-0.3	0.9	153.0

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



Source: ECB.

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

Monthly and other shorter-term growth rates for selected items are available at http://www.ccb.europa.eu/stats/money/aggregates/aggr/html/index.en.html Monetary liabilities of MFIs and central government (post office, treasury) vis-à-vis non-MFI euro area residents excluding central government. 2)

For definitions of M1, M2, M3 see glossary. Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated. Adjustment for the derecognition of loans from the MFI balance sheet on account of their sale or securitisation. 3)

4)



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

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

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

	Currency in circulation	Overnight deposits	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Repos	Money market fund shares/units	Debt securities up to 2 years	Debt securities over 2 years	Deposits redeemable at notice over 3 months	Deposits with agreed maturity over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
					Outstanding a	mounts					
2007	625.6	3,204.9	1,969.3	1,540.5	307.6	685.9	312.3	2,549.6	119.3	1,812.8	1,486.6
2008	709.9	3,264.3	2,468.5	1,567.0	354.3	755.6	266.8	2,575.5	121.2	1,990.7	1,606.8
2009 Q1	727.5	3,391.4	2,314.8	1,641.8	340.6	776.0	194.4	2,607.8	124.2	2,071.8	1,639.6
2009 Apr.	729.8	3,463.8	2,285.6	1,666.2	338.3	769.1	205.4	2,606.1	125.9	2,087.9	1,648.9
May	730.0	3,456.9	2,249.1	1,679.2	325.4	753.9	198.5	2,602.7	128.2	2,098.2	1,672.0
June	734.2	3,502.6	2,199.7	1,694.8	351.3	742.2	182.1	2,607.9	129.4	2,114.0	1,695.3
July	733.6	3,599.0	2,125.8	1,721.2	328.9	747.1	174.0	2,618.8	130.9	2,128.9	1,694.3
Aug.	742.8	3,656.3	2,081.3	1,741.9	308.2	747.1	159.5	2,637.3	132.2	2,150.9	1,714.2
Sep. (P)	747.3	3,656.2	2,024.8	1,759.4	326.9	748.7	151.7	2,621.4	133.5	2,176.9	1,720.3
~-F.		-,	_,	-,	Transactio	2005		_,		_,	-,
2007	46.7	102.1	582.2	-52.5	42.1	58.7	120.8	149.4	9.7	160.4	149.5
2008	83.3	42.0	464.9	20.0	48.0	33.3	-34.9	6.3	0.6	20.6	141.7
$\underset{Q3}{\overset{(p)}}}}\overset{(p)}{\overset{(p)}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}$	6.8	130.8	-125.4	53.8	10.9	-15.0	-13.9	15.4	4.5	40.8	64.1
	13.1	155.2	-165.8	64.7	-24.3	7.2	-31.3	31.2	4.1	65.4	7.8
2009 Apr.	2.3	88.3	-45.4	25.1	-2.2	-5.6	10.7	-6.5	1.0	13.7	12.1
May	0.2	-3.3	-30.0	13.1	-12.8	-4.7	-8.7	17.5	2.2	11.9	24.1
June	4.2	45.9	-50.0	15.6	25.9	-4.7	-15.9	4.4	1.2	15.2	27.9
July	-0.6	96.3	-73.7	26.5	-22.4	4.6	-8.9	10.7	1.5	15.1	-6.6
Aug.	9.2	58.1	-43.6	20.7	-20.6	-0.2	-14.6	24.3	1.3	22.7	15.2
Sep. <sup>(p)</sup>	4.6	0.8	-48.4	17.5	18.7	2.8	-7.8	-3.8	1.3	27.6	-0.8
					Growth ra	ites					
2007 Dec.	8.1	3.3	41.3	-3.4	15.8	9.2	62.2	6.3	9.5	9.7	11.4
2008 Dec.	13.3	1.3	23.4	1.3	15.5	4.8	-11.6	0.3	0.5	1.1	9.7
2009 Mar.	13.8	4.4	6.6	6.6	8.2	4.1	-26.9	0.7	3.7	4.9	9.1
2009 Apr.	13.2	7.4	0.5	8.0	3.8	3.1	-20.2	0.1	5.1	5.5	9.1
May	13.1	7.0	-2.6	9.3	2.0	2.6	-27.8	0.4	7.7	5.6	10.5
June	12.8	8.7	-6.1	10.3	5.3	2.8	-33.6	0.2	9.3	6.2	12.1
July	12.5	12.1	-12.1	12.2	-3.5	3.8	-38.2	-0.1	10.9	6.9	11.2
Aug.	13.2	13.7	-15.2	13.6	-7.9	1.9	-41.8	0.6	12.8	7.7	10.7
Sep. <sup>(p)</sup>	12.5	12.8	-17.8	14.9	-2.9	3.1	-46.7	0.6	15.0	9.5	8.5

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

C4 Components of longer-term financial liabilities  $^{\rm I\rm)}$ 



Source: ECB.

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

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

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

	Insurance corporations and pension funds	Other financial interme- diaries <sup>3)</sup>		Non-financia	al corporations			House	eholds <sup>4)</sup>			
	Total	Total	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Consumer credit	Loans for house purchase	Other loans		
	1	2		Outstandi	ng amounts	0	/	0	9	10		
2007 2008	107.5 103.6	881.5 978.8	4,384.1 4,823.1	1,281.1 1,381.2	860.3 961.6	2,242.7 2,480.3	4,788.9 4,882.6	616.5 630.8	3,425.2 3,487.6	747.1 764.3		
2009 Q1	102.5	975.5	4,847.0	1,338.5	981.4	2,527.1	4,888.5	640.7	3,486.3	761.5		
2009 Apr. May June July Aug. Sep. <sup>(p)</sup>	101.7 101.7 103.3 97.5 94.6 97.6	966.7 982.7 1,026.8 1,012.8 1,000.4 1,002.7	4,841.3 4,827.8 4,788.7 4,764.7 4,766.2 4,756.9	1,323.2 1,316.3 1,282.7 1,250.8 1,251.8 1,247.8	987.4 982.6 974.7 967.8 962.3 955.6	2,530.7 2,528.9 2,531.4 2,546.0 2,552.0 2,553.5	4,887.5 4,886.7 4,891.3 4,892.4 4,900.2 4,910.1	635.1 633.6 635.6 632.3 630.7 630.5	3,487.7 3,486.2 3,487.5 3,493.6 3,500.9 3,509.8	764.7 766.9 768.2 766.5 768.6 769.7		
	Transactions											
2007 2008	16.7 -4.4	177.2 89.7	554.9 419.1	145.2 87.1	156.0 119.9	253.8 212.1	279.5 79.7	31.5 10.5	228.0 52.0	20.0 17.2		
2009 Q2 Q3 <sup>(p)</sup>	2.2 -5.6	51.7 -21.7	-41.0 -22.2	-50.6 -31.6	-1.3 -16.8	10.9 26.3	3.9 27.5	-4.7 2.0	2.4 21.2	6.2 4.3		
2009 Apr. May June July Aug. Sep. <sup>(p)</sup>	-0.9 0.1 2.9 -5.8 -2.9 3.1	-10.0 20.0 41.7 -14.7 -11.5 4.5	-2.9 -4.1 -34.0 -20.9 2.9 -4.1	-14.7 -4.1 -31.9 -31.0 2.1 -2.7	6.4 -2.1 -5.7 -5.6 -6.0 -5.3	5.4 2.0 3.5 15.7 6.8 3.8	-3.5 2.1 5.4 5.4 8.5 13.6	-5.6 -1.0 1.9 -0.2 0.6 1.6	0.5 0.1 1.8 6.5 5.9 8.8	1.5 3.0 1.6 -0.9 2.1 3.2		
				Grow	th rates							
2007 Dec. 2008 Dec.	18.2 -4.1	24.9 10.2	14.5 9.5	12.7 6.8	22.0 13.9	12.8 9.4	6.2 1.7	5.4 1.7	7.1 1.5	2.7 2.3		
2009 Mar.	-6.0	3.9	6.1	-0.5	11.0	8.1	0.3	0.8	0.1	1.3		
2009 Apr. May June July Aug. Son <sup>(p)</sup>	-2.3 -3.3 -0.2 -4.2 -8.5	0.9 0.3 1.9 -0.1 -0.7	5.1 4.3 2.7 1.5 0.7	-1.8 -2.8 -5.8 -8.7 -9.3 0.7	10.6 9.7 7.1 5.9 3.7	7.0 6.3 5.9 5.7 5.2	0.0 -0.2 0.2 0.0 -0.2	-0.5 -0.7 -0.8 -1.0 -1.0	-0.2 -0.5 0.1 -0.1 -0.4	1.5 1.8 1.4 1.3 1.3		

# C5 Loans to other financial intermediaries and non-financial corporations<sup>2)</sup> (annual growth rates; not seasonally adjusted)

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







#### Source: ECB.

1)

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

3) Including investment funds.

4) Including non-profit institutions serving households.



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

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

	Insurance corporations and pension funds           Total         Up to         Over 1 year         Over 1 year           1 year         and up to         5 years			n funds	Oth	er financial in	termediaries <sup>3</sup>	)	Non-financial corporations			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
					Outstar	iding amounts						
2008	92.4	68.6	5.7	18.0	961.2	554.1	169.0	238.0	4,829.4	1,379.1	961.3	2,489.0
2009 Q1	102.0	75.6	6.2	20.2	991.4	572.3	181.2	237.9	4,842.7	1,335.7	981.9	2,525.1
2009 June July Aug. Sep. <sup>(p)</sup>	107.4 100.3 94.5 97.5	82.8 76.2 69.6 73.1	7.3 7.2 7.7 7.6	17.2 17.0 17.2 16.8	1,026.2 1,010.6 985.7 1,014.3	600.3 578.0 554.5 585.5	184.4 186.7 184.0 182.4	241.5 245.9 247.2 246.5	4,803.3 4,785.8 4,752.9 4,745.9	1,296.6 1,265.0 1,240.0 1,241.3	974.8 971.0 961.7 954.9	2,531.9 2,549.8 2,551.2 2,549.6
	Transactions											
2007 2008	15.0 -4.0	16.7 -3.1	-5.2 -1.8	3.5 0.9	175.0 90.5	113.4 26.9	34.1 21.3	27.5 42.4	555.6 419.8	144.9 86.8	156.1 120.0	254.7 213.0
2009 Q2 Q3 <sup>(p)</sup>	6.8 -9.7	7.3 -9.7	1.1 0.3	-1.6 -0.4	35.2 -9.5	30.0 -12.5	1.9 -2.6	3.3 5.6	-22.2 -47.8	-33.9 -52.1	-1.7 -17.6	13.4 21.9
2009 June July Aug. Sep. <sup>(p)</sup>	3.1 -7.0 -5.9 3.1	3.9 -6.6 -6.6 3.6	1.7 -0.2 0.5 -0.1	-2.5 -0.2 0.2 -0.4	24.8 -16.3 -24.0 30.8	21.6 -22.6 -22.3 32.4	1.9 2.1 -3.4 -1.2	1.4 4.2 1.7 -0.3	-18.4 -14.4 -31.5 -1.9	-13.7 -30.9 -23.9 2.7	-6.3 -2.5 -9.8 -5.4	1.7 18.9 2.2 0.8
					Gro	owth rates						
2008 Dec.	-4.1	-4.3	-23.7	5.0	10.5	5.3	14.4	22.0	9.5	6.8	13.9	9.4
2009 Mar.	-5.6	-7.7	-18.0	10.3	3.8	-4.7	20.1	17.2	6.1	-0.5	11.0	8.1
2009 June July Aug. Sep. <sup>(p)</sup>	0.2 -4.2 -8.5 -6.3	0.8 -5.7 -11.6 -8.2	-3.7 13.1 17.1 21.2	0.6 -2.2 -3.2 -6.4	1.8 0.0 -0.7 -0.4	-4.4 -6.0 -6.8 -4.8	13.9 12.7 10.2 6.7	11.0 7.2 7.4 6.5	2.7 1.5 0.7 -0.1	-5.8 -8.7 -9.3 -9.7	7.2 5.9 3.7 2.1	5.9 5.7 5.2 4.5

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

	Total		Consumer	credit		Lo	ans for hous	e purchase			Other lo	her loans	
		Total	Up to O 1 year	ver 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
					Οι	utstanding am	ounts						
2008	4,888.7	633.1	138.8	196.2	298.0	3,490.3	17.2	67.5	3,405.7	765.3	155.0	90.5	519.7
2009 Q1	4,878.9	637.7	136.2	199.8	301.6	3,480.9	16.3	65.6	3,399.0	760.3	150.7	88.7	520.9
2009 June	4,899.3	639.1	136.0	198.9	304.2	3,487.4	15.8	64.1	3,407.5	772.8	154.4	88.3	530.1
July	4,902.8	636.0	134.8	198.3	302.9	3,499.5	15.8	64.2	3,419.5	767.3	147.1	88.7	531.5
Aug.	4,901.7	631.2	133.6	196.6	301.0	3,503.0	15.7	64.1	3,423.2	767.4	146.3	88.1	533.1
Sep. (p)	4,917.1	632.0	134.6	195.8	301.6	3,515.1	15.7	64.3	3,435.1	770.0	149.0	88.0	532.9
						Transaction	s						
2007	278.9	31.5	3.8	1.1	26.6	227.3	0.9	2.3	224.1	20.1	1.7	4.4	14.0
2008	79.0	10.4	1.0	-9.1	18.6	51.4	1.1	-3.8	54.1	17.2	2.5	-5.3	20.1
2009 Q2	21.5	1.8	0.1	-0.7	2.3	7.7	-0.8	-1.5	10.1	12.0	4.0	-0.1	8.1
Q3 (p)	26.6	0.1	-0.9	-0.3	1.3	26.6	0.0	0.2	26.4	-0.1	-5.0	0.0	4.9
2009 June	22.0	6.7	2.9	1.3	2.5	6.8	-0.4	-1.3	8.5	8.5	7.3	-0.4	1.6
July	7.8	0.0	-1.1	0.5	0.7	12.5	0.0	0.1	12.4	-4.8	-7.1	0.4	1.9
Aug.	-0.3	-2.6	-0.9	-1.6	-0.1	2.2	-0.1	0.0	2.3	0.1	-0.9	-0.5	1.5
Sep. (p)	19.1	2.6	1.2	0.7	0.7	11.9	0.0	0.2	11.7	4.6	2.9	0.2	1.5
						Growth rate	s						
2008 Dec.	1.6	1.7	0.7	-4.4	6.7	1.5	7.0	-5.2	1.6	2.3	1.7	-5.1	4.0
2009 Mar.	0.3	0.8	0.0	-4.6	5.0	0.1	1.0	-9.0	0.3	1.3	-0.2	-7.3	3.5
2009 June	0.2	-0.8	-2.3	-5.4	3.1	0.1	-2.4	-11.2	0.3	1.4	-1.7	-5.7	3.8
Julv	0.0	-1.0	-2.7	-5.0	2.5	-0.1	-2.0	-11.2	0.1	1.3	-2.5	-5.0	3.7
Aug	-0.2	-1.0	-19	-5.4	2.5	-0.4	-3.2	-11.0	-0.1	13	-2.9	-4.5	37
Sep. (p)	-0.3	-1.1	-2.6	-4.4	1.8	-0.5	-8.5	-9.7	-0.3	1.5	-2.8	-3.7	3.8

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

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

		G	eneral governme	nt		Non-euro area residents				
	Total	Central government	Other	general governn	nent	Total	Banks <sup>3)</sup>		Non-banks	
		8	State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
				Outsta	inding amounts					
2006 2007	809.0 954.5	104.0 213.4	232.5 217.6	446.6 494.1	25.8 29.4	2,931.8 3,300.1	2,070.6 2,344.5	861.2 955.6	63.1 59.8	798.1 895.8
2008 Q3 Q4 2009 Q1 Q2 <sup>(p)</sup>	978.8 967.7 970.6 998.2	225.6 227.0 232.8 248.9	210.0 210.1 205.6 206.5	497.9 508.4 511.2 520.4	45.4 22.2 21.0 22.3	3,521.3 3,247.8 3,057.1 2,949.3	2,457.1 2,282.0 2,101.0 2,014.7	1,064.2 965.8 956.1 932.9	61.8 57.8 59.2 57.0	1,002.4 908.1 896.9 875.9
				Tı	ransactions					
2007 2008	-8.0 13.2	-4.5 12.3	-13.0 -8.1	6.0 16.2	3.6 -7.2	540.5 -59.2	381.4 -85.8	159.2 26.5	0.3 0.3	158.9 26.2
2008 Q3 Q4 2009 Q1 Q2 <sup>(p)</sup>	4.5 -9.5 2.0 28.1	4.9 1.1 5.4 16.5	-5.2 -0.2 -4.4 0.9	1.4 12.8 2.2 9.2	3.4 -23.2 -1.2 1.3	86.8 -257.6 -234.0 -72.3	71.7 -182.6 -208.5 -64.1	15.1 -75.0 -25.7 -9.7	-3.4 -0.7 0.3 -1.2	18.4 -74.3 -26.0 -8.5
				G	rowth rates					
2006 Dec. 2007 Dec.	-1.6 -1.0	-14.0 -4.3	-5.8 -5.6	5.2 1.3	-11.6 13.8	21.9 18.6	23.9 18.5	17.2 18.8	-0.1 0.5	18.8 20.2
2008 Sep. Dec. 2009 Mar. June <sup>(p)</sup>	3.4 1.4 1.5 2.6	13.3 5.8 10.0 12.6	-1.9 -3.7 -3.6 -4.1	2.7 3.3 3.5 5.2	9.6 -24.5 -43.5 -46.9	7.8 -1.7 -14.3 -13.8	5.1 -3.6 -16.7 -15.9	14.6 2.9 -8.7 -9.1	1.5 0.5 -3.6 -7.9	15.5 3.0 -9.0 -9.2

# **C7 Loans to government**<sup>2)</sup> (annual growth rates; not seasonally adjusted)



**C8 Loans to non-euro area residents**<sup>2)</sup> (annual growth rates; not seasonally adjusted)



Source: ECB.

- 1) MFI sector excluding the Eurosystem; sectoral classification is based on 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 of a similar type to MFIs resident outside the euro area. 3)



# **2.5 Deposits held with MFIs, breakdown**<sup>1), 2)</sup> (EUR billions and annual growth rates; outstanding amound

# 1. Deposits by financial intermediaries

1 1		Insu	rance corpo	rations and	d pension fu	inds				Other finan	cial intern	nediaries <sup>3)</sup>		
	Total	Overnight	With agreed	l maturity	Redeemabl	e at notice	Repos	Total	Overnight	With agreed	d maturity	Redeemable	e at notice	Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
						Outstand	ling amounts							
2007 2008	689.5 760.9	70.8 83.7	69.6 114.1	526.4 537.5	0.8 1.1	1.1 1.5	20.8 23.1	1,465.0 1,802.3	311.8 320.2	345.5 419.8	648.1 852.9	12.2 12.3	0.3 0.1	147.1 197.0
2009 Q1	760.8	91.5	98.3	545.7	2.3	1.5	21.4	1,839.9	335.4	350.2	905.0	14.4	0.0	234.7
2009 Apr. May June July Aug. Sep. <sup>(p)</sup>	762.6 755.4 749.4 748.0 748.0 741.9	89.8 83.3 85.1 85.8 86.8 82.9	99.5 98.6 91.4 91.3 87.9 86.2	549.2 550.5 550.6 550.7 551.2 550.4	1.8 1.9 1.7 1.8 1.8 1.9	1.5 1.5 1.5 1.5 1.5 1.4	20.8 19.7 19.0 16.9 18.7 19.2	1,867.2 1,854.9 1,892.3 1,854.1 1,840.8 1,866.6	327.9 310.9 337.2 316.8 305.3 314.7	372.0 364.0 342.6 346.1 350.3 333.6	914.1 926.0 943.3 945.2 945.0 950.5	15.0 14.7 14.1 14.6 14.5 14.4	$\begin{array}{c} 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.1 \\ 0.2 \end{array}$	238.1 239.2 255.0 231.4 225.5 253.3
						Tran	isactions							
2007 2008	38.5 69.4	0.8 12.4	10.4 42.8	31.9 12.3	-0.3 -0.3	-0.3 0.1	-4.1 2.2	339.0 172.3	33.9 4.4	98.7 71.0	180.4 46.6	1.7 -0.3	0.1 -0.3	24.1 51.0
2009 Q2 Q3 <sup>(p)</sup>	-11.3 -7.2	-6.4 -2.1	-6.9 -5.1	4.9 -0.2	-0.5 0.1	0.0 -0.1	-2.4 0.1	56.5 -16.1	19.5 -22.6	-20.0 -1.9	36.8 9.5	-0.2 0.4	0.0 0.1	20.4 -1.7
2009 Apr. May June July Aug. Sep. <sup>(p)</sup>	1.7 -6.9 -6.1 -1.4 0.1 -5.9	-1.8 -6.4 1.8 0.7 1.0 -3.8	1.1 -0.8 -7.2 -0.1 -3.3 -1.7	3.5 1.3 0.1 0.5 -0.8	-0.5 0.1 -0.1 0.1 0.0 0.0	0.0 0.0 0.0 0.0 0.0 -0.1	-0.6 -1.1 -0.6 -2.2 1.8 0.5	25.9 -5.7 36.3 -38.0 -11.8 33.7	8.8 -15.6 26.2 -20.3 -11.2 9.0	6.5 -4.5 -22.0 3.5 4.6 -10.0	6.7 13.4 16.8 1.9 0.6 7.0	0.6 -0.2 -0.6 0.5 -0.1 0.0	$\begin{array}{c} 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.1 \\ 0.0 \end{array}$	3.4 1.2 15.8 -23.6 -5.9 27.8
						Grov	wth rates							
2007 Dec. 2008 Dec.	5.9 10.0	1.1 17.3	17.5 60.0	6.4 2.3	-25.3 -23.4	-	-16.4 10.5	29.9 11.8	12.0 1.4	39.7 20.7	38.5 7.2	16.4 -2.5	-	19.1 34.6
2009 Mar.	4.3	8.8	13.6	2.4	-3.4	-	-2.2	9.7	-1.3	-2.4	13.6	6.3	-	39.4
2009 Apr. May June July	4.6 4.1 3.5 3.4	16.4 16.4 12.6 19.7	10.0 6.8 5.3 2.5	2.8 2.7 2.4 2.2	-13.5 -1.0 -13.3 -3.3	- - -	-8.1 -9.5 -4.0 -16.0	9.1 7.6 7.7 5.4	8.3 0.9 3.7 9.2	-9.0 -9.1 -14.5 -21.9	13.5 12.6 12.7 12.8	4.0 14.1 15.4 1.7	- - -	31.9 32.0 39.9 30.3
Aug. Sep. <sup>(p)</sup>	4.1 1.5	27.1 7.5	0.2 -6.0	2.3 2.3	3.7 7.6	-	-4.3 -5.9	4.4 5.0	10.7 1.8	-24.1 -25.4	13.5 15.9	11.5 24.0	-	23.0 36.3

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



### Source: ECB.

1)

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

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

Total deposits and deposits included in M3



insurance corporations and pension funds (total) other financial intermediaries (total) \_ \_

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

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

			Non-fina	ncial corp	orations					Н	ouseholds <sup>3</sup>	)		
	Total	Overnight	With agreed	maturity	Redeemab	le at notice	Repos	Total	Overnight	With agree	d maturity	Redeemabl	e at notice	Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
						Outstand	ling amounts							
2007	1,477.2	884.0	479.4	59.5	29.3	1.4	23.7	4,989.0	1,777.4	993.3	561.5	1,458.6	111.1	87.1
2008	1,504.4	884.4	502.7	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 Q1	1,477.2	873.3	476.1	70.7	38.0	1.3	17.9	5,446.6	1,899.2	1,281.2	524.4	1,565.5	114.9	61.4
2009 Apr.	1,491.2	875.1	480.5	72.0	42.5	1.4	19.7	5,482.2	1,956.5	1,241.9	528.1	1,583.2	115.8	56.8
May	1,501.7	891.4	470.5	72.3	45.8	1.4	20.4	5,497.0	1,985.0	1,214.3	532.0	1,594.2	117.3	54.2
June	1,516.9	916.1	459.5	71.9	48.4	1.5	19.6	5,505.7	2,010.8	1,185.5	536.2	1,604.1	118.2	50.9
July	1,517.0	912.5	458.8	74.0	54.4	1.5	18.4	5,515.9	2,028.7	1,154.2	544.7	1,018.0	119.4	20.9 49 1
Sep. <sup>(p)</sup>	1,528.7	950.5	444.9	78.0	57.0	1.5	17.4	5,502.1	2,052.8	1,085.7	561.3	1,637.7	120.1	43.2
	,					Trai	nsactions	,	,	,		,		
2007	140.2	34.1	126.8	-8.1	-10.8	-0.7	-1.1	282.9	22.4	320.9	-45.4	-43.2	11.2	17.1
2008	7.8	-5.0	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 Q2	43.4	45.5	-15.6	1.3	10.4	0.1	1.7	59.8	110.9	-94.4	11.8	39.3	2.7	-10.6
Q3 <sup>(p)</sup>	34.8	35.7	-13.5	6.2	8.6	0.0	-2.2	-2.5	42.3	-99.1	25.1	33.7	3.1	-7.7
2009 Apr.	14.3	2.7	4.0	1.2	4.5	0.0	1.9	34.2	56.2	-39.6	3.7	18.3	0.3	-4.7
May	13.6	17.9	-8.6	0.4	3.3	0.0	0.6	16.9	28.9	-25.9	4.0	11.1	1.4	-2.6
June	15.4	24.9	-11.0	-0.4	2.6	0.1	-0.8	8.7	25.8	-28.9	4.2	9.9	1.0	-3.3
July	0.8	-3.5	-0.6	2.2	4.0	0.0	-1.2	10.3	17.8	-31.2	8.5	14.0	1.1	0.1
Aug.	11.8	15.9	-6.5	2.1	2.3	0.0	-1.9	-8.2	3.4	-32.2	8.0	14.7	0.8	-2.8
Sep. v	22.2	25.5	-0.4	1.9	2.3	Gro	0.9	-4.0	21.1	-55.7	8.0	5.0	1.5	-3.0
2007 D	10.4	1.0	25.1	11.0	26.2	21.6	will fates	(1	1.2	47.7	7.6	2.2	11.0	24.4
2007 Dec. 2008 Dec	10.4	-0.6	2.8	-11.8	-20.3	-31.0	-4.4	6.1 6.9	1.5	47.7	-7.5	-5.5	11.2	-3.9
2009 Mar	-0.6	1.2	-6.2	13.2	31.2	-9.5	-21.9	6.5	6.8	15.1	-4.6	6.6	47	-35.8
2009 Apr	-0.4	2.6	_9.5	13.0	52.2	-3.3	-5.9	6.2	9.1	83	-3.1	7.9	62	-41.8
May	-0.4	2.0	-11.7	13.2	65.8	-2.4	-4.3	5.9	10.3	3.7	-1.7	87	8.9	-46.8
June	0.0	4.6	-11.4	12.1	76.5	1.0	-13.0	5.8	11.3	-0.6	0.0	9.6	10.5	-48.4
July	1.5	7.1	-13.1	12.9	102.7	5.4	-20.0	5.5	13.3	-6.8	2.3	11.3	12.1	-52.5
Aug.	2.3	9.6	-15.1	16.2	114.4	5.1	-28.8	5.2	15.1	-11.5	4.0	12.3	14.0	-56.5
Sep. (p)	2.5	8.3	-14.0	20.2	126.2	8.6	-30.8	5.0	15.9	-15.3	6.4	13.3	16.3	-60.1

20

15

10

5

0

-5

2004

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



non-financial corporations (total) . . .

2005

households (total)
 non-financial corporations (included in M3)<sup>4</sup>)
 households (included in M3)<sup>5</sup>)

2006

2007

2008

C12 Total deposits and deposits included in M3 by sector  $^{2}$ 

20

15

10

5

0

-5

2009

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

2)

3)

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



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

		Ge	neral governme	nt			Non-	euro area reside	nts	
	Total	Central government	Other	general governm	nent	Total	Banks <sup>3)</sup>		Non-banks	
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
				Out	standing amount	s				
2006 2007	329.6 373.7	124.1 126.9	45.4 59.0	91.4 107.6	68.8 80.3	3,430.0 3,861.8	2,561.5 2,953.6	868.6 908.2	128.5 143.3	740.1 764.8
2008 Q3 Q4 2009 Q1 Q2 <sup>(p)</sup>	400.7 444.4 463.8 476.0	139.9 190.8 216.2 227.1	61.7 52.3 50.6 48.9	113.5 115.5 114.0 118.4	85.6 85.8 83.0 81.5	4,151.6 3,713.9 3,665.7 3,565.2	3,149.0 2,816.9 2,786.7 2,704.5	1,002.6 897.0 879.0 860.8	141.8 65.8 63.6 62.5	860.7 831.2 815.4 798.3
					Transactions					
2007 2008	31.9 72.8	-3.1 63.5	13.6 -6.5	9.8 8.7	11.6 7.1	609.1 -184.8	542.3 -166.8	66.8 -18.0	20.2 -36.9	46.6 18.9
2008 Q3 Q4 2009 Q1 Q2 <sup>(p)</sup>	-10.8 46.2 15.6 11.7	-16.0 50.8 22.5 10.9	5.2 -9.2 -1.7 -1.6	0.8 3.0 -2.3 4.4	-0.7 1.5 -2.9 -2.0	-15.7 -427.8 -108.9 -60.8	-16.6 -332.1 -77.7 -48.5	0.9 -95.8 -31.3 -12.1	8.7 -35.3 -2.6 -0.8	-7.8 -60.4 -28.7 -11.3
					Growth rates					
2006 Dec. 2007 Dec.	4.3 9.7	-16.6 -2.4	18.4 29.9	9.3 10.7	52.1 16.9	15.7 17.9	17.3 21.3	11.2 7.7	5.3 15.8	12.4 6.3
2008 Sep. Dec. 2009 Mar. June <sup>(p)</sup>	3.7 19.5 22.8 15.3	-6.8 49.9 52.6 43.7	2.9 -11.0 2.2 -13.0	8.4 8.1 5.7 5.3	19.0 8.8 6.5 -4.8	7.6 -4.7 -13.6 -14.7	7.4 -5.6 -14.5 -15.0	8.2 -1.8 -10.9 -13.8	-1.3 -25.6 -24.1 -24.1	10.0 2.6 -8.8 -12.3

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



Source: ECB.

1)

2)

MFI sector excluding the Eurosystem; sectoral classification is based on ESA 95. Data refer to the changing composition of the euro area. For further information, see the General notes. The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area. 3)

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

			5	Securities o	ther than sh			Shares and	l other equit	y		
	Total	MI	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
					Out	standing am	ounts					
2007 2008	5,125.3 5,858.4	1,656.4 1,887.1	84.0 92.4	1,180.5 1,225.4	16.6 19.3	919.9 1,355.5	33.3 51.2	1,234.7 1,227.5	1,636.5 1,476.9	424.5 423.2	869.3 776.3	342.7 277.4
2009 Q1	6,135.8	1,982.3	103.5	1,366.7	20.6	1,396.3	50.6	1,215.7	1,456.8	424.6	760.9	271.3
2009 Apr. May June July Aug. Sep. <sup>(p)</sup>	6,211.4 6,239.3 6,285.4 6,298.0 6,305.1 6,290.0	2,013.8 2,037.5 2,016.8 2,033.1 2,030.2 2,014.9	101.8 105.7 106.7 107.7 105.4 103.1	1,384.2 1,402.8 1,445.8 1,456.7 1,457.7 1,483.4	20.9 19.2 20.4 19.2 17.9 18.1	$1,422.2 \\ 1,429.9 \\ 1,443.9 \\ 1,440.9 \\ 1,445.5 \\ 1,445.3$	50.9 47.5 47.7 48.5 47.3 46.1	1,217.6 1,196.7 1,204.1 1,192.0 1,201.1 1,179.0	1,491.8 1,488.8 1,475.0 1,486.6 1,495.9 1,499.4	432.0 431.8 428.3 437.6 449.5 443.5	785.6 782.8 770.6 767.2 763.3 779.4	274.1 274.1 276.1 281.8 283.1 276.5
						Transaction	IS					
2007 2008	543.7 597.1	136.1 212.4	18.1 5.9	-86.2 36.5	1.5 1.9	269.5 295.0	9.5 19.0	195.2 26.4	147.8 -84.2	51.3 22.9	55.4 -56.6	41.0 -50.5
2009 Q2 Q3 <sup>(p)</sup>	171.8 23.0	34.6 -4.7	4.1 -0.5	83.7 34.7	0.5 -1.9	51.7 -2.6	-1.6 -0.5	-1.2 -1.5	16.6 9.1	7.2 16.1	5.7 -5.7	3.6 -1.3
2009 Apr. May June July Aug. Sep. <sup>(p)</sup>	65.7 63.8 42.2 14.4 11.7 -3.1	31.2 24.4 -21.0 18.6 -4.6 -18.7	-3.2 6.8 0.5 1.0 -1.3 -0.3	17.6 23.1 43.0 8.0 0.6 26.2	0.1 -0.8 1.1 -1.2 -1.2 0.5	27.5 9.6 14.6 -3.9 3.4 -2.1	-0.3 -1.4 0.2 0.5 -0.8 -0.3	-7.2 2.2 3.7 -8.6 15.6 -8.5	28.6 1.3 -13.3 4.4 4.0 0.7	5.7 4.9 -3.4 6.6 10.2 -0.8	21.2 -3.4 -12.0 -7.4 -6.9 8.6	1.8 -0.3 2.1 5.2 0.7 -7.1
						Growth rate	s					
2007 Dec. 2008 Dec.	11.7 11.6	8.7 12.7	25.4 8.1	-6.8 3.1	10.7 9.9	43.3 32.2	33.4 57.2	17.7 2.2	10.0 -5.3	13.7 5.4	6.9 -6.7	13.9 -15.3
2009 Mar.	11.7	14.4	10.4	12.5	16.1	30.2	2.8	-5.4	-4.5	0.5	-6.6	-6.4
2009 Apr. May June July Aug.	11.1 10.3 10.5 9.6 8.7	14.9 13.5 11.9 11.8 10.7	2.4 1.6 1.4 -1.8 -2.0	12.8 14.0 18.0 18.2 18.3	20.0 18.2 19.8 13.6 13.7	28.7 26.5 24.5 22.3 19.5	-4.2 -7.0 -5.7 -5.5 -7.1	-7.2 -8.2 -7.7 -9.4 -9.4	-6.3 -6.5 -3.4 -4.0 -3.6	0.6 -0.8 0.7 2.0 5.5	-9.6 -9.3 -5.5 -8.6 -9.5	-6.6 -6.7 -4.0 0.6 0.0

**CI4 MFI holdings of securities**<sup>2)</sup> (annual growth rates)

securities other than shares shares and other equity .... •••• -5 -5 -10 -10 

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



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

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

		Consum	er credit		L	ending for h	ouse purchase			Other l	ending	
	Total Up to 1 year 1 2 3		Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	
	1	2	3	4	5	6	7	8	9	10	11	12
2007 2008	-4.2 -4.5	-1.2 -1.1	-1.4 -1.5	-1.6 -1.9	-2.7 -2.7	-0.2 0.0	-0.2 -0.2	-2.3 -2.5	-6.9 -6.7	-0.8 -1.2	-2.3 -2.3	-3.7 -3.2
2009 Q1 Q2	-1.8 -1.5	-0.5 -0.3	-0.5 -0.5	-0.8 -0.8	-1.2 -1.0	0.0 0.0	-0.1 0.0	-1.1 -0.9	-2.2 -1.2	-0.7 -0.1	-0.2 -0.2	-1.3 -0.8
2009 Apr. May June July Aug. Sep. <sup>(p)</sup>	-0.6 -0.3 -0.6 -0.7 -0.4 -0.5	0.0 0.0 -0.2 -0.1 -0.1 -0.1	-0.2 -0.1 -0.2 -0.3 -0.1 -0.1	-0.3 -0.2 -0.2 -0.4 -0.2 -0.3	-0.2 -0.3 -0.4 -0.3 -0.2 -0.4	$\begin{array}{c} 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\end{array}$	$0.0 \\ 0.0 $	-0.2 -0.3 -0.4 -0.3 -0.2 -0.3	-0.2 -0.4 -0.6 -0.6 -0.4 -0.5	0.0 -0.1 -0.1 -0.1 -0.1 -0.1	0.0 0.0 -0.1 -0.1 0.0 -0.1	-0.2 -0.3 -0.4 -0.4 -0.2 -0.4

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

		Non-financial corp	oorations		Non-euro	area residents	
-	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2007	-12.5	-2.1	-5.4	-4.9	-5.2	-3.4	-1.8
2008	-17.7	-4.0	-9.1	-4.5	-6.6	-3.4	-3.2
2009 Q1	-7.1	-3.4	-1.6	-2.0	-2.7	-1.3	-1.3
Q2	-5.8	-1.7	-2.4	-1.7	-1.1	-0.3	-0.8
2009 Apr.	-1.8	-0.7	-0.6	-0.6	0.1	-0.1	0.2
May	-1.3	-0.3	-0.6	-0.3	-0.3	-0.1	-0.2
June	-2.7	-0.7	-1.2	-0.8	-0.9	-0.2	-0.7
July	-2.6	-0.8	-0.9	-0.9	-0.4	-0.2	-0.2
Aug.	-1.4	-0.7	-0.4	-0.3	-0.1	-0.1	0.0
Sen <sup>(p)</sup>	-3.0	-0.8	-0.7	-1.5	-0.5	-0.2	-0.3

# 3. Revaluation of securities held by MFIs

			:	Securities o	ther than sh	ares				Shares and	d other equit	y
	Total	M	FIs	Gen gover	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
2007 2008	-14.2 -56.4	-3.3 -8.0	0.1 0.0	-0.4 5.2	-0.2 0.0	-3.2 -20.1	-0.6 -2.2	-6.7 -31.2	27.6 -60.6	3.8 -8.2	11.7 -44.1	12.1 -8.2
2009 Q1 Q2	-14.1 -2.4	-0.3 2.0	-0.1 0.1	-3.2 -2.0	0.0 -0.1	-2.9 -1.7	0.4 0.3	-8.1 -1.0	-16.0 8.2	-3.5 2.3	-11.5 4.7	-1.0 1.3
2009 Apr. May June	-0.3 -2.1 0.0	1.1 1.3 -0.4	0.1 0.0 0.0	-0.2 -2.0 0.2	0.0 -0.2 0.0	-1.8 0.2 -0.1	0.2 0.0 0.0	0.3 -1.5 0.2	6.5 2.2 -0.4	1.7 0.8 -0.2	3.6 1.2 -0.2	1.1 0.2 -0.1
July Aug.	8.0 4.9	1.8 1.5	0.1	2.9 0.4	0.0	0.6	0.2	2.3 1.8	7.3	2.7 1.7	4.0 3.0	0.5 0.5
Sep. v	4.9	2.9	0.0	-0.0	0.0	1.0	0.0	0.9	5.0	1.0	1.5	0.5

Source: ECB.

