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EUROPEAN CENTRAL BANK

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ABBREVIATIONS

COUNTRIES

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

OTHERS

BIS	Bank for International Settlements
b.o.p.	balance of payments
BPM5	IMF Balance of Payments Manual (5th edition)
CD	certificate of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
EER	effective exchange rate
EMI	European Monetary Institute
EMU	Economic and Monetary Union
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HWWI	Hamburg Institute of International Economics
ILO	International Labour Organization
IMF	International Monetary Fund
MFI	monetary financial institution
NACE	statistical classification of economic activities in the European Union
NCB	national central bank
OECD	Organisation for Economic Co-operation and Development
PPI	Producer Price Index
SITC Rev. 4	Standard International Trade Classification (revision 4)
ULCM	unit labour costs in manufacturing
ULCT	unit labour costs in the total economy

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

EDITORIAL

Based on its regular economic and monetary analyses, the Governing Council decided at its meeting on 6 May 2010 to leave the key ECB interest rates unchanged. The current rates remain appropriate. Taking into account all new information since its meeting on 8 April 2010, the Governing Council expects price developments to remain moderate over the policy-relevant horizon. Global inflationary pressures – driven mainly by price developments in commodity markets and in fast-growing economic regions of the world – are still being counteracted by low domestic price pressures. The latest information has also confirmed that the economic recovery in the euro area continued in the early months of 2010. The Governing Council expects the euro area economy to expand at a moderate pace in 2010, but growth patterns could be uneven in an environment of unusually high uncertainty. The outcome of the monetary analysis confirms that inflationary pressures over the medium term remain contained, as suggested by weak money and credit growth. Overall, the Governing Council expects price stability to be maintained over the medium term, thereby supporting the purchasing power of euro area households. Inflation expectations remain firmly anchored in line with the aim of keeping inflation rates below, but close to, 2% over the medium term. The firm anchoring of inflation expectations remains of the essence. Monetary policy will do all that is necessary to maintain price stability in the euro area over the medium term. Accordingly, the Governing Council will continue to monitor all developments over the period ahead very closely.

Turning to the economic analysis, euro area economic activity has been expanding since mid-2009, after a period of sharp decline. Notably, the economy has benefited from the ongoing recovery in the world economy, the significant macroeconomic stimulus provided and the measures adopted to restore the functioning of the banking system. Recent economic data – including positive survey indicators – support the view that the economic recovery in the euro area is continuing in 2010. While adverse weather conditions, in particular, dampened growth in the early part of the year, some strengthening appears to be taking place during the spring. Looking ahead, the Governing Council expects real GDP to expand at a moderate pace. The ongoing recovery at the global level, and its impact on the demand for euro area exports, should provide support to the euro area economy. At the same time, the financial crisis is expected to have a dampening effect on economic growth given the ongoing process of balance sheet adjustment in various sectors, the expectation of low capacity utilisation and weak labour market prospects.

The Governing Council continues to view the risks to this outlook as broadly balanced, in an environment of unusually high uncertainty. On the upside, the global economy and foreign trade may recover more strongly than projected and confidence may improve more than expected, with the result that the recovery becomes self-sustained. On the downside, concerns remain relating to renewed tensions in some financial market segments. In addition, a stronger or more protracted than expected 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 may also weigh on the downside.

With regard to price developments, euro area annual HICP inflation was 1.5% in April 2010, according to Eurostat's flash estimate, after 1.4% in March. This is somewhat higher than expected a few months ago and appears to be related, in particular, to upward pressure in energy prices. Looking ahead, global inflationary pressures may increase, driven mainly by price developments in commodity markets and in fast-growing economic regions of the world, while euro area domestic price pressures are still expected to remain contained. As a result, overall inflation rates are expected to be moderate over the policy-relevant horizon. Inflation expectations over the medium to longer

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

In the near term, given the developments in energy prices, risks to earlier projections for HICP inflation are tilted somewhat towards the upside, while risks to price stability over the medium term are viewed as still remaining broadly balanced. Upside risks over the medium term relate, in particular, to the evolution of commodity prices. Furthermore, increases in indirect taxation and administered prices may be greater than currently expected, owing to the need for fiscal consolidation in the coming years. At the same time, risks to domestic price and cost developments are contained. Overall, the Governing Council will monitor closely the future evolution of all available price indicators.

Turning to the monetary analysis, the annual growth rate of M3 remained slightly negative, at -0.1%, in March 2010. Together with the continued negative annual growth in loans to the private sector, which stood at -0.2% in March, the latest data further support the assessment that the underlying pace of monetary expansion is moderate and that the inflationary pressures over the medium term are contained. Shorter-term developments in M3 and loans have also remained muted.

The actual growth in M3 is seen as weaker than the underlying pace of monetary expansion, as the rather steep yield curve continues to foster the allocation of funds into longer-term deposits and securities outside M3. At the same time, the still narrow spreads between the interest rates paid on different M3 instruments imply low opportunity costs of allocating funds to overnight deposits rather than other M3 instruments. This is reflected in the continued marked difference between weak annual growth in M3 and strong annual growth in M1, which was 10.9% in March. However, with the current interest rate constellation already in place for some time, the latest data suggest that the large shifts in the allocation of funds are waning.

The annual growth of bank loans to the private sector remained negative in March, but this conceals a further positive monthly flow. It also conceals ongoing opposite developments at the sectoral level, with positive, increasing annual growth in loans to households on the one side, and negative annual growth in loans to non-financial corporations on the other side. While the lagged response of loans to non-financial corporations to economic activity is a normal feature of the business cycle, the data over the past few months point to a possible discontinuation of the earlier downward trend in annual loan growth.

The latest data also confirm that the reduction in the size of banks' overall balance sheets has not continued since the turn of the year. However, further adjustments cannot be ruled out and the challenge remains for banks to expand the availability of credit to the non-financial sector when demand picks up. To address this challenge, banks should turn to the market and use present funding conditions to strengthen further their capital bases.

To sum up, the current key ECB interest rates remain appropriate. Taking into account all new information since its meeting on 8 April 2010, the Governing Council expects price developments to remain moderate over the policy-relevant horizon. Global inflationary pressures – driven mainly by price developments in commodity markets and in fast-growing economic regions of the world – are still being counteracted by low domestic price pressures. The latest information has also confirmed that the economic recovery in the euro area continued in the early months of 2010. The Governing Council expects the euro area economy to expand at a moderate pace in 2010, but growth patterns could be uneven in an environment of unusually high uncertainty. A cross-check of the outcome of the economic analysis with that of the monetary analysis confirms that inflationary pressures over the medium term remain contained, as suggested by weak money and credit growth. Overall, the Governing Council expects price stability to

be maintained over the medium term, thereby supporting the purchasing power of euro area households. Inflation expectations remain firmly anchored in line with the aim of keeping inflation rates below, but close to, 2% over the medium term. The firm anchoring of inflation expectations remains of the essence. Monetary policy will do all that is necessary to maintain price stability in the euro area over the medium term. Accordingly, the Governing Council will continue to monitor all developments over the period ahead very closely.

As regards fiscal policies, the Governing Council calls for decisive actions by governments to achieve a lasting and credible consolidation of public finances. The latest information shows that the correction of the large fiscal imbalances will, in general, require a stepping-up of current efforts. Fiscal consolidation will need to exceed substantially the annual structural adjustment of 0.5% of GDP set as a minimum requirement by the Stability and Growth Pact. The longer the fiscal correction is postponed the greater the adjustment needs become and the higher the risk of reputational and confidence losses. Instead, the swift implementation of frontloaded and comprehensive consolidation plans, focusing on the expenditure side and combined with structural reforms, will strengthen public confidence in the capacity of governments to regain sustainability of public finances, reduce risk premia in interest rates and thus support sustainable growth over the medium term. In this context, the Governing Council welcomes the economic and financial adjustment programme which was approved by the Greek government following the successful conclusion of the negotiations with the European Commission, in liaison with the ECB, and the International Monetary Fund, with a view to safeguarding financial stability in the euro area as a whole.

For all euro area countries, structural reforms leading to higher growth and employment are crucial to support a sustainable recovery. In view of the recent rise in unemployment, tax and benefit systems that set effective incentives to work, improved training schemes and sufficient flexibility in labour contracts are required in order to avoid an increase in structural unemployment. At the same time, existing competitiveness problems, as well as domestic and external imbalances, need to be urgently addressed by the countries concerned. To that end, wage-bargaining institutions that allow wages to adjust appropriately to losses in competitiveness and the unemployment situation are indispensable. Likewise, measures that increase price flexibility and non-price competitiveness are essential. Finally, an appropriate restructuring of the banking sector should play an important role. Sound balance sheets, effective risk management and transparent, robust business models are key to strengthening banks' resilience to shocks and to ensuring adequate access to finance, thereby laying the foundations for sustainable growth and financial stability.

This issue of the Monthly Bulletin contains two articles. The first article provides an assessment of how the monetary policy transmission mechanism in the euro area has evolved since the introduction of the euro. The second article discusses the key underlying causes of the "Great Inflation" of the 1970s and identifies the main lessons for monetary policy. The following box outlines the measures taken by the Governing Council on 10 May 2010.

Box 1

ADDITIONAL MEASURES DECIDED BY THE GOVERNING COUNCIL

On 10 May 2010 the Governing Council decided on several measures to address the severe tensions observed in certain market segments which are hampering the monetary policy transmission mechanism and thereby the effective conduct of monetary policy oriented towards

price stability in the medium term. These measures are designed not to affect the monetary policy stance.

In particular, the Governing Council decided to conduct interventions in the euro area public and private debt securities markets, under a Securities Markets Programme, to ensure depth and liquidity in those market segments which are dysfunctional. The objective of this programme is to address the malfunctioning of securities markets and to restore an appropriate monetary policy transmission mechanism. The scope of the interventions will be determined by the Governing Council. In making this decision, the Governing Council has taken note of the statement by the euro area governments that they "will take all measures needed to meet [their] fiscal targets this year and in the years ahead in line with excessive deficit procedures" and of the precise additional commitments made by some euro area governments to accelerate fiscal consolidation and ensure the sustainability of their public finances. The impact of the above interventions will be sterilised by conducting specific operations to re-absorb the liquidity injected through the Securities Markets Programme.

In addition, the Governing Council decided to adopt a fixed rate tender procedure with full allotment in the regular three-month longer-term refinancing operations (LTROs) to be allotted on 26 May and on 30 June 2010. Moreover, a six-month LTRO with full allotment was conducted on 12 May 2010, at a rate fixed at the average minimum bid rate of the main refinancing operations over the life of the operation.

Finally, the Governing Council decided to reactivate, in coordination with other central banks, the temporary liquidity swap lines with the Federal Reserve System, and to resume US dollar liquidity-providing operations at terms of 7 and 84 days. These operations will take the form of repurchase operations against ECB-eligible collateral and will be carried out as fixed rate tenders with full allotment. The first such operation was carried out on 11 May 2010.

The Governing Council considers the above measures essential in order to ensure the effectiveness of the monetary policy transmission mechanism. In particular, the measures will help to mitigate the spillover of increased financial market volatility, liquidity risks and market dislocations in the access to finance in the economy.

The sterilisation of the interventions in the euro area public and private debt securities markets will ensure that the Securities Markets Programme does not affect prevailing levels of liquidity and money market rates. As such, the measures adopted do not affect the monetary policy stance.

ECONOMIC AND MONETARY DEVELOPMENTS

1 THE EXTERNAL ENVIRONMENT OF THE EURO AREA

The global economy has shown further signs of improvement. Global inflationary pressures have remained low as a result of substantial spare capacity, while they are picking up in some dynamic emerging market economies. Inflationary pressures from commodity prices have increased recently. In an environment of unusually high uncertainty, risks to the global economic outlook are seen to be broadly balanced.

1.1 DEVELOPMENTS IN THE WORLD ECONOMY

The global economy has shown further signs of improvement. The recovery remains supported by the monetary and fiscal policy stimuli and a prolonged inventory cycle. World trade has recovered as well, with a strong month-on-month increase in trade volumes in February.

Short-term indicators point to a further improvement in global economic conditions. The global composite Purchasing Managers' Index (PMI) rose for the eighth consecutive month in March, with business activity rising in both the manufacturing and the services sector (see Chart 1). The global manufacturing PMI increased further in April, driven by robust growth in production, which was mainly supported by a marked increase in new orders. At the same time, labour market indicators showed first signs of a stabilisation in overall employment.

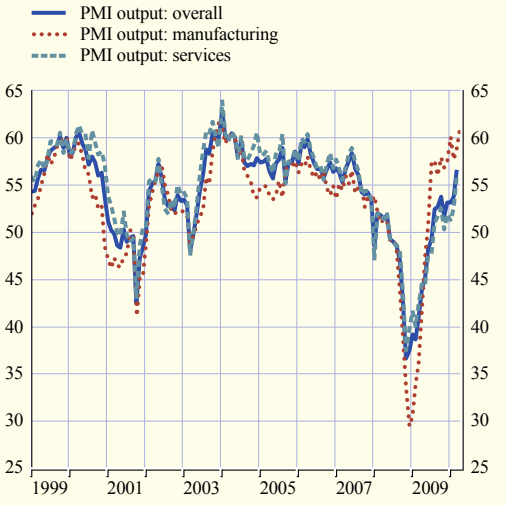
Global inflationary pressures have remained low as a result of substantial spare capacity, while they are picking up in some dynamic emerging market economies. Headline CPI inflation in the OECD countries was 2.1% in the year to March, up from 1.9% in the previous month (see Chart 2). This increase mainly reflected rising energy prices at the time. Excluding food and energy, annual CPI inflation remained broadly unchanged at 1.4% in March, close to the ten-year lows. While global PMI input prices point to a further increase in average costs, inflationary pressures remain rather limited overall, in line with a slow recovery in demand.

UNITED STATES

In the United States, the economy remains on a recovery path and real GDP continued to expand in the first quarter of 2010. According to the advance estimate by the Bureau of

Chart 1 Global PMI output

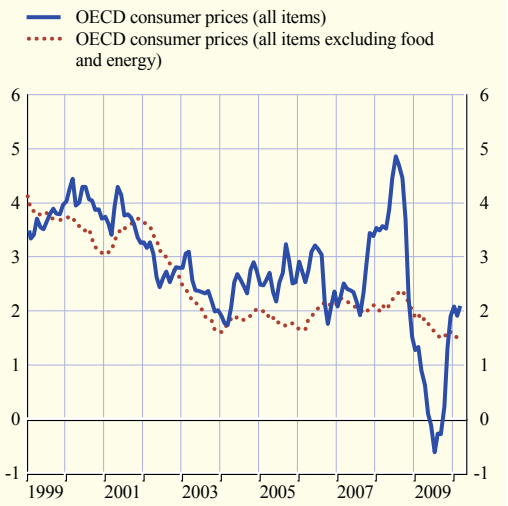
(diffusion index; seasonally adjusted; monthly data)



Source: Markit.

Chart 2 International price developments

(monthly data; annual percentage changes)



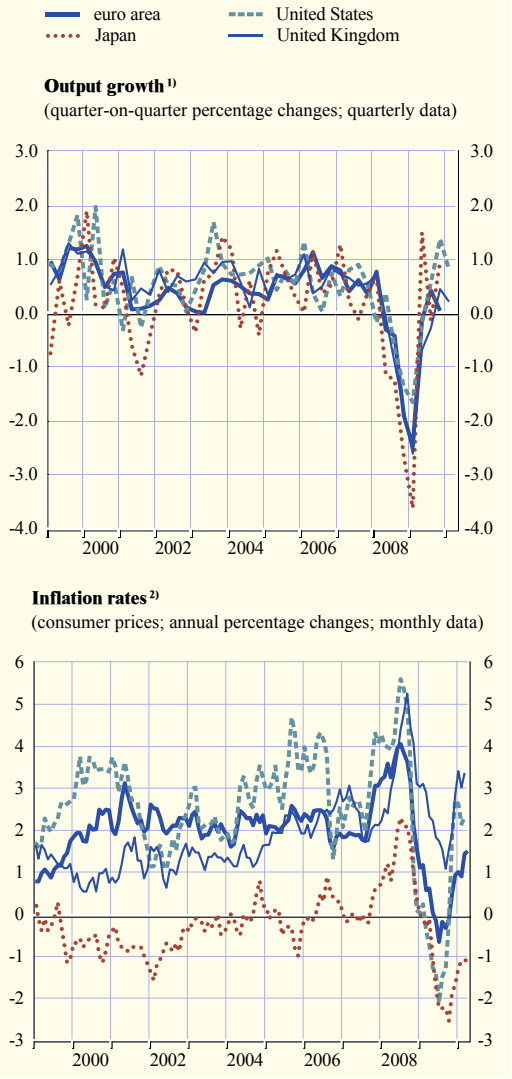
Source: OECD.

Economic Analysis, real GDP increased by 3.2% in annualised terms in the first quarter of 2010, following a 5.6% increase in the last quarter of 2009. Private inventories accounted for about half of the overall increase in GDP in the first quarter of 2010. GDP growth also partly reflected resilient consumer spending, which rose at an annualised rate of 3.6%. Business spending continued to recover, led by another marked rise in investment in equipment and software. On the other hand, growth was dampened by a marked decline in state and local government spending, a contraction in residential investment and a negative contribution from trade, as the increase in imports outpaced that in exports.

As regards price developments, annual CPI inflation picked up from 2.1% in February to 2.3% in March. The increase stemmed from a marked rise in the prices of fruit and vegetables. Core items, in particular the heavily-weighted "owner-occupier's rent equivalent" component, continued to decelerate. Excluding food and energy, annual inflation decreased to 1.1% in March from 1.3% in February, reflecting lower inflationary pressure amid substantial economic slack.

On 28 April 2010 the US Federal Open Market Committee (FOMC) decided to maintain its target range for the federal funds rate at 0% to 0.25%. The FOMC continues to hold the view that economic conditions, including low rates of resource utilisation, subdued inflationary trends and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period.

Chart 3 Main developments in major industrialised economies



Sources: National data, BIS, Eurostat and ECB calculations.
1) Eurostat data are used for the euro area and the United Kingdom; national data are used for the United States and Japan. GDP figures have been seasonally adjusted.
2) HICP for the euro area and the United Kingdom; CPI for the United States and Japan.

JAPAN

In Japan, economic conditions have continued to improve. The Bank of Japan's March 2010 Tankan survey of business sentiment showed a broad recovery in corporate sentiment, which marked its fourth successive quarter of recovery. It also confirmed that the recovery in exports has boosted activity in the manufacturing sector. In March export volumes increased by 44%, year on year, compared with 45.9% in February, and import volumes rose by 17%, year on year, in March, after 22.9% in the previous month.

Consumer price inflation remained negative in March. Overall annual CPI inflation stood at -1.1% in March. Excluding food and energy, annual CPI inflation remained negative at -1.1%, while CPI inflation excluding fresh food was also negative, at -1.2%.

At its meeting on 7 April 2010, the Bank of Japan decided to leave its target for the uncollateralised overnight call rate unchanged at 0.1%.

UNITED KINGDOM

In the United Kingdom, according to the preliminary estimate, real GDP increased by 0.2%, quarter on quarter, in the first quarter of 2010, compared with a 0.4% increase in the fourth quarter of 2009. Overall, recent activity indicators – including strong industrial production in the first quarter of 2010 – suggest that the gradual improvement in economic conditions continued in early 2010. House prices rose again in March, after several months of recovery had been interrupted by negative month-on-month growth in February. As regards credit flows, the slow recovery continued, although credit growth remained well below the levels observed in 2008. Looking ahead, activity is expected to continue its gradual recovery, supported by lagged effects of the depreciation of the pound sterling, fiscal and monetary stimuli and the improvement in global economic conditions. Annual CPI inflation continued to increase, from 3.0% in February to 3.4% in March. The expiration of the temporary VAT rate reduction and increases in energy prices played a key role in the pick-up of inflation in early 2010. In recent months, the Bank of England's Monetary Policy Committee has maintained the official Bank Rate paid on commercial bank reserves at 0.5%. The Committee also kept the stock of asset purchases financed through the issuance of central bank reserves at GBP 200 billion.

OTHER EUROPEAN COUNTRIES

Overall, economic conditions continued to improve in the other non-euro area EU countries. However, the development of quarter-on-quarter real GDP growth was fairly volatile in a number of countries. The uneven path of the recovery reflects the impact of the inventory cycle, ongoing fiscal adjustment in some countries and other temporary factors affecting growth.

In Sweden, real GDP decreased by 0.6%, quarter on quarter, in the fourth quarter of 2009, after having declined by 0.1% in the third quarter. In Denmark, output increased by 0.2% in the fourth quarter, after 0.4% in the third quarter of 2009. Short-term indicators point clearly towards a recovery in Sweden and Denmark, although business investment remained subdued in both countries. In March annual HICP inflation stood at 2.1% in Denmark and at 2.5% in Sweden.