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



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

### 1. Deposits

			MFI	[s <sup>3)</sup>			1			Non-l	MFIs			
	All	Euro <sup>4)</sup>		Non-eur	o currencies	5		All	Euro <sup>4)</sup>		Non-euro	o currencies	3	
	(outstanding amount)		Total				(	outstanding amount)		Total				
	, í			USD	JPY	CHF	GBP				USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
						By euro are	ea residen	ts						
2006	5,239.3	90.7	9.3	5.6	0.4	1.5	1.2	8,025.9	96.4	3.6	2.2	0.3	0.1	0.6
2007	6,087.7	92.1	7.9	4.8	0.4	1.1	1.0	8,994.4	96.4	3.6	2.2	0.4	0.1	0.5
2008 Q3	6,749.5	89.4	10.6	6.9	0.4	1.5	1.0	9,469.6	96.2	3.8	2.2	0.5	0.1	0.6
Q4	6,861.2	89.7	10.3	7.3	0.4	1.2	0.8	9,880.6	96.9	3.1	1.9	0.5	0.1	0.4
2009 Q1	6,609.1	90.9	9.1	6.3	0.3	1.2	0.7	9,988.3	96.9	3.1	1.9	0.4	0.1	0.5
Q2 (p)	6,627.8	92.2	7.8	5.1	0.3	1.1	0.8	10,140.2	97.0	3.0	1.8	0.3	0.1	0.5
					By	y non-euro	area resid	ents						
2006	2,561.5	45.4	54.6	35.0	2.3	2.7	11.5	868.6	50.8	49.2	31.9	1.3	2.0	10.4
2007	2,953.6	47.0	53.0	33.5	2.9	2.4	11.0	908.2	50.1	49.9	32.9	1.6	1.8	9.9
2008 Q3	3,149.0	45.8	54.2	35.1	3.2	2.7	9.8	1,002.6	52.6	47.4	30.3	1.3	1.5	10.3
Õ4	2,816.9	48.2	51.8	33.4	2.8	2.6	10.2	897.0	54.9	45.1	28.7	1.4	1.9	9.4
2009 Q1	2,786.7	47.2	52.8	34.8	2.1	2.6	10.4	879.0	52.7	47.3	31.6	1.2	1.9	8.4
O2 (p)	2,704.5	49.0	51.0	32.8	1.9	2.6	10.9	860.8	51.9	48.1	33.0	1.3	1.8	7.7

# 2. Debt securities issued by euro area MFIs

	All	Euro <sup>4)</sup>			Non-euro currencies		
	(outstanding		Total				
	aniount)			USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2006 2007	4,470.8 4,933.2	80.6 81.5	19.4 18.5	10.0 9.2	1.6 1.7	1.9 1.9	3.5 3.4
$2008 Q3 \\ Q4 \\ 2009 Q1 \\ Q2 ^{(p)}$	5,168.4 5,111.7 5,197.9 5,225.0	81.9 83.3 83.3 83.6	18.1 16.7 16.7 16.4	8.9 8.4 8.7 8.4	1.9 2.0 1.9 1.9	1.8 1.9 1.9 1.8	3.3 2.5 2.5 2.6

Source: ECB.

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

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

## 3. Loans

			MF	'Is <sup>3)</sup>						Non-	MFIs			
	All	Euro <sup>4)</sup>		Non-eu	aro currencie	es		All	Euro <sup>4)</sup>		Non-eur	o currencie	s	
	(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
						To euro a	rea reside	nts						
2006	4,938.0	-	-	-	-	-	-	9,943.7	96.4	3.6	1.6	0.2	1.1	0.5
2007	5,794.2	-	-	-	-	-	-	11,099.0	96.2	3.8	1.8	0.2	0.9	0.6
2008 Q3	6,350.3	-	-	-	-	-	-	11,783.0	95.8	4.2	2.1	0.2	1.0	0.5
Q4	6,312.6	-	-	-	-	-	-	11,739.4	95.9	4.1	2.1	0.3	1.0	0.4
2009 Q1	6,128.1	-	-	-	-	-	-	11,785.6	95.9	4.1	2.1	0.3	1.0	0.5
Q2 <sup>(p)</sup>	6,216.7	-	-	-	-	-	-	11,834.4	96.1	3.9	2.0	0.2	1.0	0.5
						Fo non-euro	o area resi	dents						
2006	2,070.6	50.9	49.1	28.7	2.0	2.3	11.0	861.2	39.3	60.7	43.1	1.1	4.0	8.6
2007	2,344.5	48.2	51.8	28.8	2.3	2.4	12.7	955.6	40.9	59.1	41.2	1.2	3.7	8.2
2008 Q3	2,457.1	42.7	57.3	33.2	2.9	2.6	12.4	1,064.2	41.4	58.6	40.5	1.5	3.9	8.0
Õ4	2,282.0	45.8	54.2	31.8	3.0	2.6	11.3	965.8	40.5	59.5	41.9	1.4	4.3	7.4
2009 Q1	2,101.0	44.8	55.2	31.2	2.7	3.1	12.7	956.1	38.1	61.9	44.5	1.0	4.2	7.8
Q2 <sup>(p)</sup>	2,014.7	45.5	54.5	29.5	2.9	3.1	13.5	932.9	39.5	60.5	43.0	0.9	4.0	7.8

## 4. Holdings of securities other than shares

			Issued b	y 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 currencie	s	
	(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						
2006	1,636.9	95.6	4.4	2.3	0.2	0.3	1.3	1,924.6	97.6	2.4	1.3	0.3	0.1	0.7
2007	1,740.4	95.2	4.8	2.4	0.3	0.3	1.5	2,150.3	97.7	2.3	1.4	0.2	0.1	0.5
2008 Q3	1,905.6	94.6	5.4	2.9	0.4	0.3	1.5	2,302.2	97.2	2.8	1.9	0.3	0.1	0.4
Q4	1,979.5	95.3	4.7	2.6	0.4	0.2	1.2	2,651.4	97.3	2.7	1.7	0.3	0.1	0.4
2009 Q1	2,085.8	95.0	5.0	2.7	0.2	0.4	1.3	2,834.3	97.5	2.5	1.7	0.2	0.1	0.4
Q2 <sup>(p)</sup>	2,123.5	95.0	5.0	2.5	0.5	0.4	1.3	2,957.9	97.7	2.3	1.5	0.2	0.1	0.3
					Issue	d by non-e	uro area r	residents						
2006	515.3	52.3	47.7	28.8	0.7	0.4	14.5	594.5	38.9	61.1	36.5	4.9	0.8	14.2
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 Q3	645.1	51.1	48.9	30.7	0.8	0.5	14.2	663.4	37.2	62.8	38.1	6.4	0.9	10.5
Q4	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 Q1	597.9	52.1	47.9	27.6	0.3	1.6	13.9	617.9	34.1	65.9	40.5	4.3	0.8	15.3
Q2 <sup>(p)</sup>	573.0	55.2	44.8	24.8	1.7	1.4	14.4	631.1	33.5	66.5	40.4	4.2	0.9	16.0

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

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

### 1. Assets

	Total	Deposits	Ho	oldings of securiti other than shares	ies	Holdings of shares/ other	Holdings of investment fund shares	Fixed assets	Other assets
			Total	Up to 1 year	Over 1 year	equity			
	1	2	3	4	5	6	7	8	9
2008 Q1	5,162.7	365.9	1,858.7	164.8	1,693.9	1,670.4	720.3	197.1	350.2
Q2	5,017.4	359.6	1,808.2	157.5	1,650.7	1,624.6	691.2	204.9	328.8
Q3	4,715.2	377.4	1,748.2	148.1	1,600.1	1,411.5	641.9	202.8	333.4
Q4	4,231.8	352.0	1,688.2	132.4	1,555.8	1,131.1	566.7	200.9	292.9
2009 Q1	4,099.2	345.6	1,699.2	121.7	1,577.5	1,043.3	529.8	205.6	275.6
O2 <sup>(p)</sup>	4,540.1	357.6	1,866.7	120.7	1,746.0	1,239.6	568.0	208.1	300.2

# 2. Liabilities

	Total	Deposits and loans taken	Investment fund shares	Other liabilities
	1	2	3	4
2008 Q1	5,162.7	76.4	4,848.6	237.7
Q2	5,017.4	74.8	4,723.1	219.5
Q3	4,715.2	71.0	4,415.4	228.8
Q4	4,231.8	64.9	3,982.4	184.6
2009 Q1	4,099.2	76.2	3,838.6	184.4
Q2 <sup>(p)</sup>	4,540.1	81.5	4,237.2	221.4

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

	Total		Fund	Funds by type of investor				
		Equity funds	Bond funds	Mixed funds	Real estate funds	Other funds	General public funds	Special investors' funds
	1	2	3	4	5	6	7	8
2008 Q1 Q2 Q3 Q4	5,162.7 5,017.4 4,715.2 4,231.8	1,362.8 1,325.4 1,132.4 907.0	1,483.8 1,413.9 1,383.2 1,331.1	1,428.1 1,405.6 1,359.3 1,210.8	249.7 256.3 253.2 256.5	638.3 616.2 587.1 526.4	3,780.2 3,649.3 3,342.9 2,950.2	1,382.5 1,368.1 1,372.3 1,281.6
2009 Q1 Q2 <sup>(p)</sup>	4,099.2 4,540.1	854.7 1,008.1	1,330.5 1,532.3	1,170.7 1,206.8	260.0 274.5	483.3 518.4	2,829.0 3,093.4	1,270.1 1,446.7

# CI5 Total assets of investment funds (EUR billions)



### Source: ECB.

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



# 2.10 Assets of euro area investment funds broken down by investment policy and type of investor (EUR billions; outstanding amounts at end of period)

# 1. Funds by investment policy

	Total	Total Deposits Holdings of securities other than shares			Holdings of shares/ other	Holdings of investment fund shares	Fixed assets	Other assets	
			Total	Up to 1 year	Over 1 year	equity	fund shures		
	1	2	3	4	5	6	7	8	9
				Equity funds					
2008 Q1 Q2 Q3	1,362.8 1,325.4 1,132.4	51.3 54.3 48.3	63.1 65.1 61.3	21.3 22.0 20.2	41.8 43.1 41.1	1,131.0 1,088.7 915.3	65.7 65.7 57.2	- -	51.7 51.6 50.2
2009 Q1 Q2 <sup>(p)</sup>	854.7 1,008.1	39.0 45.9	63.5 54.2	16.5 16.0	43.3 47.0 38.3	660.9 812.3	47.2 45.2 51.8	-	45.3 46.1 43.7
				Bond funds					
2008 Q1 Q2 Q3 Q4	1,483.8 1,413.9 1,383.2 1,331.1	124.7 115.9 128.7 122.2	1,168.2 1,118.8 1,074.0 1.034.7	80.3 74.6 67.9 62.2	1,087.9 1,044.2 1,006.0 972.5	56.8 57.9 55.7 57.0	45.5 42.7 41.3 36.4		88.6 78.6 83.5 80.6
2009 Q1 Q2 <sup>(p)</sup>	1,330.5 1,532.3	117.5 119.1	1,044.9 1,210.3	62.1 64.9	982.8 1,145.4	48.5 55.2	38.6 38.7	-	81.0 109.0
				Mixed funds					
2008 Q1 Q2 Q3 Q4	$1,428.1 \\ 1,405.6 \\ 1,359.3 \\ 1,210.8$	97.9 99.1 109.0 110.3	528.1 520.1 512.8 494.9	46.4 42.6 42.2 34.3	481.8 477.5 470.6 460.6	339.5 341.7 312.1 245.2	314.0 308.0 287.4 235.8	1.2 0.8 1.1 1.2	147.3 135.9 137.0 123.4
$\underset{Q2}{\overset{2009}{\overset{Q1}{\overset{(p)}{}}}}$	1,170.7 1,206.8	109.5 104.0	498.5 505.0	28.2 23.8	470.3 481.2	227.3 252.8	224.0 237.6	1.8 1.2	109.6 106.1
				Real estate fund	ls				
2008 Q1 Q2 Q3 Q4	249.7 256.3 253.2 256.5	19.9 18.0 19.0 14.4	5.3 5.9 4.7 4.8	1.1 1.1 1.3 1.1	4.2 4.8 3.4 3.7	3.1 3.0 3.1 11.5	11.3 10.1 9.3 6.8	195.4 203.5 201.2 199.2	14.6 15.8 16.0 19.8
2009 Q1 Q2 <sup>(p)</sup>	260.0 274.5	14.5 20.8	5.1 5.5	1.1 1.1	4.0 4.4	11.2 14.9	7.5 8.2	203.4 206.3	18.3 18.7

# 2. Funds by type of investor

	Total	Deposits	Holdings of securities other than shares	Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
	1	2	3	4	5	6	7
			General pul	blic funds			
2008 Q1	3,780.2	278.0	1,219.2	1,362.3	514.7	154.1	252.0
Q2	3,649.3	264.9	1,178.3	1,327.0	486.0	155.0	238.1
Q3	3,342.9	265.4	1,105.7	1,140.8	441.4	152.4	237.3
Q4	2,950.2	244.5	1,037.9	931.4	382.6	147.4	206.3
2009 Q1	2,829.0	244.5	1,029.9	863.6	343.0	147.8	200.3
Q2 <sup>(p)</sup>	3,093.4	257.6	1,099.9	1,021.9	361.8	150.2	201.9
			Special inves	stors' funds			
2008 Q1	1,382.5	88.0	639.6	308.1	205.6	43.0	98.2
Q2	1,368.1	94.8	629.9	297.6	205.2	49.9	90.7
Q3	1,372.3	112.0	642.5	270.7	200.5	50.5	96.1
Q4	1,281.6	107.5	650.2	199.7	184.1	53.5	86.6
2009 Q1	1,270.1	101.1	669.3	179.7	186.8	57.8	75.3
Q2 <sup>(p)</sup>	1,446.7	100.0	766.8	217.6	206.2	57.8	98.3

Source: ECB.





# **EURO AREA ACCOUNTS**

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

Hees	Furo	Households	Non-financial	Financial	General	Rest of
0305	area	Householus	corporations	corporations	government	the world
2000.02						
2009 Q2 External account						
						424.5
Exports of goods and services <i>Trade balance</i> <sup>1)</sup>						-20.8
Generation of income account						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)	1 1 1 2 0	100 (	700.4	54.4	241.5	
Compensation of employees	1,113.9	109.6	708.4	54.4	241.5	
Concurrent taxes less subsidies on production	33.0 255.1	3.3	22.7	3.0 11.6	3.8 46.0	
Net operating surplus and mixed income <sup>1</sup>	517.0	281.8	200.7	32.7	-0.6	
	517.0	201.0	205.1	52.1	0.0	
Allocation of primary income account						
Net operating surplus and mixed income						
Compensation of employees						4.7
Property income	1.016.8	27.5	402.0	418 7	68.6	115.9
Interest	425.5	37.5	492.0	254.6	68.5	64.7
Other property income	591.3	23	424.9	164.0	00.5	51.1
Net national income <sup>1)</sup>	1.862.3	1.673.3	-59.7	33.1	215.6	51.1
Secondary distribution of income account	-,	-,				
Net national income	259 4	212.5	27.0	06	0.2	4.2
Current taxes on moome, weatin, etc.	230.4	212.3	57.0	8.0	0.5	4.5
Social benefits other than social transfers in kind	414.0	414.0	15.9	31.0	390.0	0.8
Other current transfers	182.8	69.3	25.8	46.2	41.6	7.8
Net non-life insurance premiums	44.6	32.4	10.7	0.8	0.7	1.1
Non-life insurance claims	44.5			44.5		0.5
Other	93.7	36.9	15.1	0.8	40.9	6.2
Net disposable income <sup>1)</sup>	1,843.1	1,502.2	-110.8	40.2	411.5	
Use of income account						
Net disposable income						
Final consumption expenditure	1,784.5	1,294.5			490.1	
Individual consumption expenditure	1,591.5	1,294.5			297.0	
Collective consumption expenditure	193.0				193.0	
Adjustment for the change in net equity of households in pension fund reserves	17.0	0.1	0.5	16.4	0.0	0.0
Net saving/current external account <sup>1)</sup>	58.6	224.6	-111.3	23.8	-78.6	17.7
Capital account						
Net saving / current external account						
Gross capital formation	431.4	142.9	216.8	12.6	59.2	
Gross fixed capital formation	462.4	143.9	247.0	12.4	59.1	
Changes in inventories and acquisitions less disposals of valuables	-31.0	-1.1	-30.3	0.2	0.1	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.3	-1.8	1.3	0.3	0.6	-0.3
Capital taxes	45.1	8.4	3.3	6.7	26.6	4.8
Capital taxes	11.2	5.6	0.3	5.3	26.6	0.0
Net lending $(\pm)/net$ horrowing (=) (from capital account) <sup>[1]</sup>	53.9 15.2	2.8	3.0 113.2	1.4	20.0 106.0	4.8
Statistical discrepancy	0.0	-31.4	31.4	20.0	0.0	0.0
1 2	510	2111	2111	510	010	110

Sources: ECB and Eurostat. 1) For the calculation of the balancing items, see the Technical notes.



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

Resources	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
2009 Q2						
External account				II		
Imports of goods and services Trade balance						403.7
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>	2,019.6 217.1 2,236.7	491.6	1,135.0	102.3	290.7	
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	517.0 1,116.0 252.9 993.2 413.3 579.9	281.8 1,116.0 313.1 63.5 249.6	203.1 229.1 43.3 185.8	32.7 419.1 297.8 121.4	-0.6 252.9 31.8 8.6 23.2	2.7 -2.3 139.4 76.9 62.5
Secondary distribution of income account	1.0(2.2	1 (72.2	50.7	22.1	015 (	
Net national income Current taxes on income, wealth, etc. Social contributions Social benefits other than social transfers in kind Other current transfers	1,862.3 262.0 414.4 436.5 162.2	1,673.3 1.2 436.5 89.1	-59.7 17.0	33.1 47.4 45.5	215.6 262.0 348.9	0.6 1.0 2.7 28.4
Net non-life insurance premiums Non-life insurance claims Other	44.5 43.8 73.9	34.9 54.2	8.0 2.6	44.5 0.6 0.4	0.3 16.7	1.1 1.2 26.1
Net disposable income						
Use of income account						
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households in pension fund reserves Net saving/current external account	1,843.1	1,502.2	-110.8	40.2	411.5	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	58.6	224.6 96.8	-111.3 200.7	23.8	-78.6 46.0	17.7
Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes	47.8	11.4	18.6	4.8	12.9 11.2	2.1
Other capital transfers Net lending (+)/net borrowing (-) (from capital account) Statistical discrepancy	36.6	11.4	18.6	4.8	1.8	2.1

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



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

2009 Q2         mediaries         funds           Opening balance sheet, financial assets         16,592.7         13,849.2         23,623.5         9,709.5         5,915.4         3,216.5           Total financial assets         245.2         245.2         245.2         71.1         736.1           Short-term debt securities         60.4         107.0         137.5         371.0         345.3         25.5           Loans         67.5         2,631.3         12,765.8         2,266.8         367.8         444.3           of which long-term         49.5         1,460.0         9,724.0         1,757.0         304.9         355.2           Shares and other equity         3,493.2         5,812.9         1,541.0         3,399.0         1,826.1         1,111.3           Quoted shares         523.7         998.2         412.8         1,373.1         395.2         223.3           Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9	14,773.4 4,077.6 795.5 3,037.4 1,811.4 4,353.1  134.6 563.7  -8.8 0.4
Opening balance sheet, financial assets         16,592.7         13,849.2         23,623.5         9,709.5         5,915.4         3,216.5           Monetary gold and special drawing rights (SDRs)         6,242.5         1,706.8         2,181.1         1,820.2         871.1         736.1           Short-term debt securities         60.4         107.0         137.5         371.0         345.3         25.5           Long-term debt securities         61.5         2,631.3         12,765.8         2,266.8         367.8         444.3           Joans         67.5         2,631.3         12,765.8         2,266.8         367.8         444.3           Quoted shares         523.7         998.2         412.8         1,373.1         395.2         223.3           Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund	14,773.4 4,077.6 795.5 3,037.4 1,811.4 4,353.1
Total financial assets       16,592.7       13,849.2       23,623.5       9,709.5       5,915.4       3,216.5         Monetary gold and special drawing rights (SDRs)       6,242.5       1,706.8       2,181.1       1,820.2       871.1       736.1         Short-term debt securities       60.4       107.0       137.5       371.0       345.3       25.5         Logarterm debt securities       60.4       107.0       137.5       2,266.8       367.5       2,631.3       12,765.8       2,266.8       367.9       345.3       25.5         Loans       67.5       2,631.3       12,765.8       2,266.8       367.9       345.3       255.9         Shares and other equity       3,493.2       5,812.9       1,541.0       3,399.0       1,826.1       1,111.3         Quoted shares       523.7       998.2       412.8       1,373.1       395.2       223.3         Unquoted shares and other equity       1,694.2       4,496.2       909.1       1,493.0       391.2       764.1         Mutual fund shares       1,275.3       318.5       219.0       532.9       1,039.7       123.9	14,773.4 4,077.6 795.5 3,037.4 1,811.4 4,353.1
Monetary gold and special drawing rights (SDRs)         245.2           Currency and deposits         6,242.5         1,706.8         2,181.1         1,820.2         871.1         736.1           Short-term debt securities         60.4         107.0         137.5         371.0         345.3         25.5           Long-term debt securities         1,310.7         220.5         4,442.4         1,664.5         2,035.0         316.8           Loans         67.5         2,631.3         12,765.8         2,266.8         367.8         444.3           of which long-term         49.5         1,460.0         9,724.0         1,757.0         304.9         355.9           Shares and other equity         3,493.2         5,812.9         1,541.0         3,399.0         1,826.1         1,111.3           Quoted shares         523.7         998.2         412.8         1,373.1         395.2         223.3           Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9	4,077.6 795.5 3,037.4 1,811.4 4,353.1  134.6 563.7
Currency and deposits         6,242.5         1,706.8         2,181.1         1,820.2         871.1         736.1           Short-term debt securities         60.4         107.0         137.5         371.0         345.3         25.5           Long-term debt securities         1,310.7         220.5         4,442.4         1,664.5         2,035.0         316.8           Loans         67.5         2,631.3         12,765.8         2,266.8         367.8         444.3           of which long-term         49.5         1,460.0         9,724.0         1,757.0         304.9         355.9           Shares and other equity         3,493.2         5,812.9         1,541.0         3,399.0         1,826.1         1,111.3           Quoted shares         523.7         998.2         412.8         1,373.1         395.2         223.3           Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9	4,077.6 795.5 3,037.4 1,811.4 4,353.1  134.6 563.7
Short-term debt securities         60.4         107.0         137.5         371.0         345.3         25.5           Long-term debt securities         1,310.7         220.5         4,442.4         1,664.5         2,035.0         316.8           Loans         67.5         2,631.3         12,765.8         2,266.8         367.8         444.3           of which long-term         49.5         1,460.0         9,724.0         1,757.0         304.9         355.9           Shares and other equity         3,493.2         5,812.9         1,541.0         3,399.0         1,826.1         1,111.3           Quoted shares         523.7         998.2         412.8         1,373.1         395.2         223.3           Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9	795.5 3,037.4 1,811.4 4,353.1  134.6 563.7  -8.8 0.4
Loans       67.5       2,631.3       12,765.8       2,266.8       367.8       444.3         of which long-term       49.5       1,460.0       9,724.0       1,757.0       304.9       355.9         Shares and other equity       3,493.2       5,812.9       1,541.0       3,399.0       1,826.1       1,111.3         Quoted shares       523.7       998.2       412.8       1,373.1       395.2       223.3         Unquoted shares and other equity       1,694.2       4,496.2       909.1       1,493.0       391.2       764.1         Mutual fund shares       1,275.3       318.5       219.0       532.9       1,039.7       12.9	3,037.4 1,811.4 4,353.1 134.6 563.7
of which long-term         49.5         1,460.0         9,724.0         1,757.0         304.9         355.9           Shares and other equity         3,493.2         5,812.9         1,541.0         3,399.0         1,826.1         1,111.3           Quoted shares         523.7         998.2         412.8         1,373.1         395.2         223.3           Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9	4,353.1 4,353.1 134.6 563.7
Shares and other equity         3,493.2         5,812.9         1,541.0         3,399.0         1,826.1         1,111.3           Quoted shares         523.7         998.2         412.8         1,373.1         395.2         223.3           Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9           Drawmone tachning receives         5,178.3         140.5         1         0         0.1         154.4         2.1	4,353.1
Quoted shares         523.7         998.2         412.8         1,373.1         395.2         223.3           Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9           Insurance tachning receives         5,178.3         140.5         1         0.0         154.4         2.1	-8.8 0.4
Unquoted shares and other equity         1,694.2         4,496.2         909.1         1,493.0         391.2         764.1           Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9           Insurgence technical sectories         5,178.3         140.5         1.0         0.0         154.4         2.1	-8.8 0.4
Mutual fund shares         1,275.3         318.5         219.0         532.9         1,039.7         123.9           Insurance technical recentract         5.178.3         140.5         1.0         0.0         154.4         3.1	134.6 563.7 -8.8 0.4
51782 $1405$ $10$ $0.0$ $1544$ $21$	-8.8 0.4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-8.8 0.4
Unter accounts receivable and mancial derivatives 240.2 5,250.5 2,508.8 187.9 515.8 579.4	-8.8
Financial account transactions in financial assets	-8.8 0.4
Transactions in financial assets         103.0         60.2         .123.2         164.7         42.9         112.3	0.4
Monetary sold and special drawing rights (SDRs)	
Currency and deposits 74.1 41.6 -54.2 27.3 -13.3 17.1	-151.6
Short-term debt securities -14.0 -28.5 -13.7 17.8 6.5 -0.8	64.9
Long-term debt securities 16.1 -44.7 147.8 113.8 -16.0 35.9	23.0
Loans 0.3 14.0 61.8 -55.7 5.6 23.5	-56.5
0 which long-term 0.0 /./ 58./ -61.2 5.1 1.6	101.0
Shares and other eduity 31.5 04.9 21.9 52.1 00.1 20.9 Outlet shares 18.9 37.9 -0.5 -1.6 5.0 10.0	121.2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	:
Mutual fund shares 0.1 -4.1 9.2 18.2 58.4 -0.1	
Insurance technical reserves 56.5 0.2 0.0 0.0 0.3 0.0	-2.3
Other accounts receivable and financial derivatives         28.5         12.7         -286.3         29.3         -0.3         9.6	-7.9
Changes in net financial worth due to transactions	
Other changes account, financial assets	
Total other changes in financial assets         306.0         310.5         231.5         331.2         86.4         20.4	55.5
Monetary gold and special drawing rights (SDRs) -10.8	
Currency and deposits         0.0         -4.5         -21.0         -5.8         0.0         0.9	-42.0
Short-term debt securities -0.7 18.0 -1.3 5.4 0.5 0.5	-20.0
Long-term debt securities $1/.2$ -5.4 -3.5 19.4 11.1 -1.0	-1.8
Loans $0.0 - 5.0 - 54.2 - 19.2 - 1.5 0.5$	-19.0
0.0 -5.0 -1.2 -21.1 -0.5 -0.4 Shares and other county 233 3 3618 622 317.8 65.2 216	196.8
Outed shares         90.7         95.8         43.1         188.3         39.3         21.2	190.0
Unquoted shares and other equity 91.1 250.0 35.8 110.3 5.2 -3.3	
Mutual fund shares         51.5         16.0         -16.7         19.2         20.6         3.7	
Insurance technical reserves         53.9         3.5         0.0         0.0         28.5         0.0	-46.1
Other accounts receivable and financial derivatives 2.3 -59.4 240.2 13.6 -17.4 -1.9	-11.8
Other changes in net financial worth	
Closing balance sheet, financial assets	
Total financial assets         17,091.7         14,219.9         23,731.9         10,205.4         6,044.7         3,349.2           Manufacture scheduler         23,240         24,240         24,240         24,240	14,819.7
Currence van de positis (SDRS) 234.0 Currence van de positis (SDRS) 6316.6 1743.8 2105.9 1.841.7 857.8 754.1	3 883 9
Short-term deb securities 457 965 1224 3942 352 3 252	840 5
Long-term debt securities 1,344.0 170.3 4,586.7 1,797.6 2.030.1 351.7	3,058.6
Loans 67.8 2,641.7 12,793.4 2,192.0 371.9 468.1	1,735.3
of which long-term 49.5 1,464.1 9,765.5 1,674.0 309.1 357.1	
Shares and other equity         3,758.0         6,239.6         1,625.0         3,748.9         1,951.3         1,159.7	4,671.0
Quoted shares         633.3         1,131.9         455.4         1,559.8         439.5         254.5	•
Unquoted shares and other equity 1,797.8 4,777.3 958.1 1,618.8 393.1 777.8	•
Mutual rund snares         1,526.9         530.4         211.5         570.4         1,118.7         127.5           Incurrence tachnical resenvas         5,208.7         144.2         1.0         0.0         192.2         2.2	
Other accounts receivable and financial derivatives         5,200.7         144.2         1.9         0.0         185.2         5.2           Other accounts receivable and financial derivatives         271.0         3.183.6         2.262.6         230.8         298.1         587.2	544.0
Net financial worth	

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
20	09 Q2				mediaries	funds		
Opening balance sheet, liabilities								
Total liabilities		6,339.0	21,856.3	23,014.5	9,398.4	6,083.0	7,713.7	13,030.3
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			26.3	14,856.7	21.0	0.0	245.6	2,485.8
Short-term debt securities			308.5	255.5	96.2	10.7	943.3	228.0
Long-term debt securities			481.7	2,800.0	2,193.5	31.5	4,859.7	2,660.8
Loans		5,716.4	8,205.0		1,828.2	214.7	1,260.3	3,130.4
of which long-term		5,344.4	5,687.8	2 4 4 6 1	826.8 5.042.6	80.4	1,068.8	4 0 2 2 4
Quoted shares			2 514 0	2,440.1	93.8	122.0	4.2	4,055.4
Unquoted shares and other equity			7,107.7	924.9	1.152.2	265.4	4.2	
Mutual fund shares			,,10,11,	1,203.1	3,797.6	20011		
Insurance technical reserves		33.7	330.9	62.9	0.8	5,184.0	0.5	
Other accounts payable and financial derivatives		588.8	2,882.1	2,593.3	215.3	254.8	400.0	491.8
Net financial worth 1)	-1,497.9	10,253.8	-8,007.0	609.1	311.1	-167.6	-4,497.2	
Financial account, transactions in liabilities								
Total transactions in liabilities		41.2	142.0	-153.0	193.8	23.0	218.3	-24.1
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.5	14.8	-0.9	0.0	8.2	-81.5
Short-term debt securities			8.1	-49.5	-0.2	-1.0	68.5	6.4
Long-term debt securities		21.1	25.1	47.9	67.4	-1.1	113.6	22.9
Loans		31.1	12.3		-61.4	-0.2	50.3 20.1	-39.1
Of which long-term Shares and other equity		27.8	40.5	36	-75.5	-0.2	29.1	88 0
Quoted shares			26.2	12.0	14	0.0	0.0	00.0
Unquoted shares and other equity			51.9	9.4	29.5	0.3	0.0	
Mutual fund shares				-17.8	157.6			
Insurance technical reserves		0.1	0.6	2.1	0.0	52.0	0.0	
Other accounts payable and financial derivatives		9.9	17.5	-171.9	0.4	-26.9	-22.3	-20.9
Changes in net financial worth due to transactions <sup>1)</sup>	-15.3	151.9	-81.8	29.8	-29.1	19.9	-106.0	15.3
Other changes account, liabilities								
Total other changes in liabilities		-1.3	503.2	305.5	305.0	77.0	13.5	149.3
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	-50.3	0.0	0.0	0.0	-22.2
Short-term debt securities			11.3	0.6	0.6	0.0	-1.0	-9.3
Long-term debt securities		0.6	-2.0	2.0	24.9	-0.1	-20.5	31.6
Loans		-0.6	-19.2		-40.5	-1.4	-2.6	-13.6
of which long-term		-0.1	-5.1	124.6	-44.5	-1.5	-2.7	156.5
Quoted shares			302.9	119 5	25.5	19.4	0.5	150.5
Unquoted shares and other equity			325.0	27.2	55.6	7.8	0.3	
Mutual fund shares				-12.1	231.0			
Insurance technical reserves		0.0	0.0	0.0	0.0	39.9	0.0	
Other accounts payable and financial derivatives		-0.7	-114.9	218.6	7.8	11.4	37.2	6.2
Other changes in net financial worth <sup>1</sup>	83.0	307.3	-192.7	-74.0	26.2	9.3	6.9	-93.8
Closing balance sheet, liabilities								
Total liabilities		6,378.8	22,501.5	23,167.0	9,897.2	6,183.1	7,945.5	13,155.4
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			26.8	14,821.2	20.1	0.0	253.8	2,382.1
Short-term debt securities			327.9 504.9	206.6	96.6	9.7	1,010.8	225.1
Long-term debt securities		5 746 9	504.8 8 198 1	2,849.9	2,285.8	30.3 213.0	4,952.9	2,715.4
of which long-term		5 372 1	5 723 0		706.8	78.7	1.095 3	5,077.7
Shares and other equity		5,572.1	10,327.7	2,584.3	5,544.2	414.9	4.5	4,277.9
Quoted shares			2,843.1	449.5	120.6	141.4	0.0	
Unquoted shares and other equity			7,484.6	961.5	1,237.4	273.5	4.5	
Mutual fund shares				1,173.3	4,186.3			
Insurance technical reserves		33.8	331.5	65.1	0.8	5,275.8	0.5	
Other accounts payable and financial derivatives	1.406.2	598.0	2,784.7	2,640.0	223.4	239.3	414.9	477.1
iver financial worth "	-1,430.3	10,713.0	-8,281.6	564.9	308.2	-138.4	-4,596.3	
Source: ECB.								


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

Uses	2005	2006	2007	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4	2008 Q2- 2009 Q1	2008 Q3- 2009 Q2
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>	3,907.1 130.0 1,186.7 2,072.1	4,070.1 128.8 1,247.2 2,189.5	4,255.9 137.1 1,315.2 2,331.7	4,356.9 136.3 1,347.5 2,375.2	4,403.1 137.1 1,363.9 2,379.2	4,438.5 133.8 1,378.2 2,358.6	4,444.9 131.7 1,390.3 2,293.3	4,441.1 126.3 1,400.0 2,211.7
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 <sup>1)</sup>	2,618.2 1,345.8 1,272.4 6,970.7	3,056.3 1,644.0 1,412.3 7,317.8	3,617.1 2,055.4 1,561.7 7,695.2	3,838.5 2,226.3 1,612.3 7,783.9	3,923.1 2,296.2 1,626.9 7,819.7	3,929.5 2,307.2 1,622.3 7,803.3	3,824.1 2,222.5 1,601.6 7,720.6	3,588.7 2,062.9 1,525.8 7,631.1
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 <sup>1)</sup>	935.9 1,477.8 1,505.5 712.0 179.6 180.5 351.8 6,884.3	1,028.2 1,540.5 1,553.2 722.8 179.6 179.9 363.3 7,225.6	1,111.8 1,595.9 1,597.1 753.5 184.2 183.9 385.4 7,599.7	$1,140.2 \\ 1,627.7 \\ 1,627.1 \\ 775.5 \\ 186.5 \\ 186.6 \\ 402.4 \\ 7,680.2$	1,142.1 1,645.3 1,647.5 781.7 187.7 188.0 406.1 7,717.1	1,124.2 1,660.4 1,665.1 790.1 188.3 189.3 412.5 7,697.7	1,113.7 1,669.2 1,688.9 784.3 185.7 186.6 412.0 7,615.7	1,077.3 1,671.4 1,717.4 775.3 182.6 183.3 409.3 7,526.8
Use of income account								
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households in pension funds reserves <i>Net saving</i> <sup>1)</sup>	6,355.7 5,691.0 664.7 60.8 528.9	6,631.5 5,946.4 685.1 62.9 594.3	6,891.7 6,180.3 711.3 59.7 708.2	7,044.4 6,313.6 730.8 62.3 635.8	7,119.0 6,378.6 740.4 63.7 598.2	7,156.8 6,407.4 749.4 64.2 540.9	7,164.8 6,405.2 759.6 64.8 450.9	7,157.6 6,391.1 766.4 64.5 369.2
Capital account								
Net saving Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables Consumption of fixed capital Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes	1,717.1 1,709.9 7.3 -0.4 183.6 24.4	1,876.7 1,854.9 21.8 -0.5 170.0 22.5	2,021.7 1,995.5 26.1 -1.2 151.2 24.3	2,056.2 2,034.3 21.9 0.1 159.6 23.9	2,072.2 2,048.2 24.0 0.3 163.7 24.1	2,066.3 2,029.3 37.0 0.7 164.1 23.6	2,003.1 1,976.4 26.7 1.2 161.4 23.5	1,910.5 1,907.2 3.2 0.7 169.9 28.6
Other capital transfers Net lending (+)/net borrowing (-) (from capital account) <sup>1)</sup>	159.2 12.1	147.4	126.9 16.8	135.7 -57.8	139.6 -97.1	140.5 -136.3	137.9 -153.9	141.3 -132.9

Sources: ECB and Eurostat. 1) For the calculation of the balancing items, see the Technical notes.