In the largest central and eastern European EU Member States, growth patterns were fairly diverse in the fourth quarter of 2009. While the pace of decline in real GDP moderated further in Hungary, to -0.4% (from -1.2% in the third quarter), growth turned negative in Romania, to -1.5% (after 0.1% in the third quarter). In Poland and the Czech Republic, real GDP growth gained momentum in the fourth quarter of 2009, reaching 1.3% and 0.7% respectively. Overall, recent confidence indicators, as well as industrial production and trade data, point to improvements in activity in all four countries. At the same time, a number of factors – including rising unemployment and weak credit conditions (especially in Hungary and Romania) – signal a continued weakness of domestic demand. In March annual HICP inflation was at a fairly low level in the Czech Republic, namely at 0.4%. In Hungary, Poland and Romania, by contrast, annual HICP inflation remained at higher levels, at 5.7%, 2.9% and 4.2% respectively. On 26 April 2010 Magyar Nemzeti Bank decided to decrease the main policy rate by 25 basis points to a historical low of 5.25%.

EMERGING ASIA

Emerging Asia's export performance has continued to exceed market expectations. Together with strengthening domestic demand, buoyant export growth has led to a surge in regional output. High growth has, in turn, contributed to falling unemployment rates in some countries. In March, inflation for the region as a whole was slightly lower than in February – 3.4%, year on year, compared with 3.7% – and monetary policy was tightened further in several countries. In April the Reserve Bank of India raised its policy rates by 25 basis points for the second time this year.

In China, real GDP increased by 11.9%, year on year, in the first quarter of 2010, the strongest performance since the final quarter of 2007. Although the past fiscal and monetary stimuli have continued to support growth, private domestic demand – both investment and consumption – has increasingly become self-sustained. External demand has also recovered. Nominal exports increased by 24%, year on year, in March, mainly reflecting the revival of processing trade, while nominal imports surged by 66%, driven by strong demand for raw materials and higher import prices. As a result, China ran a trade deficit of USD 7.2 billion in March, the first monthly deficit in six years. Annual CPI inflation decreased to 2.4% in March, from 2.7% in January, on account of developments in food prices. However, nationwide property and land prices have picked up strongly in recent months, in an environment of still ample liquidity, loose credit conditions and negative real interest rates on deposits.

LATIN AMERICA

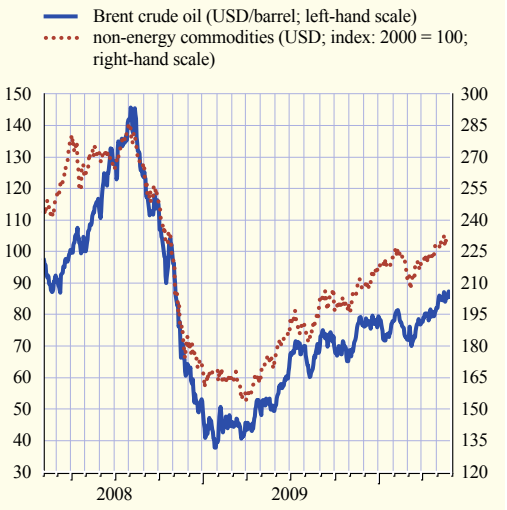
In Latin America, economic activity continued to recover rapidly in most countries, with industrial production in Argentina, Brazil and Mexico increasing by 11.0%, 18.4% and 4.5% respectively in February, compared in all cases with a year earlier. At the same time, inflationary pressures increased. More specifically, in March, headline consumer prices in Argentina stood 9.7% higher than a year earlier, while they were 4.8% higher in Brazil and 5.0% higher in Mexico. In April the Banco Central do Brasil increased its policy rate by 75 basis points to 9.5%.

1.2 COMMODITY MARKETS

After remaining broadly stable in March, oil prices increased in April and early May. Brent crude oil prices stood at USD 87.1 per barrel on 5 May, which is about 11% higher than at the beginning of the year (see Chart 4). Looking ahead, market participants are expecting higher oil prices in the medium term, with futures contracts for December 2012 trading at around USD 93.1 per barrel.

Looking at fundamentals, the International Energy Agency (IEA) has recently revised its oil demand projections upwards on the back of better-than-expected developments in non-OECD economies. Overall, oil demand in 2010 is expected to increase significantly, by 1.7 million barrels per day in comparison with last year, mainly driven by robust demand

Chart 4 Main developments in commodity prices



Sources: Bloomberg and HWWI.

in China and the Middle East. However, the upward pressure on oil prices from the demand side has been partly counterbalanced by ample spare capacity in the OPEC countries and by high OECD inventories. Furthermore, the non-OPEC supply has increased in the last few months, driven by higher output in Canada and Russia. The IEA also revised its projections for the non-OPEC oil supply upwards, to 52 million barrels per day in 2010.

The prices of non-energy commodities remained broadly stable in April. Metal prices decreased slightly, driven by, in particular, aluminium and copper prices. Meanwhile, food prices have recovered from recent declines on the back of rising wheat and soybean prices. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was about 2.5% higher towards the end of April than at the beginning of the year.

1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

Leading indicators continue to point towards economic expansion across the globe, albeit at a different pace across countries and regions. In February the composite leading indicators (CLIs) for the OECD economies pointed to continued expansion (see Chart 5), with the strongest signs of increasing economic activity being recorded in the United States and Japan. At the same time, tentative signals of a slower pace of economic expansion are emerging in China, where the CLI remained unchanged in the first two months of 2010. The CLIs for India, Brazil and Russia recorded moderate increases, driving the indicators close to, or above, their average long-term levels.

In an environment of unusually high uncertainty, the risks to global activity remain broadly balanced. On the upside, confidence may improve more than expected, with the result that the recovery becomes self-sustained. On the downside, concerns remain relating to renewed tensions in some financial market segments. In addition, a stronger or more protracted-than-expected negative feedback loop between the real economy and the financial sector, renewed increases in oil and other commodity prices, and the intensification of protectionist pressures, as well as the possibility of a disorderly correction of global imbalances, may weigh on the downside.

Chart 5 OECD composite leading indicators

(monthly data; amplitude-adjusted)

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

2 MONETARY AND FINANCIAL DEVELOPMENTS

2.1 MONEY AND MFI CREDIT

The annual growth rates of M3 and MFI loans to the private sector have both remained weak in recent months. At the same time, the annual growth of headline M3 continues to understate the pace of underlying monetary expansion, owing to the downward impact of the steep yield curve. Taken together, this supports the assessment that the pace of underlying monetary expansion remains moderate and medium-term inflationary pressures stemming from monetary developments are contained. The subdued growth observed in March 2010 for MFI loans to the private sector concealed a further rise in the annual growth rate of loans to households, while the annual growth rate of MFI loans to non-financial corporations remained unchanged in negative territory. Finally, data for March suggest that the contraction observed in the MFI balance sheet has come to a halt. In fact, the main assets of the MFI sector increased in the first quarter of this year.

THE BROAD MONETARY AGGREGATE M3

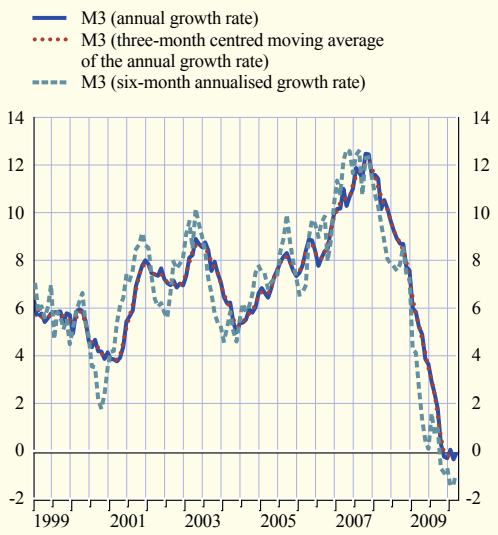
In March 2010 the annual growth rate of M3 continued to hover close to zero, standing at -0.1%, up from -0.3% in February (see Chart 6). The pattern of annual growth continued to reflect the impact of base effects, but monetary dynamics remained weak even when looking beyond these effects. This reflects the fact that economic activity remains moderate, as well as the downward impact of the steep yield curve, which encourages shifts out of M3 and into longer-term assets. However, given that the yield curve has had this shape since early 2009, these shifts out of M3 have been declining in recent months. Shifts also continued to take place within M3, as the spread between the interest rate on deposits with an agreed maturity of up to two years and the interest rate on overnight deposits remained low and thus continued to encourage the allocation of funds to the more liquid assets contained in M1. As a result, the annual growth rate of M1 remained elevated, and the difference between the contributions made by M1 and M3-M1 to the annual growth rate of M3 continued to increase.

On the counterpart side, the weak annual growth rate of M3 was mirrored by subdued credit growth, with the annual growth rate of MFI loans to the private sector standing at -0.2% in March, up from -0.4% in February. This concealed a further increase in the annual growth rate of lending to households, while the annual growth rate of loans to non-financial corporations remained unchanged, suggesting that its downward momentum has dissipated. This pattern of sectoral loan developments remains consistent with business cycle regularities.

As regards euro area credit institutions, data for the three months to March suggest that the shedding of assets in the banking sector has come to a halt in recent months, with net inflows being recorded for MFIs' main assets for the first time since the summer of 2009.

Chart 6 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

MAIN COMPONENTS OF M3

The weak annual growth rate of M3 continued to conceal differences in the levels of growth of the various components. The annual growth rate of M1 remained strongly positive, while those of both marketable instruments and short-term deposits other than overnight deposits remained strongly negative.

The annual growth rate of M1 stood at 10.9% in March, compared with 11.0% in February (see Table 1). The monthly flow of M1 was smaller than in the previous month, but remained positive as a result of a sizeable inflow for currency in circulation.

The annual growth rate of short-term deposits other than overnight deposits stood at -8.0% in March, having remained practically unchanged since January. Among its sub-components, a further outflow was recorded for deposits with an agreed maturity of up to two years (i.e. short-term time deposits), which was only partly offset by an inflow for deposits redeemable at notice of up to three months (i.e. short-term savings deposits). The low opportunity cost of holding overnight deposits and short-term savings deposits is providing incentives to move funds into these instruments from short-term time deposits. However, the importance of these substitution effects has waned over the last few months, as short-term interest rate spreads have remained stable for a considerable period of time.