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

Resources	2005	2006	2007	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4	2008 Q2- 2009 Q1	2008 Q3- 2009 Q2
Generation of income account								
Gross value added (basic prices) Taxes less subsidies on products Gross domestic product (market prices) <sup>2</sup> ) Compensation of employees Other taxes less subsidies on production Consumption of fixed capital Net operating surplus and mixed income	7,295.9 845.1 8,141.1	7,635.5 913.7 8,549.3	8,039.8 959.1 8,998.9	8,216.0 954.1 9,170.1	8,283.2 952.5 9,235.7	8,309.1 945.6 9,254.7	8,260.3 928.9 9,189.2	8,179.0 912.6 9,091.6
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>	2,072.1 3,914.4 988.2 2,614.3 1,320.3 1,294.0	2,189.5 4,077.6 1,054.0 3,053.1 1,614.5 1,438.6	2,331.7 4,264.0 1,103.2 3,613.5 2,014.6 1,598.9	2,375.2 4,365.4 1,095.8 3,786.1 2,172.5 1,613.6	2,379.2 4,411.6 1,095.0 3,857.0 2,241.0 1,616.0	2,358.6 4,447.0 1,084.5 3,842.8 2,251.0 1,591.8	2,293.3 4,453.2 1,065.7 3,732.6 2,164.3 1,568.3	2,211.7 4,449.4 1,045.4 3,513.4 2,009.0 1,504.4
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	6,970.7 939.5 1,477.0 1,497.9 630.4 180.5 178.3 271.6	7,317.8 1,032.9 1,539.7 1,545.1 634.7 179.9 176.8 278.1	7,695.2 1,119.2 1,595.0 1,588.1 660.5 183.9 181.3 295.3	7,783.9 1,148.4 1,626.9 1,618.4 673.1 186.6 183.7 302.7	7,819.7 1,150.4 1,644.6 1,639.1 680.0 188.0 184.9 307.2	7,803.3 1,132.5 1,659.5 1,657.0 685.1 189.3 185.7 310.1	7,720.6 1,121.9 1,668.2 1,680.7 680.4 186.6 183.0 310.8	7,631.1 1,083.8 1,670.4 1,709.4 673.4 183.3 179.9 310.1
Use of income account								
Net disposable income Final consumption expenditure Individual consumption expenditure Collective consumption expenditure Adjustment for the change in net equity of households in pension funds reserves Net saving	6,884.3	63.1	7,599.7 59.9	7,680.2	7,717.1	7,697.7	7,615.7	7,526.8
Capital account								
Net saving Gross capital formation Gross fixed capital formation Changes in inventories and acquisitions less disposals of valuables	528.9	594.3	708.2	635.8	598.2	540.9	450.9	369.2
Consumption of fixed capital Acquisitions less disposals of non-produced non-financial assets Capital transfers Capital taxes Other capital transfers Net lending (+)/net borrowing (-) (from capital account)	1,186.7 196.8 24.4 172.4	1,247.2 184.5 22.5 162.0	1,315.2 165.1 24.3 140.8	1,347.5 174.6 23.9 150.8	1,363.9 177.0 24.1 152.9	1,378.2 175.7 23.6 152.1	1,390.3 170.6 23.5 147.1	1,400.0 179.0 28.6 150.4

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

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

	2005	2006	2007	2007 Q3- 2008 Q2	2007 Q4- 2008 Q3	2008 Q1- 2008 Q4	2008 Q2- 2009 Q1	2008 Q3- 2009 Q2
Income, saving and changes in net worth								
Compensation of employees (+)	3,914.4	4,077.6	4,264.0	4,365.4	4,411.6	4,447.0	4,453.2	4,449.4
Gross operating surplus and mixed income (+)	1,332.8	1,409.6	1,492.9	1,524.8	1,538.7	1,544.8	1,539.4	1,529.5
Interest receivable (+)	227.0	262.5	306.1	328.4	338.2	338.6	326.3	302.8
Interest payable (-)	130.7	163.9	209.6	227.1	234.1	232.9	217.2	192.6
Other property income receivable (+)	722.7	771.5	808.8	826.3	830.2	819.1	814.1	791.4
Other property income payable (-)	9.5	9.8	9.9	9.9	9.9	9.8	10.0	9.9
Current taxes on income and wealth (-)	741.7	794.1	852.7	882.4	889.4	891.8	889.2	876.2
Net social contributions (-)	1,473.8	1,536.5	1,591.6	1,623.4	1,640.9	1,655.9	1,664.7	1,666.9
Net social benefits (+)	1,492.6	1,539.7	1,582.5	1,612.6	1,633.3	1,651.2	1,674.9	1,703.5
Net current transfers receivable (+)	66.5	66.5	69.1	70.6	70.2	71.1	72.4	74.7
= Gross disposable income	5,400.1	5,623.2	5,859.4	5,985.3	6,047.9	6,081.3	6,099.1	6,105.7
Final consumption expenditure (-)	4,691.4	4,898.4	5,088.0	5,195.4	5,249.2	5,263.4	5,245.6	5,220.3
Changes in net worth in pension funds (+)	60.6	62.7	59.5	61.9	63.2	63.8	64.3	64.1
= Gross saving	769.4	787.5	830.8	851.9	862.0	881.7	917.8	949.5
Consumption of fixed capital (-)	319.9	338.6	359.0	368.7	373.1	376.4	379.2	381.6
Net capital transfers receivable (+)	24.1	18.9	11.9	14.2	14.8	15.7	15.4	17.3
Other changes in net worth $^{1}(+)$	524.3	563.8	45.4	-1,150.4	-1,321.4	-1,768.7	-1,361.8	-752.7
= Changes in net worth <sup>1)</sup>	997.9	1,031.7	529.0	-653.0	-817.9	-1,247.8	-807.8	-167.5
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	546.9	601.5	638.9	644.6	644.2	633.0	615.1	591.9
Consumption of fixed capital (-)	319.9	338.6	359.0	368.7	373.1	376.4	379.2	381.6
Main items of financial investment (+)	01515	00010	22710	50017	0,011	57011	01012	20110
Short-term assets	206.4	307.5	425.9	426.9	433.0	440.8	384.5	283.4
Currency and deposits	246.9	284.3	349.8	387.6	392.4	437.0	397.6	335.4
Money market fund shares	-20.2	0.9	40.0	10.5	13.5	-9.1	-4.0	-24.9
Debt securities <sup>2)</sup>	-20.3	22.2	36.0	28.7	27.1	12.9	-9.1	-27.0
Long-term assets	422.9	364.3	160.6	109.0	61.9	77.0	118.5	214.6
Deposits	-5.3	-1.2	-29.8	-37.2	-40.0	-32.9	-17.9	10.5
Debt securities	-1.7	76.6	13.9	73.8	83.4	72.1	65.2	47.9
Shares and other equity	137.5	-27.6	-86.6	-149.5	-189.5	-137.0	-98.4	-17.8
Ouoted unquoted shares and other equity	71.1	-9.8	-5.7	-24.8	-41.9	-7.9	3.4	30.6
Mutual fund shares	66.4	-17.9	-81.0	-124.7	-147.6	-129.1	-101.8	-48.4
Life insurance and pension fund reserves	292.5	316.5	263.2	221.9	208.0	174.8	169.7	174.1
Main items of financing (-)								
Loans	397.2	393.5	350.5	287.8	252.2	205.4	147.7	112.1
of which from euro area MFIs	358.5	355.3	283.7	199.0	183.2	81.6	18.8	9.1
Other changes in financial assets (+)								
Shares and other equity	443.3	510.7	7.9	-1,007.0	-1,051.3	-1,403.6	-1,090.8	-624.5
Life insurance and pension fund reserves	105.5	50.6	28.1	-127.8	-180.3	-259.3	-203.8	-115.2
Remaining net flows (+)	-10.1	-70.9	-22.8	-42.2	-100.0	-153.9	-104.3	-24.0
= Changes in net worth <sup>1)</sup>	997.9	1,031.7	529.0	-653.0	-817.9	-1,247.8	-807.8	-167.5
Financial balance sheet								
Financial assets (+)								
Short-term assets	4,482.0	4,748.0	5,212.3	5,488.3	5,546.3	5,724.5	5,792.7	5,798.3
Currency and deposits	4,174.0	4,454.4	4,843.3	5,055.2	5,104.7	5,312.9	5,374.4	5,430.1
Money market fund shares	296.4	257.6	296.0	346.5	348.5	328.0	346.5	312.0
Debt securities <sup>2)</sup>	11.6	36.0	72.9	86.6	93.0	83.6	71.7	56.2
Long-term assets	10,994.7	11,966.2	12,112.0	11,173.5	10,843.7	10,371.0	10,148.5	10,609.9
Deposits	1,023.3	1,031.1	966.8	903.6	887.0	890.6	868.0	886.6
Debt securities	1,209.3	1,283.1	1,279.2	1,306.2	1,287.2	1,280.5	1,299.3	1,333.4
Shares and other equity	4,514.7	5,037.4	4,960.3	4,078.7	3,790.5	3,378.7	3,146.7	3,445.9
Quoted, unquoted shares and other equity	3,192.0	3,634.3	3,612.9	2,949.6	2,736.5	2,406.1	2,218.0	2,431.1
Mutual fund shares	1,322.7	1,403.2	1,347.4	1,129.1	1,054.0	972.6	928.7	1,014.8
Life insurance and pension fund reserves	4,247.5	4,614.5	4,905.7	4,885.1	4,878.8	4,821.2	4,834.5	4,943.9
Remaining net assets (+)	95.2	72.2	74.2	49.0	67.4	37.8	29.0	51.7
	1 700 1	5 190 0	5 512 6	5 679 1	5 692 9	5 722 1	57164	5 746 0
of which from euro area MFIs	4 201 0	4 553 1	4 825 5	4 887 7	4 038 7	4 001 0	4 870 5	4 800 0
- Net financial wealth	10 783 0	11 606 3	11 885 0	11.082.5	10 773 4	10 4 10 1	10 253 8	10 713 0

Sources: ECB and Eurostat. 1) Excluding changes in net worth due to other changes in non-financial assets such as revaluations of residential property. 2) Securities issued by MFIs with a maturity of less than two years and by other sectors with a maturity of less than one year.



### **3.4 Non-financial corporations** (EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

				2007 Q3-	2007 Q4-	2008 Q1-	2008 Q2-	2008 Q3-
	2005	2006	2007	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2
Income and saving								
Gross value added (basic prices) (+)	4,178.2	4,387.2	4,635.4	4,739.5	4,777.6	4,781.9	4,724.9	4,644.5
Compensation of employees (-)	2,479.0	2,592.9	2,720.8	2,789.4	2,820.4	2,841.9	2,838.5	2,828.6
Other taxes less subsidies on production (-)	73.1	75.2	80.6	80.9	81.8	79.1	77.6	73.7
= Gross operating surplus (+)	1,626.2	1,719.2	1,833.9	1,869.2	1,875.4	1,860.9	1,808.8	1,742.1
Consumption of fixed capital (-)	672.7	704.8	741.9	759.6	768.8	777.3	784.6	790.2
= Net operating surplus (+)	953.5	1,014.4	1,092.0	1,109.6	1,106.6	1,083.5	1,024.2	951.9
Property income receivable (+)	440.2	508.5	581.8	598.7	602.3	599.7	582.2	557.8
Interest receivable	141.1	169.7	199.0	219.3	225.9	227.9	218.2	203.6
Other property income receivable	299.1	338.8	382.8	379.4	376.4	371.7	364.1	354.2
Interest and rents payable (-)	237.3	284.6	346.2	382.1	397.1	403.8	386.2	356.4
= Net entrepreneurial income (+)	1,156.4	1,238.3	1,327.6	1,326.2	1,311.7	1,279.4	1,220.2	1,153.3
Distributed income (-)	887.7	961.5	1,016.5	1,050.5	1,064.6	1,059.5	1,055.0	1,024.7
Taxes on income and wealth payable (-)	149.1	190.0	211.1	215.3	212.2	195.2	188.9	169.4
Social contributions receivable (+)	72.8	74.9	64.3	64.1	64.9	65.4	65.6	66.2
Social benefits payable (-)	60.7	60.6	61.7	62.4	62.7	62.9	63.0	63.1
Other net transfers (-)	61.7	66.0	57.0	59.6	59.8	60.0	60.1	61.3
= Net saving	70.1	35.1	45.5	2.5	-22.7	-32.8	-81.3	-99.1
Investment, financing and saving								
Net acquisition of non-financial assets (+)	256.4	313.6	367.7	371.7	376.8	367.6	313.0	232.7
Gross fixed capital formation (+)	920.7	993.9	1,084.2	1,111.1	1,123.6	1,109.8	1,073.1	1,022.2
Consumption of fixed capital (-)	672.7	704.8	741.9	759.6	768.8	777.3	784.6	790.2
Net acquisition of other non-financial assets (+)	8.4	24.5	25.4	20.2	22.0	35.1	24.6	0.7
Main items of financial investment (+)								
Short-term assets	128.6	160.3	158.9	119.6	93.5	49.4	-37.4	-18.1
Currency and deposits	113.7	146.3	154.5	114.2	89.4	15.6	-5.3	9.8
Money market fund shares	8.3	2.5	-19.1	-10.1	6.6	30.6	27.7	33.0
Debt securities <sup>1)</sup>	6.6	11.5	23.5	15.5	-2.5	3.2	-59.8	-60.9
Long-term assets	393.5	489.5	518.7	522.6	544.2	631.3	644.3	536.3
Deposits	34.2	35.7	28.4	-19.7	3.1	9.4	14.0	29.4
Debt securities	-34.9	5.9	-27.4	-80.0	-44.3	-25.3	30.3	-5.9
Shares and other equity	255.9	265.5	346.4	380.0	339.1	332.9	326.3	281.7
Other, mainly intercompany loans	138.3	182.5	171.2	242.2	246.3	314.4	273.7	231.0
Remaining net assets (+)	83.7	156.3	211.5	63.7	-9.4	-59.8	-149.8	-120.1
Main items of financing (-)								
Debt	440.3	750.3	787.7	743.5	760.6	692.5	579.6	393.7
of which loans from euro area MFIs	271.8	453.1	556.8	543.1	495.0	400.0	273.0	119.3
of which debt securities	13.8	41.8	37.3	12.3	41.7	55.1	68.4	82.9
Shares and other equity	291.3	262.2	355.6	259.4	191.0	248.5	189.8	255.3
Quoted shares	104.1	42.4	42.9	-12.1	-29.7	2.2	12.1	45.2
Unquoted shares and other equity	187.2	219.9	312.6	271.5	220.7	246.3	177.8	210.0
Net capital transfers receivable (-)	60.4	72.1	68.8	75.7	79.0	78.3	79.3	76.9
= Net saving	70.1	35.1	45.5	2.5	-22.7	-32.8	-81.3	-99.1
Financial balance sheet								
Financial assets								
Short-term assets	1,505.2	1,670.9	1,808.4	1,837.7	1,851.4	1,869.7	1,849.6	1,882.2
Currency and deposits	1,229.3	1,367.2	1,507.6	1,521.7	1,536.6	1,540.9	1,510.4	1,550.5
Money market fund shares	176.5	184.8	161.0	182.2	182.8	187.8	210.5	213.7
Debt securities <sup>1)</sup>	99.4	118.8	139.8	133.8	132.0	141.0	128.7	118.0
Long-term assets	8,634.3	10,024.2	10,744.1	9,903.2	9,634.1	8,871.6	8,628.8	9,009.8
Deposits	109.5	147.7	200.4	169.8	192.0	206.6	196.4	193.3
Debt securities	284.5	284.2	252.4	188.2	192.4	208.8	198.8	148.9
Shares and other equity	6,350.0	7,533.7	8,032.9	7,125.0	6,771.0	5,907.2	5,602.4	6,025.9
Other, mainly intercompany loans	1,890.4	2,058.5	2,258.4	2,420.1	2,478.6	2,548.9	2,631.3	2,641.7
Remaining net assets	407.8	453.3	606.9	542.6	578.6	578.1	515.0	569.9
Liabilities								
Debt	7,046.1	7,771.6	8,518.4	8,900.5	9,088.0	9,229.5	9,326.2	9,362.3
of which loans from euro area MFIs	3,527.9	3,980.9	4,525.1	4,764.1	4,853.6	4,918.8	4,902.9	4,874.8
of which debt securities	675.4	695.1	692.4	698.7	721.4	745.9	790.3	832.7
Shares and other equity	10,994.5	12,966.9	14,011.7	12,209.5	11,427.7	10,300.7	9,621.7	10,327.7
Quoted shares	3,711.1	4,491.5	5,010.2	4,000.1	3,454.4	2,864.2	2,514.0	2,843.1
Unquoted shares and other equity	7,283.5	8,475.3	9,001.5	8,209.4	7,973.3	7,436.5	7,107.7	7,484.6
Sources: ECB and Eurostat								

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

**3.5** Insurance corporations and pension funds (EUR billions; four-quarter cumulated flows; outstanding amounts at end-of-period)

				2007 Q3-	2007 Q4-	2008 Q1-	2008 Q2-	2008 Q3-
Financial account financial transactions	2005	2006	2007	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2
Financial account, financial transactions								
Main items of financial investment (+)								
Short-term assets	25.5	67.4	92.3	105.8	90.9	107.0	55.8	39.0
Currency and deposits	7.2	10.6	6.4	35.2	32.4	57.0	18.2	12.5
Money market fund shares	-0.5	3.6	3.1	14.3	21.7	20.3	16.8	9.4
Debt securities "	18.9	53.3	82.8	56.2	36.8	29.8	20.8	17.1
Long-term assets	284.6	319.2	202.3	144.9	119.7	101.9	95.2	129.9
Deposits Debt accurities	17.4	/0.9	47.8	13.5	-0.4	0.0	10.1	10.5
Learne	132.9	129.3	//.0	/0.6	80.7	05.8	80.6	37.8
Loans Oueted shores	-5.7	2.1	-0.7	11.9	15.5	23.2	0.0	10.2
Unconstant shares and other acquity	50.7	-3.4	-2.2	-2.1	-10.9	-11.5	-0.2	-10.5
Mutual fund abarea	19.9	20.2	23.3 62.0	22.1	12.9	14.9	10.8	/./ 60.1
Mutual lund snares	87.5	85.4	03.0 24.7	28.7	13.9	9.4 20.8	1.4	09.1
Main items of financing ()	2.7	5.4	-34.7	-18.0	1.7	50.8	0.0	25.0
Dabt sequrities	0.4	57	2.0	5.1	5.4	0.2	0.0	7.0
Leone	-0.4	14.9	5.9	2.5	J.4 7.4	9.3 22.2	9.9 10.4	6.3
Loans Shares and other equity	17.5	44.0	0.7	5.5 2.1	-7.4	1.4	-10.4	0.5
Insurance technical recenter	225.2	210.0	270.8	-3.1	-0.7	-1.4	168.6	162.7
Net equity of households in life insurance and pension fund reserves	201.6	313.6	219.0	240.5	233.1	191.0	160.0	157.5
Proportional promision of insurance and resortion for	291.0	515.0	277.0	230.5	217.0	1/7.1	100.4	157.5
outstanding claims	13.6	62	2.0	10.0	15.4	14.5	87	63
- Changes in not financial worth due to transactions	43.0	8.0	2.0	20.1	10.1	14.5	0.2 17.4	16.5
Other changes account	-49.9	0.0	-55.0	-20.1	-10.1	10.1	-17.4	10.5
Other changes in financial assets (+)		100.0						
Shares and other equity	190.5	182.0	1.3	-342.0	-415.9	-549.8	-432.7	-319.7
Other net assets	82.0	-37.1	-56.7	-16.5	-7.9	32.2	9.3	74.9
Other changes in liabilities (-)	117.0	27.0	27.6	150.4	146.4	105 1	100.2	101.4
Shares and other equity	117.9	57.0	-37.0	-150.4	-146.4	-185.1	-188.5	-121.4
Not aquity of households in life incurrence and nonsion fund recording	137.7	51.9	20.8	-128.3	-185.5	-200.5	-205.9	-130.7
Braneyments of incurance promiums and reserves for	140.8	51.6	20.9	-124.2	-1/0.4	-232.2	-199.8	-120.5
enterending cloims	0.1	2.5	0.1	4.1	6.0	8.2	6.1	4.4
- Other abanges in not financial worth	-9.1	52.6	-0.1	-4.1	-0.9	-0.5	-0.1	-4.4
	10.8	52.0	-44.0	-19.1	-94.2	-/1.9	-29.2	7.5
Financial balance sheet								
Financial assets (+)	427.2	512.0	509.2	((5.2	(70.2	700.9	710.9	709.2
Short-term assets	437.3	512.9	598.5	005.5	0/0.2	709.8	/19.8	/08.2
Management of the second	140.0	130.0	105.1	160.5	100.4	100.2	214.7	196.5
Debt coourition <sup>1)</sup>	75.0 215.0	274.7	02.3 252.7	94.0 200.0	282.8	286.6	202.1	105.7
Long term assets	4 623 6	5.064.0	5 214 5	5 020 0	4 954 1	4 773 6	4 725 4	400.0
Deposits	+,023.0 523.7	601.3	647.0	5,020.0 640.4	644.9	646.1	656.4	650.3
Debt securities	1 778 2	1 851 7	1 880 0	1 01/1 8	1 960 3	1 050 0	1 088 2	1 076 4
Loans	356.1	355.6	341.5	355.5	356.7	366.0	367.8	371.9
Quoted shares	653.2	736.4	728.3	598.0	538.4	427.2	395.2	439.5
Unquoted shares and other equity	404.7	483.6	513.4	459.3	444.6	420.2	391.2	393.1
Mutual fund shares	907.7	1 035 5	1 103 4	1 043 1	1 009 1	963.3	926.7	1 015 1
Remaining net assets (+)	180.7	205.2	165.7	171.6	180 5	216.2	215.4	242.0
Liabilities (-)	100.7	205.2	105.1	171.5	100.5	210.2	215.7	212.0
Debt securities	21.3	35.9	35.2	36.5	36.7	43.2	42.2	40.0
Loans	142.1	183.7	186.9	204.3	195.5	209.2	214.7	213.0
Shares and other equity	618.8	667.4	632.8	535.5	514.9	446.3	387.4	414.9
Insurance technical reserves	4,559.9	4,935.0	5,241.7	5,242.8	5,239.8	5,172.8	5,184.0	5,275.8
Net equity of households in life insurance and pension fund reserves	3,892.2	4.257.6	4.562.4	4.554.2	4.550.4	4,487.3	4,495,6	4.585.4
Prepayments of insurance premiums and reserves		.,	.,	.,	.,	.,	.,	.,20211
for outstanding claims	667.6	677.4	679.3	688.5	689.5	685.5	688,4	690.4
= Net financial wealth	-100.5	-39.9	-118.1	-162.2	-182.1	-172.0	-167.6	-138.4

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





## 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: )

		Fotol in ourse <sup>1)</sup>		By euro area residents In euro In euro In all currencies								
		t otar in euro 7			In euro				In all cu	rrencies		
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally	adjusted 2)
	1	2	2	4	5	C	7	0	0	10	Net issues	6-month growth rates
	1	4	3	4	5	Total	1	0		10	11	12
2008 Aug. Sep. Oct. Nov. Dec. 2009 Jan. Feb. Mar. Apr. May June July	13,633.4 13,636.0 13,735.0 13,953.3 14,139.0 14,238.0 14,430.4 14,605.2 14,682.4 14,682.4 14,889.6 14,978.3	880.7 1,022.1 1,454.3 1,422.3 1,538.1 1,500.7 1,259.3 1,318.0 1,233.7 1,159.5 1,085.2	123.0 1.5 98.3 218.3 189.2 94.4 190.0 173.2 79.9 207.2 88.2	11,417.8 11,385.0 11,536.8 11,764.2 11,916.5 12,056.2 12,242.4 12,381.2 12,481.4 12,654.7 12,716.3 12,768.5	816.1 930.5 1,417.3 1,369.7 1,449.4 1,451.4 1,200.0 1,229.8 1,167.4 1,070.1 1,006.5 1,070.9	105.2 -33.7 151.2 227.7 156.0 136.1 184.0 137.4 102.8 173.4 60.9 54.9	12,744.6 12,704.7 12,904.7 13,097.8 13,170.3 13,371.5 13,575.1 13,679.5 13,792.7 13,931.3 14,001.2 14,066.8	889.5 1,001.3 1,494.5 1,437.1 1,526.6 1,530.0 1,285.5 1,323.1 1,250.5 1,156.7 1,089.4 1,151.1	110.5 -43.2 146.3 213.7 142.7 145.3 203.6 148.4 110.7 168.7 73.9 69.3	7.8 7.0 6.9 8.1 9.5 10.1 11.1 11.9 12.1 12.0 11.9 11.8	146.5 8.1 120.3 193.1 228.8 103.3 156.3 132.9 92.8 108.9 92.4 103.1	9.0 8.7 9.6 11.1 13.2 13.1 15.2 14.6 13.0 10.6 10.5
Aug.		•		12,805.7	825.8	36.2	14,089.9	896.2	25.1	11.0	63.3	9.0
2008 Aug. Sep. Oct. Nov. Dec.	12,203.6 12,192.2 12,216.7 12,392.4 12,571.0	160.0 183.6 199.0 275.5 362.9	87.2 -10.2 24.8 174.4 179.8	10,134.3 10,111.9 10,147.9 10,324.0 10,495.1	133.8 145.5 182.8 253.9 328.3	76.1 -21.2 36.4 175.0 172.7	11,252.7 11,236.3 11,329.4 11,485.4 11,579.6	149.2 158.6 195.5 262.8 340.0	76.8 -31.6 30.9 166.1 153.4	6.1 5.7 5.3 6.2 7.3	121.4 0.8 32.9 138.5 165.0	7.7 7.5 6.7 8.0 9.7
2009 Jan. Feb. Mar. Apr. May June July Aug.	12,647.6 12,817.3 13,000.4 13,076.7 13,278.8 13,398.5	291.7 300.6 319.8 292.3 338.6 309.4	74.4 168.5 153.3 79.5 203.3 117.9	10,584.9 10,746.5 10,919.6 10,987.9 11,157.1 11,267.5 11,296.8 11,346.1	276.9 269.6 280.2 257.4 280.7 274.3 249.4 108.1	88.6 160.7 143.3 71.6 170.4 108.4 31.8 49.1	11,714.2 11,887.0 12,024.3 12,102.6 12,252.4 12,381.9 12,419.6 12,467.4	300.3 296.7 301.8 276.3 301.0 308.1 274.2 121.0	89.2 172.8 144.4 75.0 174.6 128.5 40.7 53.2	8.2 9.2 10.4 10.3 10.7 10.9 10.9 10.6	115.7 135.6 141.7 71.8 111.9 101.4 82.0 101.5	10.5 10.7 13.3 14.0 13.3 12.0 11.3 10.5

C16 Total outstanding amounts and gross issues of securities, other than shares, issued by euro area residents

total gross issues (right-hand scale) . . . . total outstanding amounts (left-hand scale) outstanding amounts in euro (left-hand scale) -18000 1600 1400 16000 14000 1200 Just -- Amy t-w-12000 1000 10000 800 8000 600 6000 400 4000 200 2009 2000 1994 1995 1996 1997 1998 1999 T 2000 2001 1 2002 2003 2004 2005 2006 2007 2008

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

1) Total euro-denominated securities, other than shares, issued by euro area residents and non-euro area residents.

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

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

#### 1. Outstanding amounts and gross issues

			Outstandi	ng amounts					Gross i	issues 1)		
	Total	MFIs (including	Non-MFI c	orporations	General go	overnment	Total	MFIs (including	Non-MFI c	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						
2007 2008	12,066	5,046 5,266	1,506	653 697	4,534	327 340	1,138	841 817	59 74	109 100	116	12 24
2008 O3	12,705	5,267	1,530	681	4,747	324	1,177	691	54	97	148	27
Q4	13,170	5,266	1,930	697 710	4,937	340	1,486	1,006	136	107	209	28
2009 Q1 Q2	14,001	5,392	2,038 2,119	719	5,344	343	1,380	922 749	62	92 90	231	33 20
2009 May	13,931	5,456	2,101	744	5,281	350	1,157	745	67	89	239	17
June July	14,001 14,067	5,433 5,447	2,119	753 766	5,344 5,345	351	1,089	695 718	54 73	89 95	235 251	16 14
Aug.	14,090	5,439	2,156	763	5,377	354	896	628	27	74	160	8
						Short-term						
2007 2008	1,287 1,591	787 822	36 62	100 116	345 566	18 25	946 962	754 723	18 26	101 92	64 101	9 19
2008 Q3	1,468	826	62	111	457	13	849	614	25	92	94	24
Q4	1,591	822	62	116	566	25	1,220	911	39	96 74	152	23
2009 Q1 Q2	1,619	785	42 37	98 85	696	16	870	631	17	69	143	13
2009 May	1,679	832	41	90	701	15	856	626	13	64	142	10
June Julv	1,619	785 779	37	85 85	696 731	16	781 877	572 615	15	69 77	113	12
Aug.	1,623	752	34	83	738	15	775	567	10	72	122	5
	10	1.0.50				Long-term <sup>2)</sup>						
2007 2008	10,779 11,580	4,259 4,445	1,469 1,868	553 581	4,189 4,371	309 315	191 215	86 95	41 48	8 8	52 61	3 4
2008 Q3	11,236	4,441	1,624	570	4,290	311	168	76	29	5	54	3
2009 Q1	12,024	4,445 4,554	1,808	581 621	4,571 4,528	315	200 300	116	98 61	11	57 96	5
Q2	12,382	4,648	2,082	669	4,648	336	295	118	48	21	101	7
2009 May June	12,252	4,624 4,648	2,060 2,082	654 669	4,579 4,648	335 336	301 308	119 122	54 39	25 21	96 122	6 4
July	12,420	4,668	2,119	681	4,614	337	274	103	62	18	84	7
Aug.	12,407	4,087	2,122	080	4,039	2009 2 ch long-term f	ived rate	01	17	2	30	5
2007	7.324	2.263	594	419	3,797	250	107	44	10	5	45	3
2008	7,611	2,326	636	445	3,955	250	119	48	9	6	53	3
2008 Q3	7,534 7,611	2,370 2,326	619 636	432 445	3,865 3,955	248 250	101 120	42 42	7	3 10	47	2
2009 Q1	7,931	2,396	703	487	4,094	252	208	72	27	18	86	5
Q2	8,246	2,494	749	535	4,210	259	209	72	23	20	90	5
June June	8,108	2,439	749	535	4,140 4,210	259	233	78	28	24 19	109	2
July Aug	8,261 8,295	2,511 2,524	767 766	548 547	4,176 4 199	259 259	180 65	62 33	24 4	17	72 26	6
	0,255	2,521	,	2.17	Of which	long-term va	riable rate			-		
2007	3,001	1,621	857	123	342	58	69	31	30	3	4	0
2008	3,480	1,724	1,202	126	363	64	81	36	38	1	5	1
2008 Q3 Q4	3,229 3,480	1,698	1,202	129	362 363	61 64	53 129	24 39	21 83	2	43	1
2009 Q1	3,589	1,757	1,269	124	369	70 75	75	32	34	0	5	3
2009 May	3 619	1,740	1,307	123	367	73	72	27	34	1	9	1
June	3,620	1,740	1,307	123	374	75	50	28	11	2	7	2
July Aug.	3,640 3,646	1,745 1,747	1,327	123	370 368	76 78	78 40	30 17	38 12	0	8	1

Source: ECB.
 Monthly data on gross/net 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 of zero coupon bonds and revaluation effects.



# 4.2 Securities, other than shares, issued by euro area residents, by sector of the issuer and instrument type (EUR billions unless otherwise indicated; transactions during the period; nominal values)

	Non-seasonally adjusted <sup>1)</sup>							Seasonally adjusted <sup>1)</sup>						
-	Total	MFIs (including	Non-MFI co	orporations	General go	overnment	Total	MFIs (including	Non-MFI co	orporations	General go	overnment		
	1	Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government	7	Eurosystem)	Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government		
	1	2		4		Total	1	0	y	10	11	12		
2007 2008	83.6 95.2	40.7 23.2	27.6 35.3	4.2 4.0	9.9 31.7	1.2 1.1	83.7 95.9	41.3 23.3	27.1 34.5	4.3 4.1	10.0 33.1	1.1 0.9		
2008 Q3 Q4 2009 O1	47.4 167.6 165.8	10.9 11.4 40.5	18.6 81.7 35.2	2.0 6.2 7.0	14.7 63.0 82.1	1.2 5.4 1.0	85.2 180.7 130.8	20.0 21.5 21.1	32.9 56.5 45.2	4.7 9.2 5.1	25.3 90.7 56.9	2.2 2.8 2.5		
Q2	117.8	21.7	27.7	11.5	54.0	2.9	98.0	21.1	27.4	7.4	39.2	3.0		
2009 May June July Aug.	73.9 69.3 25.1	55.3 -18.7 18.0 -9.6	33.1 17.5 35.6 3.3	14.4 9.2 12.7 -2.1	66.0 64.0 0.8 32.7	-0.2 1.8 2.2 0.9	108.9 92.4 103.1 63.3	31.9 14.5 13.6 -0.5	30.5 13.8 49.2 15.0	6.8 8.5 12.7 2.4	39.3 54.0 24.9 44.6	0.5 1.7 2.7 1.9		
						Long-term								
2007 2008	61.7 65.8	23.9 16.2	27.0 33.2	2.4 2.5	7.8 13.3	0.7 0.5	61.3 65.1	24.1 16.4	26.4 32.4	2.4 2.6	7.7 13.2	0.7 0.5		
2008 Q3 Q4 2009 Q1 Q2	26.9 116.8 135.5 126.0	7.4 2.9 25.8 36.1	15.2 81.8 42.1 29.1	2.6 4.4 12.9 15.9	1.3 26.2 51.7 41.2	0.5 1.5 3.1 3.8	63.5 112.1 131.0 95.0	16.2 12.5 17.1 25.4	29.6 57.2 52.2 28.2	4.1 4.7 14.4 12.3	12.2 37.0 44.4 25.5	1.5 0.7 3.0 3.7		
2009 May June July Aug.	174.6 128.5 40.7 53.2	48.4 23.2 23.3 21.2	35.2 20.9 37.9 4.6	19.9 14.3 12.6 -0.3	69.0 69.2 -34.3 25.5	2.2 0.9 1.3 2.1	111.9 101.4 82.0 101.5	25.6 22.2 22.4 37.5	30.9 16.5 52.9 18.0	13.3 11.2 13.1 2.8	39.6 50.7 -8.3 40.4	2.5 0.7 1.9 2.9		

#### 2. Net issues

C17 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 gross/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-mon	th seasonally a	djusted growt	h 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
2008 Aug. Sep. Oct. Nov. Dec	7.8 7.0 6.9 8.1 9.5	8.4 6.9 5.3 5.7 5.5	23.9 23.8 21.1 24.0 28.1	4.9 6.0 4.5 4.3 7.3	3.0 2.6 5.0 6.7 8.4	3.4 2.3 2.9 2.8 4.0	9.0 8.7 9.6 11.1 13.2	8.8 8.1 6.7 5.1 4.8	27.9 28.4 25.8 30.8 35.7	3.1 5.3 5.4 5.1 12.9	4.5 3.9 8.2 12.5 15.5	5.9 5.9 9.9 7.1 9.6
2009 Jan. Feb. Mar. Apr. May June July Aug.	10.1 11.1 11.9 12.1 12.0 11.9 11.8 11.0	5.3 6.3 6.5 6.3 5.5 4.9 4.2 3.6	30.2 32.3 33.3 33.5 33.1 29.9 31.0 27.6	7.0 8.1 9.0 10.1 10.2 11.8 13.1 12.6	9.6 10.1 11.5 11.6 12.7 13.6 13.5 13.3	5.4 6.5 7.9 10.6 9.5 9.7 9.5 9.0	13.1 13.1 15.2 14.6 13.0 10.6 10.5 9.0	3.6 3.8 4.9 6.1 5.9 4.8 4.9 3.2	38.3 36.6 38.4 41.6 35.3 24.3 24.3 24.3 19.5	12.3 12.3 13.3 12.9 15.3 15.9 10.8 14.1 12.1	16.0 16.0 19.5 14.9 12.7 11.8 11.0 10.5	8.5 7.2 10.0 11.3 11.9 10.1 10.6 10.9
						Long-term						
2008 Aug. Sep. Oct. Nov. Dec.	6.1 5.7 5.3 6.2 7.3	5.3 5.1 4.3 4.5 4.6	21.6 21.5 19.3 22.6 27.0	3.1 4.5 3.8 3.2 5.5	2.5 1.7 2.1 3.4 3.8	3.5 2.2 1.4 1.3 2.1	7.7 7.5 6.7 8.0 9.7	7.2 7.1 6.0 4.6 4.0	27.0 27.1 23.8 29.6 35.8	2.1 5.5 4.5 3.6 9.7	2.8 1.9 2.1 5.2 7.1	5.0 4.3 5.5 3.0 4.3
2009 Jan. Feb. Mar. Apr. May June July Aug.	8.2 9.2 10.4 10.3 10.7 10.9 10.9 10.6	4.4 5.1 5.5 5.6 5.2 4.9 4.6 4.9	30.9 34.1 35.0 34.9 34.6 31.9 33.6 30.6	8.2 10.5 13.0 14.8 16.4 19.1 21.1 20.6	4.4 5.1 6.7 5.9 7.1 8.4 7.8 7.8	3.3 3.9 5.7 8.6 8.5 8.5 8.5 8.1 8.1	10.5 10.7 13.3 14.0 13.3 12.0 11.3 10.5	3.1 3.0 4.0 5.3 5.8 5.7 6.2 6.8	42.5 41.3 43.3 46.9 39.6 28.1 25.5 20.7	16.0 19.4 21.0 26.1 30.6 29.2 26.4 21.9	7.1 7.3 11.7 9.9 9.1 9.8 8.5 8.2	4.1 2.9 7.2 11.8 14.2 13.1 12.4 13.5

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

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

MFIs (including Eurosystem)



Source: ECB.