The annual rate of growth of marketable instruments increased to -10.8% in March, up from -12.3% in February. This development was driven by significant inflows for repurchase agreements, which were related to interbank activity settled through central counterparties belonging to the OFI sector (i.e. non-monetary financial intermediaries other than insurance corporations and

Table 1 Summary table of monetary variables

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

	Outstanding amount as a percentage of M3 [1]	Annual growth rates					
		2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Feb.	2010 Mar.
M1	**49.0**	**8.1**	**12.2**	**12.3**	**11.3**	**11.0**	**10.9**
Currency in circulation	8.3	13.2	12.8	7.5	6.2	6.0	6.8
Overnight deposits	40.7	7.1	12.1	13.3	12.4	12.0	11.8
M2 – M1 (= other short-term deposits)	39.2	3.0	-3.1	-7.7	-8.2	-8.1	-8.0
Deposits with an agreed maturity of up to two years	19.5	-0.8	-13.2	-22.1	-22.8	-22.5	-22.0
Deposits redeemable at notice of up to three months	19.7	8.6	12.9	15.8	13.3	12.7	11.8
M2	**88.2**	**5.6**	**4.5**	**2.2**	**1.7**	**1.6**	**1.7**
M3 – M2 (= marketable instruments)	11.8	-2.5	-7.7	-11.4	-11.4	-12.3	-10.8
M3	**100.0**	**4.4**	**2.7**	**0.3**	**-0.2**	**-0.3**	**-0.1**
Credit to euro area residents		**5.0**	**3.7**	**3.0**	**1.8**	**1.6**	**1.7**
Credit to general government		9.5	12.1	14.3	10.1	9.3	9.9
Loans to general government		1.6	2.6	3.1	3.8	3.1	6.4
Credit to the private sector		4.1	2.1	0.8	0.1	0.0	-0.1
Loans to the private sector		2.1	0.4	-0.6	-0.4	-0.4	-0.2
Loans to the private sector adjusted for sales and securitisation		3.5	1.6	0.3	-0.2	-0.2	-0.1
Longer-term financial liabilities (excluding capital and reserves)		**4.3**	**4.8**	**6.8**	**5.0**	**4.5**	**4.3**

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

pension funds). In addition, the money-holding sector significantly increased its holdings of MFI debt securities, which could provide indications that institutional investors' appetite for this instrument is returning. By contrast, the monthly flow for the largest sub-component of marketable instruments – money market fund shares/units – remained negative, reflecting shifts into longer-term and potentially riskier assets.

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 – remained unchanged at 1.0% in March. This concealed a sizeable monthly increase in the M3 deposits held by non-financial corporations, while those held by households declined. As a result, the contribution of households declined further, while that of non-financial corporations continued to pick up. The contribution of households has been on a downward trend – consistent both with the fact that household income typically lags economic recoveries and with the strong incentives to shift funds into longer-term assets. The fact that the contribution of non-financial corporations has been moving in broadly the opposite direction since July 2009 reflects firms' rebuilding of liquidity buffers, a development which is typically seen early in an economic recovery.

MAIN COUNTERPARTS OF M3

Turning to the counterparts of M3, the annual growth rate of total MFI credit to euro area residents increased slightly to stand at 1.7% in March, up from 1.6% in February (see Table 1). This was the result of an increase in the annual growth rate of credit to general government, while the annual growth rate of credit to the private sector continued to hover around zero.

The annual growth rate of loans to the private sector (the largest component of credit to the private sector) increased for a second month to stand at -0.2% in March, up from -0.4% in February. When adjusted for the impact of securitisation, the annual growth rate was slightly higher (standing at -0.1%, broadly unchanged from February). However, the differential between the adjusted and unadjusted loan series has declined further over the past few months as the base effects stemming

Table 2 MFI loans to the private sector

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

	Outstanding amount as a percentage of the total[1]	Annual growth rates					
		2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Feb.	2010 Mar.
Non-financial corporations	**43.5**	**4.6**	**1.2**	**-1.4**	**-2.5**	**-2.4**	**-2.4**
Up to one year	25.1	-2.6	-8.6	-11.9	-12.2	-12.0	-10.6
Over one and up to five years	19.7	9.8	4.7	-0.2	-3.4	-3.5	-4.4
Over five years	55.2	6.8	5.4	3.9	3.2	3.1	2.7
Households[2]	**46.3**	**0.1**	**-0.1**	**0.3**	**1.7**	**1.8**	**2.2**
Consumer credit[3]	12.5	-0.4	-1.0	-1.0	-0.6	-0.8	-1.1
Lending for house purchase[3]	71.9	-0.2	-0.2	0.2	2.0	2.1	2.6
Other lending	15.7	1.5	1.3	1.9	2.4	2.7	2.9
Insurance corporations and pension funds	**0.8**	**-3.5**	**-6.1**	**-12.3**	**-8.7**	**-4.7**	**-10.8**
Other non-monetary financial intermediaries	**9.4**	**1.4**	**-0.0**	**0.2**	**0.2**	**-0.8**	**-0.1**

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.

from the large-scale derecognition at the beginning of 2009 have dropped out of the calculation of the annual growth rate. Furthermore, the last two quarters have seen negative flows for loan derecognition as a result of redemptions of previously derecognised loans.

The developments observed in March for loans to the private sector continued to conceal differences across the various sub-sectors. The annual growth rate of loans to non-financial corporations remained unchanged at -2.4% in March, concealing the fact that the monthly flow – which had in February been clearly positive for the first time since early 2009 – was negative again. From a maturity perspective, this negative flow was mainly the result of outflows for loans with longer maturities, while a slight inflow was recorded for loans with maturities of up to one year. At the same time, the annual growth rate of loans to households increased further to stand at 2.2% in March, up from 1.8% in February. Lending for house purchase continued to be the main contributor to this increase, while the contribution of consumer credit declined further. Box 2 briefly reviews the impact that real estate developments have on loans for house purchase and loans to the private sector in general.

Box 2

REAL ESTATE DEVELOPMENTS IN THE EURO AREA AND THEIR IMPACT ON LOANS TO THE PRIVATE SECTOR

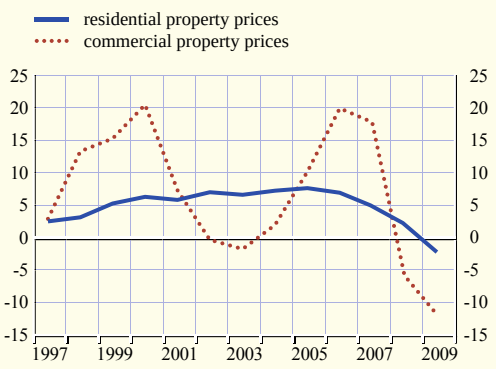
The impact that the housing market has had on the annual growth of loans to the private sector in recent years has been widely acknowledged. This impact is typically measured in terms of the contribution that loans to households for house purchase make to the annual growth of total loans to the private sector. This box adopts a wider perspective, looking at the contribution made by a broader-based estimate of all loans related to real estate. This perspective is particularly relevant in the context of the current unwinding of past buoyancy in the real estate sector, as reflected in the evolution of both residential and commercial property prices (see Chart A).[1]

A working definition of the impact of real estate on private sector loans

Developments in the real estate market have an impact on MFI loans to the private sector that goes beyond their impact on loans to households for house purchase. In particular, the levels of activity in the industries most closely related to the real estate market, such as construction and those described here as "real estate activities" (which include buying, selling, renting and intermediation), are typically correlated with real estate cycles. Consequently, an examination of the overall impact that real estate developments have on loans to the private sector requires the adoption

Chart A Commercial and residential property prices

(annual percentage changes)



Sources: Jones Lang LaSalle and ECB calculations.

1 See also Box 9, entitled "Recent housing market developments in the euro area", in this issue of the Monthly Bulletin.

of a wider perspective, considering not only loans to households for house purchase, but also loans to non-financial corporations engaged in broader real estate activities.

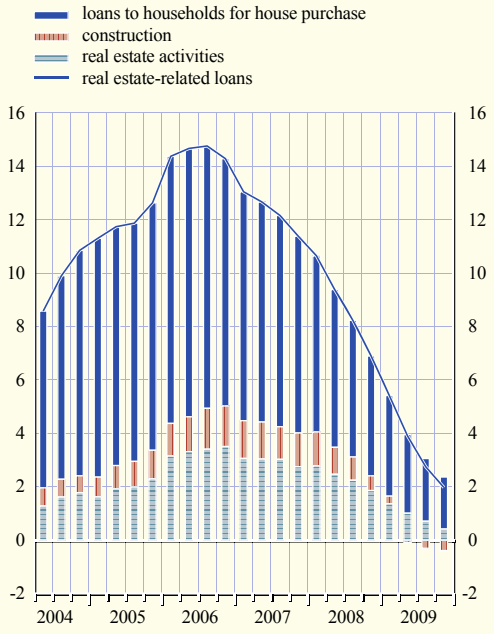
Estimates of loans to euro area non-financial corporations by industry are available on a quarterly basis.[2] These estimates include details of the construction industry and real estate activities. However, in those statistics real estate activities are combined with other activities which are not related to the real estate market (such as other business and administrative services), so this box uses an estimate, based on estimates of national data available for some euro area countries, to separate real estate activities from the rest.[3] As regards loans to the construction industry, the aggregate used includes not only loans related to building projects, but also loans related to civil engineering activities, as no further breakdown is possible on the basis of available data. In the remainder of this box, loans granted to the construction and real estate sectors, together with loans for house purchase, are used to approximate the overall contribution made by "real estate-related loans" to private sector loans.

The relative importance of loans for house purchase in real estate-related loans

Of the three components of real estate-related loans, loans to households for house purchase are the most important, accounting for more than two-thirds of growth from 2004 to 2009. Real estate activities account for most of the remaining third, while the contribution made by loans to non-financial corporations in the construction sector is relatively minor (see Chart B).[4,5] All components have contributed to the slowdown observed in recent years (with construction even making a negative contribution towards the end of the period under consideration). However, loans to households for house purchase have been the main driver in absolute terms.

Chart B Real estate-related loans and their components

(annual percentage changes; contributions in percentage points)



Source: ECB.
Note: "Real estate-related loans" comprise loans to households for house purchase and loans to non-financial corporations engaged in construction and real estate activities.

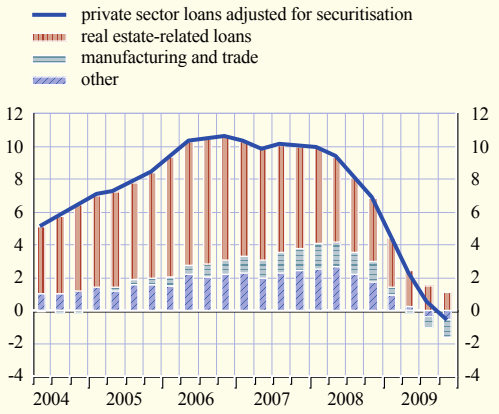
2 See Box 5, entitled "Developments in MFI loans to non-financial corporations by industry", in the December 2009 issue of the Monthly Bulletin.
3 Loans to non-financial corporations engaged in real estate activities are calculated as a percentage of total loans to non-financial corporations engaged in real estate, other business and administrative services for those euro area countries that provide country-level estimates solely for real estate activities. This is then used to estimate loans for real estate activities at the euro area level. This assumes that the share of loans to non-financial corporations engaged in real estate activities is the same in the other countries.
4 The distinction between construction and real estate activities is not straightforward, given that firms that are classified as belonging to the construction sector on the basis of their main activity could also be involved in real estate activities.
5 Shifts in loan dynamics can affect the relative contributions of those three components as a result of differences in the typical maturities of the three types of loan.

The relative importance of real estate-related loans in private sector loans

Chart C shows that real estate-related loans are the main contributor to loans to the private sector. In 2006, at the peak of the most recent loan cycle, these loans contributed around 7 percentage points to the overall growth rate of 10%. The remainder was accounted for by (i) loans to non-financial corporations engaged in manufacturing, trade and other activities, and (ii) loans to households for purposes other than house purchase, which contributed around 1 and 2 percentage points respectively. Since then, the contribution made by real estate-related loans has declined steadily, being responsible for approximately half of the overall decline in the annual growth rate of loans to the private sector. However, in more recent quarters, at least, the strength of the overall deceleration can be explained mainly by the contraction in loans to non-financial corporations engaged in manufacturing and trade. Loan flows to non-financial corporations engaged in these relatively cyclical activities declined dramatically following the intensification of the financial crisis at the end of 2008 and were negative for most of 2009.

Chart C Loans to the private sector and the contribution made by real estate-related loans

(annual percentage changes; contributions in percentage points)



Sources: ECB and ECB calculations.
Notes: "Real estate-related loans" comprise loans to households for house purchase and loans to non-financial corporations engaged in construction and real estate activities. "Manufacturing and trade" comprises loans to non-financial corporations engaged in: manufacturing; the repair and installation of machinery and equipment; and wholesale and retail trade. "Other" comprises loans to non-financial corporations engaged in other activities and loans to households for purposes other than house purchase.

The contribution made by real estate-related loans conceals strong differences across countries

The data on real estate-related loans at the euro area level conceal significant heterogeneity at the country level – in terms of both the individual countries' contributions and their evolution over time – as a result of considerable differences in the housing market developments of the various countries. Indeed, some countries accounting for a relatively small share of euro area GDP accounted for a disproportionately large share of the growth observed for real estate-related loans as of 2004, before experiencing stronger unwinding later on. Meanwhile, others accounting for a relatively large share of GDP experienced more modest developments throughout the period under consideration. To illustrate these patterns, euro area countries have been divided up on the basis of the growth rates of real estate-related loans in 2006, resulting in three groups (i.e. countries exhibiting strong, moderate and weak growth) of similar sizes in terms of their share of overall outstanding amounts.[6] In 2006, the strong growth group contributed around 9 percentage points to the overall growth rate of 15%, with the moderate and weak growth

6 2006 has been chosen as the reference year on the grounds that it represented the peak of the most recent cycle in real estate-related loans. The strong growth group comprises Ireland, Spain, Greece, the Netherlands and Slovenia; the weak growth group comprises Germany, Austria and Portugal; and the remaining countries make up the moderate growth group. Estimates of real estate-related loans for individual euro area countries are subject to greater uncertainty and are not published by the ECB.

groups contributing around 5 and 1 percentage points respectively. The contribution of the strong growth group has declined markedly ever since (standing close to zero in the fourth quarter of 2009), accounting for more than half of the reduction observed in the annual growth rate of real estate-related loans (see Chart D). The contributions of the moderate and weak growth groups have also declined (albeit to a much lesser extent), falling to around 2 and 0.5 percentage points respectively. In fact, these two groups have underpinned the growth observed for real estate-related loans in the last few quarters.

Overall, this box has shown that, while the impact of real estate activity on private sector loan growth comprises more than just the contribution of loans for house purchase, such loans account for the largest share of real estate-related loans. The moderate recovery currently being observed for loans for house purchase should thus be supportive of the overall growth of loans to the private sector, especially if it were to trigger or coincide with a recovery in the growth of loans to non-financial corporations engaged in construction and real estate activities.

Chart D Cross-country heterogeneity in real estate-related loans

(annual percentage changes; contributions in percentage points)

Sources: ECB and ECB calculations.
Notes: "Real estate-related loans" comprise loans to households for house purchase and loans to non-financial corporations engaged in construction and real estate activities. Countries are allocated to the strong, moderate and weak growth groups on the basis of the growth rates recorded in 2006 at the country level. The three groups had similar shares of outstanding amounts in that year (each accounting for around one-third).

The annual growth rate of loans to households has edged up further over the past few months, having bottomed out in the third quarter of 2009, while that of loans to non-financial corporations appears to have stabilised since the beginning of 2010, albeit at a negative level (see Table 2). Overall, these divergent patterns in sectoral loan developments are consistent with historical regularities: growth in loans to households tends to pick up early in the economic cycle, while growth in loans to non-financial corporations typically lags improvements in economic activity. For details of developments in euro area banks' credit standards and loan demand, see Box 3.

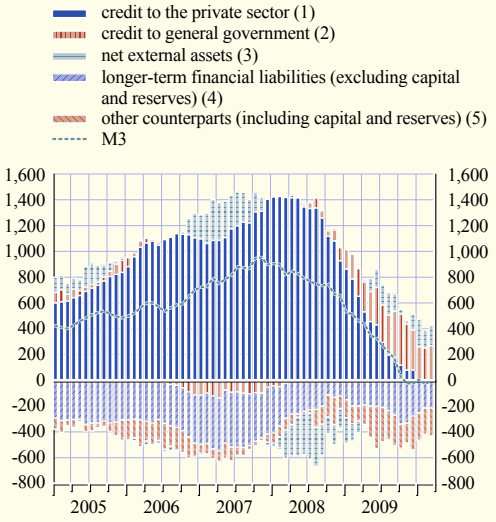
Among the other counterparts of M3, the annual growth rate of MFI longer-term financial liabilities (excluding capital and reserves) declined further to stand at 4.3% in March, down from 4.5% in February. This decline was primarily the result of moderate monthly outflows for longer-term deposits, while a sizeable inflow was recorded for longer-term securities. From a sectoral perspective, credit institutions continued to obtain long-term funding from households in the form of long-term deposits, reflecting the fact that these instruments have remained much better remunerated than shorter-term deposits. The annual growth rate of capital and reserves rose to 8.8% in March, up from 7.7% in February.

Finally, the annual inflow for MFIs' net external asset position was €157 billion in March, up from €137 billion in February (see Chart 7). A monthly net inflow of €19 billion was recorded in March, following a monthly net outflow of €30 billion in the previous month. Looking at the gross positions, the annual flows of external assets and liabilities remained negative. However, the negative flow for liabilities was larger than that seen for assets.

To sum up, the fact that the annual growth rates of M3 and loans to the private sector have both declined over a protracted period of time and have both remained weak in recent months supports the assessment that the pace of underlying monetary expansion is moderate and inflationary pressures stemming from monetary developments are contained. In this respect, it should be noted that the strong downward impact of the steep yield curve is depressing developments in headline M3, which therefore understates the pace of underlying monetary growth.

Chart 7 Counterparts of M3

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



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

Box 3

THE RESULTS OF THE APRIL 2010 BANK LENDING SURVEY FOR THE EURO AREA

This box describes the main results of the April 2010 bank lending survey (BLS) for the euro area, which was conducted by the Eurosystem between 15 March and 1 April 2010.[1] Overall, with respect to loans to enterprises, the survey results point to an unchanged net tightening of credit standards. The net tightening remained broadly unchanged also for consumer credit and other lending to households. By contrast, there was some increase in the net tightening of credit standards on loans to households for house purchase in the first quarter of 2010.

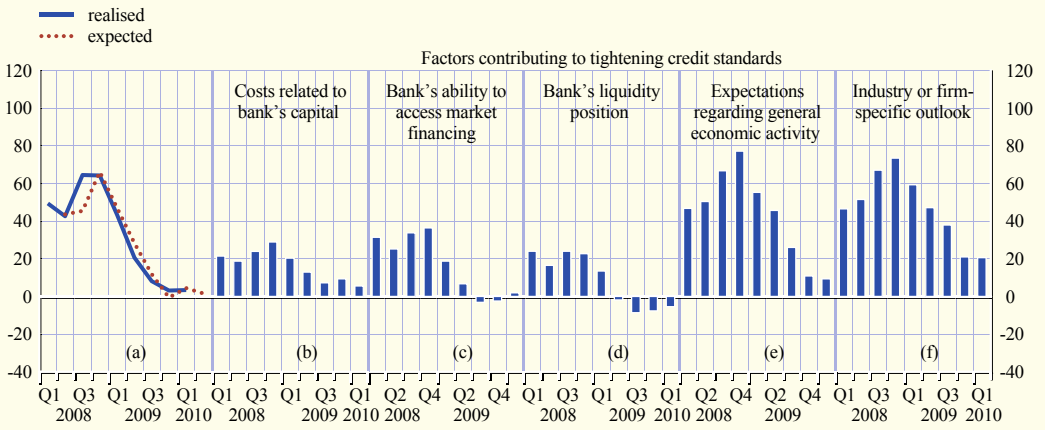
Loans and credit lines to enterprises

In the first quarter of 2010 the net percentage[2] of banks reporting a tightening of credit standards on loans and credit lines to enterprises remained unchanged at 3% (see Chart A), broadly in line with banks' expectations in the previous survey round (which stood at 4%). The overall results for enterprises were consistent across firm size classes. The net percentage of credit

1 The cut-off date of the survey was 1 April 2010. A comprehensive assessment of the results of the April 2010 bank lending survey for the euro area was published on 28 April 2010 on the ECB's website.
2 The reported net percentage refers to the difference between the proportion of banks reporting that credit standards have been tightened and the proportion of banks reporting that they have been eased. A positive net percentage indicates that banks have tended to tighten credit standards ("net tightening"), whereas a negative net percentage indicates that banks have tended to ease credit standards ("net easing").

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

(net percentages)



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

standards remained broadly unchanged and stood at similar levels both for loans to small and medium-sized enterprises (at 4%, unchanged from the fourth quarter of 2009) and loans to large firms (3%, compared with 4% in the fourth quarter of 2009).