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



general government

	2	0 /										
			Long-tern	n fixed rate					Long-term	variable rate		
	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 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					
2007 2008	5.2 3.0	7.2 4.9	17.0 5.7	4.0 4.2	2.5 1.5	6.6 1.4	15.8 12.9	11.1 5.5	37.8 33.7	18.6 7.1	3.8 7.6	-1.8 3.2
2008 Q3	3.0	5.5	5.0	3.5	1.3	2.0	12.4	5.3	32.3	3.2	7.7	6.0
2009 01	5.2	4.5	4.9	4.5	2.5	-0.8	15.1	5.7	54.1 45.1	4.5	5.8 0.8	10.2
Q2	9.0	6.9	20.4	21.3	7.4	4.5	14.7	3.3	44.3	-1.3	-0.6	20.6
2009 Mar. Apr.	8.4 8.4	6.6 6.7 7.2	18.1 19.8	17.6 20.1	7.3 6.6 7.4	2.6 5.3	16.3 15.6	5.0 4.5	47.1 45.7	-0.7 -0.9	0.4 -1.5	16.7 20.3
June	9.2 10.3	7.5	21.1	22.3	9.1	4.2	14.2	1.3	38.7	-2.1	-0.3	20.9
July	10.4	6.8	26.1	28.5	8.6	3.7	12.5	1.5	39.5	-3.3	-2.3	24.9
Aug.	10.6	7.5	24.9	28.1	8.7	3.2	10.9	0.9	35.0	-4.0	-3.8	27.1
						In euro						
2007 2008	4.6 2.9	6.5 4.8	13.7 6.1	2.3 2.1	2.7 1.7	6.7 1.3	15.1 14.3	10.3 6.5	35.4 35.2	18.2 7.2	3.9 7.9	-2.4 2.0
2008 Q3	2.9	5.4	6.0	1.1	1.5	1.8	14.3	6.8	34.3	3.9	8.1	4.6
2000 Q4	3.3	4.7	7.2	2.2	2.5	-1.3	15.4	7.7	36.8	5.2	4.0	9.2
2009 Q1 Q2	9.6	8.9	23.4	19.6	7.6	3.9	17.5	5.4	48.0	-2.0	-0.7	22.5
2009 Mar.	8.9	8.1	21.7	15.4	7.5	1.9	19.2	7.5	50.2	-1.5	0.3	17.7
Apr.	9.0	8.6	23.2	18.2	6.8	4.6	18.4	6.6	48.9	-1.4	-1.6	22.2
May	9.9	9.5	23.9	20.6	7.6	4.4	17.0	4.3	47.5	-2.9	-0.6	22.9
June	10.9	8.9	24.5	24.3	9.4	3.5	15.0	3.1	41.7	-2.0	-0.2	26.8
Aug	11.0	9.0	26.0	27.5	8.0 8.9	2.6	14.9	2.6	42.1	-3.8	-3.0	27.2
			2015	=	515	2.0	1010	210	2710			

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

C19 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined (annual percentage changes)



#### Source: ECB.

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

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

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

(outstanding amounts as end-of-period)

		Total		MFI	s	Financial corporations	s other than MFIs	Is Non-financial corporations	
	Total	Index: Dec. 2001 = 100	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2007 Aug. Sep. Oct. Nov.	6,626.8 6,690.9 6,945.9 6,631.8	103.9 104.0 104.3 104.3	1.2 1.2 1.4 1.4	1,062.0 1,050.6 1,074.6 1,034.6	1.6 1.9 1.3 1.1	583.9 597.3 628.2 578.6	1.0 0.8 3.3 3.3	4,981.0 5,042.9 5,243.1 5,018.6	1.2 1.1 1.2 1.2
Dec.	6,588.7	104.4	1.4	1,019.0	1.2	578.4	2.9	4,991.2	1.2
2008 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.	5,766.1 5,820.8 5,567.1 5,748.0 5,729.4 5,081.0 4,972.6 4,999.2 4,430.0 3,743.8 3,489.3 3,482.6	$\begin{array}{c} 104.4 \\ 104.5 \\ 104.5 \\ 104.4 \\ 104.5 \\ 104.5 \\ 104.6 \\ 104.6 \\ 104.6 \\ 104.7 \\ 105.0 \\ 105.2 \\ 105.4 \end{array}$	$\begin{array}{c} 1.3\\ 1.2\\ 1.2\\ 1.0\\ 0.9\\ 0.6\\ 0.6\\ 0.6\\ 0.7\\ 0.7\\ 0.7\\ 0.9\\ 1.0\\ \end{array}$	889.8 860.1 860.5 837.2 771.0 665.3 691.6 665.5 612.2 451.9 394.5 377.0	$\begin{array}{c} 0.8\\ 0.5\\ 1.1\\ 1.3\\ 1.8\\ 2.8\\ 2.8\\ 3.6\\ 4.2\\ 5.9\\ 5.8\end{array}$	497.0 492.0 501.0 519.1 496.7 435.5 427.9 438.0 381.8 280.2 265.1 269.1	2.8 2.6 2.5 2.4 2.5 2.4 2.5 2.7 2.6 2.8 2.3 3.0	4,379.3 4,468.7 4,205.6 4,391.6 4,461.7 3,980.2 3,853.1 3,895.6 3,436.0 3,011.8 2,829.7 2,836.5	$\begin{array}{c} 1.2\\ 1.2\\ 1.1\\ 0.7\\ 0.6\\ 0.1\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ 0.0\\ -0.1\\ -0.2\\ -0.1\\ \end{array}$
2009 Jan. Feb. Mar. Apr. May June July Aug.	3,286.8 2,922.1 3,009.9 3,435.5 3,580.6 3,530.7 3,815.2 4,044.3	105.6 105.6 106.1 106.2 106.5 107.3 107.5 107.5	1.1 1.1 1.5 1.7 2.0 2.7 2.7 2.7	344.6 276.7 315.8 414.4 455.2 448.5 509.4 572.4	7.4 7.3 8.0 8.2 8.9 9.8 9.5 9.4	239.9 189.0 204.8 249.9 254.8 257.9 278.3 301.0	3.1 3.1 3.2 3.3 3.1 4.2 3.9 3.6	2,702.3 2,456.4 2,489.2 2,771.3 2,870.6 2,824.3 3,027.5 3,171.0	$\begin{array}{c} -0.1 \\ -0.1 \\ 0.4 \\ 0.5 \\ 0.8 \\ 1.5 \\ 1.6 \\ 1.7 \end{array}$

C20 Annual growth rates for quoted shares issued by euro area residents (annual percentage changes)



#### Source: ECB.

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



# **4.4 Quoted shares issued by euro area residents** <sup>1)</sup> (EUR billions; market values)

#### 2. Transactions during the month

		Total		MFIs			Financial cor	porations othe	r than MFIs	Non-fin	ancial corpor	ations
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2007 Aug.	2.5	6.6	-4.2	0.0	0.1	-0.1	1.0	1.4	-0.5	1.5	5.1	-3.6
Sep.	4.7	2.5	2.2	2.6	0.0	2.6	0.4	0.3	0.1	1.6	2.1	-0.5
Oct.	27.2	8.0	19.1	0.2	3.2	-3.0	16.1	0.5	15.6	10.8	4.3	6.5
Nov.	6.8	3.3	3.5	0.9	0.0	0.9	1.0	1.3	-0.3	4.9	2.0	2.9
Dec.	9.5	4.6	4.9	0.9	0.0	0.9	0.7	2.2	-1.5	7.9	2.5	5.5
2008 Jan.	3.6	1.4	2.3	0.1	0.0	0.1	0.4	0.7	-0.2	3.1	0.7	2.4
Feb.	2.8	1.9	0.9	1.0	0.0	1.0	0.1	0.3	-0.2	1.7	1.6	0.1
Mar.	6.4	6.0	0.3	5.9	0.0	5.9	0.0	0.5	-0.4	0.4	5.6	-5.1
Apr.	2.0	3.0	-0.9	1.1	0.0	1.1	0.1	0.5	-0.3	0.8	2.5	-1.7
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.	1.5	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.	12.8	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.	9.3	2.6	6.8	0.0	0.0	0.0	1.3	0.0	1.2	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.	13.6	0.2	13.4	3.6	0.0	3.6	0.1	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	11.2	0.3	10.9	4.4	0.0	4.4	0.0	0.0	0.0	6.7	0.3	6.5
June	27.0	2.0	25.0	4.8	0.0	4.8	3.3	0.3	3.0	18.9	1.8	17.2
July	7.2	0.2	7.0	3.0	0.0	3.0	0.0	0.0	0.0	4.1	0.2	3.9
Aug.	3.6	3.3	0.2	0.0	0.0	0.0	1.0	1.9	-0.9	2.6	1.4	1.2

# C21 Gross issues of quoted shares by sector of the issuer (EUR billions; transactions during the months market values)



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

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

			Deposits fr	rom household	s		Depos	ations	Repos		
	Overnight <sup>2)</sup>	Wi	th agreed matur	ity	Redeemable a	at notice <sup>2), 3)</sup>	Overnight <sup>2)</sup>	Wit	h agreed matur	ity	
		Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 1 year	Over 1 and up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9	10	11
2008 Oct. Nov. Dec.	1.34 1.29 1.16	4.77 4.26 3.75	4.85 4.67 4.35	3.57 3.71 3.69	3.01 3.02 2.95	4.12 4.20 4.17	2.20 1.98 1.61	4.26 3.53 2.87	5.12 4.58 4.23	4.57 4.15 4.08	3.66 3.19 2.63
2009 Jan. Feb. Mar. Apr. May	1.02 0.90 0.80 0.66 0.61	3.28 2.62 2.24 2.01 1.89	3.90 3.40 2.97 2.70 2.42 2.38	3.52 3.23 3.07 2.87 2.71 2.57	2.88 2.49 2.31 2.22 1.98	4.08 3.98 3.87 3.75 3.62 2.52	1.26 1.10 0.93 0.77 0.74	2.24 1.61 1.36 1.15 1.08	3.81 3.21 2.97 2.64 2.39 2.18	3.76 3.89 3.30 3.07 3.11 2.57	2.05 1.55 1.23 1.12 1.02
July Aug. Sep.	0.50 0.52 0.50 0.48	1.80 1.86 1.72 1.61	2.38 2.41 2.32 2.28	2.37 2.62 2.64 2.52	1.95 1.86 1.64 1.60	3.32 3.38 3.23 3.12	0.63 0.57 0.54 0.52	0.82 0.71 0.69	2.18 2.48 2.06 2.09	2.93 2.93 2.73	0.93 0.68 0.57 0.58

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

	Bank overdrafts <sup>2)</sup>		Consumer	credit			Lending f	or house pu		Oth by initi	er lending al rate fixation	on	
		By initi	al rate fixation	on	Annual	I	By initial rate	e fixation		Annual	·		
					percentage					percentage			
		Floating rate	Over 1	Over	rate of	Floating rate	Over 1	Over 5	Over	rate of	Floating rate	Over 1	Over
		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
		1 year	5 years			1 year	5 years	10 years			1 year	5 years	
					-		_			10			
	1	2	3	4	5	6	7	8	9	10	11	12	13
2008 Oct.	10.83	8.81	7.22	8.69	8.90	5.84	5.42	5.28	5.37	5.70	6.37	6.26	5.80
Nov.	10.78	8.85	7.17	8.69	8.88	5.63	5.34	5.22	5.28	5.58	5.84	6.15	5.75
Dec.	10.45	8.16	7.03	8.39	8.48	5.09	5.06	5.10	5.13	5.30	4.99	5.75	5.29
2009 Jan.	10.13	8.27	7.03	8.63	8.66	4.37	4.77	4.92	5.00	4.86	4.43	5.44	5.23
Feb.	10.15	8.06	6.65	8.49	8.35	3.97	4.54	4.80	4.89	4.60	4.08	5.03	5.16
Mar.	9.94	7.51	6.51	8.31	8.05	3.65	4.34	4.61	4.72	4.38	3.83	4.72	5.05
Apr.	9.71	7.43	6.50	8.27	8.05	3.38	4.21	4.55	4.68	4.22	3.54	4.69	4.90
May	9.62	7.87	6.44	8.17	8.08	3.22	4.15	4.50	4.58	4.12	3.60	4.71	4.90
June	9.54	7.30	6.36	8.03	7.83	3.12	4.12	4.51	4.58	4.07	3.54	4.76	4.95
July	9.30	7.67	6.49	8.04	8.02	3.03	4.09	4.54	4.54	4.02	3.35	4.77	4.91
Aug.	9.26	7.96	6.53	7.96	8.17	3.00	4.10	4.54	4.45	4.06	3.21	4.74	4.82
Sep.	9.30	7.72	6.48	7.90	8.05	2.81	4.05	4.48	4.41	3.95	3.14	4.66	4.71

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

	Bank overdrafts <sup>2)</sup>	Other lo by	oans up to EUR 1 mi initial rate fixation	Other b	loans over EUR 1 m y initial rate fixation	illion	
		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
2008 Oct. Nov. Dec.	6.89 6.66 6.24	6.52 6.04 5.38	6.35 6.10 5.78	5.57 5.41 5.32	5.59 4.86 4.28	5.75 5.01 4.50	5.08 4.97 4.76
2009 Jan. Feb. Mar. Apr. May June July Aug. Sep.	5.65 5.38 5.08 4.72 4.64 4.55 4.34 4.24 4.24	$\begin{array}{c} 4.73\\ 4.32\\ 4.03\\ 3.82\\ 3.73\\ 3.64\\ 3.57\\ 3.42\\ 3.36\end{array}$	5.46 5.25 5.06 5.01 4.86 4.79 4.68 4.55	5.24 4.96 4.74 4.60 4.52 4.49 4.32 4.24 4.16	3.52 3.12 2.85 2.55 2.49 2.57 2.38 2.32 2.09	3.95 3.51 3.22 3.34 3.22 3.08 2.89 2.81 2.85	4.58 4.23 3.87 4.01 3.98 3.71 3.90 3.83 3.62

#### Source: ECB.

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

2) 3)

For this instrument category, households and non-financial corporations are merged and allocated to the household sector, since the outstanding amounts of non-financial corporations are negligible compared with those of the household sector in all participating Member States combined. The annual percentage rate of charge covers the total cost of a loan. The total cost comprises an interest rate component and a component of other (related) charges, such as the 4) cost of inquiries, administration, preparation of documents, guarantees, etc.



### 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	sits from househo	olds		Deposits from	rporations	Repos	
	Overnight <sup>2)</sup>	With agreed	maturity	Redeemable a	t notice 2),3)	Overnight 2)	With agreed	l maturity	
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2 3		4	5	6	7	8	9
2008 Oct.	1.34	4.54	3.08	3.01	4.12	2.20	4.68	4.45	4.06
Nov.	1.29	4.51	3.12	3.02	4.20	1.98	4.44	4.40	3.95
Dec.	1.16	4.41	3.07	2.95	4.17	1.61	4.01	4.30	3.56
2009 Jan.	1.02	4.16	3.10	2.88	4.08	1.26	3.49	4.11	3.09
Feb.	0.90	3.98	3.17	2.49	3.98	1.10	3.18	4.00	2.68
Mar.	0.80	3.78	3.06	2.31	3.87	0.93	2.82	3.87	2.29
Apr.	0.66	3.54	3.11	2.22	3.75	0.77	2.52	3.84	1.95
May	0.61	3.38	3.04	1.98	3.62	0.74	2.37	3.70	1.79
June	0.56	3.25	3.07	1.95	3.52	0.63	2.21	3.65	1.63
July	0.52	3.07	3.03	1.86	3.38	0.57	1.99	3.53	1.53
Aug.	0.50	2.94	3.01	1.64	3.23	0.54	1.91	3.39	1.53
Sep.	0.48	2.82	3.01	1.60	3.12	0.52	1.82	3.40	1.45

5. Interest rates on loans (outstanding amounts)

			Loans to h		Loans to non-financial corporations				
	Lendi	ng for house purcha with maturity	se,	Consum	er credit and other with maturity	loans,		With maturity	
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2008 Oct.	5.78 5.71	5.06	5.17	9.45	7.48	6.47 6.46	6.43	5.99 5.81	5.58
Dec.	5.49	4.90	5.08	9.02	7.38	6.38	5.71	5.42	5.27
2009 Jan.	5.22	4.72	4.93	8.72	7.22	6.22	5.10	4.89	4.89
Feb.	5.14	4.75	4.91	8.61	7.27	6.21	4.75	4.59	4.74
Mar.	4.92	4.63	4.78	8.43	7.08	6.07	4.40	4.28	4.48
Apr.	4.70	4.49	4.65	8.19	7.00	5.92	4.10	3.98	4.25
May	4.59	4.59 4.45 4.56		8.09	6.92	5.84	4.00	3.84	4.12
June	4.50	4.40	4.46	7.98	6.91	5.79	3.91	3.72	4.00
July	4.31 4.32 4.36			7.82	6.79	5.70	3.73	3.59	3.81
Aug.	4.23	4.25	4.28	.28 7.81 6.74 5.6			3.65	3.50	3.73
Sep.	4.20	4.25	4.24	7.80	6.78	5.63	3.62	3.44	3.69

C23 rate

C22 New deposits with agreed maturity



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

- to households for consumption
- to households for house purchase
  to non-financial corporations, up to EUR 1 million





loans at floating rate and up to I year initial

Source: ECB.

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

				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
2006	2.83	2.94	3.08	3.23	3.44	5.20	0.30
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
2008 Q3 Q4 2009 Q1 Q2 Q3	4.25 3.17 1.37 0.77 0.36	4.54 3.92 1.67 0.94 0.53	4.98 4.24 2.01 1.31 0.87	5.18 4.31 2.11 1.51	5.37 4.38 2.22 1.67	2.91 2.77 1.24 0.84 0.41	0.90 0.96 0.67 0.53 0.40
2008 Oct.	3.82	4.83	5.11	5.18	5.25	4.06	1.04
Nov.	3.15	3.84	4.24	4.29	4.35	2.28	0.91
Dec.	2.49	2.99	3.29	3.37	3.45	1.83	0.92
2009 Jan.	1.81	2.14	2.46	2.54	2.62	1.21	0.73
Feb.	1.26	1.63	1.94	2.03	2.14	1.24	0.64
Mar.	1.06	1.27	1.64	1.77	1.91	1.27	0.62
Apr.	0.84	1.01	1.42	1.61	1.77	1.11	0.57
May	0.78	0.88	1.28	1.48	1.64	0.82	0.53
June	0.70	0.91	1.23	1.44	1.61	0.62	0.49
July	0.36	0.61	0.97	1.21	1.41	0.52	0.43
Aug.	0.35	0.51	0.86	1.12	1.33	0.42	0.40
Sep.	0.36	0.46	0.77	1.04	1.26	0.30	0.36
Oct.	0.36	0.43	0.74	1.02	1.24	0.28	0.33



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>

				Spot rat		Instantaneous forward rates						
	3 months	1 year 2	2 years 3	5 years 4	7 years 5	10 years 6	10 years - 3 months (spread) 7	10 years - 2 years (spread) 8	1 year 9	2 years	5 years	10 years
2006	3.44	3.76	3.82	3.83	3.86	3.91	0.47	0.09	3.92	3.85	3.88	4.08
2007	3.85	4.00	4.01	4.11	4.23	4.38	0.52	0.36	4.06	4.02	4.40	4.78
2008	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2008 Q3	3.71	3.60	3.59	3.88	4.09	4.34	0.63	0.75	3.52	3.67	4.45	5.00
Q4	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2009 Q1	0.78	0.88	1.46	2.70	3.23	3.77	3.00	2.31	1.41	2.58	4.24	5.19
Q2	0.62	0.90	1.50	2.85	3.42	3.99	3.37	2.49	1.47	2.67	4.54	5.42
Q3	0.41	0.70	1.33	2.59	3.12	3.64	3.23	2.31	1.34	2.47	4.14	4.96
2008 Oct.	2.52	2.86	2.68	3.58	3.95	4.25	1.74	1.58	2.27	2.99	4.80	4.97
Nov.	2.00	2.10	2.38	3.16	3.49	3.77	1.78	1.40	2.33	2.97	4.16	4.48
Dec.	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2009 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct.	$\begin{array}{c} 1.19\\ 0.93\\ 0.78\\ 0.74\\ 0.79\\ 0.62\\ 0.49\\ 0.44\\ 0.41\\ 0.50\\ \end{array}$	$\begin{array}{c} 1.27\\ 1.01\\ 0.88\\ 0.96\\ 0.93\\ 0.90\\ 0.74\\ 0.74\\ 0.70\\ 0.81\\ \end{array}$	$ \begin{array}{r} 1.79\\ 1.56\\ 1.46\\ 1.53\\ 1.53\\ 1.50\\ 1.43\\ 1.46\\ 1.33\\ 1.43 \end{array} $	3.02 2.79 2.70 2.72 3.00 2.85 2.68 2.69 2.59 2.61	3.53 3.31 3.23 3.25 3.60 3.42 3.21 3.19 3.12 3.13	4.02 3.85 3.77 3.79 4.18 3.99 3.74 3.68 3.64 3.68	2.83 2.93 3.00 3.05 3.39 3.37 3.26 3.24 3.23 3.18	2.24 2.30 2.31 2.26 2.65 2.49 2.31 2.22 2.31 2.25	$1.70 \\ 1.48 \\ 1.41 \\ 1.52 \\ 1.43 \\ 1.47 \\ 1.49 \\ 1.55 \\ 1.34 \\ 1.49$	2.85 2.64 2.58 2.58 2.77 2.67 2.62 2.66 2.47 2.50	4.53 4.32 4.24 4.24 4.81 4.54 4.21 4.16 4.14 4.12	5.26 5.25 5.19 5.61 5.42 5.13 4.95 4.96 5.11



Source: ECB, underlying data provided by EuroMTS, ratings provided by Fitch Ratings. 1) Data refer to the changing composition of the euro area. For further information, see the General notes.



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

					Dow Jo	nes EURO	O STOXX i	ndices <sup>1)</sup>					United States	Japan
	Bench	ımark					Main indu	stry indices						
	Broad	50	Basic materials	Consumer services	Consumer goods	Oil & gas	Financials	Industrials	Technology	Utilities	Telecom.	Health care	Standard & Poor's 500	Nikkei 225
2006	357.3	3,795.4	402.3	205.0	293.7	419.8	370.3	391.3	345.3	440.0	416.8	530.2	1,310.5	16,124.0
2007	416.4	4,315.8	543.8	235.4	366.5	449.6	408.3	488.4	383.4	561.4	492.7	519.2	1,476.5	16,984.4
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
2008 Q3	309.7	3,278.8	506.0	162.2	282.2	382.8	260.5	345.7	285.6	494.8	412.4	407.4	1,252.7	12,758.7
Q4	228.7	2,497.7	320.7	136.5	236.9	287.6	169.3	238.1	200.0	384.7	387.0	358.1	910.9	8,700.4
2009 Q1	200.2	2,166.4	293.6	131.6	207.9	272.5	126.3	223.0	175.7	340.6	367.2	345.7	810.1	7,968.8
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
2008 Oct.	241.5	2,627.3	342.1	135.6	249.1	287.9	195.0	245.1	212.8	392.4	378.2	363.7	968.8	9,080.5
Nov.	225.0	2,452.9	315.2	136.2	237.6	294.8	159.0	229.5	197.7	393.6	386.0	361.7	883.3	8,502.7
Dec.	219.0	2,407.0	304.0	137.8	224.2	281.0	152.5	238.7	189.4	369.2	396.6	349.4	877.2	8,492.1
2009 Jan.	215.5	2,344.9	309.7	136.8	220.8	280.5	143.4	236.4	188.1	376.5	384.1	364.8	866.6	8,402.5
Feb.	200.4	2,159.8	299.2	132.7	208.0	280.9	123.3	226.1	175.7	341.0	361.7	354.1	806.3	7,707.3
Mar.	184.6	1,993.9	272.5	125.3	194.9	256.9	111.8	206.8	163.5	304.2	355.2	319.1	757.1	7,772.8
Apr.	209.3	2,256.3	308.4	134.6	219.0	268.1	145.0	237.9	196.0	323.2	356.8	327.7	848.5	8,755.5
May	225.7	2,426.7	331.6	140.1	233.8	296.0	164.5	259.8	203.1	346.3	348.0	346.7	901.7	9,257.7
June	226.7	2,449.0	341.0	135.3	235.9	298.3	166.8	255.5	204.3	343.8	349.6	357.0	926.1	9,810.3
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

C28 Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225 (January 1994 = 100; monthly averages)



#### Source: ECB.

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





## PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

### 5.1 HICP, other prices and costs

#### 1. Harmonised Index of Consumer Prices<sup>1)</sup>

			Total				Fotal (s.a., p		Memo	o item: red prices <sup>2)</sup>			
	Index		Total	Goods	Services	Total	Processed	Unprocessed	Non-energy	Energy	Services	T I I I I I	
	2005 = 100		Total excl				food	food	industrial	(n.s.a.)		Total HICP	Administered
			unprocessed						goous			administered	prices
			food and energy									prices	
% of total 3)	100.0	100.0	83.0	58.6	41.4	100.0	11.9	7.5	29.7	9.6	41.4	89.3	10.7
	1	2	3	4	5	6	7	8	0	10	11	12	13
	1	2	5	4	5	0	1	0	<i>y</i>	10	11	12	15
2005	100.0	2.2	1.5	2.1	2.3	-	-	-	-	-	-	2.1	2.5
2006	102.2	2.2	1.5	2.3	2.0	-	-	-	-	-	-	2.1	2.7
2007	104.4	2.1	2.0	1.9	2.5	-	-	-	-	-	-	2.1	2.1
2008	107.8	3.3	2.4	3.8	2.6	-	-	-	-	-	-	3.3	3.0
2008 O3	108.4	3.8	2.5	4.7	2.6	0.8	0.8	1.0	0.2	2.1	0.7	3.9	3.3
Ò4	108.2	2.3	2.2	2.1	2.6	-0.6	0.3	0.3	0.3	-8.7	0.5	2.1	3.4
2009 Ò1	107.4	1.0	1.6	0.1	2.2	-0.3	-0.1	0.3	0.0	-4.9	0.4	0.7	2.9
Ò2	108.3	0.2	1.5	-1.2	2.2	0.3	0.1	-0.8	0.2	0.7	0.4	0.0	1.7
Q3	108.0	-0.4	1.2	-1.9	1.8	0.2	0.4	-1.0	0.0	0.8	0.4	-0.6	1.1
2009 May	108.3	0.0	1.5	-1.4	2.1	0.0	-0.1	-0.4	0.0	0.4	0.0	-0.2	1.6
June	108.5	-0.1	1.3	-1.6	2.0	0.3	0.3	-0.3	0.0	2.5	0.1	-0.4	1.6
July	107.8	-0.7	1.2	-2.4	1.9	-0.1	0.1	-0.5	0.0	-1.8	0.1	-0.9	1.2
Aug.	108.1	-0.2	1.2	-1.5	1.8	0.3	0.1	-0.3	0.1	1.8	0.2	-0.3	1.1
Sep.	108.2	-0.3	1.1	-1.8	1.8	-0.1	0.0	0.1	0.0	-1.2	0.1	-0.5	1.0
Oct. 4)	100.2	-0.1											1.0

			Goods	\$			Services						
	Food (incl. alc	coholic beverage	s and tobacco)		Industrial good	s	Hous	sing	Transport	Communication	Recreation	Miscellaneous	
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy		Rents			personal		
% of total 3)	19.3	11.9	7.5	39.3	29.7	9.6	10.1	6.0	6.3	3.2	14.9	6.8	
	14	15	16	17	18	19	20	21	22	23	24	25	
2005 2006 2007 2008	1.6 2.4 2.8 5.1	2.0 2.1 2.8 6.1	0.8 2.8 3.0 3.5	2.4 2.3 1.4 3.1	0.3 0.6 1.0 0.8	10.1 7.7 2.6 10.3	2.6 2.5 2.7 2.3	2.0 2.1 2.0 1.9	2.7 2.5 2.6 3.9	-2.2 -3.3 -1.9 -2.2	2.3 2.3 2.9 3.2	3.1 2.3 3.2 2.5	
2008 Q3 Q4 2009 Q1 Q2 Q3	5.6 3.8 2.4 1.0 -0.1	6.7 4.3 2.1 1.1 0.6	3.9 3.0 2.8 0.8 -1.2	4.2 1.2 -1.1 -2.3 -2.8	0.7 0.9 0.7 0.7 0.5	15.1 2.1 -6.1 -10.7 -11.9	2.3 2.2 2.0 2.1 2.0	1.9 1.9 1.7 1.8 1.8	4.4 4.5 3.6 3.1 2.5	-2.4 -2.0 -1.7 -1.2 -0.6	3.4 3.3 2.7 2.7 1.8	2.3 2.2 2.1 2.0 2.1	
2009 Apr. May June July Aug.	1.4 0.9 0.7 0.0 -0.1	1.2 1.0 1.1 0.8 0.6	1.6 0.7 0.0 -1.1 -1.2	-1.7 -2.5 -2.7 -3.6 -2.3	0.8 0.8 0.6 0.5 0.6	-8.8 -11.6 -11.7 -14.4 -10.2	2.0 2.1 2.1 2.1 2.1 2.0	1.8 1.8 1.8 1.8 1.8	3.5 3.1 2.7 2.6 2.5	-1.6 -1.0 -0.9 -0.8 -0.7	3.4 2.4 2.2 1.9 1.8	2.1 2.0 1.9 2.0 2.0	
Sep.	-0.2	0.5	-1.3	-2.6	0.5	-11.0	2.0	1.8	2.3	-0.3	1.7	2.1	

Sources: Eurostat and ECB calculations.

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

3) Weighting used in 2009.

4) Estimate based on provisional national releases usually covering around 95% of the euro area, as well as on early information on energy prices.



#### 5.1 HICP, other prices and costs

#### 2. Industry, construction and residential property prices<sup>1)</sup>

		Industrial producer prices excluding construction													
	Total (index	Т	otal		Industry ex	cluding con	struction	and energy		Energy		prices <sup>3)</sup>			
	2005 = 100)	[	Manu- facturing	Total	Intermediate	Capital		Consumer g	oods						
			iacturing		goods	goods	Total	Durable	Non-durable						
07- of total 4)	100.0	100.0	82.0	75.9	20.1	21.0	22.7	2.7	21.0	24.2					
70 OI 101ai 1	100.0	100.0	85.0	75.0	50.1	21.9	23.1	2.7	21.0	24.2					
	1	2	3	4	5	6	7	8	9	10	11	12			
2005	100.0	4.1	3.1	1.9	2.8	1.2	0.9	1.3	0.8	13.5	3.7	7.5			
2006	105.1	5.1	3.5	2.8	4.6	1.6	1.5	1.4	1.5	13.4	4.9	6.5			
2007	107.9	2.7	3.0	3.2	4.6	2.2	2.2	2.4	2.1	1.2	4.2	4.4			
2008	114.4	6.1	4.8	3.5	4.0	2.1	3.9	2.8	4.1	14.1	3.4	1.7			
2008 Q3	117.2	8.4	6.7	4.2	5.4	2.3	4.2	2.7	4.4	21.5	4.8	-			
Q4	113.7	3.4	0.7	2.4	2.6	2.5	2.0	2.6	1.9	6.7	3.0	0.65			
2009 Q1	109.8	-2.0	-4.3	-1.1	-2.7	1.8	-1.0	1.9	-1.4	-4.1	2.3	-			
Q2	108.3	-5.7	-6.8	-3.0	-5.7	0.6	-2.0	1.5	-2.5	-13.2	-0.5				
Q3	108.0	-7.9	-7.4	-4.2	-7.4	-0.2	-2.6	1.0	-3.1	-18.1		-			
2009 Apr.	108.1	-4.8	-5.9	-2.5	-5.1	1.1	-1.8	1.6	-2.2	-11.1	-	-			
May	108.1	-5.9	-7.1	-3.0	-5.7	0.5	-2.0	1.4	-2.5	-13.7	-	-			
June	108.5	-6.5	-7.3	-3.5	-6.4	0.3	-2.3	1.6	-2.9	-14.7	-	-			
July	107.8	-8.4	-8.2	-4.1	-7.5	0.0	-2.5	1.2	-3.0	-19.9	-	-			
Aug.	108.3	-7.5	-7.0	-4.2	-7.4	-0.2	-2.6	1.1	-3.1	-16.7	-	-			
Sep.	107.9	-7.7	-6.9	-4.3	-7.3	-0.5	-2.7	0.7	-3.2	-17.6	-	-			

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

	Oil prices <sup>6</sup> (EUR per		Non	-energy co	mmodity	prices		GDP deflators							
	barrel)	Impo	ort-weig	hted 7)	Use	-weighte	ed <sup>8)</sup>	Total (s.a. index	Total		Domesti	c demand		Exports 9)	Imports <sup>9)</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	44.3	55.7								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2005 2006 2007 2008	44.6 52.9 52.8 65.9	11.9 27.5 7.5 2.0	0.9 5.8 14.3 18.2	17.9 37.6 5.0 -4.3	9.0 24.4 5.1 -1.7	2.5 5.9 9.4 9.6	14.4 38.1 2.7 -8.5	111.6 113.8 116.4 119.1	2.0 1.9 2.3 2.3	2.3 2.4 2.3 2.8	2.1 2.2 2.2 2.9	2.3 2.0 1.7 2.9	2.5 2.9 2.6 2.2	2.4 2.7 1.7 2.5	3.4 3.9 1.5 3.8
2008 Q2 Q3 Q4 2009 Q1 Q2	78.5 77.6 43.5 35.1 43.8	2.5 6.8 -10.1 -29.2 -24.5	32.4 16.2 -7.8 -15.0 -11.2	-7.5 2.8 -11.2 -36.0 -31.0	-0.3 0.6 -14.6 -28.7 -22.5	20.3 4.3 -13.1 -17.7 -10.0	-11.1 -1.9 -15.8 -36.8 -31.4	118.9 119.4 120.0 120.1 120.1	2.3 2.3 2.4 1.9 1.1	3.1 3.2 2.1 1.1 0.0	3.3 3.4 2.0 0.5 -0.4	3.7 2.8 2.2 2.7 1.6	2.3 2.6 1.7 0.6 -0.7	2.7 3.4 1.4 -2.5 -4.0	4.7 5.7 0.6 -4.5 -6.8
2009 May June July Aug. Sep. Oct.	42.8 49.5 46.5 51.1 46.9 49.8	-24.5 -23.6 -22.9 -16.2 -16.8 -6.1	-8.4 -13.3 -15.3 -10.3 -11.2 -0.7	-32.1 -28.8 -26.6 -19.1 -19.4 -8.5	-22.0 -21.9 -21.6 -17.5 -17.3 -8.1	-6.8 -12.3 -14.3 -16.0 -15.3 -10.4	-32.6 -28.9 -26.8 -18.7 -18.7 -6.6	- - - - -		- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

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).

Data refer to the Euro 16.
 Input prices for residential buildings.

3) Experimental data based on non-harmonised national sources (see http://www.ecb.int/stats/intro/html/experiment.en.html for further details).

4) In 2005.

5) The quarterly data for the second (fourth) quarter refer to semi-annual averages of the first (second) half of the year, respectively. Since some national data are only available at annual frequency, the semi-annual estimate is partially derived from annual results; therefore, the accuracy of semi-annual data is lower than the accuracy of annual data.
6) Brent Blend (for one-month forward delivery).

7) 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 (see http://www.ecb.int/stats/intro/html/experiment.en.html for details).