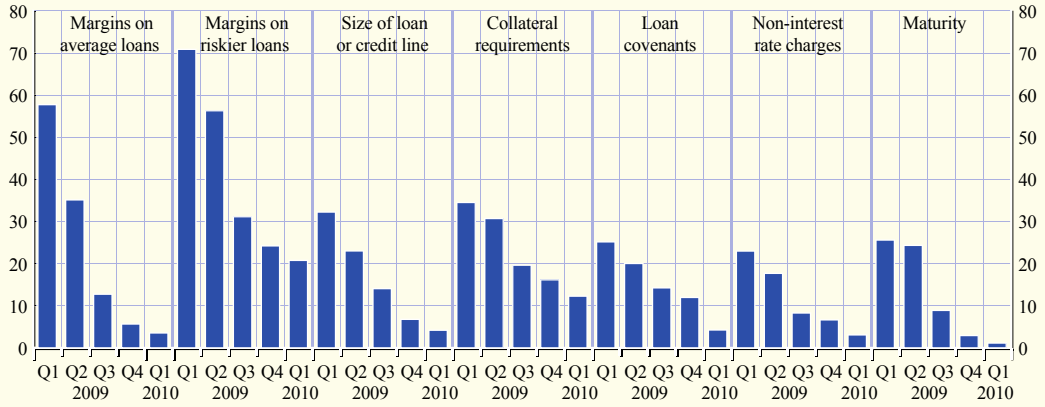
Looking at the factors contributing to the net tightening of credit standards, the contributions of the industry or firm-specific outlook (21%), as well as of the expectations regarding general economic activity (9%), remained broadly unchanged compared with the fourth quarter of 2009, whereas the contribution of the risk on collateral demanded has declined (4%, down from 12%). Hence, the decline in the factors related to banks' risk perception in 2009 slowed down in the first quarter of 2010. With respect to the bank-specific factors, the picture remained mixed. Costs related to banks' capital position continued to contribute to the tightening of credit standards, although slightly less than before (6%, as against 9% in the fourth quarter of 2009). Banks' ability to access market financing also contributed slightly to the tightening of credit standards, after an easing contribution in the two previous quarters. By contrast, banks' liquidity position, helped by the non-standard monetary policy operational measures of the ECB, continued to contribute to an easing of credit standards (-6%, as against -8% in the fourth quarter of 2009).

The net tightening of the price and non-price terms and conditions on loans to enterprises continued to decline in the first quarter of 2010 (see Chart B). This decline was broadly based across all types of terms and conditions, with, in particular, a reduction in the net tightening of loan covenants (4%, as against 12% in the fourth quarter of 2009). Across the firm size dimension, margins on average loans to large firms eased slightly (-1%, from 6% in the fourth quarter of 2009) for the first time since this breakdown became available in the first quarter of 2009, whereas the net tightening of margins remained broadly unchanged (8%, as against 7% in the fourth quarter of 2009) for SME loans.

Looking forward, euro area banks expect the net tightening of credit standards on loans to enterprises to remain broadly unchanged in the second quarter of 2010 (at 2%; see Chart A).

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

(net percentages of banks reporting tightening terms and conditions)



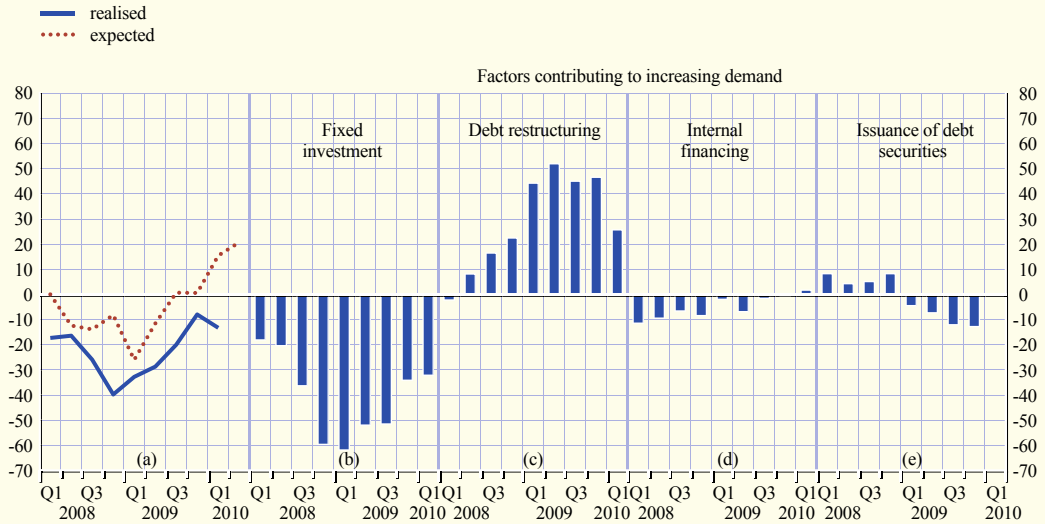
Note: The net percentages refer to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably".

Loan demand: Net demand[3] for loans from enterprises declined in the first quarter of 2010 (to -13%, as against -8% in the fourth quarter of 2009; see Chart C). Hence, the gradual recovery in loan demand by enterprises that had started in the first quarter of 2009 seems to have weakened in the first quarter of 2010. Net demand for loans weakened for both loans to SMEs

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

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

(net percentages)



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

(-9%, from -4%) and loans to large firms (-20%, from -18%). It remained overall weaker for large firms. The most important reason for the weakening in net demand for loans by enterprises appears to be a lower positive contribution of debt restructuring (i.e. altering the terms and conditions of outstanding debt obligations of enterprises; 26%, as against 47% in the fourth quarter of 2009), coming down from exceptionally high previous levels. Favourable market conditions, leading to some substitution of bank-based financing by market-based financing, also lowered loan demand by enterprises, as indicated in particular by the negative contribution of debt securities issuance (-10%, as against -13% in the fourth quarter of 2009). By contrast, the negative contribution of fixed investment remained broadly unchanged at depressed levels (-32%, as against -34% in the fourth quarter of 2009), related to subdued investment expenditures, while the contribution of inventories and working capital turned positive (to 3%, as against -1% in the fourth quarter of 2009) for the first time since the third quarter of 2008.

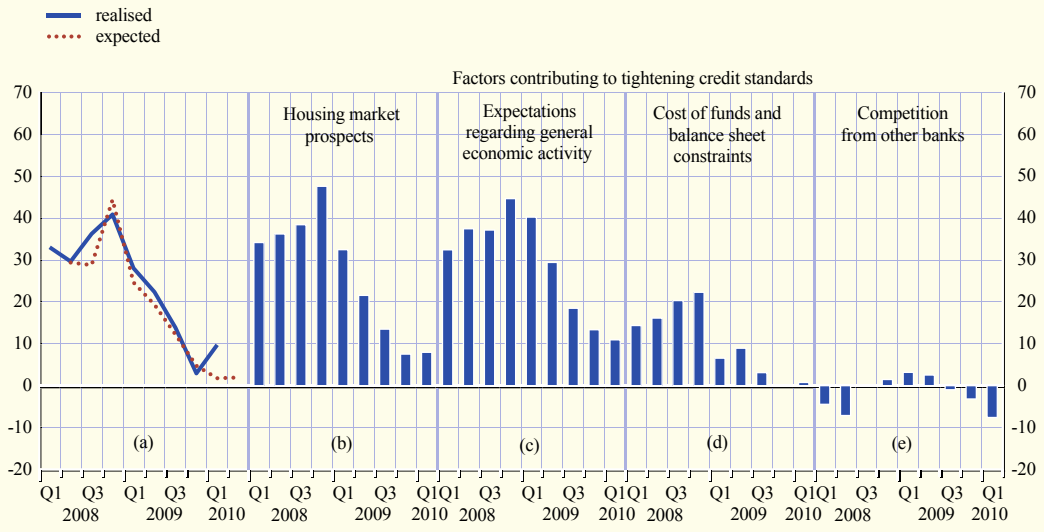
Looking forward, banks continue to be relatively optimistic regarding loan demand by enterprises. On balance, 21% (up from 16%) expect net loan demand from enterprises to turn positive in the second quarter of 2010, and, in line with the current pattern of loan demand, it is expected to be more positive for SMEs (+24% in the second quarter of 2010) than for large firms (+9%).

Loans to households for house purchase

Credit standards: In contrast with developments over previous quarters and the situation for loans to enterprises, there has been an increase in the net percentage of banks reporting a tightening of credit standards on loans to households for house purchase in the first quarter of 2010 (to 10%, from 3% in the fourth quarter of 2009; see Chart D). This is also somewhat in contrast with banks' expectations in the previous round, when they foresaw a similarly low net tightening as in the fourth quarter of 2009. In addition, the increase in net tightening in the first quarter of 2010 did not seem to be reflected in the underlying factors, which either

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

(net percentages)



Note: See notes to Chart A.

remained broadly unchanged (for instance housing market prospects) or contributed less to the net tightening of credit standards (for instance the general economic outlook) in the first quarter of 2010. At the same time, part of the explanation for the increase in the net tightening of credit standards may be related to other factors, such as changes in banks' risk management. As in the previous survey round and unlike for corporate loans, banks' cost of funds and balance sheet constraints, seen as pure supply-side factors with respect to the provision of loans, remained neutral (1%, as against 0% in the fourth quarter of 2009).

Regarding terms and conditions on loans for house purchase, margins on riskier loans (16%), loan-to-value ratios (11%) and collateral requirements (4%) continued to be tightened by banks, although moderately compared with levels one year ago. By contrast, loan maturity (1%) remained broadly neutral and the margins on average loans (-3%) declined in the first quarter of 2010 for the first time since the third quarter of 2007.

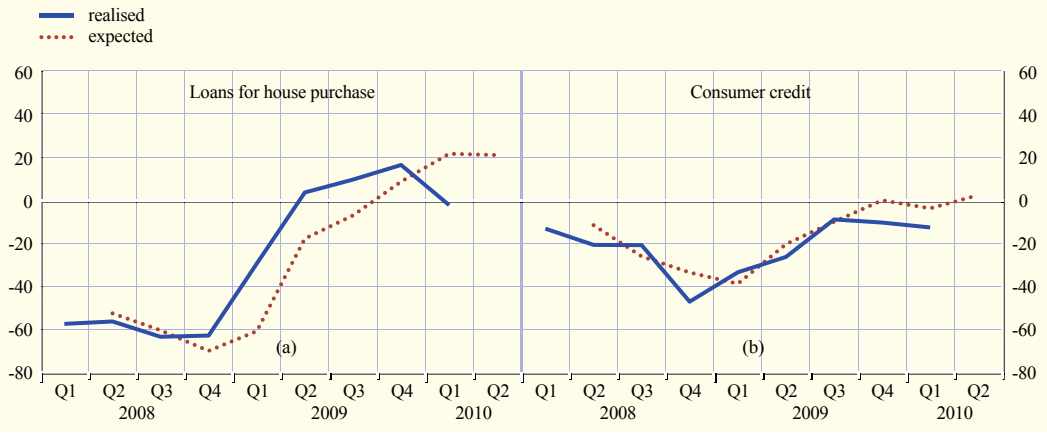
Looking forward, banks expect a renewed decrease in the net tightening of credit standards for housing loans in the second quarter of 2010 (to 2%).

Loan demand: Net demand for housing loans declined significantly in the first quarter of 2010 (-2%, as against 16% in the fourth quarter of 2009), after an increase for three consecutive quarters and in contrast to the positive net demand banks had expected in the previous survey round (see Chart E). The fall in net demand can be explained in particular by a less positive contribution of housing market prospects (3%, as against 8% in the fourth quarter of 2009) and a more negative contribution of consumer confidence (-13%, as against -2% in the fourth quarter of 2009). In addition, competition from other banks contributed negatively to the demand for housing loans (-6%, from 0%).

Looking forward, banks expect the net demand for housing loans to increase in the second quarter of 2010 (to 21%).

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

(net percentages)



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

Consumer credit and other lending to households

Credit standards: The net percentage of banks reporting a tightening of credit standards for consumer credit and other lending to households remained broadly unchanged in the first quarter of 2010 (11%, as against 10% in the fourth quarter of 2009; see Chart F), broadly in line with expectations in the previous survey round. While banks' expectations regarding general economic activity (10%, as against 13% in the fourth quarter of 2009) and the creditworthiness of consumers (19%, as against 17% in the fourth quarter of 2009) were the main factors underlying the net tightening, competition between banks contributed to an easing of credit standards (-3%, compared with -1% in the fourth quarter of 2009). In addition, as for housing loans, banks' cost of funds and balance sheet constraints were broadly neutral for the provision of consumer credit and other lending to households (1%, as against 4% in the fourth quarter of 2009).

Looking forward, banks expect the net tightening to decline in the second quarter of 2010 (to 2%).

Loan demand: Developments in the demand for consumer loans appear to have been somewhat more sluggish in the first quarter of 2010 (-13%, as against -10% in the fourth quarter of 2009; see Chart E). Banks had expected a smaller decline for the first quarter of 2010. While most factors having an impact on consumer loans remained broadly unchanged in the first quarter of 2010, competition from other banks dampened somewhat the net demand for loans.

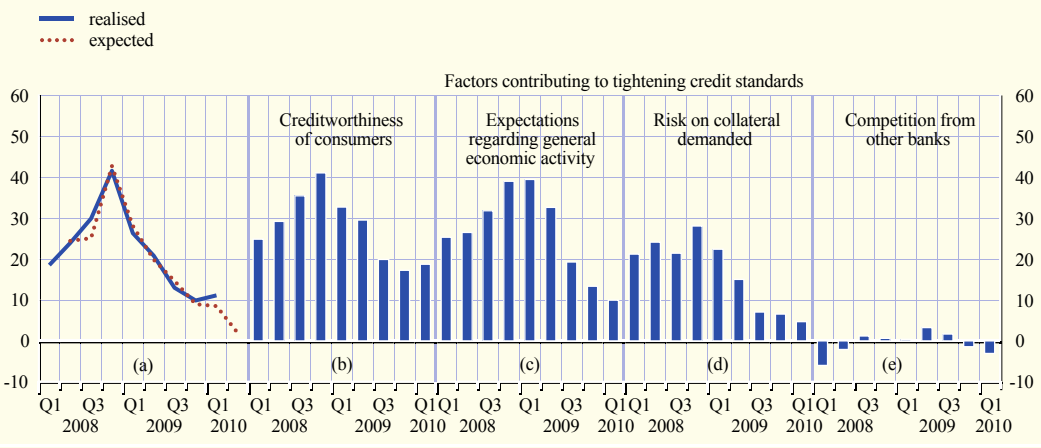
Looking ahead, in contrast with the previous survey round, banks expect a slightly positive net demand for consumer credit and other lending to households in the second quarter of 2010 (2%).

Ad hoc questions on the impact of the financial turmoil

As in previous survey rounds, the April 2010 survey also contains a set of ad hoc questions, which aim at assessing the extent to which the financial market tensions have affected banks'

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

(net percentages)



Note: See notes to Chart A.

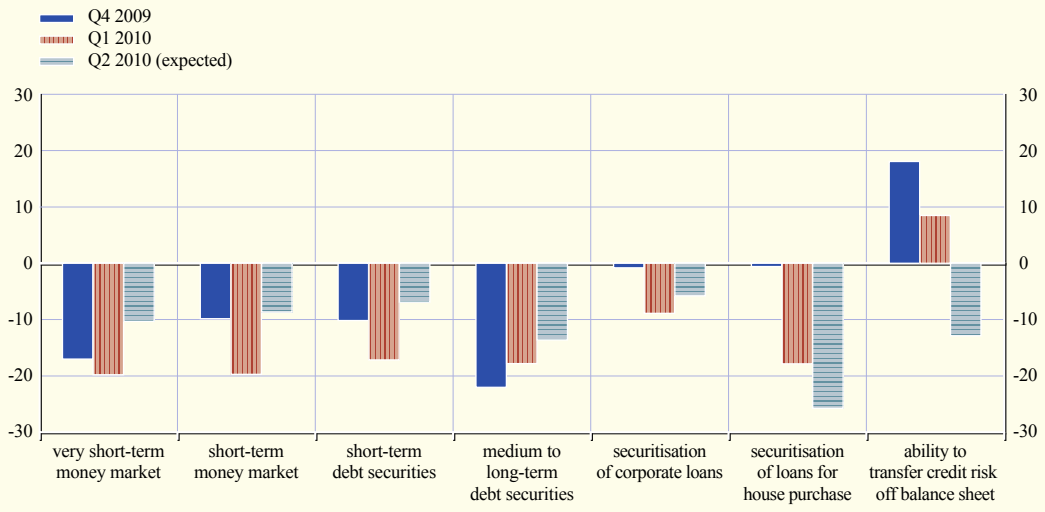
credit standards for loans and credit lines to enterprises and loans to households in the euro area in the first quarter of 2010 and the extent to which they might still exert an effect in the second quarter.

For the first quarter of 2010 banks generally reported that their access to wholesale funding became easier, with the exception of their ability to transfer credit risk off their balance sheets (see Chart G). On balance, around 17-20% of the banks (excluding the banks that replied "not applicable") reported an easier access to money markets and debt securities markets in the first quarter of 2010. In addition, after a broadly neutral assessment of true-sale securitisation access for corporate and housing loans in the fourth quarter of 2009, banks for which this business is relevant (i.e. around 60% of the banks) assessed the situation as being clearly more positive, in particular for the securitisation of housing loans. On balance, 18% of these banks reported an easier access to this type of securitisation. By contrast, according to 9% of the banks for which this business is relevant (i.e. 40% of the banks), synthetic securitisation, i.e. the ability to transfer credit risk off balance sheet, still deteriorated, but banks reported a decreased difficulty in transferring risk than in the previous quarter. For the second quarter of 2010 banks expect a further improvement in the access to wholesale funding. In particular, on balance, 13% of the banks for which this business is relevant expect that also their access to synthetic securitisation will become easier.

Regarding the impact of the financial turmoil on banks' costs related to their capital position and on their lending policy, there was limited change between the fourth quarter of 2009 and the first quarter of 2010. In the first quarter of 2010 about 40% of the reporting banks indicated "some" or a "considerable" impact on both capital and lending, broadly in line with replies from the previous survey round. In addition, 38% (as against 32% in the fourth quarter of 2009) reported that there was basically no impact on their capital in the first quarter of 2010 resulting from the financial turmoil.

Chart G Change in the access to wholesale funding over the past three months

(net percentages of banks reporting deteriorated market access)



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

2.2 SECURITIES ISSUANCE

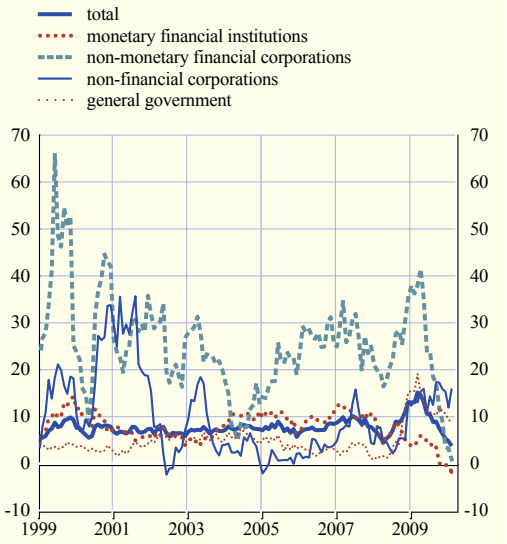
The annual growth rate of debt securities issuance continued to moderate, declining to 6.3% in February 2010. Data on sectoral issuance activity reveal that this moderation was broadly based across most sectors, except for the non-financial sector, and across maturities. Meanwhile, the annual growth rate of issuance of quoted shares remained broadly unchanged.

DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents continued to moderate, falling to 6.3% in February 2010, from 7.7% in the previous month (see Table 3). Following the downward trend that started a year ago, the annual growth rate of short-term debt securities issuance contracted to -5.9% in February 2010. At the same time, the annual growth rate of long-term debt securities issuance declined to 8%. The six-month annualised and seasonally adjusted growth rate of debt securities issued, which better captures short-term trends, confirms a broad-based moderation across almost all institutional sectors (see Chart 8).

Chart 8 Sectoral breakdown of debt securities issued by euro area residents

(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

Over recent months, refinancing activity has picked up due to a surge in long-term issuance, notably at fixed rates, to the detriment of short-term debt securities issuance. In February 2010, however, the annual growth rate of fixed rate long-term debt securities issuance seems

Table 3 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) 2010 February	Annual growth rates[1] 2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 January	2010 February
Debt securities	**15,206**	**10.6**	**12.0**	**11.5**	**10.2**	**7.7**	**6.3**
MFIs	5,416	5.9	5.8	4.1	2.9	2.2	0.5
Non-monetary financial corporations	2,976	30.8	32.5	28.6	22.2	13.2	9.4
Non-financial corporations	827	7.9	10.3	13.3	15.5	13.2	14.3
General government	5,987	9.6	12.2	13.5	12.7	10.1	9.8
of which:							
Central government	5,612	9.9	12.4	13.7	12.9	10.2	9.8
Other general government	375	6.0	9.6	9.5	10.4	9.1	10.8
Quoted shares	**4,171**	**1.2**	**1.9**	**2.7**	**2.8**	**2.9**	**3.0**
MFIs	504	7.2	8.7	9.4	8.9	8.3	8.3
Non-monetary financial corporations	337	3.1	3.4	4.1	2.9	5.3	5.4
Non-financial corporations	3,330	0.0	0.8	1.6	1.9	1.9	2.0

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

to have stabilised at 11% compared with 11.6% in the previous month. At the same time, the annual growth rate of floating rate long-term debt securities issued roughly halved to 1.5% from 3.4% in the previous month.