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 employee and labour productivity<sup>1)</sup> (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
				U	Jnit labour costs	2)		
2005	109.0	1.2	8.4	-0.5	3.2	0.7	2.1	2.1
2006	110.0	0.9	2.3	-0.5	3.3	0.5	2.0	2.1
2007	111.7	1.5	1.8	0.5	4.1	0.5	2.4	1.8
2008	115.2	3.2	-0.5	3.6	2.4	3.2	2.9	3.1
2008 Q2	114.7	2.8	-1.6	1.4	2.4	2.4	2.5	4.3
Q3	115.6	3.5	-1.1	4.2	2.7	4.5	3.2	2.5
Q4	117.9	4.6	-0.3	9.8	2.2	5.1	2.3	3.1
2009 Q1	120.0	5.8	1.6	16.5	1.8	6.8	0.2	3.2
Q2	120.2	4.8	1.9	14.8	0.2	5.7	1.4	1.7
				Comp	ensation per em	ployee		
2005	112.3	2.0	2.5	1.9	2.2	1.9	2.4	1.9
2006	114.9	2.3	3.3	3.4	3.5	1.6	2.3	1.7
2007	117.7	2.5	3.6	2.7	2.8	1.9	2.4	2.5
2008	121.4	3.1	2.8	3.0	3.8	2.8	2.5	3.6
2008 Q2	121.1	3.1	2.2	2.7	3.6	2.1	2.3	4.5
Q3	121.9	3.5	3.2	3.1	4.2	4.0	3.0	3.4
Q4	122.5	2.9	2.7	2.7	3.8	2.9	2.0	3.4
2009 Q1	122.5	1.8	3.3	0.4	2.6	2.3	0.5	3.1
Q2	123.0	1.6	3.6	-0.5	3.4	2.5	2.0	1.9
				La	bour productivit	y <sup>3)</sup>		
2005	103.1	0.7	-5.4	2.4	-1.0	1.2	0.2	-0.2
2006	104.5	1.3	1.0	3.9	0.2	1.1	0.3	-0.4
2007	105.5	1.0	1.7	2.2	-1.2	1.4	0.1	0.7
2008	105.4	-0.1	3.3	-0.6	1.3	-0.4	-0.4	0.5
2008 Q2	105.6	0.3	3.9	1.3	1.1	-0.3	-0.2	0.1
Q3	105.5	0.0	4.4	-1.0	1.5	-0.4	-0.2	0.8
Q4	103.9	-1.7	3.0	-6.5	1.5	-2.1	-0.3	0.4
2009 Q1	102.1	-3.7	1.7	-13.8	0.8	-4.2	0.3	-0.1
Q2	102.4	-3.1	1.7	-13.3	3.2	-3.0	0.5	0.3

#### 5. Hourly labour costs 1), 4)

	Total (s.a. index 2008 = 100)	Total	Ву с	omponent	By selec	cted economic activ	vity	Memo: indicator
	2008 = 100)		Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	of negotiated wages <sup>5)</sup>
% of total 6)	100.0	100.0	75.2	24.8	32.4	9.0	58.6	
	1	2	3	4	5	6	7	8
2005 2006 2007 2008	92.2 94.3 96.7 99.9	2.2 2.3 2.5 3.4	2.3 2.4 2.9 3.4	2.0 2.3 1.5 3.3	2.1 3.3 2.2 3.9	1.6 1.4 2.6 4.1	2.3 1.9 2.7 3.1	2.1 2.3 2.1 3.2
2008 Q2 Q3 Q4 2009 Q1	99.2 100.4 101.4 102.3 102.2	2.5 3.6 4.2 3.6	2.5 3.6 4.1 3.4	2.4 3.5 4.6 4.1	2.5 3.1 6.0 5.6	3.8 3.7 4.7 3.0	2.3 3.8 3.2 2.5	2.9 3.4 3.6 3.2

Sources: Eurostat, ECB calculations based on Eurostat data (Table 4 in Section 5.1 and column 7 in Table 5 in Section 5.1) and ECB calculations (column 8 in Table 5 in Section 5.1).
Data refer to Euro 16.
Compensation (at current prices) per employee divided by value added (volumes) per person employed.
Value added (volumes) per person employed.
Hourly labour costs for the whole economy, excluding agriculture, public administration, education, health and services not elsewhere classified. Owing to differences in

coverage, the estimates for the components may not be consistent with the total. Experimental data (see http://www.ecb.int/stats/intro/html/experiment.en.html for further details). In 2008.

5)

6)



#### 1. GDP and expenditure components 1)

					GDP				
	Total		D	omestic demand			Exte	ernal balance 2)	
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories 3)	Total	Exports <sup>2)</sup>	Imports <sup>2)</sup>
	1	2	3	4	5	6	7	8	9
			Curr	ent prices (EUR bill	ions, seasonally ad	ljusted)			
2005	8,140.1	8,021.0	4,669.2	1,664.4	1,681.1	6.3	119.1	3,114.3	2,995.2
2006	8,557.1	8,460.9	4,872.9	1,733.3	1,831.0	23.7	96.3	3,470.2	3,374.0
2007	9,002.2	8,863.7	5,064.5	1,801.6	1,970.1	27.5	138.5	3,746.0	3,607.5
2008 02	9,203.2	9,108.4	1,209,4	1,092.2	2,002.0	41.5	94.7	3,880.8	3,780.0
2008 Q2	2,525.0	2,291.9	1,308.4	473.9	507.5	2.3	55.0 15.7	992.2	939.2
ŏ4	2,297.1	2,284.3	1,306.4	480.6	483.2	14.0	12.8	908.5	895.7
2009 Q1	2,241.9	2,235.4	1,288.9	487.9	455.0	3.5	6.5	803.4	796.9
Q2	2,238.1	2,218.4	1,291.6	493.5	446.5	-13.3	19.7	785.0	765.2
				percenta	ge of GDP				
2008	100.0	99.0	56.5	20.4	21.6	0.4	1.0	-	-
			Chain-linked vol	umes (prices of the	previous year, sea	sonally adjusted 4) )			
				quarter-on-quarter	percentage chang	es			
2008 Q2	-0.3	-0.6	-0.4	0.8	-1.3	-	-	-0.5	-1.1
Q3	-0.4	0.1	0.0	0.5	-1.5	-	-	-1.0	0.3
2000 01	-1.8	-0.7	-0.5	0.6	-3.5	-	-	-7.0	-4.6
2009 Q1 Q2	-0.2	-2.0	-0.5	0.0	-1.5	-	-	-9.2	-2.9
~-	012		011	annual perce	ntage changes			115	
2005	17	1.9	1.8	1.5	3.2			5.0	57
2005	3.0	2.9	2.1	2.0	5.5	_	-	8.3	8.3
2007	2.8	2.4	1.6	2.2	4.9	-	-	6.1	5.3
2008	0.7	0.6	0.4	2.1	-0.3	-	-	1.2	1.1
2008 Q2	1.5	0.8	0.5	2.1	1.2	-	-	4.0	2.5
Q3	0.4	0.3	0.0	2.2	-0.9	-	-	1.3	1.0
2000 Q4	-1.8	-0.5	-0.7	2.4	-5.5	-	-	-6.6 16.8	-3.7
2009 Q1 Q2	-4.9	-3.1	-1.4	2.0	-11.2	-		-10.8	-12.0
~~			tributions to quart	er-on-auarter percer	ntage changes of G	DP in percentage	points		
2008 02	0.2	0.6	0.2	0.2	0.2	0.2	0.2		
2008 Q2 Q3	-0.3	-0.0	-0.2	0.2	-0.3	-0.2	-0.5	-	-
Õ4	-1.8	-0.7	-0.3	0.1	-0.8	0.2	-1.1	-	-
2009 Q1	-2.5	-2.0	-0.3	0.1	-1.1	-0.6	-0.5	-	-
Q2	-0.2	-0.7	0.0	0.2	-0.3	-0.6	0.5	-	-
			contributions to	annual percentage	changes of GDP in	n percentage points			
2005	1.7	1.8	1.1	0.3	0.6	-0.2	-0.1	-	-
2006	3.0	2.9	1.2	0.4	1.1	0.1	0.1	-	-
2007	2.8	2.4	0.9	0.4	-0.1	0.0	0.4		-
2000	1.5	0.0	0.2	0.4	-0.1	0.1	0.0	-	-
2008 Q2	1.5	0.8	0.5	0.4	-0.2	-0.2	0.0		-
Q4	-1.8	-0.5	-0.4	0.5	-1.2	0.6	-1.3	-	_
2009 Q1	-4.9	-3.1	-0.8	0.5	-2.5	-0.4	-1.9	-	-
02	-4.8	-3.2	-0.5	0.5	-2.5	-0.7	-1.6	-	-

Sources: Eurostat and ECB calculations.
Data refer to Euro 16.
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.



### 2. Value added by economic activity $^{\scriptscriptstyle 1)}$

	Gross value added (basic prices)										
	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, seasor	nally adjusted)						
2005	7,295.2	143.7	1,481.3	439.8	1,540.9	2,018.0	1,671.4	844.9			
2006	7,643.0	141.7	1,563.6	476.8	1,596.9	2,132.5	1,731.5	914.1			
2007	8,045.1	152.5	1,040.1	515.5	1,070.4	2,204.7	1,802.1	939.0			
2008 02	2 086 5	37.7	424.0	133.0	431.7	580.3	460.0	238.5			
2008 Q2 Q3	2,088.9	36.5	418.6	135.3	434.4	593.1	471.0	238.3			
Q4	2,066.6	35.9	396.6	132.7	429.7	593.6	478.0	230.5			
2009 Q1	2,018.4	36.0	360.3	130.9	418.1	588.0	485.0	223.5			
Q2	2,016.2	35.4	351.1	130.4	419.5	590.0	489.8	221.9			
			per	centage of value add	ed						
2008	100.0	1.8	20.0	6.4	20.8	28.4	22.6	-			
		Chain-	linked volumes (pric	es of the previous ye	ar, seasonally adjusted	1 <sup>2)</sup> )					
			quarter-or	n-quarter percentage	changes						
2008 Q2	-0.3	-0.1	-1.0	-2.1	-0.5	0.4	0.3	-0.9			
Q3	-0.4	-0.1	-1.9	-1.5	-0.3	0.0	0.6	-0.1			
Q4	-1.8	0.6	-6.2	-1.6	-1.8	-0.6	0.3	-2.0			
2009 Q1 Q2	-2.5	-0.7	-8.3 -1.9	-1.1	-2.9	-0.8	0.1	-2.7			
	0.2	0.2	ann	ual percentage chang	pes 0.0	0.1	0.0	0.5			
2005	17	-6.1	13	16	19	2.7	13	19			
2005	3.0	-0.1	3.6	2.9	2.8	4.1	1.5	3.3			
2007	3.0	0.2	2.5	2.6	3.4	4.1	1.9	0.9			
2008	0.9	1.8	-0.8	-0.9	0.8	1.9	1.7	-1.1			
2008 Q2	1.7	1.9	1.7	-0.1	1.4	2.4	1.5	-0.4			
Q3	0.7	2.8	-1.2	-1.4	0.4	1.6	1.8	-1.4			
2009 01	-1.7	2.2	-/./	-3.8	-1.9	0.4	1./	-2.5			
02	-4.8	-0.1	-17.2	-4.5	-4.8	-0.9	1.5	-4.4			
		contributions to	quarter-on-quarter	percentage changes of	of value added in perc	entage points					
2008 O2	-0.3	0.0	-0.2	-0.1	-0.1	0.1	0.1	-			
Q3	-0.4	0.0	-0.4	-0.1	-0.1	0.0	0.1	-			
Q4	-1.8	0.0	-1.2	-0.1	-0.4	-0.2	0.1	-			
2009 Q1	-2.5	0.0	-1.6	-0.1	-0.6	-0.2	0.0	-			
Q2	-0.2	0.0	-0.5	0.0	0.0	0.0	0.1	-			
2005	17	contributi	ons to annual percen	tage changes of valu	e added in percentage	points 0.7	0.2				
2005	1./	-0.1	0.3	0.1	0.4	0.7	0.3	-			
2007	3.0	0.0	0.7	0.2	0.0	1.1	0.5	-			
2008	0.9	0.0	-0.2	-0.1	0.2	0.5	0.4	-			
2008 Q2	1.7	0.0	0.3	0.0	0.3	0.7	0.3	-			
Q3	0.7	0.0	-0.2	-0.1	0.1	0.5	0.4	-			
Q4	-1.7	0.0	-1.6	-0.2	-0.4	0.1	0.4	-			
2009 Q1	-4.9	0.0	-3.4	-0.4	-1.1 -1.0	-0.3	0.3	-			

 Q2
 -4.8

 Sources: Eurostat and ECB calculations.

 1) Data refer to Euro 16.

 2) Annual data are not working day-adjusted.

#### 3. Industrial production<sup>1)</sup>

	Total				Indu	stry excluding	construction	ı.				Construction
		Total (s a index	Т	otal		Industry e	xcluding con	struction a	nd energy		Energy	
		2005 = 100		Manu- facturing	Total	Intermediate goods	Capital goods	(	Consumer go	oods		
						8	8	Total	Durable	Non-durable		
% of total 2)	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
2006 2007 2008	4.0 3.2 -2.3	104.3 108.2 106.3	4.2 3.7 -1.7	4.6 4.1 -1.9	4.7 4.3 -1.9	4.9 3.7 -3.4	6.0 6.7 -0.2	2.9 2.3 -2.0	4.4 1.3 -5.7	2.7 2.5 -1.4	0.6 -0.9 0.3	3.0 1.1 -4.7
2008 Q3 Q4 2009 Q1 Q2	-2.2 -8.9 -17.0 -16.7	107.3 98.7 90.2 89.2	-1.5 -9.0 -18.5 -18.6	-1.5 -9.3 -20.2 -19.5	-1.6 -9.5 -20.7 -20.0	-2.2 -13.4 -25.3 -24.1	-0.6 -8.6 -23.9 -24.3	-2.2 -4.7 -7.4 -6.1	-7.3 -11.8 -19.9 -21.5	-1.4 -3.5 -5.4 -3.4	-0.2 -4.2 -4.5 -8.7	-4.9 -8.4 -10.4 -7.5
2009 Mar. Apr. May June July Aug	-17.6 -18.7 -16.1 -15.2 -15.5 -14.7	88.7 88.3 89.2 90.0 90.2 91.2	-19.4 -21.4 -17.7 -16.7 -15.9 -15.2	-20.4 -22.1 -18.7 -17.9 -17.0 -16.4	-20.9 -22.7 -18.9 -18.5 -17.8 -16.3	-26.1 -27.0 -23.1 -22.1 -19.9	-23.3 -27.5 -23.1 -22.4 -23.6 -22.5	-7.6 -7.5 -5.4 -5.3 -4.1	-20.7 -20.9 -19.9 -23.5 -20.7 -19.2	-5.4 -5.2 -2.8 -2.4 -1.5	-10.2 -12.4 -7.6 -5.7 -5.6 -5.9	-8.5 -5.8 -8.6 -8.0 -9.8 -10.4
nug.	11.7	,1.2	15.2	month-	on-month r	ercentage chang	es (s.a.)	5.0	17.2	1.5	5.5	10.1
2009 Mar. Apr. May	-0.9 -1.2 0.2	- -	-0.4 -0.5 1.1	-1.0 -0.9 0.4	-0.8 -1.4 0.9	-1.0 -0.1 1.5	0.2 -1.6 1.0	-0.9 0.3 0.3	-2.6 0.9 -2.0	-0.5 0.3 0.7	-3.9 -1.4 1.7	0.5 0.0 -2.0
June July Aug.	-0.3 -0.9 -0.1	-	0.9 0.2 1.1	-0.3 -0.2 0.0	-0.4 -0.4 0.6	0.6 1.4 0.8	0.0 -1.6 1.0	-0.2 0.4 -0.6	-3.4 0.7 5.9	0.1 0.3 -1.3	2.2 0.1 0.6	-0.3 -1.4 -0.1

#### 4. Industrial new orders and turnover, retail sales and new passenger car registrations<sup>1)</sup>

	Industrial no	ew orders	Industrial t	turnover Retail sales (exluding automotive fuel)								New passenger car registrations	
	Manufactu (current p	ring <sup>3)</sup> prices)	Manufac (current p	turing prices)	Current prices			Constant	t prices				
	Total (s.a. index 2005 = 100)	Total	Total (s.a. index 2005 = 100)	Total	Total	Total (s.a. index 2005 = 100)	Total	Food, beverages, tobacco		Non-food Textiles, clothing, footwear	Household equipment	Total (s.a., thousands) <sup>4)</sup>	Total
% of total 2)	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
2006 2007 2008	110.7 120.0 113.3	10.3 8.7 -5.2	108.3 115.0 116.9	8.0 6.5 1.9	3.4 2.8 1.7	102.4 104.1 103.3	2.5 1.6 -0.8	1.1 0.1 -1.7	3.6 2.7 -0.2	3.1 3.5 -1.6	5.3 2.4 -1.9	978 970 893	3.3 -0.9 -7.9
2008 Q4 2009 Q1 Q2 Q3	94.2 83.5 84.6	-22.4 -31.7 -30.4	107.1 95.1 94.1	-7.5 -21.6 -23.2	-0.3 -2.6 -2.7	102.4 101.8 101.5	-1.8 -2.6 -1.7	-2.2 -3.6 -1.4	-1.4 -1.8 -1.9	-3.1 -0.4 -2.0	-2.7 -6.1 -5.3	827 834 936 949	-18.5 -12.6 4.0 7.7
2009 Apr. May June July Aug. Sep.	83.2 83.5 87.0 89.6 91.3	-35.2 -30.3 -25.7 -24.9 -23.3	94.2 94.5 93.7 95.0 97.7	-25.9 -23.4 -20.4 -20.7 -17.9	-1.8 -3.5 -2.7 -2.9 -3.2	101.8 101.3 101.3 101.1 101.0	-1.2 -2.4 -1.6 -1.5 -1.7	-0.7 -2.2 -1.5 -1.6 -0.6	-1.7 -2.6 -1.4 -1.6 -2.6	-0.1 -4.4 -1.5 0.4 -3.9	-5.4 -6.0 -4.6 -3.3 -2.9	898 945 965 946 955 947	-3.7 5.7 10.0 6.9 5.9 10.1
					month-on-n	onth percentag	e changes (	(s.a.)					
2009 May June July Aug.		0.5 4.2 3.0 1.9	- - -	0.3 -0.9 1.4 2.8	-0.6 -0.1 -0.3 0.0		-0.5 -0.1 -0.2 -0.1	-0.6 -0.3 -0.4 0.7	-0.4 0.0 -0.2 -0.4	-0.6 0.5 1.0 -2.3	-0.5 0.2 0.2 -0.2		5.2 2.1 -2.0 1.0
Sep.	-		-			-						-	-0.9

Sources: Eurostat, except columns 12 and 13 in Table 4 in Section 5.2 (ECB calculations based on data from the ACEA, European Automobile Manufacturers' Association).
Data refer to Euro 16.
In 2005.
Includes manufacturing industries working mainly on the basis of orders, representing 61.2% of total manufacturing in 2005.
Annual and quarterly figures are averages of monthly figures in the period concerned.



#### 5. Business and Consumer Surveys

	Economic sentiment		Man	ufacturing ind	lustry			Consur	ner confidence	indicator	
	indicator <sup>2)</sup> (long-term	In	dustrial confid	lence indicator		Capacity utilisation 3)	Total <sup>4)</sup>	Financial situation	Economic situation	Unemployment situation	Savings over next
	average = 100)	Total <sup>4)</sup>	Order books	Stocks of finished products	Production expectations	(percentages)		over next 12 months	over next 12 months	over next 12 months	12 months
	1	2	3	4	5	6	7	8	9	10	11
2005	98.2	-7	-16	11	6	81.1	-14	-4	-15	28	-9
2006	106.9	2	0	6	13	83.1	-9	-3	-9	15	-9
2007	108.9	4	5	5	13	84.1	-5	-2	-4	5	-8
2008	91.1	-9	-15	11	-2	81.8	-18	-10	-25	23	-14
2008 Q3	89.9	-10	-15	12	-2	82.2	-19	-12	-28	23	-14
Q4	75.6	-25	-36	18	-22	78.1	-27	-11	-34	49	-14
2009 Q1	65.7	-36	-56	20	-31	72.5	-33	-11	-41	64	-14
Ő2	70.2	-33	-62	18	-21	70.0	-28	-9	-34	59	-11
Q3	79.9	-26	-58	12	-9	70.1	-21	-5	-20	51	-9
2009 May	70.2	-33	-61	18	-21	-	-28	-9	-33	58	-13
June	73.2	-32	-63	16	-16	-	-25	-7	-29	55	-9
July	76.0	-30	-61	14	-13	69.6	-23	-6	-23	53	-10
Aug.	80.8	-25	-56	13	-8	-	-22	-5	-21	53	-9
Sep.	82.8	-24	-56	10	-7	-	-19	-4	-15	48	-10
Oct.	86.2	-21	-53	9	-1	70.7	-18	-3	-12	48	-8

	Construction	n confidence	indicator	Retail trade confidence indicator Services confidence indi						nce indicator	
	Total <sup>4)</sup>	Order books	Employment expectations	Total <sup>4)</sup>	Present business situation	Volume of stocks	Expected business situation	Total <sup>4)</sup>	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2005	-7	-12	-2	-7	-12	13	4	11	5	10	18
2006	1	-4	6	1	3	14	13	18	13	18	24
2007	0	-8	7	1	4	15	12	19	16	19	23
2008	-14	-20	-7	-7	-6	16	1	2	-5	4	7
2008 Q3	-14	-21	-7	-9	-9	17	-1	1	-7	3	6
Q4	-23	-31	-16	-15	-16	17	-13	-12	-20	-9	-6
2009 Q1	-31	-36	-26	-19	-21	15	-20	-24	-33	-21	-18
Q2	-34	-42	-25	-17	-23	9	-19	-22	-29	-23	-15
Q3	-32	-41	-22	-14	-19	10	-13	-12	-19	-13	-5
2009 May June	-34 -33	-44 -42	-23 -24	-14 -17	-18 -24	8 9	-17 -17	-23 -20	-29 -26	-25 -22	-14 -11
July	-33	-41	-25	-13	-16	10	-14	-18	-24	-19	-9
Aug.	-32	-40	-23	-14	-20	10	-12	-11	-16	-10	-5
Sep.	-30	-42	-19	-15	-21	11	-14	-9	-15	-10	-2
Oct.	-29	-42	-16	-15	-25	10	-12	-7	-10	-9	0

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

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

2) The economic sentiment indicator is composed of the industrial, services, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values of the economic sentiment indicator above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period 1990 to 2008.
 3) Data are collected in January, April, July and October each year. The quarterly figures shown are averages of two successive surveys. Annual data are derived from quarterly

averages.

4) The confidence indicators are calculated as simple averages of the components shown; the assessments of stocks (columns 4 and 17) and unemployment (column 10) are used with inverted signs for the calculation of confidence indicators.



### 5.3 Labour markets <sup>1)</sup>

#### 1. Employment

	Whole ec	conomy	By employ	ment status			By ec	onomic activity		
	Millions (s.a.)		Employees	Self- employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total 2)	100.0	100.0	85.2	14.8	3.9	17.1	7.5	25.6	15.9	30.0
	1	2	3	4	5	6	7	8	9	10
2005 2006 2007 2008	141.846 144.148 146.712 147.821	1.0 1.6 1.8 0.8	1.0 1.8 2.0 0.9	0.5 0.7 0.8 -0.3	-0.7 -1.8 -1.5 -1.4	-1.1 -0.3 0.3 -0.2	2.7 2.7 3.9 -2.2	0.7 1.7 2.0 1.3	2.5 3.9 4.1 2.2	1.5 1.8 1.2 1.1
2008 Q2 Q3 Q4 2009 Q1 Q2	148.164 147.743 147.304 146.215 145.526	1.1 0.5 0.0 -1.2 -1.8	1.3 0.8 0.1 -1.0 -1.7	-0.2 -0.9 -0.8 -2.3 -2.2	-1.8 -1.7 -1.0 -2.0 -1.9	0.3 -0.1 -1.2 -3.0 -4.6	-1.4 -2.7 -5.0 -7.1 -7.6	1.6 0.9 0.4 -1.2 -1.9	2.6 1.8 0.7 -1.2 -1.9	1.4 1.0 1.4 1.4 1.4
				quarter	-on-quarter per	centage changes (	(s.a.)			
2008 Q2 Q3 Q4 2009 Q1 Q2	0.089 -0.421 -0.439 -1.089 -0.689	0.1 -0.3 -0.3 -0.7 -0.5	0.2 -0.2 -0.3 -0.7 -0.5	-0.5 -0.6 -0.4 -0.9 -0.5	-1.1 -0.6 0.3 -0.7 -0.8	-0.1 -0.6 -1.0 -1.5 -1.5	-0.9 -2.0 -2.1 -2.1 -1.5	0.1 -0.2 -0.4 -0.8 -0.5	0.0 0.0 -0.4 -0.8 -0.6	0.6 0.1 0.6 0.1 0.5

## 2. Unemployment (seasonally adjusted)

	Tot	al		B	y age <sup>3)</sup>		By gender 4)			
	Millions	% of labour force	Ad	lult	Y	outh	1	Male	F	emale
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total 2)	100.0		77.9		22.1		50.4		49.6	
	1	2	3	4	5	6	7	8	9	10
2005 2006 2007 2008	13.716 12.878 11.662 11.893	9.0 8.3 7.5 7.6	10.674 10.053 9.114 9.270	7.9 7.3 6.6 6.6	3.042 2.825 2.548 2.623	17.5 16.4 14.9 15.4	6.916 6.388 5.733 5.998	8.1 7.5 6.7 6.9	6.800 6.490 5.929 5.896	10.0 9.4 8.5 8.3
2008 Q3 Q4 2009 Q1 Q2 Q3	11.904 12.659 13.852 14.679 15.150	7.6 8.0 8.8 9.3 9.6	9.521 9.853 10.769 11.450 11.851	7.0 7.6 8.1 8.4	2.845 2.806 3.083 3.228 3.299	13.3 16.6 18.3 19.3 20.0	6.547 7.317 7.861 8.166	7.6 8.5 9.1 9.5	6.113 6.535 6.818 6.984	8.3 8.6 9.2 9.5 9.7
2009 Apr. May June July Aug. Sep.	14.507 14.691 14.839 14.988 15.140 15.323	9.2 9.3 9.4 9.5 9.6 9.7	11.305 11.452 11.594 11.720 11.843 11.991	8.0 8.1 8.2 8.3 8.4 8.5	3.202 3.239 3.245 3.268 3.297 3.333	19.1 19.3 19.5 19.8 20.0 20.1	7.747 7.872 7.964 8.071 8.156 8.272	9.0 9.1 9.2 9.3 9.4 9.6	6.760 6.819 6.874 6.917 6.984 7.051	9.4 9.5 9.6 9.6 9.7 9.8

Source: Eurostat.

Source: Eurostat.
 Data refer to Euro 16. Data for employment refer to persons and are based on the ESA 95. Data for unemployment refer to persons and follow ILO recommendations.
 In 2008.
 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<sup>1)</sup>

#### 1. Euro area - revenue

	Total				Capital revenue		Memo: fiscal							
		Г	Direct			Indirect		Social			Sales		Capital	burden <sup>2)</sup>
			taxes	Households	Corporations	taxes	Received by EU	contributions	Employers I	Employees			taxes	
							institutions							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	46.5	46.2	12.6	9.6	3.0	13.9	0.6	15.8	8.2	4.8	2.2	0.3	0.3	42.6
2001	45.7	45.4	12.2	9.4	2.7	13.5	0.5	15.6	8.2	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	8.2	4.6	2.1	0.3	0.3	41.2
2003	45.0	44.4	11.4	9.0	2.3	13.5	0.4	15.7	8.3	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	8.2	4.5	2.1	0.5	0.4	40.7
2005	44.8	44.4	11.5	8.8	2.6	13.7	0.3	15.4	8.1	4.5	2.2	0.5	0.3	40.9
2006	45.3	45.0	12.1	8.9	3.0	13.9	0.3	15.3	8.1	4.5	2.1	0.3	0.3	41.5
2007	45.5	45.2	12.4	9.1	3.1	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	2.7	13.3	0.3	15.3	8.1	4.4	2.1	0.2	0.3	41.0

#### 2. Euro area - expenditure

	Total				Current e	expenditure	•			Capital ex	penditure		Memo: primary	
		Total	Compensation of	Intermediate consumption	Interest	Current transfers	Social	Subsidies			Investment	Capital transfers	Paid by EU	expenditure <sup>3</sup>
			employees				payments		Paid by EU				institutions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	46.6	43.8	10.4	4.8	3.9	24.7	21.6	2.0	0.5	2.8	2.5	1.3	0.0	42.7
2001	47.6	43.7	10.3	4.8	3.8	24.8	21.7	1.9	0.5	3.9	2.5	1.4	0.0	43.8
2002	47.7	43.9	10.4	4.9	3.5	25.1	22.2	1.9	0.5	3.8	2.4	1.4	0.0	44.2
2003	48.1	44.1	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	43.6	10.4	5.0	3.1	25.1	22.3	1.8	0.5	3.9	2.5	1.5	0.1	44.4
2005	47.4	43.5	10.4	5.0	3.0	25.0	22.3	1.7	0.5	3.9	2.5	1.4	0.0	44.4
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	46.1	42.3	10.0	5.0	3.0	24.4	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	3.9	2.5	1.3	0.0	43.9

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

		Deficit	(-)/surplu	ıs (+)		Primary deficit (-)/			(	Government	consumption <sup>4)</sup>			
	Total	Central	State	Local	Social	surplus (+)	Total						Collective	Individual
		gov.	gov.	gov.	security	· · ·		Compensation	Intermediate	Transfers	Consumption	Sales	consumption	consumption
		-	-	-	funds			of employees	consumption	in kind	of fixed	(minus)	-	-
										via market	capital			
										producers	-			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	-0.1	-0.5	-0.1	0.1	0.5	3.8	19.7	10.4	4.8	4.9	1.8	2.2	8.2	11.6
2001	-1.9	-1.7	-0.4	-0.1	0.3	1.9	19.8	10.3	4.8	4.9	1.8	2.1	8.2	11.7
2002	-2.6	-2.1	-0.5	-0.2	0.2	0.9	20.2	10.4	4.9	5.1	1.8	2.1	8.3	12.0
2003	-3.1	-2.4	-0.5	-0.2	0.0	0.2	20.5	10.5	5.0	5.2	1.8	2.1	8.3	12.2
2004	-3.0	-2.5	-0.4	-0.3	0.2	0.2	20.4	10.4	5.0	5.1	1.9	2.1	8.3	12.1
2005	-2.6	-2.2	-0.3	-0.2	0.2	0.4	20.4	10.4	5.0	5.1	1.9	2.2	8.2	12.3
2006	-1.3	-1.4	-0.1	-0.2	0.4	1.6	20.3	10.2	5.0	5.2	1.9	2.1	8.0	12.2
2007	-0.6	-1.2	0.0	0.0	0.5	2.4	20.0	10.0	5.0	5.2	1.9	2.1	7.9	12.1
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	12.3

#### 4. Euro area countries – deficit (-)/surplus (+)<sup>5)</sup>

	<b>BE</b> 1	<b>DE</b> 2	<b>IE</b> 3	GR 4	<b>ES</b> 5	<b>FR</b> 6	<b>IT</b> 7	<b>CY</b> 8	<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
2005	-2.7	-3.3	1.7	-5.2	1.0	-2.9	-4.3	-2.4	0.0	-2.9	-0.3	-1.6	-6.1	-1.4	-2.8	2.8
2006	0.3	-1.6	3.0	-2.9	2.0	-2.3	-3.3	-1.2	1.3	-2.6	0.5	-1.6	-3.9	-1.3	-3.5	4.0
2007	-0.2	0.2	0.3	-3.7	1.9	-2.7	-1.5	3.4	3.7	-2.2	0.2	-0.6	-2.6	0.0	-1.9	5.2
2008	-1.2	0.0	-7.2	-7.7	-4.1	-3.4	-2.7	0.9	2.5	-4.7	0.7	-0.4	-2.7	-1.8	-2.3	4.5

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit/surplus.

1) The data refer to the Euro 16. Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions involving the EU budget are included and consolidated.

Transactions among Member States' governments are not consolidated.

The fiscal burden comprises taxes and social contributions.
 Comprises total expenditure minus interest expenditure.
 Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
 Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.



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

	Total		Financial in	struments				Holders		
		Currency and	Loans	Short-term securities	Long-term securities		Domestic o	creditors <sup>2)</sup>		Other creditors <sup>3)</sup>
		deposits				Total	MFIs	Other financial corporations	Other sectors	
	1	2	3	4	5	6	7	8	9	10
1999	72.0	2.9	14.5	4.3	50.4	48.7	25.4	13.7	9.7	23.3
2000	69.2	2.7	13.2	3.7	49.6	44.0	22.1	12.3	9.6	25.2
2001	68.2	2.8	12.4	4.0	49.0	41.8	20.6	11.0	10.2	26.4
2002	68.0	2.7	11.8	4.6	48.9	40.0	19.4	10.6	10.0	28.0
2003	69.1	2.1	12.4	5.0	49.6	39.3	19.6	11.0	8.6	29.8
2004	69.5	2.2	12.0	5.0	50.3	37.5	18.5	10.7	8.3	31.9
2005	70.0	2.4	11.8	4.7	51.2	35.5	17.2	11.1	7.1	34.6
2006	68.2	2.4	11.4	4.1	50.2	33.8	17.4	9.4	7.0	34.4
2007	65.9	2.2	10.8	4.2	48.8	32.1	16.8	8.6	6.7	33.9
2008	69.3	2.3	10.9	6.7	49.4	32.5	17.2	8.2	7.1	36.8

### 2. Euro area - by issuer, maturity and currency denomination

	Total		Issued	<b>by</b> <sup>4)</sup>		O	riginal matu	rity	R	esidual maturi	ty	Currenc	ies
	-	Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies	Other currencies
	1	2	3	4	5	6	7	8	9	10	11	12	13
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	$\begin{array}{c} 72.0\\ 69.2\\ 68.2\\ 68.0\\ 69.1\\ 69.5\\ 70.0\\ 68.2\\ 65.9\\ 69.3\end{array}$	60.5 58.1 57.0 56.7 57.4 57.6 55.9 54.0 57.1	$\begin{array}{c} 6.0 \\ 5.8 \\ 6.0 \\ 6.2 \\ 6.5 \\ 6.6 \\ 6.7 \\ 6.5 \\ 6.2 \\ 6.6 \end{array}$	5.1 4.9 4.7 5.0 5.1 5.2 5.3 5.2 5.2	$\begin{array}{c} 0.4 \\ 0.4 \\ 0.4 \\ 0.6 \\ 0.4 \\ 0.5 \\ 0.5 \\ 0.5 \\ 0.4 \end{array}$	$7.3 \\ 6.5 \\ 7.0 \\ 7.6 \\ 7.8 \\ 7.8 \\ 7.9 \\ 7.4 \\ 10.2$	$\begin{array}{c} 64.6\\ 62.7\\ 61.2\\ 60.4\\ 61.3\\ 61.6\\ 62.2\\ 60.8\\ 58.5\\ 59.1 \end{array}$	7.0 6.2 5.3 5.2 5.0 4.7 4.6 4.3 4.3 4.3	13.5 13.4 13.7 15.5 14.9 14.8 14.8 14.4 14.2 17.8	27.8 27.8 26.6 25.3 26.0 26.2 25.6 24.0 22.7 22.2	30.6 28.1 27.9 27.2 28.2 28.5 29.7 29.8 29.1 29.3	69.9 67.4 66.7 68.1 68.6 69.1 67.7 65.4 68.6	$\begin{array}{c} 2.0\\ 1.8\\ 1.5\\ 1.3\\ 0.9\\ 0.9\\ 1.0\\ 0.6\\ 0.5\\ 0.7\\ \end{array}$
3. Euro ai	rea coun	tries											

	<b>BE</b>	<b>DE</b>	<b>IE</b>	<b>GR</b>	<b>ES</b>	FR	<b>IT</b>	<b>CY</b>	LU	<b>MT</b>	<b>NL</b>	<b>AT</b>	<b>РТ</b>	<b>SI</b>	<b>SK</b>	<b>FI</b>
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2005	92.1	68.0	27.6	100.0	43.0	66.4	105.8	69.1	6.1	70.2	51.8	63.9	63.6	27.0	34.2	41.8
2006	88.1	67.6	25.0	97.1	39.6	63.7	106.5	64.6	6.6	63.6	47.4	62.2	64.7	26.7	30.5	39.3
2007	84.2	65.0	25.1	95.6	36.1	63.8	103.5	58.3	6.6	62.0	45.5	59.5	63.6	23.3	29.3	35.2
2008	89.8	65.9	44.1	99.2	39.7	67.4	105.8	48.4	13.5	63.8	58.2	62.6	66.3	22.5	27.7	34.1

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' debt.
The 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.
 Includes residents of euro area countries other than the country whose government has issued the debt.
 Excludes debt held by general government in the country whose government has issued it.



### 6.3 Change in debt 1)

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

	Total	Sour	ce of change			Financial	instruments			Hol	ders	
	-	Borrowing requirement <sup>2)</sup>	Valuation effects <sup>3)</sup>	Other changes in volume <sup>4)</sup>	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors <sup>5)</sup>	MFIs	Other financial corporations	Other creditors <sup>6)</sup>
	1	2	3	4	5	6	7	8	9	10	11	12
2000	1.1	1.2	0.0	-0.1	0.0	-0.5	-0.3	1.9	-2.1	-2.0	-0.6	3.2
2001	1.9	1.9	-0.1	0.1	0.2	-0.2	0.5	1.5	-0.3	-0.5	-0.8	2.2
2002	2.1	2.7	-0.5	-0.1	0.0	-0.2	0.7	1.6	-0.4	-0.5	-0.1	2.5
2003	3.1	3.3	-0.2	0.0	-0.6	0.9	0.6	2.1	0.5	0.8	0.8	2.6
2004	3.1	3.2	-0.1	0.0	0.2	0.1	0.1	2.7	-0.2	-0.3	0.1	3.3
2005	3.1	3.0	0.0	0.0	0.3	0.3	-0.1	2.6	-0.7	-0.6	0.8	3.8
2006	1.5	1.4	0.1	0.0	0.2	0.2	-0.4	1.5	0.0	1.0	-1.2	1.5
2007	1.1	1.1	0.0	0.0	-0.1	-0.1	0.3	1.0	0.0	0.2	-0.3	1.1
2008	5.2	5.1	0.1	0.0	0.1	0.4	2.6	2.0	1.3	0.9	-0.2	3.8

### 2. Euro area - deficit-debt adjustment

	Change in debt	<b>Deficit</b> (-) / surplus (+) <sup>7)</sup>						Deficit-de	bt adjustment <sup>8)</sup>					
		• • • •	Total		Transactio	ons in mair	n financial asse	ts held by ger	eral government	1	Valuation		Other	Other <sup>9)</sup>
							- 10				effects	Exchange	changes in	
				Total	Currency	Loans	Securities 10)	Shares and				rate	volume	
					and			other	Privatisations	Equity		effects		
					deposits			equity		injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	1.1	-0.1	1.0	1.0	0.7	0.1	0.2	0.0	-0.3	0.2	0.0	0.1	-0.1	0.1
2001	1.9	-1.9	0.0	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	-0.1	0.0	0.1	0.6
2002	2.1	-2.6	-0.5	0.1	0.1	0.0	0.0	-0.1	-0.4	0.1	-0.5	-0.1	-0.1	0.0
2003	3.1	-3.1	0.0	0.1	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.1	0.0	0.1
2004	3.1	-3.0	0.2	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.1
2005	3.1	-2.6	0.5	0.6	0.3	0.1	0.1	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	0.5	0.6	0.3	0.0	0.3	0.1	-0.2	0.2	0.0	0.0	0.0	-0.1
2008	5.2	-2.0	3.2	3.1	0.8	0.7	0.7	0.8	-0.1	0.7	0.1	0.0	0.0	0.0

Source: ECB.

1) The 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).
2) The borrowing requirement is by definition equal to transactions in debt.
3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).

4) Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.

5) Holders resident in the country whose government has issued the debt.

6) Includes residents of euro area countries other than the country whose government has issued the debt.

Including proceeds from sales of UMTS licences. 7)

8)

The difference between the annual change 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). 9)

10) Excluding financial derivatives.



### 6.4 Quarterly revenue, expenditure and deficit/surplus <sup>1</sup>)

#### 1. Euro area - quarterly revenue

	Total			Current rev	enue			Capital 1	evenue	Memo:
		Γ	Direct taxes	Indirect taxes	Social contributions	Sales	Property income		Capital taxes	burden <sup>2)</sup>
	1	2	3	4	5	6	7	8	9	10
2003 Q2	45.8	44.3	11.9	12.7	15.7	2.0	1.4	1.4	1.2	41.4
Q3	42.7	42.2	10.8	12.6	15.5	1.9	0.6	0.5	0.2	39.1
Q4	49.2	48.2	13.1	14.1	16.2	2.9	0.8	1.0	0.3	43.7
2004 Q1	41.4	40.9	9.6	12.9	15.3	1.7	0.6	0.4	0.3	38.1
Q2	44.8	44.0	12.0	12.9	15.3	2.0	1.1	0.8	0.6	40.7
Q3	42.8	42.3	10.6	12.8	15.4	1.9	0.7	0.5	0.3	39.1
Q4	49.0	48.0	12.9	14.2	16.2	2.9	0.7	1.0	0.4	43.7
2005 Q1	42.0	41.5	9.9	13.0	15.2	1.7	0.6	0.5	0.3	38.4
Q2	44.4	43.8	11.7	13.2	15.1	2.0	1.1	0.6	0.3	40.2
Q3	43.4	42.7	11.0	13.0	15.2	1.9	0.7	0.7	0.3	39.5
Q4	49.1	48.3	13.4	14.2	16.1	2.9	0.8	0.7	0.3	43.9
2006 Q1	42.4	41.9	10.2	13.4	15.1	1.6	0.8	0.4	0.3	38.9
Q2	45.5	45.0	12.4	13.5	15.1	1.9	1.3	0.5	0.3	41.2
Q3	43.7	43.2	11.5	13.0	15.2	2.0	0.8	0.5	0.3	39.9
Q4	49.4	48.8	14.0	14.2	15.8	2.9	0.9	0.6	0.3	44.4
2007 Q1	42.2	41.8	10.3	13.5	14.8	1.7	0.8	0.4	0.3	38.8
Q2	45.8	45.4	12.8	13.5	15.0	1.9	1.5	0.4	0.3	41.5
Q3	43.7	43.2	12.0	12.8	14.9	1.9	0.8	0.5	0.3	40.0
Q4	49.7	49.2	14.4	14.2	15.8	3.0	0.9	0.5	0.3	44.6
2008 Q1	42.2	41.9	10.6	12.9	14.8	1.7	1.0	0.3	0.2	38.6
Õ2	45.1	44.7	12.8	12.8	15.0	1.9	1.5	0.4	0.3	40.9
Q3	43.1	42.7	11.8	12.4	15.1	1.9	0.8	0.4	0.3	39.5
Q4	48.8	48.3	13.6	13.6	16.2	3.0	1.0	0.5	0.3	43.6
2009 Q1	42.2	42.0	10.5	12.4	15.5	1.8	1.0	0.2	0.2	38.7
Q2	44.6	44.0	11.7	12.5	15.6	2.0	1.4	0.6	0.5	40.3

#### 2. Euro area - quarterly expenditure and deficit/surplus

	Total			Currer	nt expendi	ture			Capi	tal expenditu	re	Deficit (-)/	Primary
		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
2003 Q2	47.1	43.6	10.4	4.7	3.4	25.1	21.6	1.3	3.5	2.3	1.2	-1.3	2.1
Q3	47.1	43.4	10.2	4.8	3.3	25.1	21.6	1.3	3.7	2.5	1.2	-4.4	-1.1
Q4	51.0	46.2	11.1	5.7	3.1	26.4	22.8	1.5	4.8	3.3	1.6	-1.9	1.2
2004 Q1	46.4	43.0	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	3.3	24.7	21.4	1.3	3.4	2.3	1.1	-1.8	1.5
Q3	46.1	42.7	9.9	4.7	3.1	24.9	21.5	1.3	3.4	2.4	1.0	-3.3	-0.1
Q4	50.9	45.6	11.0	5.7	2.9	26.1	22.6	1.4	5.2	3.1	2.1	-1.9	1.0
2005 Q1	46.8	43.1	10.2	4.6	3.1	25.1	21.3	1.2	3.7	1.9	1.8	-4.9	-1.7
Q2	46.1	42.7	10.2	4.9	3.2	24.4	21.3	1.1	3.4	2.3	1.1	-1.7	1.5
Q3	45.8	42.3	9.9	4.8	3.0	24.7	21.3	1.2	3.4	2.5	1.0	-2.4	0.6
Q4	50.5	45.7	11.1	5.8	2.7	26.1	22.5	1.3	4.8	3.1	1.7	-1.5	1.3
2006 Q1	45.3	42.1	10.0	4.5	2.9	24.6	21.1	1.2	3.1	1.9	1.2	-2.9	0.0
Q2	45.4	42.2	10.2	4.9	3.1	24.0	21.0	1.1	3.2	2.3	1.0	0.0	3.1
Q3	45.3	41.9	9.8	4.7	2.9	24.5	21.1	1.2	3.4	2.4	1.0	-1.6	1.3
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	41.2	9.8	4.5	2.9	23.9	20.5	1.2	3.2	2.0	1.2	-2.1	0.8
Q2	44.6	41.4	9.9	4.8	3.2	23.5	20.5	1.1	3.2	2.3	0.8	1.2	4.3
Q3	44.6	41.2	9.6	4.7	3.0	23.9	20.7	1.2	3.4	2.5	0.9	-0.9	2.0
Q4	50.3	45.2	10.7	5.8	2.8	26.0	22.2	1.5	5.1	3.4	1.8	-0.6	2.2
2008 Q1	44.7	41.5	9.8	4.6	2.9	24.2	20.5	1.2	3.2	2.0	1.2	-2.5	0.5
Q2	45.3	41.9	10.1	4.9	3.1	23.7	20.6	1.1	3.4	2.3	1.1	-0.2	3.0
Q3	45.4	41.9	9.7	4.8	3.0	24.4	21.2	1.2	3.5	2.5	1.1	-2.3	0.7
Q4	51.8	46.7	11.0	6.1	2.8	26.9	23.0	1.4	5.1	3.4	1.7	-3.0	-0.2
2009 Q1 Q2	48.3 49.7	44.9 45.9	10.6 10.8	5.2 5.5	3.2	26.2 26.4	22.3 23.0	1.3	3.4 3.9	2.1 2.6	1.2	-6.1 -5.1	-3.1 -2.0

Source: ECB calculations based on Eurostat and national data.

The data refer to the Euro 16. Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions between the EU budget and entities outside the government sector are not included. Otherwise, and except for different data transmission deadlines, the quarterly data are consistent with the annual data. The data are not seasonally adjusted.

2) The fiscal burden comprises taxes and social contributions.



### 6.5 Quarterly debt and change in debt 1)

#### 1. Euro area – Maastricht debt by financial instrument<sup>2)</sup>

	Total		Financial ins	struments	
	1	Currency and deposits 2	Loans 3	Short-term securities 4	Long-term securities 5
2006 Q3	69.9	2.5	11.6	4.7	51.1
Q4	68.2	2.4	11.4	4.1	50.2
2007 Q1	68.4	2.4	11.5	4.7	49.9
Q2	68.6	2.2	11.2	5.1	50.2
Q3	67.6	2.1	11.0	5.1	49.4
Q4	65.9	2.2	10.8	4.2	48.8
2008 Q1	66.9	2.1	11.1	5.0	48.7
Q2	67.2	2.1	11.0	4.9	49.1
Q3	67.1	2.1	10.8	5.5	48.6
Q4	69.3	2.3	10.9	6.7	49.4
2009 Q1	72.7	2.3	11.0	7.9	51.5
Q2	75.8	2.3	11.5	8.4	53.5

### 2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)				Deficit-d	lebt adjustment				Memo: Borrowing
			Total	Transacti	ons in main fina	ncial assets h	eld by general go	overnment	Valuation effects and other changes	Other	requirement
				Total	Currency and deposits	Loans	Securities	Shares and other equity	in volume		
	1	2	3	4	5	6	7	8	9	10	11
2006 Q3	1.2	-1.6	-0.4	-0.9	-0.7	-0.2	0.2	-0.2	0.3	0.2	0.9
Q4	-2.9	-1.0	-3.9	-2.4	-1.5	-0.5	-0.2	-0.2	-0.2	-1.3	-2.8
2007 Q1	4.4	-2.1	2.3	2.0	1.0	0.0	0.6	0.2	-0.7	1.0	5.1
Q2	4.2	1.2	5.3	5.0	4.1	0.0	0.6	0.4	0.6	-0.3	3.5
Q3	-0.6	-0.9	-1.5	-1.5	-2.1	0.1	0.4	0.0	0.1	-0.1	-0.7
Q4	-3.4	-0.6	-3.9	-2.8	-1.9	-0.2	-0.6	-0.2	0.0	-1.0	-3.3
2008 Q1	6.3	-2.5	3.8	3.1	1.9	0.0	0.9	0.3	-0.1	0.7	6.3
Q2	3.7	-0.2	3.5	3.4	1.8	0.3	1.1	0.1	0.0	0.0	3.7
Q3	1.9	-2.3	-0.5	-0.9	-1.6	0.0	0.1	0.6	0.5	0.0	1.4
Q4	8.9	-3.0	5.9	6.5	1.1	2.6	0.8	2.0	0.1	-0.7	8.8
2009 Q1	11.9	-6.1	5.8	5.4	4.8	-0.1	-0.2	0.9	-0.3	0.7	12.2
02	93	-5.1	4 2	34	19	-0.8	10	12	-0.2	1.0	96

### **C29 Deficit, borrowing requirement and change in debt** (four-quarter moving sum as a percentage of GDP)









Source: ECB calculations based on Eurostat and national data.

1) The data refer to the Euro 16.

2) The stock data in quarter t are expressed as a percentage of the sum of GDP in t and the previous three quarters.



## **EXTERNAL TRANSACTIONS AND POSITIONS**

### 7.1 Summary balance of payments <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
2006 2007 2008	-10.2 10.6 -143.3	10.7 46.0 -11.4	41.6 48.3 40.6	17.3 2.8 -74.4	-79.8 -86.4 -98.1	9.1 5.0 10.0	-1.1 15.7 -133.3	-9.1 -1.2 163.9	-160.2 -72.9 -189.0	188.7 151.3 350.5	-0.6 -64.6 -65.7	-35.7 -9.9 72.1	-1.3 -5.1 -3.9	10.2 -14.4 -30.7
2008 Q2 Q3 Q4 2009 Q1 Q2	-42.8 -34.7 -32.2 -38.0 -19.8	4.9 -10.4 -1.9 -7.7 12 5	12.6 12.9 7.1 0.5 7.4	-41.7 -12.8 -11.7 -2.3 -24.7	-18.6 -24.4 -25.7 -28.4 -15.0	2.0 1.7 1.7 1.4 2.4	-40.8 -32.9 -30.5 -36.6 -17.4	33.9 58.3 41.5 55.8 10.2	-44.8 -23.6 -61.1 -58.8 -0.6	14.8 114.7 152.7 129.9 98 1	-11.9 -8.2 -13.3 -5.3 20.3	75.9 -26.1 -36.1 -15.7 -105.3	0.0 1.6 -0.5 5.7 -2.4	6.8 -25.4 -11.0 -19.1 7 3
2008 Aug. Sep. Oct. Nov. Dec.	-15.4 -11.0 -9.1 -17.4 -5.7	-7.8 -2.5 3.2 -4.8 -0.2	4.8 4.0 1.4 1.9 3.8	-4.2 -4.4 -2.7 -5.3 -3.8	-8.2 -8.0 -11.0 -9.2 -5.5	0.5 0.4 0.2 1.6 -0.1	-14.9 -10.6 -9.0 -15.8 -5.7	10.8 23.9 12.8 12.7 16.1	-11.6 -21.6 -4.8 -53.5 -2.8	21.7 84.6 101.1 50.2 1.4	-10.2 3.3 0.6 -10.3 -3.7	8.5 -44.0 -76.2 26.7 13.4	2.3 1.6 -8.0 -0.4 7.9	4.1 -13.3 -3.8 3.2 -10.3
2009 Jan. Feb. Mar. Apr. May June July Aug.	-24.0 -5.4 -8.6 -10.2 -13.2 3.5 10.1 -4.2	$ \begin{array}{r} -10.6 \\ -0.1 \\ 3.0 \\ 4.0 \\ 2.0 \\ 6.5 \\ 12.6 \\ -0.6 \end{array} $	$\begin{array}{c} 0.2 \\ 0.4 \\ -0.2 \\ 1.8 \\ 3.1 \\ 2.5 \\ 4.4 \\ 2.7 \end{array}$	-3.2 0.0 0.9 -7.8 -12.2 -4.7 -0.4 1.7	-10.4 -5.6 -12.3 -8.1 -6.1 -0.8 -6.6 -8.0	0.2 0.5 0.7 1.9 0.2 0.2 0.6 0.6	-23.8 -4.9 -7.9 -8.2 -13.0 3.8 10.7 -3.5	31.8 11.2 12.7 16.1 5.3 -11.2 -9.7 0.2	-22.8 -11.7 -24.3 4.8 6.0 -11.4 8.5 3.8	-6.4 67.3 69.0 18.2 37.9 42.0 -3.0 53.4	3.4 -1.3 -7.3 8.9 9.2 2.3 7.7 -5.9	52.4 -44.3 -23.8 -16.0 -45.5 -43.8 -19.9 -51.4	5.3 1.2 -0.8 0.1 -2.2 -0.4 -3.0 0.2	-8.0 -6.3 -4.9 -7.9 7.7 7.5 -1.0 3.4
2000 4	05 1	10.1	25.0	41.0	01.6	12-mor	nth cumulated	transaction	100.0	515.7	(7	272.2	1.5	22.0
2009 Aug.	-95.1	12.4	25.9	-41.9	-91.6	7.1	-88.0	121.8	-129.8	515.7	6.7	-272.3	1.5	-33.8

# C31 B.o.p. current account balance (EUR billions)



Source: ECB.

1) The sign convention is explained in the general notes.



# 7.2 Current and capital accounts (EUR billions; transactions)

#### 1. Summary current and capital accounts

	Current account												Capital account		
		Total		Goods		Servio	ces	Incon	ne		Current t	ransfers			
	Credit Debit Net		Credit	Debit	Credit	Debit	Credit	Debit	Cr	edit	De	bit	Credit	Debit	
	1	2	3	4	5	6	7	8	9	10	Workers remit- tances 11	12	Workers remit- tances 13	14	15
2006 2007 2008	2,429.1 2,697.0 2,744.9	2,439.3 2,686.3 2,888.1	-10.2 10.6 -143.3	1,396.4 1,516.5 1,581.0	1,385.7 1,470.5 1,592.4	441.2 491.8 509.9	399.6 443.5 469.2	499.9 597.4 565.1	482.7 594.7 639.6	91.6 91.3 88.8	5.4 6.4 6.7	171.4 177.7 186.9	17.4 20.6 21.4	23.8 25.7 24.2	14.7 20.7 14.2
2008 Q2 Q3 Q4 2009 Q1	702.5 692.4 674.0 561.1	745.3 727.0 706.2 599.1	-42.8 -34.7 -32.2 -38.0	407.7 403.0 379.5 307.8 312.3	402.8 413.4 381.3 315.6 200.7	127.4 137.2 128.0 108.8	114.8 124.2 120.9 108.3	145.4 138.2 139.6 118.8	187.1 150.9 151.3 121.1	22.0 14.0 27.0 25.7 20.8	1.5 1.8 1.8 1.4	40.6 38.4 52.7 54.1	5.3 5.4 5.6 5.0	6.4 4.9 5.3 4.1	4.4 3.2 3.7 2.7
2009 June July Aug.	195.3 199.6 172.8	191.7 189.5 177.0	3.5 10.1 -4.2	109.4 117.3 93.9	102.8 104.8 94.5	38.8 42.7 41.1	36.3 38.3 38.4	37.9 35.2 33.2	42.6 35.6 31.5	9.2 4.3 4.7	1.5	10.0 10.9 12.6		1.2 1.4 1.4	1.0 0.8 0.7
						Seaso	nally adju	sted							
2008 Q2 Q3 Q4 2009 Q1 Q2	700.6 692.1 650.5 581.5 564.7	729.6 729.6 693.2 618.9 576.5	-28.9 -37.5 -42.8 -37.4 -11.8	404.1 403.4 368.4 317.6 314.2	405.1 407.0 370.2 327.2 306.6	128.3 127.1 125.7 119.4 115.1	117.6 118.4 118.1 113.7 109.5	143.0 141.1 134.7 123.1 112.4	158.5 160.9 156.5 132.2 118.0	25.3 20.4 21.7 21.5 23.1		48.4 43.3 48.4 45.8 42.4		- - - -	
2009 Mar. Apr. May June July Aug.	192.0 187.7 188.2 188.8 189.3 185.9	201.4 195.0 191.5 189.9 184.4 186.0	-9.3 -7.3 -3.3 -1.2 4.9 -0.1	105.5 104.0 104.0 106.1 108.4 105.5	106.4 102.9 101.8 101.9 99.0 99.5	39.3 39.3 38.8 37.0 38.1 38.6	37.7 36.8 36.3 36.4 35.0 36.8	40.0 36.9 38.5 37.0 36.2 35.3	41.6 40.4 39.2 38.4 37.6 35.9	7.2 7.5 6.9 8.7 6.6 6.6		15.7 14.8 14.3 13.3 12.8 13.8			

## C32 B.o.p. goods (EUR billions, seasonally







Source: ECB.



# 7.2 Current and capital accounts (EUR billions)

#### 2. Income account

(transactions)

	Comper of emp	nsation loyees		Investment income												
	Credit	Debit	То	tal	Direct investment							Portfolio	Other investment			
			Credit	Debit		Equ	iity De			Debt Equity			Deb	ot	Credit	Debit
					Cı	Credit Debit		ebit	Credit	Debit	Credit	Debit	Credit	Debit		
						Reinv.	Reinv.									
	1	2	3	4	5	earnings 6	7	earnings 8	9	10	11	12	13	14	15	16
2006	17.4	9.8	482.5	472.8	184.3	40.3	114.5	37.5	20.6	20.2	39.2	96.3	103.6	91.5	134.9	150.4
2007	18.8	10.2	578.6	584.5	208.8	72.7	139.1	46.1	26.4	24.9	45.4	113.2	118.8	110.9	179.3	196.4
2008	19.1	10.5	546.0	629.1	163.6	30.5	153.8	58.2	30.3	25.5	42.9	120.5	123.9	127.8	185.3	201.4
2008 Q2	4.7	2.6	140.7	184.4	42.9	2.2	39.4	7.7	7.6	6.9	14.5	56.6	30.4	31.3	45.3	50.3
Q3	4.6	3.1	133.5	147.8	39.0	10.7	37.7	20.3	7.1	6.2	10.2	23.2	32.1	31.0	45.1	49.8
Q4	4.9	2.7	134.7	148.6	38.4	2.9	38.4	12.8	8.7	6.4	8.3	20.2	30.8	33.6	48.4	50.0
2009 Q1	4.7	2.0	114.1	119.1	37.9	12.1	28.4	17.2	5.5	5.9	6.5	13.0	25.8	36.3	38.3	35.6
Q2	4.6	2.7	109.1	135.7	35.9	2.7	28.4	5.8	5.7	5.8	8.7	36.5	24.2	35.5	34.5	29.6

# **3. Geographical breakdown** (cumulated transactions)

	Total	EU	J Memb	er States	outside th	ie euro area	1	Brazil	Canada	China	India	Japan	Russia	Switzer-	United States	Other
	-	Total	Den-	Sweden	United	Other EU	EU							lanu	States	
			mark		Kingdom	countries	insti-									
2008 Q3 to							tutions									
2009 Q2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Credits															
Current account	2,487.5	883.2	53.3	73.3	446.9	252.2	57.7	37.2	33.0	82.4	28.8	51.5	85.9	176.0	356.4	753.0
Goods	1,402.6	472.0	32.0	45.3	201.4	193.2	0.0	20.4	17.1	64.1	21.6	30.7	64.7	87.4	172.3	452.3
Services	487.2	162.0	11.8	12.6	104.6	27.5	5.4	7.3	6.6	14.1	5.4	10.8	12.7	48.4	75.9	144.1
Income	510.2	186.6	8.7	13.8	128.7	28.4	7.0	9.3	8.6	3.9	1.7	9.7	8.1	33.5	101.9	147.0
Investment income	491.4	180.1	8.6	13.7	127.0	27.7	3.1	9.2	8.5	3.8	1.7	9.7	8.0	26.5	100.0	143.7
Current transfers	87.5	62.7	0.7	1.5	12.1	3.1	45.2	0.2	0.7	0.3	0.1	0.4	0.4	6.8	6.4	9.7
Capital account	19.1	17.0	0.0	0.0	1.1	0.1	15.7	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	1.1
	Debits															
Current account	2,612.2	826.0	44.2	75.8	392.9	214.2	99.0	-	28.5	-	-	91.5	-	168.3	370.1	-
Goods	1,410.1	387.2	28.4	42.2	152.3	164.3	0.0	24.6	12.7	172.1	19.7	47.7	90.0	76.5	135.0	444.6
Services	459.4	140.0	7.9	11.5	87.2	33.2	0.2	5.4	6.2	11.0	4.5	7.9	8.5	38.3	99.8	137.9
Income	561.8	189.3	7.0	21.0	141.3	12.1	7.9	-	7.9	-	-	35.3	-	47.8	128.3	-
Investment income	551.2	183.1	6.9	20.9	139.7	7.6	7.9	-	7.8	-	-	35.2	-	47.2	127.4	-
Current transfers	181.0	109.7	0.9	1.1	12.1	4.6	90.8	1.5	1.8	2.8	0.7	0.6	0.5	5.8	6.9	50.8
Capital account	12.0	2.3	0.0	0.1	1.1	0.2	0.9	0.1	0.1	0.1	0.2	0.1	0.1	0.5	0.8	7.6
									Net							
Current account	-124.7	57.2	9.1	-2.5	53.9	38.0	-41.3	-	4.5	-	-	-40.0	-	7.7	-13.6	-
Goods	-7.5	84.8	3.6	3.1	49.2	28.9	0.0	-4.2	4.4	-108.0	1.9	-17.1	-25.3	10.9	37.3	7.7
Services	27.8	22.0	3.9	1.2	17.4	-5.7	5.2	1.9	0.5	3.0	1.0	2.9	4.2	10.1	-23.9	6.2
Income	-51.6	-2.7	1.7	-7.1	-12.7	16.3	-0.9	-	0.7	-	-	-25.6	-	-14.3	-26.5	-
Investment income	-59.9	-3.0	1.7	-7.2	-12.7	20.1	-4.8	-	0.8	-	-	-25.5	-	-20.7	-27.4	-
Current transfers	-93.4	-47.0	-0.2	0.3	0.0	-1.5	-45.6	-1.2	-1.1	-2.5	-0.6	-0.2	-0.1	1.0	-0.6	-41.1
Capital account	7.2	14.7	0.0	-0.1	0.0	0.0	14.8	-0.1	-0.1	-0.1	-0.2	-0.1	0.0	-0.2	-0.3	-6.5
Source: ECB.																



# 7.3 Financial account (EUR billions and annual growth rate

#### 1. Summary financial account

		Total <sup>1)</sup>		as	Total s a % of GD	Р	Din inves	rect tment	Port inves	folio tment	Net financial derivatives	Net Other ancial investment		
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities	utilities	Assets	Liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
				(	Outstanding a	amounts (ir	ternational	investment	position)					
2005 2006 2007 2008	10,838.5 12,384.0 13,906.9 13,312.5	11,554.1 13,399.8 15,155.8 14,949.2	-715.6 -1,015.8 -1,248.9 -1,636.7	133.1 144.8 154.5 143.6	141.9 156.7 168.4 161.3	-8.8 -11.9 -13.9 -17.7	2,790.8 3,153.4 3,572.8 3,744.4	2,444.3 2,729.4 3,130.7 3,217.0	3,887.5 4,372.1 4,631.6 3,763.9	5,057.8 5,950.0 6,556.5 6,078.6	-21.4 -20.8 -26.0 -36.2	3,861.5 4,553.4 5,381.3 5,466.1	4,052.0 4,720.4 5,468.6 5,653.6	320.1 325.8 347.2 374.2
2009 Q1 Q2	13,110.5 13,248.6	14,763.2 14,820.6	-1,652.8 -1,572.0	142.6 145.7	160.6 163.0	-18.0 -17.3	3,837.7 3,958.1	3,237.8 3,318.5	3,638.4 3,859.5	6,015.7 6,300.3	-50.7 -57.9	5,289.4 5,107.3	5,509.8 5,201.8	395.7 381.5
	,	,	,		(	Changes to	outstanding	amounts	,	,		,	,	
2005 2006 2007 2008	2,209.7 1,545.5 1,522.9	2,070.3 1,845.7 1,756.0	139.3 -300.2 -233.1	27.1 18.1 16.9	25.4 21.6 19.5	1.7 -3.5 -2.6	522.1 362.6 419.4	209.0 285.1 401.3	842.5 484.6 259.5	1,012.3 892.2 606.5	16.0 0.6 -5.2	790.0 691.9 827.9	849.1 668.4 748.1	39.1 5.7 21.4
2009 Q1 Q2	-202.0 138.1	-186.0 57.3	-16.1 80.8	-0.4 -9.2 6.2	-8.5	-4.2 -0.7 3.6	93.2 120.5	20.7 80.7	-125.5 221.1	-62.9 284.6	-10.2 -14.5 -7.2	-176.8 -182.0	-143.8 -308.0	21.6
						Tr	ansactions							
2005 2006 2007 2008	1,358.3 1,728.3 1,940.9 480.6	1,320.7 1,719.1 1,939.7 644.5	37.6 9.1 1.2 -163.9	16.7 20.2 21.6 5.2	16.2 20.1 21.6 7.0	0.5 0.1 0.0 -1.8	358.4 417.6 481.2 326.5	152.4 257.4 408.3 137.5	416.2 519.8 436.7 -9.0	524.5 708.5 587.9 341.5	17.3 0.6 64.6 65.7	584.3 788.9 953.4 93.4	643.7 753.2 943.4 165.5	-18.0 1.3 5.1 3.9
2008 Q4 2009 Q1 Q2	-334.6 -204.1 -23.2	-293.1 -148.4 -13.0	-41.5 -55.8 -10.2	-14.1 -9.3 -1.0	-12.4 -6.8 -0.6	-1.8 -2.5 -0.5	46.8 100.1 92.8	-14.3 41.3 92.3	-166.1 -71.2 41.1	-13.4 58.7 139.2	13.3 5.3 -20.3	-229.2 -232.7 -139.2	-265.3 -248.4 -244.5	0.5 -5.7 2.4
2009 Apr. May June July Aug.	106.4 -124.2 -5.5 -35.3 26.7	122.5 -118.8 -16.7 -45.0 26.8	-16.1 -5.3 11.2 9.7 -0.2	· · · ·	• • •	· · ·	64.6 13.0 15.2 9.5 16.2	69.4 19.0 3.8 18.0 20.0	4.4 22.0 14.8 6.5 30.9	22.6 59.8 56.8 3.5 84.3	-8.9 -9.2 -2.3 -7.7 5.9	46.5 -152.2 -33.5 -46.7 -26.1	30.5 -197.7 -77.3 -66.6 -77.5	-0.1 2.2 0.4 3.0 -0.2
						Oth	her changes							
2005 2006 2007 2008	851.4 -182.7 -418.0 -1,075.0	749.6 126.6 -183.7 -851.1	101.7 -309.3 -234.3 -223.9	10.5 -2.1 -4.6 -11.6	9.2 1.5 -2.0 -9.2	1.2 -3.6 -2.6 -2.4	163.7 -55.0 -61.8 -154.9	56.5 27.7 -7.0 -51.2	426.3 -35.2 -177.2 -858.7	487.7 183.7 18.6 -819.5	-1.4 0.0 -69.8 -75.9	205.7 -97.0 -125.5 -8.6	205.4 -84.8 -195.3 19.6	57.1 4.4 16.3 23.1
					Other c	hanges due	e to exchang	ge rate chan	ges					
2005 2006 2007 2008	394.2 -343.3 -533.1 -43.6	245.0 -227.3 -293.0 64.7	149.2 -116.0 -240.1 -108.2	4.8 -4.0 -5.9 -0.5	3.0 -2.7 -3.3 0.7	1.8 -1.4 -2.7 -1.2	89.8 -72.1 -113.3 -17.3	5.7 -4.2 -5.9 -0.2	158.3 -151.7 -221.2 -1.5	101.4 -99.9 -107.5 47.4		129.2 -105.7 -185.0 -34.0	137.9 -123.2 -179.5 17.5	17.0 -13.9 -13.7 9.2
					Oti	her change:	s due to prie	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	r changes a	lue to other	adjustment	\$					
2005 2006 2007 2008	172.7 -128.0 32.7 -17.6	74.3 55.5 -15.4 186.3	98.3 -183.5 48.1 -203.9	2.1 -1.5 0.4 -0.2	0.9 0.6 -0.2 2.0	1.2 -2.1 0.5 -2.2	29.0 -28.3 5.0 18.0	10.0 -1.6 -13.6 87.4	69.0 -109.6 -31.0 -53.6	-3.1 18.6 13.9 96.8		76.5 8.7 59.5 25.4	67.4 38.4 -15.7 2.1	-1.8 1.2 -0.8 -7.3
					Gro	owth rates o	of outstandin	ng amounts						
2004 2005 2006 2007	10.6 15.2 16.1 15.7	8.8 13.4 14.8 14.4	-	•		-	7.8 15.2 15.0 15.3	4.2 6.8 10.5 14.9	12.8 13.1 13.6 10.0	10.7 12.1 13.7 9.8		12.0 18.5 20.5 21.0	9.5 19.5 18.7 20.0	-4.1 -5.9 0.3 1.6
2008 Q4 2009 Q1 Q2	3.4 -2.3 -3.1	4.3 -0.8 -1.7	- -				9.2 7.7 9.3	4.4 2.8 6.1	-0.5 -4.4 -6.1	5.4 3.8 3.8	-	1.7 -7.8 -8.9	3.1 -7.5 -11.5	1.1 -1.8 -1.2

Source: ECB. 1) Net financial derivatives are included in assets.



# 7.3 Financial account (EUR billions and annual

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

#### 2. Direct investment

			By resid	lent units a	broad			By non-resident units in the euro area							
	Total	Equ and rein	uity capital vested earr	nings	Other capital (mostly inter-company loans)			Total	E and re	quity capita invested ear	l nings	Other capital (mostly inter-company loans)			
		Total	MFIs	Non- MFIs	Total	MFIs	Non- MFIs		Total	into MFIs	into Non-MFIs	Total	to MFIs	to Non-MFIs	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
					Oustanding	amounts (in	ternational	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 Q1	3,837.7	2,988.9	253.9	2,735.1	848.7	10.6	838.1	3,237.8	2,427.6	78.7	2,348.9	810.1	16.8	793.4	
Q2	3,958.1	3,092.0	266.5	2,825.5	866.1	10.4	855.7	3,318.5	2,492.7	80.9	2,411.9	825.8	16.6	809.1	
						Tı	ansactions								
2007	481.2	373.0	25.5	347.4	108.2	-0.1	108.4	408.3	310.5	5.1	305.4	97.8	1.4	96.4	
2008	326.5	198.1	2.2	195.9	128.4	-0.2	128.6	137.5	91.3	-1.0	92.2	46.2	1.6	44.6	
2008 Q4	46.8	26.7	-1.6	28.3	20.1	-0.3	20.3	-14.3	20.3	0.1	20.1	-34.6	-0.2	-34.4	
2009 Q1	100.1	55.6	20.4	35.2	44.6	0.9	43.7	41.3	44.0	1.2	42.8	-2.7	0.1	-2.8	
Q2	92.8	75.4	9.5	65.9	17.4	0.6	16.8	92.3	71.0	1.3	69.7	21.2	0.4	20.8	
2009 Apr.	64.6	54.2	6.3	48.0	10.3	1.5	8.8	69.4	59.6	-0.9	60.5	9.8	0.1	9.7	
May	13.0	7.0	0.4	6.6	6.1	0.1	6.0	19.0	6.3	2.2	4.1	12.8	-0.6	13.4	
June	15.2	14.2	2.8	11.4	1.0	-1.1	2.0	3.8	5.1	0.0	5.1	-1.3	0.9	-2.2	
July	9.5	2.3	3.0	-0.7	7.3	-0.1	7.3	18.0	14.1	0.3	13.8	3.9	0.9	3.1	
Aug.	16.2	11.7	2.2	9.5	4.5	0.3	4.2	20.0	12.9	0.3	12.6	7.1	0.0	7.1	
0						Gi	rowth rates								
2006	15.0	14.8	19.5	14.4	16.2	-2.9	16.3	10.5	12.2	10.3	12.3	5.4	-1.2	5.5	
2007	15.3	14.6	11.3	14.9	18.5	-55.0	18.7	14.9	14.8	8.3	15.0	15.3	6.3	15.5	
2008 Q4	9.2	6.9	0.8	7.5	18.8	-1.6	19.1	4.4	3.8	-1.4	4.0	6.4	9.9	6.3	
2009 Q1	7.7	5.4	5.9	5.3	16.8	-20.9	17.3	2.8	4.1	-0.1	4.2	-0.8	9.8	-1.1	
Q2	9.3	7.9	7.8	7.9	14.5	5.7	14.6	6.1	7.4	4.6	7.5	2.1	4.9	2.1	

#### C34 B.o.p. net direct and portfolio investment (EUR billions)



Source: ECB.



### 7.3 Financial account (EUR billions and annual growth ra

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

### 3. Portfolio investment assets

	Total	otal Equity						Debt instruments									
								E	Bonds and	notes		Money market instruments					
		Total	Total MFIs Non-MFIs			Total	M	FIs	Non	-MFIs	Total	MFIs		Non-MFIs			
				Euro- system		General government			Euro- system		General government			Euro- system		General government	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	Outstanding amounts (international investment position)																
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 Q1 Q2	3,638.4 3,859.5	1,068.8 1,209.2	60.8 66.7	2.9 3.0	1,008.0 1,142.4	27.3 29.2	2,139.5 2,220.2	946.9 927.7	17.1 17.3	1,192.6 1,292.5	17.4 18.2	430.1 430.2	360.5 353.1	58.9 55.3	69.6 77.0	1.7 1.5	
	Transactions																
2007 2008	436.7 -9.0	64.2 -101.8	26.7 -37.9	0.0 0.6	37.5 -63.9	8.2 0.1	291.5 95.4	148.3 43.9	4.9 3.3	143.2 51.5	3.3 2.6	81.0 -2.5	63.4 26.8	26.3 15.1	17.6 -29.4	0.8 0.4	
2008 Q4 2009 Q1 Q2	-166.1 -71.2 41.1	-54.1 -38.1 9.4	-4.0 -5.7 -0.4	$0.4 \\ 0.0 \\ 0.0$	-50.0 -32.4 9.8	-1.4 0.1 0.3	-62.8 -56.1 11.7	-16.7 -49.1 -34.9	-1.1 -2.4 0.1	-46.1 -7.0 46.6	-0.4 -1.2 0.2	-49.3 23.0 20.1	-22.1 21.6 12.5	-5.1 -0.5 -1.8	-27.2 1.4 7.6	0.2 0.4 -0.3	
2009 Apr. May June	4.4 22.0 14.8 6.5	-5.1 2.0 12.5 6.4	-0.1 0.2 -0.5	-0.1 0.0 0.0	-5.1 1.8 13.1 5.3		7.1 7.3 -2.7	-17.6 -20.9 3.6 -10.6	0.5 -0.1 -0.3 0.7	24.7 28.2 -6.3		2.4 12.7 5.0 0.4	0.2 7.3 5.1	0.7 -1.0 -1.5 0.8	2.2 5.4 -0.1		
Aug.	30.9	4.4	1.2	0.0	3.2		21.2	12.0	-0.2	9.2		5.3	4.1	-3.0	1.0	· ·	
							Gro	wth rate	s								
2006 2007	13.6 10.0	9.2 3.3	19.7 22.2	1.3 -0.5	8.5 2.0	28.6 21.3	16.7 14.0	24.7 16.7	16.8 38.9	11.4 12.0	26.4 23.3	19.9 23.1	20.5 23.7	262.8 272.7	19.3 25.8	-15.8 277.4	
2008 Q4 2009 Q1 Q2	-0.5 -4.4 -6.1	-6.1 -7.9 -8.5	-29.7 -22.0 -15.5	24.6 18.8 14.9	-4.4 -7.0 -8.1	0.2 1.3 -0.9	4.3 -0.9 -4.0	4.5 -3.8 -10.4	20.4 14.4 -12.9	4.0 1.5 1.3	15.6 5.3 -3.1	-0.5 -10.5 -10.4	9.1 -2.3 -7.0	41.9 43.6 -18.6	-32.1 -38.8 -24.2	70.8 36.6 39.2	

### 4. Portfolio investment liabilities

	Total		Equity		Debt instruments									
						Bonds a	nd notes		N	loney market	instruments			
		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 amounts (international investment position)													
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 Q1 Q2	6,015.7 6,300.3	1,986.4 2,231.5	649.7 680.2	1,336.8 1,551.2	3,557.5 3,558.6	1,248.9 1,212.7	2,308.5 2,345.9	1,402.3 1,430.9	471.8 510.2	91.9 81.3	379.9 428.9	320.4 359.8		
	Transactions													
2007 2008	587.9 341.5	157.9 -124.8	24.3 93.4	133.6 -218.2	367.1 250.0	156.5 31.5	210.6 218.6	141.7 199.2	62.9 216.3	52.9 -2.5	10.0 218.9	20.4 185.7		
2008 Q4 2009 Q1 Q2	-13.4 58.7 139.2	-96.7 -51.3 49.2	15.1 -4.4 4.8	-111.8 -46.8 44.4	-23.7 90.4 38.4	-44.1 -11.0 -7.5	20.3 101.4 45.8	37.4 67.6 56.9	107.0 19.6 51.7	-11.7 -11.4 -0.1	118.7 31.0 51.8	109.7 51.6 51.0		
2009 Apr. May June July Aug.	22.6 59.8 56.8 3.5 84.3	-19.6 30.9 37.9 33.8 45.1	2.3 2.0 0.5 12.3 18.5	-21.9 28.9 37.4 21.6 26.6	0.5 29.0 8.8 -45.5 22.5	9.0 -0.4 -16.1 3.8 15.0	-8.4 29.4 24.9 -49.3 7.5	· · ·	41.6 0.0 10.1 15.2 16.7	-11.7 -0.8 12.4 -16.5 0.9	53.3 0.7 -2.2 31.7 15.8	- - - -		
					Gro	wth rates								
2006 2007	13.7 9.8	9.7 5.2	19.9 4.4	7.4 5.3	20.6 13.5	22.4 15.9	19.6 12.2	14.4 14.2	-7.9 31.2	25.1 54.5	-30.9 13.7	-34.1 33.2		
2008 Q4 2009 Q1 Q2	5.4 3.8 3.8	-5.4 -10.0 -7.0	16.0 2.1 -0.2	-10.5 -13.6 -9.0	8.3 9.0 4.6	2.8 1.1 -5.0	11.5 13.6 10.4	17.8 18.5 17.7	88.3 83.0 99.0	-2.0 -18.5 -17.9	202.0 208.0 230.7	246.5 250.6 297.0		

Source: ECB.
# **7.3 Financial account** (EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

# 5. Other investment assets

	Total		Eurosystem	L	(exclu	MFIs ding Euros	ystem)		Gene govern	eral iment			Other se	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 d	currency eposits
			deposits		-	deposits				10	Currency and deposits	10	12		Currency and deposits
	1	2	3	4	Outstanding	g amounts (i	/ nternationa	l investmer	9 nt position)	10	11	12	13	14	15
2007 2008	5,381.3 5,466.1	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	1,882.1 2,055.6	196.2 186.1	1,518.5 1,644.9	476.5 474.5
2009 Q1 Q2	5,289.4 5,107.3	21.7 27.9	21.4 27.7	0.3 0.3	3,094.0 2,972.6	3,037.2 2,936.8	56.8 35.9	108.3 103.1	12.2 12.1	46.9 42.1	16.3 11.2	2,065.4 2,003.7	185.5 189.3	1,647.2 1,575.9	458.1 437.7
						Т	ransactions								
2007 2008	953.4 93.4	22.0 -9.4	22.0 -9.4	$\begin{array}{c} 0.0\\ 0.0\end{array}$	546.8 -50.2	539.6 -65.5	7.2 15.3	-7.7 -6.6	-1.4 -1.1	-7.2 -6.8	-5.5 -5.8	392.2 159.6	14.1 2.5	335.3 97.6	55.3 -31.9
2008 Q4 2009 Q1 Q2	-229.2 -232.7 -139.2	-6.9 -8.2 7.0	-7.0 -8.2 7.0	0.0 0.0 0.0	-239.9 -236.4 -82.8	-250.2 -234.6 -69.2	10.3 -1.8 -13.6	0.1 6.5 -3.8	-0.3 0.0 0.0	1.0 5.8 -4.5	-1.9 9.1 -5.1	17.6 5.3 -59.6	-10.0 -3.5 5.7	27.5 8.7 -69.5	2.2 1.1 -19.2
2009 Apr. May June July Aug.	46.5 -152.2 -33.5 -46.7 -26.1	1.7 0.0 5.3 -2.2 -0.1		- - - - -	38.4 -68.2 -53.1 -35.4 -31.9			-9.8 4.0 2.0 -4.5 1.3			-10.1 3.8 1.3 -4.4 2.2	16.2 -88.0 12.2 -4.6 4.6			-0.4 -23.0 4.2 1.2 17.0
						G	rowth rates								
2006 2007	20.5 21.0	-37.6 157.3	-40.0 173.7	1.6 -1.7	21.9 18.6	22.1 18.8	10.7 11.4	-5.5 -6.4	-26.1 -9.8	-4.3 -12.4	53.4 -28.6	21.7 26.6	3.4 7.5	26.5 28.8	7.6 14.0
2008 Q4 2009 Q1 Q2	1.7 -7.8 -8.9	-26.2 -57.3 -28.7	-26.9 -58.7 -30.3	5.0 6.0 5.6	-1.5 -14.1 -13.8	-2.0 -14.6 -13.9	21.6 11.2 -16.5	-6.2 4.6 -4.9	-8.9 -6.7 -3.2	-14.0 9.2 -13.2	-44.4 39.1 -35.7	8.6 4.3 0.0	1.2 -3.1 -4.6	6.5 3.6 -1.0	-6.9 -11.3 -3.8

# 6. Other investment liabilities

	Total		Eurosyste	m	(exclu	MFIs iding Euros	system)		Gei gover	neral rnment			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	iounts (inter	national inv	vestment 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	$\begin{array}{c} 0.0 \\ 0.0 \end{array}$	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 Q1 Q2	5,509.8 5,201.8	404.2 313.5	400.9 308.4	3.3 5.1	3,702.6 3,579.1	3,649.0 3,542.7	53.6 36.4	58.7 56.6	$0.0 \\ 0.0$	55.5 53.3	3.2 3.2	1,344.3 1,252.6	180.5 182.6	1,043.6 953.7	120.2 116.3
							Trans	actions							
2007 2008	943.4 165.5	91.4 280.7	91.4 280.6	0.0 0.1	625.3 -181.0	620.5 -191.9	4.8 10.9	-1.0 9.5	0.0 0.0	-2.0 11.0	1.0 -1.5	227.8 56.3	10.0 10.5	218.9 46.1	-1.1 -0.3
2008 Q4 2009 Q1 Q2	-265.3 -248.4 -244.5	111.3 -82.2 -89.3	111.3 -85.1 -91.1	-0.1 2.9 1.8	-411.0 -112.7 -82.2	-418.0 -111.4 -70.9	7.0 -1.3 -11.4	9.0 -3.7 -2.6	0.0 0.0 0.0	8.6 -2.7 -3.1	0.4 -0.9 0.5	25.4 -49.9 -70.3	-5.1 -5.1 4.7	24.1 -40.2 -74.5	6.4 -4.6 -0.5
2009 Apr. May June July	30.5 -197.7 -77.3 -66.6 77.5	-28.9 -20.1 -40.2 -15.7			37.6 -67.5 -52.4 -30.8 43.3		•	-0.5 0.3 -2.4 -0.4				22.3 -110.4 17.8 -19.6 24.6			
	-11.5	-10.0	· ·	· ·	-+5.5	· ·	Grow	th rates	· ·	•		-24.0	· ·	· ·	
2006 2007	18.7 20.0	22.4 79.2	22.4 79.4	5.7 -6.9	16.4 18.0	16.4 18.2	13.3 9.5	3.5 -1.9	-24.1 27.4	4.2 -4.1	-3.2 20.7	27.7 20.7	9.8 6.8	32.5 26.2	17.9 0.5
2008 Q4 2009 Q1 Q2	3.1 -7.5 -11.5	141.3 82.4 19.1	141.4 81.3 17.3	20.8 439.8 1,123.2	-4.6 -13.5 -15.0	-4.9 -13.9 -15.1	17.3 10.3 -9.6	18.3 12.5 10.1	-20.1 -11.4 41.1	23.6 14.2 11.3	-27.9 -12.6 -6.0	4.3 -4.1 -7.7	6.6 -0.4 -3.3	4.5 -4.4 -9.2	-0.8 -7.7 -1.5

Source: ECB.



# **7.3 Financial account** (EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

7. Reserve assets

/ Reserve u	55665															
							Reserve	assets							Ν	<b>Jemo</b>
	Total	Monet	ary gold	Special drawing	Reserve position				Foreigr	ı exchang	e			Other claims	Other foreign	Predetermined short-term
		In EUR billions	In fine troy ounces	rights	in the IMF	Total	Currency deposit	and s		Seci	urities		Financial derivatives		currency assets	net drains on
			(millions)				With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments				foreign currency
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
					Ou	tstandir	ng amounts (in	ternation	al invest	ment posi	tion)					
2005 2006 2007	320.1 325.8 347.2	163.4 176.3 201.0	375.861 365.213 353.688	4.3 4.6 4.6	10.6 5.2 3.6	141.7 139.7 138.0	12.6 6.3 7.2	21.4 22.5 22.0	107.9 110.7 108.5	0.6 0.5 0.4	69.4 79.3 87.8	38.0 30.8 20.3	-0.2 0.3 0.3	$0.0 \\ 0.0 \\ 0.0$	25.6 24.6 44.3	-17.9 -21.5 -38.5
2008 Q4 2009 Q1 Q2	374.2 395.7 381.5	217.0 240.4 229.8	349.190 349.059 347.546	4.7 4.8 4.2	7.3 8.4 11.3	145.1 142.1 136.1	7.6 8.4 9.5	8.0 3.7 6.5	129.5 129.9 119.9	0.6 0.6 0.5	111.3 108.6 99.3	17.6 20.7 20.0	0.0 0.1 0.2	0.1 0.1 0.1	262.8 155.4 77.6	-245.7 -141.4 -65.6
2009 July Aug. Sep.	386.5 428.0 430.8	230.8 232.7 236.1	347.531 347.515 347.200	4.2 45.2 49.8	11.5 11.6 11.7	140.0 138.6 133.2	9.2 11.2 12.7	10.5 8.3 7.1	120.1 119.0 113.2		- - -		0.2 0.1 0.1	$\begin{array}{c} 0.0 \\ 0.0 \\ 0.0 \end{array}$	67.6 62.7 56.7	-60.0 -55.0 -42.4
							Tra	ansaction	s							
2006 2007 2008	1.3 5.1 3.9	-4.2 -3.2 -2.1	-	0.5 0.3 -0.1	-5.2 -0.9 3.8	10.2 8.8 2.3	-6.1 1.0 5.0	2.7 1.6 -15.8	13.7 6.2 11.8	0.0 0.0 0.1	19.4 14.5 15.8	-5.7 -8.3 -4.1	0.0 0.0 1.3	0.0 0.0 0.1	- - -	-
2008 Q4 2009 Q1 Q2	0.5 -5.7 2.4	-0.9 -0.9 0.1	- - -	0.0 0.0 -0.5	3.4 0.9 3.3	-2.0 -5.7 -0.5	0.5 2.2 -0.4	-10.7 -4.9 2.9	7.1 -3.7 -3.2	$0.0 \\ 0.0 \\ 0.0$	6.2 -6.6 -2.0	0.9 2.9 -1.2	1.1 0.6 0.2	0.1 0.0 0.0		- - -
							Gro	owth rate	s							
2005 2006 2007	-5.9 0.3 1.6	-2.8 -2.4 -1.7	-	4.4 11.6 7.3	-44.6 -49.0 -18.3	-4.1 7.7 6.3	-2.0 -48.4 14.9	-25.3 12.7 6.4	1.5 13.4 5.7	2.2 0.0 1.1	7.1 29.2 18.6	-7.9 -15.3 -27.6	-	-	-	- -
2008 Q4 2009 Q1 Q2	1.1 -1.8 -1.2	-1.0 -1.1 -0.9	-	-2.6 4.6 -6.6	105.3 135.1 174.2	1.7 -6.3 -6.5	67.7 142.1 106.0	-69.1 -90.5 -80.8	10.8 6.7 2.1	28.0 2.6 2.6	17.9 3.7 0.0	-20.6 25.5 15.5	-	-	-	-

Source: ECB.

7.3 Financial account (EUR billions; outstanding amounts at end of period, transactions during period)

# 8. Geographical breakdown

	Total	1	European	Union 27	7 (outside t	he euro ar	ea)	Canada	China	Japan	Switzer- land	United States	Offshore	Internat. organisa-	Other countries
		Total	Denmark	Sweden	United	Other EU	EU					States	centres	tions	countries
		rouu	D U IIIIIIII	5 euen	Kingdom	countries	institutions								
					8										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2008					C	Outstanding	amounts (in	nternation	al invest	ment pos	ition)				
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	10136	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	2,00110	849 1	50.3	81.5	569.1	70.3	77.8	61.6	23	61.7	12.6	705.4	238.2	28.4	219.9
Money market instruments	422.1	164.5	69	21.0	134.6	0.5	13	3.0	0.6	67.1	12.0	141.5	230.2	20.4	219.9
Other investment	187.5	01.1	51.1	28.0	110.4	108.8	168.6	62	16.0	10.2	131.2	286.3	22.4	1.8	349.6
Assets	5 466 1	2 / 10 7	100.0	20.0	2 0 2 0 2	201.8	-108.0	-0.2	34.0	100.2	276.5	-200.5 852.5	640.7	58.7	1 0/8 8
Concerci concercionet	101.0	2,419.7	0.7	0.1	2,020.2	201.0	13.4	25.7	1.0	109.4	270.5	2.1	1.4	40.1	20.1
MEL	2 200 5	1 721 1	82.0	50.4	1 410 1	167.0	9.7	16.0	1.0	70.0	164.5	419.0	2677	40.1	409.9
MIFIS Other exctore	3,309.3	672.5	05.9	24.6	1,419.1	107.9	1.9	10.8	14.5	79.0	104.5	410.9	271.7	10.2	490.0
Uner sectors	2,055.0	0/5.5	10.4	24.0	2 120 6	33.3	1.0	22.0	50.0	30.5	111.9	430.2	2/1./	0.5	510.9
	3,033.0	2,510.8	49.8	33.3	2,130.0	93.0	182.0	32.0	50.0	119.5	407.7	1,138.8	0.860	57.0	699.1
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	751.1	535.1	36.8	527.2
Other sectors	1,357.6	570.8	10.8	21.7	463.2	23.0	52.0	7.5	17.9	27.8	/8.6	380.8	103.2	2.5	168.7
2008 Q3 to 2009 Q2							Cumulated	l transacti	ons						
Direct investment	144.1	73.8	-0.2	8.6	50.9	14.4	0.0	-2.3	1.8	-4.7	-34.3	31.6	64.5	0.0	13.6
Abroad	337.2	132.7	1.8	23.7	98.1	9.2	0.0	6.8	2.3	0.7	-11.3	91.6	67.2	0.0	47.2
Equity/reinvested earnings	227.5	76.7	1.1	12.9	57.8	4.9	0.0	6.9	3.1	1.8	-5.7	62.7	48.0	0.0	34.0
Other capital	109.7	56.0	0.7	10.8	40.3	4.4	0.0	-0.2	-0.7	-1.1	-5.6	28.9	19.2	0.0	13.2
In the euro area	193.1	58.9	1.9	15.0	47.2	-5.2	0.0	9.0	0.5	5.4	23.0	60.0	2.8	0.0	33.5
Equity/reinvested earnings	176.1	50.7	1.0	12.7	35.0	2.0	0.0	9.9	0.2	2.5	12.9	63.9	12.7	0.0	23.2
Other capital	16.9	8.2	1.0	2.3	12.1	-7.2	0.0	-0.9	0.3	2.8	10.1	-3.9	-9.9	0.0	10.3
Portfolio investment assets	-265.6	9.1	4.4	12.3	-18.8	-6.9	18.2	14.9	2.7	-45.9	4.4	-107.6	-103.3	-1.1	-38.9
Equity	-128.4	-22.8	0.3	-0.7	-21.8	-0.5	0.0	7.4	3.7	-19.4	4.0	-41.5	-40.8	0.0	-19.0
Debt instruments	-137.2	31.9	4.1	13.0	3.0	-6.4	18.2	7.5	-1.0	-26.4	0.4	-66.1	-62.5	-1.1	-19.9
Bonds and notes	-90.8	46.7	3.7	10.8	24.6	-6.7	14.2	2.5	-0.5	-17.9	-0.1	-47.6	-55.4	-1.5	-17.0
Money market instruments	-46.4	-14.7	0.4	2.2	-21.6	0.2	4.0	5.0	-0.5	-8.5	0.4	-18.5	-7.1	0.4	-2.9
Other investment	183.2	-258.8	-29	-17.7	-268.7	46.6	-16.1	-5.4	-5.3	69.9	54.8	64.6	179.0	11.1	73.3
Assets	-499.0	-294.5	-17.1	-12.7	-305.5	39.4	14	0.7	-8.3	_4.4	-62.9	-140.9	34.6	-6.7	-16.4
General government		-274.5	-17.1	-12.7	-505.5	0.4	0.7	0.7	-0.5	-4.4	0.1	0.1	0.0	-0.7	-10.4
MFIs	-492.1	-280.8	-0.2	-0.1	_201.0	-0.4	0.7	0.0	_0.0	17	-58 1	_53.5	-18.4	-7.0	-0.9
Other sectors	-492.1	-200.0	-14.5	-11.0	-291.9	2.4	0.7	0.0	-9.9	6.1	-50.1	-55.5 97 5	52.0	-7.9	-05.5
Liphilities	-1.7	-7.9	-2.0	-1.0	-7.0	5.4	17.5	6.1	3.0	-0.1	-5.0	205.4	144.4	17.9	49./ 80.9
Concerct accomment	-002.2	-35.7	-14.3	5.0	-30.8	-7.2	17.5	0.1	-5.0	-/4.4	-11/.8	-205.4	-144.4	-17.8	-09.8
MEL	592.1	2.0	0.0	-0.1	10.0	0.0	1.4	0.0	0.0	-0.1	102.1	0.3	151.0	3.0	-0.2
MIF1S	-382.1	-22.5	-14.0	0.9	-18.2	-5.1	/.9	3.0	-3.2	-/0.4	-102.1	-95.5	-151.8	-20.6	-112.8
Other sectors	-105.1	-15.2	-0.2	-1.8	-19.2	-2.1	8.1	5.0	0.2	2.2	-15.6	-110.2	1.4	-0.2	25.5

Source: ECB.



External transactions and positions

			B.c	.p. items bal	ancing trans	sactions in the ex	xternal cour	iterpart of M3				Memo: Transactions
	Current and capital	Direct inv	estment	Po	ortfolio inves	tment	Other in	nvestment	Financial derivatives	Errors	Total	in the external
	accounts balance	By resident	By non- resident	Assets	Lia	bilities	Assets	Liabilities	denvauves	omissions	columns 1 to 10	counterpart of M3
		abroad (non-MFIs)	units moad [FIs]         units in the euro area         Non-MFIs         Equity <sup>2</sup> )         Debt instruments <sup>3</sup> )           2         3         4         5         6           91.6         261.8         -271.8         187.0         404.8           57.6         405.8         -199.2         112.5         349.0					Non-MFIs				
	1	2	3	4	5	6	7	8	9	10	11	12
2006	8.0	-391.6	261.8	-271.8	187.0	404.8	-256.5	229.9	-0.3	13.3	184.7	204.0
2007	22.8	-457.6	405.8	-199.2	112.5	349.0	-384.8	226.8	-64.8	-14.1	-3.6	-16.0
2008	-126.2	-325.0	135.1	42.1	-175.4	512.1	-153.7	66.4	-65.6	-31.7	-121.9	-162.6
2008 Q2	-38.6	-31.1	-11.9	-74.1	-40.7	142.0	-30.4	-21.7	-11.8	5.6	-112.7	-147.6
Q3	-31.2	-107.4	73.3	27.2	-86.9	170.5	-27.3	-8.1	-8.3	-25.3	-23.4	0.0
2000 Q4	-28.9	-48.9	-15.0	123.3	-93.7	142.8	-18.1	34.8	-13.2	-10.4	72.7	75.0
2009 Q1	-30.0	-70.0	41.1 01 0	-63.0	-46.2	115.4	-11.0	-33.3	-5.5	-19.1	-39.0	-/1.5
Q2	-17.4	-02.7	51.5	-05.5	40.9	110.1	05.4	-12.5	20.5	1.5	102.0	100.0
2008 Aug.	-14.6	-20.7	10.9	0.6	-13.0	27.1	16.3	-12.4	-10.2	3.0	-12.9	-10.7
Sep.	-9.9	-48.2	27.8	23.2	-37.8	104.8	-25.8	-12.7	3.2	-13.3	11.2	19.7
Oct.	-8.4	-5.9	0.3	/5.0	-90.7	90.7	-59.3	46.4	0.6	-4.2	44.5	57.5
Nov.	-13.4	-55.0	-10.4	31.0	1.9	59.9	12.2	20.0	-10.4	4.9	23.5	10.1
Dec.	-5.1	-0.0	5.0	51.9	-4.0	-7.0	20.9	-20.9	-3.4	-11.2	2.0	/.+
2009 Jan.	-23.8	-21.1	11.5	-3.3	-61.6	43.7	-3.7	-43.7	3.4	-8.0	-106.7	-107.2
Feb.	-4.9	-19.5	13.0	19.6	7.0	55.7	6.8 15.0	-17.3	-1.3	-0.3	50.8	46.0
Mar.	-7.9	-38.2	10.0	21.0	0.4	18.0	-15.0	/.0	-/.3	-4.9	-3.0	-10.5
Apr. May	-0.2	-50.8	10.7	-21.9	-20.7	26.3	-0.4 84.0	110.1	0.9	-7.9	29.0	34.3
June	-15.0	-12.5	20	-55.4	34.3	26.3	14.2	-110.1	2.2	7.5	58.2	40.4
Inly	10.7	-15.5	17.2	-17.3	33.6	-26.7	-14.2	-20.0	2.3	-1.0	66	12.7
Aug.	-3.5	-13.7	20.0	-13.5	46.1	34.9	-5.8	-24.2	-5.9	3.4	37.7	30.5
					12-mon	th cumulated tran	sactions					
2009 Aug.	-85.7	-279.0	183.0	89.6	-53.0	481.2	10.9	-148.6	6.8	-33.2	172.0	172.3

# 7.4 Monetary presentation of the balance of payments <sup>I</sup>) (EUR billions; transactions)

C35 Main b.o.p. transactions underlying the developments in MFI net external assets <sup>1)</sup>



Source: ECB.

Data refer to the changing composition of the euro area. For further information, see the General notes.
 Excluding money market fund shares/units.
 Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

# 7.5 Trade in goods

# 1. Values and volumes by product group<sup>1)</sup>

(seasonally adjusted, unless otherwise indicated)

	Total (	( <b>n.s.a.</b> )		E	xports (f.	<b>o.b.</b> )				Impo	rts (c.i.f.)		
				Tota	l		Memo:		Tota	1		Memo:	
	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	ions; annual p	ercentage changes	for colum	ns 1 and 2)				
2007 2008	11.0 3.7	8.4 8.4	1,507.6 1,560.4	739.5 765.0	326.4 334.9	401.3 410.9	1,282.9 1,302.5	1,492.2 1,607.4	913.8 1,021.3	234.4 231.3	323.2 331.5	1,020.0 1,019.9	227.5 295.2
2008 Q3	5.4	13.5	397.9	196.7	84.4	102.9	329.8	415.4	271.7	59.0	83.5	257.4	87.8
2009 Q1 Q2	-20.9 -23.5	-21.1 -27.3	310.9 308.2	149.4 149.4	65.6 63.4	86.4 84.6	258.9 253.4	320.4 304.7	181.4 169.4	49.4 47.5	78.6 76.1	241.9 212.7 201.6	35.6 41.3
2009 Mar. Apr.	-14.9 -26.3	-18.1 -27.6	104.7 103.5	50.8 50.8	22.2 21.1	28.9 28.4	88.1 86.2	106.3 103.4	59.4 57.4	16.8 16.2	26.2 25.5	71.1 68.3	12.6 13.0
May June July	-22.8 -21.3 -18.1	-27.7 -26.7 -29.0	102.0 102.7 107.6	48.9 49.7 52.0	21.2 21.1 22.6	28.0 28.3 29.4	84.3 82.8 89.7	100.5 100.8 101.6	55.5 56.5 57.6	15.7 15.6 15.4	25.2 25.4 25.7	67.2 66.1 66.6	13.7 14.7 15.7
Aug.	-23.0	-26.6	101.3			. 100	81.7	100.3		•	•	65.3	
				Volume in	fices (200	0 = 100; annua	al percentage char	iges for co	lumns 1 and 2)				
2007 2008	8.6 1.3	6.8 0.4	144.4 146.1	141.3 140.6	153.1 156.6	144.6 146.5	142.1 142.8	129.2 128.9	123.1 122.3	143.3 142.7	141.5 142.4	134.8 133.2	107.7 108.9
2008 Q3 Q4 2009 Q1 Q2	2.4 -7.4 -20.9 -22.4	1.9 -5.0 -15.2 -19.7	147.6 136.5 117.6 117.8	142.3 126.6 112.4 114.2	158.3 149.7 120.2 117.3	145.9 136.2 124.5 122.2	144.3 131.2 111.9 111.3	127.7 122.7 113.1 108.4	121.4 114.9 104.3 97.4	147.6 134.3 117.5 113.7	143.2 136.7 130.8 130.1	134.0 122.7 109.3 105.9	109.5 107.6 99.4 97.2
2009 Mar. Apr. May June July Aug	-14.7 -25.5 -21.9 -19.8 -16.1	-11.7 -21.0 -20.4 -17.5 -18.3	119.2 118.8 117.3 117.3 122.5	115.6 116.2 112.6 114.0 119.1	121.5 117.6 117.6 116.6 124.2	124.8 124.1 120.7 121.8 125.2	114.6 113.8 111.0 109.0 117.3	112.2 110.9 107.5 106.8 107.1	102.3 99.8 96.1 96.2 97.4	118.7 116.1 112.3 112.6 112.3	131.0 131.7 128.6 130.2 130.7	109.4 107.4 105.8 104.6 105.2	101.5 99.8 98.1 93.7 98.2

# 2. Prices<sup>2)</sup>

(annual percentage changes, unless otherwise indicated)

		Indus	trial producer	export p	rices (f.o.b.)	) <sup>3)</sup>				Industrial im	port pric	es (c.i.f.)		
	Total (index			Total			Memo: Manufac-	Total (index			Total			Memo: Manufac-
	2005 = 100)		Intermediate goods	Capital goods	Consumer goods	Energy	turing	2005 = 100)		Intermediate goods	Capital goods	Consumer goods	Energy	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
2007	101.8	0.4	2.7	-0.5	0.9	1.8	0.4	105.9	0.1	2.3	-3.5	0.5	1.6	-0.3
2008	103.5	1.6	1.5	-0.4	2.4	25.2	1.5	112.7	6.5	0.2	-3.4	2.4	28.2	0.8
2009 Q1	101.2	-1.3	-1.1	1.3	1.4	-32.3	-1.4	101.4	-8.4	-4.0	-0.3	2.7	-27.9	-2.4
Q2 Q3	100.9	-2.8 -4.0	-3.9 -6.1	0.7	0.9	-36.4 -34.4	-2.7 -3.8	101.5	-12.4	-0.5	0.1	1.4	-35.5	-4.2
2009 Apr.	100.8	-2.1	-2.9	1.8	1.1	-36.0	-2.1	100.5	-10.7	-5.4	0.5	2.3	-33.6	-3.2
May	100.8	-3.0	-3.9	1.4	0.9	-37.8	-2.9	101.1	-13.1	-6.8	0.1	1.3	-37.1	-4.5
June	101.1	-3.3	-4.9	1.4	0.7	-35.4	-3.2	102.8	-13.2	-7.3	-0.3	0.6	-34.9	-5.0
July	100.8	-4.0	-5.7	1.3	0.5	-39.1	-3.8	101.6	-15.0	-8.1	-0.6	0.6	-39.2	-5.4
Aug.	101.1	-3.6	-6.1	0.8	0.7	-30.5	-3.5	103.4	-12.2	-7.6	-1.0	-0.3	-31.4	-4.8
Sep.	100.6	-4.4	-6.6	-0.1	0.0	-33.4	-4.2							

Source: Eurostat.

1) Product groups according to the classification by Broad Economic Categories. Unlike the product groups shown in Table 2, intermediate and consumption product groups include

agricultural and energy products. Product groups according to the classification of 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 that shows a different composition compared with the data shown in columns 7 and 12 of Table 1. Data shown are affected to the shown in Table 1. Which are affected 2) 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 the latter 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. 3)



External transactions and positions

# 7.5 Trade in goods (EUR billions, unless

# 3. Geographical breakdown

	Total	European	Union 27 (	outside the	euro area)	Russia	Switzer- land	Turkey	United States		Asia		Africa	Latin America	Other
		Denmark	Sweden	United Kingdom	Other EU countries				States		China	Japan			
	1	2	2	4	5	6	7	0	0	10	11	12	12	14	15
	1	2	3	4	J	0	Exports (	o f.o.b.)	9	10	11	12	15	14	15
2007 2008	1,507.6 1,560.4	34.1 35.0	55.6 54.1	230.9 221.5	216.3 231.3	67.9 78.4	82.3 86.6	41.5 42.9	195.9 187.6	295.9 308.1	60.6 65.7	34.3 33.7	87.6 100.4	61.9 68.3	137.8 146.2
2008 Q1 Q2 Q3	397.4 398.0 397.9	8.8 9.1 9.1	14.0 14.5 14.1	57.4 58.3 56.2	58.8 60.3 60.1	19.7 20.2 20.8	21.4 22.2 21.8	12.4 11.4 10.8	49.6 47.4 46.6	79.0 77.7 76.9	17.2 16.8 16.0	8.8 8.5 8.2	24.0 24.8 26.7	16.2 16.7 17.9	36.0 35.5 37.1
2009 Q1 02	310.9 308.2	7.3	10.0	49.7	43.7 42.1	12.6	19.9 19.2	7.7	40.0	65.1 70.2	15.4 16.7	7.1	23.4	17.3 12.8 12.3	26.1
2009 Mar. Apr. May June July Aug.	104.7 103.5 102.0 102.7 107.6 101.3	2.4 2.3 2.1 2.0 2.3	3.4 3.2 3.1 3.3 3.6	14.2 14.1 13.8 14.4 15.0	14.7 14.2 14.0 13.9 14.8	4.1 4.2 3.8 4.1 4.2 3.8	6.5 6.4 6.4 6.4 6.5 6.4	2.7 2.7 2.8 2.8 3.0 3.0	14.0 12.7 12.4 12.4 12.5 11.5	22.6 23.1 23.4 23.7 24.0 23.6	5.6 5.6 5.5 5.7 5.6	2.2 2.4 2.3 2.4 2.6 2.2	7.7 7.6 7.5 7.5 7.6 7.4	4.2 4.2 4.1 4.0 5.2 4.3	8.0 8.7 8.6 8.3 8.9
						%	share of to	tal exports							
2008	100.0	2.2	3.5	14.2	14.8	5.0	5.6	2.7	12.0	19.8	4.2	2.2	6.4	4.4	9.4
							Imports (	c.i.f.)							
2007 2008	1,492.2 1,607.4	28.8 30.3	52.2 52.4	169.6 165.6	169.6 185.8	102.2 122.0	67.2 69.7	32.4 32.4	131.7 137.6	455.6 481.2	172.7 184.3	59.1 57.0	113.4 140.9	75.2 81.8	94.4 107.9
2008 Q1 Q2 Q3 Q4	404.9 410.8 415.4 376.3	7.4 7.9 7.8 7.2	13.8 13.7 13.4 11.6	43.8 42.8 42.0 36.9	46.3 47.7 48.0 43.7	30.6 32.3 34.3 24.8	16.8 17.5 17.9 17.4	8.6 8.5 8.2 7.1	34.7 33.7 35.4 33.7	122.0 121.5 124.0 113.6	44.7 45.1 48.0 46.5	14.8 14.6 14.1 13.5	34.9 37.3 37.9 30.7	20.4 20.2 21.3 19.9	25.6 27.5 25.1 29.7
2009 Q1 Q2	320.4 304.7	6.9 6.2	9.4 8.9	31.7 30.1	39.0 38.3	17.8 18.1	16.7 16.1	6.6 6.3	33.1 28.2	99.0 92.7	42.1 39.8	11.4 10.2	23.9 23.0	14.9 14.2	21.4 22.5
2009 Mar. Apr. May June July Aug	106.3 103.4 100.5 100.8 101.6 100.3	2.3 2.1 2.1 2.0 2.3	3.1 2.9 2.9 3.0 3.3	10.5 10.1 10.1 10.0 10.3	13.5 12.9 12.7 12.7 13.1	6.2 5.8 5.9 6.4 6.8 6.5	5.5 5.5 5.3 5.3 5.3 5.3	2.3 2.0 2.1 2.1 2.2 2.1	11.9 9.3 9.8 9.1 9.0 8 5	32.7 31.7 30.6 30.4 30.3 30.2	13.8 13.8 13.1 12.9 12.5 12.6	3.5 3.4 3.4 3.4 3.3 3.2	7.5 7.9 7.3 7.8 7.6 7.2	5.1 4.8 4.6 4.8 4.9 4.7	5.8 8.3 7.0 7.3 6.5
	10012	•	•			%	share of tot	al imports	015	2012	1210	512			•
2008	100.0	1.9	3.3	10.3	11.6	7.6	4.3 Rolon	2.0	8.6	29.9	11.5	3.5	8.7	5.1	6.7
2007 2008	15.4 -47.0	5.3 4.7	3.4 1.8	61.3 56.0	46.7 45.5	-34.2 -43.6	15.1 16.9	9.0 10.5	64.2 50.0	-159.7 -173.1	-112.1 -118.6	-24.8 -23.3	-25.8 -40.5	-13.4 -13.6	43.4 38.4
2008 Q1 Q2 Q3 Q4	-7.5 -12.8 -17.5 -9.2	1.5 1.2 1.2 0.8	0.3 0.8 0.7 0.0	13.5 15.5 14.2 12.7	12.5 12.5 12.1 8.5	-10.9 -12.2 -13.5 -7.0	4.6 4.6 4.0 3.8	3.8 2.8 2.6 1.3	14.9 13.7 11.2 10.2	-43.0 -43.8 -47.2 -39.1	-27.5 -28.3 -32.0 -30.8	-5.9 -6.1 -5.9 -5.4	-10.9 -12.5 -11.2 -5.9	-4.2 -3.5 -3.5 -2.4	10.4 8.1 11.9 7.9
2009 Q1 Q2	-9.5 3.6	0.5 0.1	0.6 0.7	10.7 12.2	4.6 3.8	-5.2 -6.0	3.3 3.1	1.1 2.1	6.9 9.3	-33.9 -22.5	-26.7 -23.0	-4.4 -3.1	-0.5 -0.4	-2.2 -1.9	4.6 3.0
2009 Mar. Apr. May June July Aug	-1.6 0.1 1.5 1.9 6.0 1.0	$\begin{array}{c} 0.1 \\ 0.1 \\ 0.0 \\ 0.0 \\ 0.0 \end{array}$	0.3 0.3 0.1 0.3 0.2	3.8 4.1 3.8 4.4 4.7	1.3 1.3 1.2 1.3 1.7	-2.0 -1.7 -2.1 -2.3 -2.6 -2.7	$1.0 \\ 0.9 \\ 1.0 \\ 1.2 \\ 1.2 \\ 1.0 \\ 1.0 \\ 1.1 \\ 1.0 $	0.4 0.7 0.6 0.9 0.9	2.2 3.4 2.7 3.3 3.5 2.9	-10.1 -8.5 -7.2 -6.7 -6.2 -6.6	-8.2 -8.2 -7.4 -7.4 -6.8 -7.0	-1.3 -1.1 -1.1 -0.9 -0.7 -1.0	0.2 -0.3 0.2 -0.3 0.0 0.2	-0.8 -0.6 -0.5 -0.8 0.2 -0.4	2.2 0.4 1.5 1.1 2.5

Aug. Source: Eurostat.





# **EXCHANGE RATES**

# 8.1 Effective exchange rates <sup>1</sup>) (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
	1	2	3	4	5	6	7	8
2006 2007 2008	103.7 107.9 113.0	105.0 109.0 113.6	103.3 107.2 110.3	102.4 105.8 110.4	105.2 109.7 116.8	100.7 103.8 109.2	110.1 114.3 120.0	103.8 107.2 111.1
2008 Q3 Q4 2009 Q1 Q2 Q3	114.1 109.1 111.9 113.2 114.3	114.4 109.6 112.2 113.4 114.2	110.6 105.8 107.2 107.8 108.8	111.5 106.7 109.3 110.4	118.3 115.4 121.5 127.6	110.0 105.7 109.3 110.1	120.8 116.7 120.1 121.1 122.4	111.6 107.7 110.4 111.2 112.0
2008 Oct. Nov. Dec.	107.9 107.1 112.4	108.3 107.5 112.9	104.7 103.8 108.7	- - -	-	- - -	115.4 114.5 120.3	106.4 105.6 111.0
2009 Jan. Feb.	111.9 110.4	112.3 110.7	107.5 105.7	-	- -	-	119.9 118.6	110.4 109.1
Mar. Apr. May	113.3 112.5 113.0	113.5 112.8 113.2	108.1 107.2 107.7	-	-	-	121.6 120.5 120.9	111.7 110.6 110.9
June July	114.0 113.8	114.2 113.7	108.4 108.0	-	-	-	122.0 121.9	112.0 111.5
Aug. Sep. Oct.	113.9 115.2 116.6	113.9 115.0 116.3	108.3 110.1 111.5	-	-	-	122.0 123.5 124.6	111.7 112.7 113.6
			% change versi	us previous month				
2009 Oct.	1.2	1.1	1.3	-	-	-	0.9	0.8
			% change vers	sus previous year				
2009 Oct.	8.1	7.4	6.5	-	-	-	8.0	6.8

# **C36 Effective exchange rates** (monthly averages: index 1999 Q1=100)







Source: ECB.1) For the definition of the trading partner groups and other information, please refer to the General notes.



8.2	Bilateral	exchan	ge rates

	Danish krone	Swedish krona	Pound sterling	US dollar	Japanese yen	Swiss franc	South Korean won	Hong Kong dollar	Singapore dollar	Canadian dollar	Norwegian krone	Australian dollar
	1	2	3	4	5	6	7	8	9	10	11	12
2006	7.4591	9.2544	0.68173	1.2556	146.02	1.5729	1,198.58	9.7545	1.9941	1.4237	8.0472	1.6668
2007	7.4506	9.2501	0.68434	1.3705	161.25	1.6427	1,272.99	10.6912	2.0636	1.4678	8.0165	1.6348
2008	7.4560	9.6152	0.79628	1.4708	152.45	1.5874	1,606.09	11.4541	2.0762	1.5594	8.2237	1.7416
2009 Q1	7.4514	10.9410	0.90878	1.3029	122.04	1.4977	1,847.59	10.1016	1.9709	1.6223	8.9472	1.9648
Q2	7.4471	10.7806	0.87883	1.3632	132.59	1.5138	1,747.10	10.5657	2.0050	1.5883	8.8431	1.7917
Q3	7.4442	10.4241	0.87161	1.4303	133.82	1.5195	1,772.14	11.0854	2.0570	1.5704	8.7397	1.7169
2009 Apr.	7.4491	10.8796	0.89756	1.3190	130.25	1.5147	1,760.14	10.2229	1.9823	1.6188	8.7867	1.8504
May	7.4468	10.5820	0.88445	1.3650	131.85	1.5118	1,710.18	10.5807	1.9939	1.5712	8.7943	1.7831
June	7.4457	10.8713	0.85670	1.4016	135.39	1.5148	1,768.80	10.8638	2.0357	1.5761	8.9388	1.7463
July	7.4458	10.8262	0.86092	1.4088	133.09	1.5202	1,778.43	10.9182	2.0421	1.5824	8.9494	1.7504
Aug.	7.4440	10.2210	0.86265	1.4268	135.31	1.5236	1,768.99	11.0587	2.0577	1.5522	8.6602	1.7081
Sep.	7.4428	10.1976	0.89135	1.4562	133.14	1.5148	1,768.58	11.2858	2.0720	1.5752	8.5964	1.6903
Oct.	7.4438	10.3102	0.91557	1.4816	133.91	1.5138	1,739.94	11.4828	2.0714	1.5619	8.3596	1.6341
					% char	ige versus	previous month					
2009 Oct.	0.0	1.1	2.7	1.7	0.6	-0.1	-1.6	1.7	0.0	-0.8	-2.8	-3.3
					% cha	nge versus	previous year					
2009 Oct.	-0.1	4.7	16.4	11.2	0.3	-0.4	-1.1	11.1	5.3	-0.2	-2.7	-15.5

	Czech koruna	Estonian kroon	Latvian lats	Lithuanian litas	Hungarian forint	Polish zloty	Bulgarian lev	New Roma- nian leu	Croatian kuna	New Turkish lira
	13	14	15	16	17	18	19	20	21	22
2006 2007 2008	28.342 27.766 24.946	15.6466 15.6466 15.6466	0.6962 0.7001 0.7027	3.4528 3.4528 3.4528	264.26 251.35 251.51	3.8959 3.7837 3.5121	1.9558 1.9558 1.9558	3.5258 3.3353 3.6826	7.3247 7.3376 7.2239	1.8090 1.7865 1.9064
2009 Q1 Q2 Q3	27.601 26.679 25.597	15.6466 15.6466 15.6466	0.7061 0.7065 0.7019	3.4528 3.4528 3.4528	294.19 285.71 271.35	4.4988 4.4523 4.1978	1.9558 1.9558 1.9558	4.2682 4.1963 4.2263	7.4116 7.3528 7.3232	2.1635 2.1410 2.1444
2009 Apr. May June July Aug. Sep. Oct.	26.774 26.731 26.545 25.793 25.646 25.346 25.861	$\begin{array}{c} 15.6466\\ 15.6466\\ 15.6466\\ 15.6466\\ 15.6466\\ 15.6466\\ 15.6466\\ 15.6466\end{array}$	0.7093 0.7092 0.7015 0.7006 0.7013 0.7039 0.7088	3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528 3.4528	295.26 281.93 280.46 272.06 270.05 271.84 268.49	4.4326 4.4103 4.5084 4.2965 4.1311 4.1584 4.2146	1.9558 1.9558 1.9558 1.9558 1.9558 1.9558 1.9558 1.9558	4.2041 4.1700 4.2131 4.2183 4.2183 4.2420 4.2871	7.4172 7.3515 7.2954 7.3307 7.3287 7.3102 7.2419	2.1277 2.1251 2.1675 2.1378 2.1236 2.1711 2.1823
				% chang	e versus previou	is month				
2009 Oct.	2.0	0.0	0.7	0.0	-1.2	1.4	0.0	1.1	-0.9	0.5
				% chan	ge versus previo	us year				

2009 Oct.		4.4 0	0.0	-0.1	0.0	3.2	17.8	0.0		14.4	1.1	11.3
	Brazilian real <sup>1)</sup> 23	Chinese yuan renminbi 24	Icelandic krona <sup>2)</sup> 25	Indian rupee <sup>3)</sup> 26	Indonesian rupiah 27	Malaysian ringgit 28	Mexican peso <sup>1)</sup> 29	New Zealand dollar 30	Philippine peso 31	Russian rouble 32	South African rand 33	Thai baht 34
2006 2007 2008	2.7333 2.6594 2.6737	10.0096 10.4178 10.2236	87.76 87.63 143.83	56.8435 56.4186 63.6143	11,512.37 12,528.33 14,165.16	4.6044 4.7076 4.8893	13.6936 14.9743 16.2911	1.9373 1.8627 2.0770	64.379 63.026 65.172	34.1117 35.0183 36.4207	8.5312 9.6596 12.0590	47.594 44.214 48.475
2009 Q1 Q2 Q3	3.0168 2.8245 2.6699	8.9066 9.3107 9.7702	- -	64.7948 66.3982 69.1909	15,174.96 14,334.53 14,285.93	4.7259 4.8340 5.0333	18.7267 18.1648 18.9695	2.4498 2.2565 2.1232	62.133 65.097 68.815	44.4165 43.7716 44.7703	12.9740 11.5242 11.1618	46.038 47.294 48.575
2009 Apr. May June July Aug. Sep. Oct.	2.9197 2.8232 2.7391 2.7221 2.6314 2.6520 2.5771	9.0110 9.3157 9.5786 9.6246 9.7485 9.9431 10.1152	- - - - - -	66.0471 66.1762 66.9191 68.2333 68.9570 70.4154 69.2160	14,552.65 14,137.45 14,315.40 14,241.51 14,270.78 14,346.84 14,057.25	4.7562 4.8057 4.9305 4.9963 5.0185 5.0862 5.0425	17.7645 17.9969 18.6813 18.8143 18.5571 19.5255 19.5856	2.3123 2.2663 2.1967 2.1873 2.1097 2.0691 2.0065	63.462 64.600 67.036 67.724 68.803 69.967 69.419	44.2135 43.5678 43.5553 44.3881 45.1972 44.7624 43.6188	11.8784 11.4475 11.2718 11.2007 11.3415 10.9495 11.0938	46.741 47.241 47.844 47.969 48.543 49.239 49.504
	% change versus previous month											

					0 .							
2009 Oct.	-2.8	1.7	-	-1.7	-2.0	-0.9	0.3	-3.0	-0.8	-2.6	1.3	0.5
% change versus previous year												
2009 Oct.	-11.5	11.1	-	7.2	5.8	7.5	16.5	-8.3	8.7	23.9	-14.2	7.9

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

### 1. Economic and financial developments

	Bulgaria	Czech Republic	Denmark	Estonia	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
	1	2	3	4	5 HICP	6	7	8	9	10	11
2007 2008	7.6 12.0	3.0 6.3	1.7 3.6	6.7 10.6	10.1 15.3	5.8 11.1	7.9 6.0	2.6 4.2	4.9 7.9	1.7 3.3	2.3 3.6
2009 Q1 Q2 Q3	5.1 3.1 0.8	1.5 1.0 -0.1	1.7 1.1 0.6	3.7 0.2 -0.9	9.0 4.4 1.2	8.4 4.9 2.4	2.7 3.6 4.9	3.6 4.3 4.3	6.8 6.1 5.0	2.1 1.7 1.7	3.0 2.1 1.5
2009 May June July Aug. Sep.	3.0 2.6 1.0 1.3 0.2	0.9 0.8 -0.1 0.0 -0.3	1.1 0.9 0.7 0.7 0.5	0.3 -0.5 -0.4 -0.7 -1.7	4.4 3.1 2.1 1.5 0.1	4.9 3.9 2.6 2.2 2.3	3.8 3.7 4.9 5.0 4.8	4.2 4.2 4.5 4.3 4.0	5.9 5.9 5.0 4.9 4.9	1.7 1.6 1.8 1.9 1.4	2.2 1.8 1.8 1.6 1.1
			Ger	neral governmer	nt deficit (-)/si	urplus (+) as a	% of GDP				
2006 2007 2008	3.0 0.1 1.8	-2.6 -0.7 -2.1	5.2 4.5 3.4	2.3 2.6 -2.7	-0.5 -0.3 -4.1	-0.4 -1.0 -3.2	-9.3 -5.0 -3.8	-3.6 -1.9 -3.6	-2.2 -2.5 -5.5	2.5 3.8 2.5	-2.7 -2.7 -5.0
				General gove	rnment gross	debt as a % of	GDP				
2006 2007 2008	22.7 18.2 14.1	29.4 29.0 30.0	31.3 26.8 33.5	4.5 3.8 4.6	10.7 9.0 19.5	18.0 16.9 15.6	65.6 65.9 72.9	47.7 45.0 47.2	12.4 12.6 13.6	45.9 40.5 38.0	43.2 44.2 52.0
			Long-ter	m government b	ond yield as a	a % per annum	, period average	e			
2009 Apr. May June July Aug.	7.24 7.08 7.30 7.56 7.77	5.25 5.06 5.45 5.41 5.09	3.50 3.62 3.76 3.74 3.60	- - -	11.15 11.09 12.75 12.75 12.81	14.50 14.50 14.50 14.50 14.50	10.63 10.01 10.15 8.81 8.40	6.19 6.31 6.34 6.19 6.08	9.77 8.32 11.26 11.46 11.46	3.18 3.57 3.62 3.37 3.45	3.16 3.41 3.53 3.55 3.45
Sep.	7.45	5.01	3.65	- month interest r	13.27	14.50	7.91	6.17	11.00	3.38	3.42
2009 Apr.	6.05	2.50	2.94	6.51	12.43	6.94	9.56	4.20	13.61	1.00	1.53
May June July Aug. Sep.	5.98 5.94 5.69 5.30 5.11	2.30 2.17 2.09 1.92 1.88	2.67 2.35 2.06 1.94 1.76	6.27 6.20 6.16 5.85 5.58	13.41 21.25 16.94 13.06 11.58	6.81 8.14 8.41 7.98 7.07	11.30 9.99 9.02 8.78	$\begin{array}{r} 4.52 \\ 4.60 \\ 4.26 \\ 4.16 \\ 4.18 \end{array}$	11.23 10.22 9.21 9.06 9.05	0.95 0.97 0.67 0.62 0.55	1.36 1.24 1.00 0.78 0.61
					Real GD	Р					
2007 2008	6.2 6.0	6.1 2.7	1.6 -1.2	7.2 -3.6	10.0 -4.6	9.8 2.8	1.2 0.6	6.8 5.0	6.2 7.1	2.6 -0.2	2.6 0.6
2009 Q1 Q2 Q3	-3.5 -4.9	-4.5 -5.5	-3.6 -7.0	-15.0 -16.1	-18.6 -17.4	-13.1 -19.7 -14.3	-5.6 -7.3	1.3 1.1	-6.2 -8.7	-6.5 -6.1	-5.0 -5.5 -5.2
2007	27.0	2.6	1.5	Current and capi	ital accounts b	balance as a %	of GDP	2.6	12.0	0.5	
2007 2008	-27.2 -24.6	-2.0	1.5 2.2	-10.8 -8.4	-20.4 -11.5	-12.8 -10.1	-6.1 -6.0	-3.0 -3.9	-12.9 -11.8	8.5 7.6	-2.5
2008 Q4 2009 Q1 Q2	-30.9 -17.2 -12.2	-5.2 4.5 -2.7	2.0 0.7 4.4	-3.5 0.8 6.3	-6.5 4.2 16.8	-3.4 4.7 2.4	-6.1 0.1 4.5	-4.6 2.6 -0.2	-8.3 -4.1 -5.6	5.5 7.6 8.6	-1.9 -1.0 -2.8
2007	14.2	2.9	4.2	17.3	Unit labour	costs 65	5.4	2.6		47	30
2008	16.2	5.0	7.1	14.1	21.1	9.3	4.5	6.4		2.6	2.5
2008 Q4 2009 Q1 Q2	17.5 16.1 14.2	5.2 5.8 4.9	9.1 6.2 9.9	12.2 10.0 3.4	17.7 8.2 -1.7	7.8 14.2 10.8		12.0 6.0 2.3		6.0 8.4 7.4	1.8 2.9
2007	69	53	3.8	dardised unempl	oyment rate a	as a % of labou	r force (s.a.) 7 4	9.6	6.4	61	53
2008	5.6	4.4	3.4	5.6	7.5	5.9	7.8	7.2	5.8	6.2	5.6
2009 Q1 Q2 Q3	6.0 6.3 7.2	5.5 6.3 6.9	4.7 5.9 6.1	11.0 13.3	13.2 16.4 18.7	11.0 13.8	9.2 9.7 9.6	7.7 8.0 8.1	6.2 6.4	7.4 8.1 8.6	7.0 7.7
2009 May June July Aug. Sep.	6.3 6.5 6.8 7.2 7.6	6.3 6.5 6.7 6.9 7.0	5.9 6.1 6.0 6.0 6.4		16.6 17.2 17.8 18.6 19.7	13.8 13.8 16.7	9.7 9.6 9.5 9.6 9.7	8.0 8.0 8.0 8.1 8.2	6.4 6.4	8.1 8.3 8.4 8.6 8.7	7.7 7.8 7.8

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 <sup>1)</sup>	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money <sup>2)</sup>	3-month interbank deposit rate <sup>3)</sup>	10-year zero coupon government bond yield <sup>3)</sup> end-of- period	Exchange rate <sup>4)</sup> as national currency per euro	Fiscal deficit (-)/ surplus (+) as a % of GDP	Gross public debt <sup>5)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
					United States						
2005 2006 2007 2008	3.4 3.2 2.9 3.8	2.3 2.8 2.3 1.0	3.1 2.7 2.1 0.4	4.2 2.7 1.6 -3.1	5.1 4.6 4.6 5.8	4.2 5.0 5.8 6.9	3.57 5.20 5.30 2.93	5.05 5.26 4.81 2.70	1.2441 1.2556 1.3705 1.4708	-3.3 -2.2 -2.8 -6.5	48.2 47.7 48.3 56.0
2008 Q3 Q4 2009 Q1 Q2 Q3	5.3 1.6 0.0 -1.2 -1.6	1.8 1.7 -0.1 -1.2	0.0 -1.9 -3.3 -3.8 -2.3	-3.9 -8.7 -13.9 -14.6 -10.8	6.1 6.9 8.1 9.3 9.6	6.1 8.3 9.4 8.6 7.6	2.91 2.77 1.24 0.84 0.41	4.61 2.70 2.96 3.95 3.61	1.5050 1.3180 1.3029 1.3632 1.4303	-6.4 -8.1 -9.9 -11.8	52.0 56.0 59.7 62.7
2009 June July Aug. Sep. Oct.	-1.4 -2.1 -1.5 -1.3	- - - -	- - - -	-14.8 -13.5 -11.6 -7.2	9.5 9.4 9.7 9.8	9.0 8.2 7.9 6.7	0.62 0.52 0.42 0.30 0.28	3.95 3.90 3.77 3.61 3.71	$\begin{array}{c} 1.4016 \\ 1.4088 \\ 1.4268 \\ 1.4562 \\ 1.4816 \end{array}$	- - - -	- - - -
					Japan						
2005 2006 2007 2008	-0.3 0.2 0.1 1.4	-2.1 -0.5 -1.1 1.7	1.9 2.0 2.3 -0.7	1.4 4.5 2.8 -3.4	4.4 4.1 3.8 4.0	1.8 1.0 1.6 2.1	0.06 0.30 0.79 0.93	1.66 1.85 1.70 1.21	136.85 146.02 161.25 152.45	-6.7 -1.6 -2.5	163.2 160.0 156.1
2008 Q3 Q4 2009 Q1 Q2 Q3	2.2 1.0 -0.1 -1.0 -2.2	1.3 4.3 4.9	-0.3 -4.5 -8.4 -7.2	-1.4 -14.6 -34.6 -27.9 -20.2	4.0 4.0 4.5 5.2	2.2 1.8 2.1 2.6 2.8	0.90 0.96 0.67 0.53 0.40	1.72 1.21 1.33 1.41 1.45	161.83 126.71 122.04 132.59 133.82	· · · · · · · · · · · · · · · · · · ·	
2009 June July Aug. Sep. Oct.	-1.8 -2.2 -2.2 -2.2 -2.2	- - - -	- - -	-23.6 -22.7 -19.0 -18.9	5.4 5.7 5.5	2.5 2.7 2.8 3.0	0.49 0.43 0.40 0.36 0.33	1.41 1.51 1.44 1.45 1.58	135.39 133.09 135.31 133.14 133.91	- - - -	- - - -

C38 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).

Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector. 1)

2) 3) Period averages; M2 for US, M2+CDs for Japan.

Percentages per annum. For further information on 3-month interbank deposit rate, see Section 4.6. For more information, see Section 8.2.

4) 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 Espa–a, 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 funds' 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  $L_t$  he level outstanding at the end of month t, the index  $I_t$  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.



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 ECBis 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 first meeting in the month of the Governing Council of the ECB. For this issue, the cut-off date was 4 November 2009.

Unless otherwise indicated, all data series including observations for 2009 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), the statistical series refer to the changing composition of the euro area. Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for 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. Historical data referring to the euro area before the entry of Slovakia are available on the ECB's website at: http://www.ecb.europa.eu/stats/ services/downloads/html/index.en.html.

The statistical series referring to the changing composition of the euro area are based on the euro area composition at the time to which the statistics relate. Thus, data prior to 2001 refer to the Euro 11, i.e. the following 11 EU Member States: Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Data from 2001 to 2006 refer to the Euro 12, i.e. the Euro 11 plus Greece. Data for 2007 refer to the Euro 13, i.e. the Euro 12 plus Slovenia. 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

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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 Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the monetary financial institutions sector<sup>2</sup>, as last amended by Regulation ECB/2003/10.<sup>3</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 end-of-quarter outstanding amounts for the balance sheet of euro area investment funds (other than money market funds). The balance sheet is aggregated, and so the liabilities include holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond

2 OJ L 356, 30.12.1998, p. 7.



<sup>3</sup> OJ L 250, 2.10.2003, p. 19.

funds, mixed funds, real estate funds and other funds) and by type of investor (general public funds and special investors' funds). Section 2.10 shows the aggregated balance sheet for each investment fund sector, with data broken down by investment policy and type of investor.

# **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 the EU Member States that had adopted the euro at the time to which the statistics relate (changing composition), with the exception of statistics on securities issues (Sections 4.1 to 4.4), which relate to the Euro 16 (i.e. the Euro 15 plus Slovakia) for the whole time series (fixed composition).

Statistics on securities other than shares and quoted shares (Sections 4.1 to 4.4) are produced by the ECB using data from the ESCB and the BIS. Section 4.5 presents MFI interest rates on euro-denominated deposits and loans by euro area residents. Statistics on money market interest rates, long-term government bond yields and stock market indices (Sections 4.6 to 4.8) are produced by the ECB using data from wire services.

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Sections 4.1, 4.2 and 4.3, and quoted shares, which are presented in Section 4.4. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as "long-term". Long-term debt securities issued by euro area residents are broken down further into fixed and variable rate issues. Fixed rate issues consist of issues where the coupon rate does not change during the life of the issues. Variable rate issues include all issues where the coupon is periodically re-fixed by reference to an independent interest rate or index. The statistics on debt securities are estimated to cover approximately 95% of total issues by euro area residents. The euro-denominated securities indicated in Sections 4.1, 4.2 and 4.3 also include items expressed in national denominations of the euro.

Section 4.1 shows securities other than shares, by original maturity, residency of the issuer and currency. The section presents outstanding amounts, gross issues and net issues of securities other than shares denominated in euro and securities other than shares issued by euro area residents in euro and in all currencies for total and long-term debt securities. Net issues differ from the changes in outstanding amounts owing to valuation changes, reclassifications and other adjustments. This section also presents seasonally adjusted statistics, including annualised sixmonth seasonally adjusted growth rates for total and long-term debt securities. The latter are calculated from the seasonally adjusted index of notional stocks, from which the seasonal effects have been removed. See the Technical Notes for details

Section 4.2 contains a sectoral breakdown of outstanding amounts, gross issues and net issues for issuers resident in the euro area in line with the ESA 95. The ECB is included in the Eurosystem.

The total outstanding amounts for total and long-term debt securities in column 1 of Table 1 in Section 4.2 corresponds to the data on outstanding amounts for total and long-term debt securities issued by euro area residents in column 7 of Section 4.1. The outstanding amounts for total and long-term debt securities issued by MFIs in column 2 of Table 1 in Section 4.2 are broadly comparable with data for debt securities issued, as shown on the liabilities side of the aggregated MFI balance sheet in column 8 of Table 2 in Section 2.1. The total net issues for total debt securities in column 1 of Table 2 in Section 4.2 correspond to the data on total net issues by euro area residents in column 9 of Section 4.1. The residual difference between long-term debt securities and total fixed and variable rate long-term debt securities in Table 1 in Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows non-seasonally and seasonally adjusted growth rates for debt securities

issued by euro area residents (broken down by maturity, type of instrument, sector of the issuer and currency), which are based on financial transactions that occur when an institutional unit incurs or redeems liabilities. The growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes that do not arise from transactions. The seasonally adjusted growth rates have been annualised for presentational purposes. See the Technical Notes for details.

Section 4.4, columns 1, 4, 6 and 8, show the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Section 3.4 (financial balance sheet, quoted shares).

Section 4.4, columns 3, 5, 7 and 9, show annual growth rates for quoted shares issued by euro area residents (broken down by the sector of the issuer), which are based on financial transactions that occur when an issuer issues or redeems shares for cash excluding investments in the issuers' own shares. The calculation of annual growth rates excludes reclassifications, revaluations and any other changes that do not arise from transactions.

Section 4.5 presents statistics on all the interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-àvis households and non-financial corporations resident in the euro area. Euro area MFI interest rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. The new MFI interest rate statistics replace the ten transitional statistical series on euro area retail interest rates that have been published in the Monthly Bulletin since January 1999. Section 4.6 presents money market interest rates for the euro area, the United States and Japan. For the euro area, a broad spectrum of money market interest rates is covered, ranging from interest rates on overnight deposits to those on twelve-month deposits. Before January 1999, synthetic euro area interest rates were calculated on the basis of national rates weighted by GDP. With the exception of the overnight rate 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 AAArated euro-denominated bonds issued by euro area central governments. The yield curves are estimated using the Svensson model.<sup>4</sup> Spreads between the ten-year rates and the three-month and two-year rates are also released. Additional yield curves (daily releases, including charts and tables) and the corresponding methodological information are available at http://www.ecb. europa.eu/stats/money/yc/html/index.en.html. Daily data may also be downloaded.

Section 4.8 shows stock market indices for the euro area, the United States and Japan.

# PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

Most of the data described in this section are produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro

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<sup>4</sup> Svensson, L. E., "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051, 1994.

area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. Statistics on hourly labour costs, GDP and expenditure components, value added by economic activity, industrial production, retail sales and passenger car registrations are 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>5</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>6</sup> has been applied in the production of short-term statistics. The breakdown by end-use of product for industrial producer prices and industrial production is the harmonised sub-division of industry excluding construction (NACE Revision 2, sections B to E) into Main Industrial Groupings (MIGs) as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007.7 Industrial producer prices reflect the ex-factory gate prices of producers. They include indirect taxes except VAT and other deductible taxes. Industrial

production reflects the value added of the industries concerned.

The two non-energy commodity price indices shown in Table 3 in Section 5.1 are compiled with the same commodity coverage, but using two different weighting schemes: one based on the respective commodity imports of the euro area (columns 2-4), and the other (columns 5-7) based on estimated euro area domestic demand, or "use", taking into account information on imports, exports and the domestic production of each commodity (ignoring, for the sake of simplicity, inventories, which are assumed to be relatively stable over the observed period). The import-weighted commodity price index is appropriate for analysing external developments, while the use-weighted index is suitable for the specific purpose of analysing international commodity price pressures on euro area inflation. The use-weighted commodity price indices are experimental data. For more details as regards the compilation of the ECB commodity price indices, see Box 1 in the December 2008 issue of the Monthly Bulletin.

The labour cost indices (Table 5 in Section 5.1) measure the changes in labour costs per hour worked in industry (including construction) and market services. Their methodology is laid down in Regulation (EC) No 450/2003 of the European Parliament and of the Council of 27 February 2003 concerning the labour cost index<sup>8</sup> and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003.9 A breakdown of hourly labour costs for the euro area is available by labour cost component (wages and salaries, and employers' social contributions plus employment-related taxes paid by the employer less subsidies received by the employer) and by economic activity. The ECB calculates the indicator of negotiated wages (memo item in Table 3 of Section 5.1) on the basis of non-harmonised, national-definition data.

- 5 OJ L 162, 5.6.1998, p. 1.
- 6 OJ L 393, 30.12.2006, p. 1.
- 7 OJ L 155, 15.6.2007, p. 3.
- 8 OJ L 69, 13.3.2003, p. 1.
- 9 OJ L 169, 8.7.2003, p. 37

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 (Table 1 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 2 in Section 5.3) conform to International Labour Organization guidelines. They refer to persons actively seeking work as a share of the labour force, using harmonised criteria and definitions. The labour force estimates underlying the unemployment rate are different from the sum of the employment and unemployment levels published in Section 5.3.

# **GOVERNMENT FINANCE**

Sections 6.1 to 6.5 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The annual euro area aggregates in Sections 6.1 to 6.3 are compiled by the ECB on the basis of harmonised data

provided by the NCBs, which are regularly updated. The deficit and debt data for the euro area countries may therefore differ from those used by the European Commission within the excessive deficit procedure. The quarterly euro area aggregates in Sections 6.4 and 6.5 are compiled by the ECB on the basis of Eurostat and national data.

Section 6.1 presents annual figures on general government revenue and expenditure on the basis of definitions laid down in Commission Regulation (EC) No 1500/2000 of 10 July 2000<sup>10</sup> amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include summary data for the individual euro area countries owing to their importance within the framework of the Stability and Growth Pact. The deficits/surpluses presented for the individual euro area countries correspond to excessive deficit procedure B.9, as defined by Council Regulation (EC) No 479/2009 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit - the deficit-debt adjustment is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002 on quarterly non-financial accounts for general government.<sup>11</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.

10 OJ L 172, 12.7.2000, p. 3.



<sup>11</sup> OJ L 179, 9.7.2002, p. 1.

### **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)12 and the amending ECB Guideline of 31 May 2007 (ECB/2007/3).13 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 8 in Section 7.3 present a breakdown of the euro area b.o.p. and i.i.p. vis-à-vis major partner countries, both individually and as a group, distinguishing between EU Member States outside the euro area and countries or areas outside the European Union. The breakdown also shows transactions and positions vis-à-vis EU institutions (which, with the exception of the ECB, are considered to be outside the euro area for statistical purposes, regardless of their physical location) and, for some purposes, offshore centres and international organisations. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives or international reserves. In addition, separate data are not provided for investment income payable to Brazil, mainland China, India or Russia. The geographical breakdown is described in the article entitled "Euro area balance of payments and international investment position vis-à-vis main counterparts" in the February 2005 issue of the Monthly Bulletin.

The data on the euro area b.o.p. financial account and i.i.p. in Section 7.3 are based on transactions and positions vis-à-vis non-residents of the euro area, regarding the euro area as a single economic entity (see also Box 9

12 OJ L 354, 30.11.2004, p. 34.

<sup>13</sup> OJ L 159, 20.6.2007, p. 48.

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.

Section 7.4 contains a monetary presentation of the euro area balance of payments, in which the balance of payments transactions mirror the transactions in the external counterpart of M3. In portfolio investment liabilities (columns 5 and 6), the transactions include sales and purchases of equity and debt securities issued by MFIs in the euro area, excluding shares of money market funds and debt securities with a maturity of up to two years. A methodological note on the monetary presentation of the euro area balance of payments is available in the "Statistics" section of the ECB's website. See also Box 1 in the June 2003 issue of the Monthly Bulletin.

Section 7.5 shows data on euro area external trade in goods. The source is Eurostat. 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 bilateral exchange rates for the euro against the currencies of the euro area's trading partners. A positive change denotes an appreciation of the euro. Weights are based on

trade in manufactured goods with those trading partners in the periods 1995-1997 and 1999-2001, and are calculated to account for third-market effects. The EER indices are the result of the indices based on 1995-1997 weights being linked with those based on 1999-2001 weights at the beginning 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 includes the EER-21 and the following countries: Algeria, Argentina, Brazil, Chile, Croatia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela. Real EERs are calculated using consumer price indices, producer price indices, gross domestic product deflators, unit labour costs in manufacturing and unit labour costs in the economy as a whole.

For more detailed information on the calculation of the EERs, see Box 8, entitled "The effective exchange rates of the euro following the recent euro area and EU enlargements", in the March 2007 issue of the Monthly Bulletin and 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. A reference rate for the Indian rupee vis-à-vis the euro was included for the first time in January 2009. Data prior to 1 January 2009 are to be regarded as indicative rates.

# **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. 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 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 AND 5 NOVEMBER 2009

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.





# DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE 2008

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## GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website (www.ecb.europa.eu/home/glossary/html/index.en.html).

**Autonomous liquidity factors:** liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

**Balance of payments (b.o.p.):** a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

**Bank lending survey (BLS):** a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

Borrowing requirement (general government): net incurrence of debt by the general government.

**Capital account:** a b.o.p. account that covers all capital transfers and acquisitions/disposals of non-produced, non-financial assets between residents and non-residents.

**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, deposit liabilities, debt securities issued and pension fund reserves of non-financial corporations (resulting from employers' direct pension commitments on behalf of their employees), valued at market value at the end of the period.

**Debt (general government):** the gross debt (deposits, loans and debt securities excluding financial derivatives) at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

**Debt security:** a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

**Debt-to-GDP ratio (general government):** the ratio of general government debt to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit.

**Deficit (general government):** the general government's net borrowing, i.e. the difference between total government revenue and total government expenditure.

**Deficit-debt adjustment (general government):** the difference between the general government deficit and the change in general government debt.

**Deficit ratio (general government):** the ratio of the general government deficit to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

**Deflation:** a decline in the general price level, e.g. in the consumer price index.

**Deposit facility:** a standing facility of the Eurosystem which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at an NCB.

**Direct investment:** cross-border investment for the purpose of obtaining a lasting interest in an enterprise resident in another economy (assumed, in practice, for ownership of at least 10% of the ordinary shares or voting power). Included are equity capital, reinvested earnings and other capital associated with inter-company operations. The direct investment account records net transactions/ positions in assets abroad by euro area residents (as "direct investment abroad") and net transactions/ positions in euro area assets by non-residents (as "direct investment in the euro area").

Effective exchange rates (EERs) of the euro (nominal/real): weighted averages of bilateral euro exchange rates against the currencies of the euro area's main trading partners. The nominal EER indices for 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 euro area trade and account for competition in third markets. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

**EONIA (euro overnight index average):** a measure of the effective interest rate prevailing in the euro interbank overnight market. It is calculated as a weighted average of the interest rates on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.

**Equities:** securities representing ownership of a stake in a corporation. They comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.



**ERM II (exchange rate mechanism II):** the exchange rate arrangement that provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

**EURIBOR (euro interbank offered rate):** the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

**Euro area:** the area formed by those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty establishing the European Community.

**European Commission surveys:** harmonised surveys of business and/or consumer sentiment conducted on behalf of the European Commission in each of the EU Member States. Such questionnaire-based surveys are addressed to managers in the manufacturing, construction, retail and services industries, as well as to consumers. From each monthly survey, composite indicators are calculated that summarise the replies to a number of different questions in a single indicator (confidence indicators).

**Eurosystem:** the central banking system made up of the ECB and the NCBs of those EU Member States that have already adopted the euro.

**Eurozone Purchasing Managers' Surveys:** surveys of business conditions in manufacturing and in services industries conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers' Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers' delivery times and stocks of purchases. The services sector survey asks questions on business activity, expectations of future business activity, the amount of business outstanding, incoming new business, employment, input prices and prices charged. The Eurozone Composite Index is calculated by combining the results from the manufacturing and services sector surveys.

**External trade in goods:** exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

**Financial account:** a b.o.p. account that covers 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.

**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 (SDRs) 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 operation:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a monthly standard tender and normally have a maturity of three months.

**M1:** a narrow monetary aggregate that comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

**M2:** an intermediate monetary aggregate that comprises M1 plus deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

**M3:** a broad monetary aggregate that comprises M2 plus marketable instruments, in particular repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

**Main refinancing operation:** a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

**Marginal lending facility:** a standing facility of the Eurosystem which counterparties may use to receive overnight credit from an NCB at a pre-specified interest rate against eligible assets.

**MFI credit to euro area residents:** MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

**MFI interest rates:** the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

**MFI longer-term financial liabilities:** deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

**MFI net external assets:** the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

**MFIs (monetary financial institutions):** financial institutions which together form the 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.

**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.