Regarding sectoral issuance, the moderation in the pace of debt securities issuance registered in February 2010 appears to be broad-based, although it did not include the corporate sector, which witnessed a rebound at historically high levels. In particular, the annual growth rate of debt securities issued by euro area non-financial corporations stood at 14.3% in February 2010, up from 13.2% in the previous month. High volumes and a sustained pace of net issuance of fixed rate long-term debt securities since end-2008 suggest that corporations, especially large ones, have drawn resources from capital markets, taking advantage in particular of narrowing corporate bond spreads and reacting to the relatively strict terms and conditions on bank loans, as reported by the April 2010 bank lending survey (see Box 3).

Despite some signs of moderation, the annual growth rate of debt securities issued by the general government sector remained strong in February 2010, at 9.8%, compared with 10.1% in the previous month. This is in line with the continued substantial funding needs of the euro area public sectors, although it is notable that there has been in the latest months a strong reduction in short-term government debt securities issuance (see also Box 4).

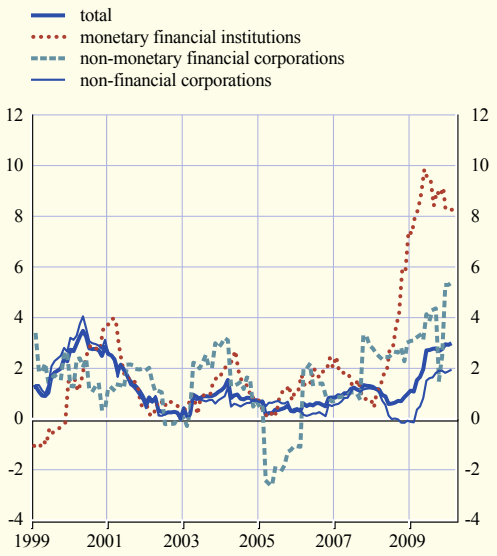
Turning to the financial sector, the annual growth rate of debt securities issued by MFIs strongly declined to 0.5% in February, which is the lowest level reached in the last two decades. This weakness has largely been driven by a sharp contraction of debt securities issued at short-term maturities (the annual growth rate standing at -14.2% in February 2010), while the annual growth rate of long-term debt securities issued declined to 3.3%. A broadly similar picture emerges for debt securities issued by non-monetary financial corporations, the annual growth rate of which declined to 9.4% in February 2010, from 13.2% in the previous month, mostly due to a further strong contraction in short-term issuance.

QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents remained broadly unchanged at 3.0% in February 2010 (see Chart 9). Moderating somewhat compared with the previous months, the annual growth rate of equity issuance by MFIs remained strong at 8.3% in February 2010. This reflects the efforts by banks to raise capital in order to consolidate their balance sheets. Meanwhile, the annual growth rate of quoted shares issued by non-financial corporations remained broadly unchanged at 2% in February, despite the relatively high cost of equity financing.

Chart 9 Sectoral breakdown of quoted shares issued by euro area residents

(annual growth rates)



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

Box 4

THE SIZE AND COMPOSITION OF GOVERNMENT BORROWING IN THE EURO AREA

Since the start of the financial crisis, government debt has increased strongly after a period of relatively low financing needs. In 2010 euro area governments' borrowing – to finance government deficits and refinance maturing government debt – is likely to amount to about 26% of euro area GDP. This represents a sharp increase from around 15% of GDP in 2007 and 17% of GDP in 2008.

The size and composition of government borrowing are of concern to central banks for several reasons. First, the effects of a tighter monetary policy on economic activity and prices may be reinforced if a government takes fiscal measures to counteract the effect of rising interest expenditure on the overall budget balance. Second, the size and composition of government borrowing also affect the financing conditions of the private sector, with possible negative effects on overall economic activity. Third, a higher share of short-term government debt and/or floating interest rate instruments reduces government interest expenditure in times of low short-term market rates. However, ceteris paribus, it increases the exposure of governments to refinancing risks stemming from changes in monetary policy interest rates, as well as in market sentiment.

Against this background, this box reviews: (a) the instruments of government borrowing in the euro area, (b) the currency denomination and the type of investors, (c) the maturity structure of outstanding government debt securities and how it has changed since the start of the crisis and (d) the link between the slope of the yield curve and the issuance behaviour of governments.

The instruments of general government borrowing

Over the past year governments have been forced to increasingly tap financial markets and to some extent also banks for funding related to the consequences of the financial crisis and economic downturn for their fiscal positions. Government debt ratios were rising rapidly (by more than 10 percentage points) in Ireland, Greece, Spain and Slovenia in 2009 and their levels were particularly high (well above 100%) in Italy and Greece.[1] The two main types of instruments used by euro area governments for borrowing are debt securities and bank loans. At end-2009 about 82% of government debt in the euro area was financed in the form of debt securities. The share of bank loans in government debt was about 15%. Bank loans are mainly used in the financing of local governments and municipalities or in the case of long-term investment projects, while central governments rely more on the issuance of marketable debt securities.

Currency denomination and type of investors

In March 2010 the vast majority of outstanding euro area government debt securities were denominated in euro (97.3% or €5,873 billion), while only about 2.1% (€126 billion) were denominated in US dollars and 0.1% (€6 billion) in pounds sterling. This compares with 97.5% denominated in euro, 1.4% denominated in US dollars and 0.1% denominated in pounds sterling in January 2007. Only a few euro area countries have a notable share of their debt denominated

1 The sharp increase in government debt-to-GDP ratios in 2009 reflected a combination of high primary deficits (partly due to fiscal stimulus measures), an unfavourable growth/interest rate differential, as well as, in some countries, the cost of capital support to financial institutions. For more details, see A. van Riet (ed.), "Euro area fiscal policies and the crisis", ECB Occasional Paper No 109, April 2010.

in foreign currencies and their exposure to exchange rate risks is usually contained by hedging. Moreover, the small increase in the euro area governments' debt denominated in US dollars between January 2007 and March 2010 was accompanied by the relative reduction of debt denominated in other currencies (e.g. Swiss francs or Japanese yen).

Taking an individual euro area country perspective, domestic (resident) investors hold about 47% of total government debt, while about 53% is held by non-residents (including of other euro area countries). The high share of non-residents holding government debt testifies to the high degree of integration of capital markets. The share of domestically held government debt varies across countries from roughly 20% up to as much as 90%.

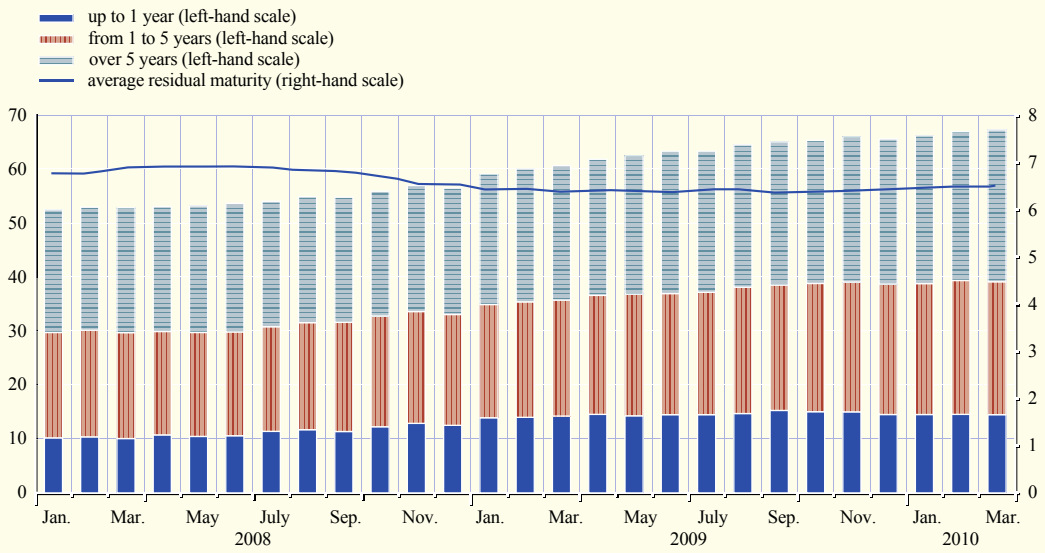
Maturity structure

As regards the maturity structure of government borrowing, this box concentrates on the outstanding amount of marketable debt securities (i.e. government bonds and bills) and does not cover the funding through bank loans or the effects of derivatives, which may modify the maturity structure, although only marginally. The main motivation for the use of derivatives is to separate the issuance strategy from the management of interest rate or currency risk. For example, it may be preferable – with a view to enhancing secondary market liquidity – to concentrate issuance in relatively few benchmark series. Such an issuance strategy can potentially help in maintaining a stable investor base and limiting government interest expenditure via lower government bond yields.

The significant increase in the stock of government debt since the onset of the crisis has been accompanied by a slight decline in the overall residual maturity of government securities in the euro area. For example, over the period from January 2008 to March 2010, the average

Chart A Outstanding amount of euro area government debt securities and residual maturity

(as a percentage of GDP; years)



Source: ECB calculations.

Residual maturity of government debt securities in the euro area at end-March 2010

(as a percentage of total; EUR billions)

Months/years to maturity	% of total debt	% of total debt (cumulative)	EUR billions	EUR billions (cumulative)
0-3 months	7.1	7.1	429.0	429.0
4-6 months	6.5	13.6	389.5	818.5
7-9 months	3.5	17.1	212.0	1,030.5
10-12 months	4.5	21.5	270.5	1,301.0
13-18 months	6.0	27.5	361.2	1,662.2
19-24 months	5.2	32.7	312.9	1,975.2
2-5 years	25.4	58.1	1,535.6	3,510.7
5-10 years	23.4	81.6	1,414.3	4,925.1
10-15 years	6.5	88.1	391.1	5,316.2
Over 15 years	11.9	100.0	721.3	6,037.4

Source: ECB calculations.

residual maturity of outstanding government debt securities declined from 6.7 to 6.5 years (see Chart A). In the same period the share of government debt securities with an initial maturity of up to one year increased from 5.7% to 10.3%, while the share of outstanding government debt securities with an initial maturity of over five years decreased from 79.1% to 73.3% in the euro area. The share of euro area government debt securities with variable interest rates declined to 5.5% in March 2010, compared with 6.6% in January 2008.

Viewed from the perspective of governments' refinancing risk, the amount of debt securities maturing within one or two years is more important than the average residual maturity of the outstanding government debt, because any financing difficulties or market tensions affect directly the debt maturing in the short term. At the end of March 2010 about 21.5% (€1,301 billion, or about 14.5% of GDP) of outstanding euro area government debt securities would mature within one year and about 32.7% (€1,975 billion, or about 22.0% of GDP) cumulatively within two years (see table).

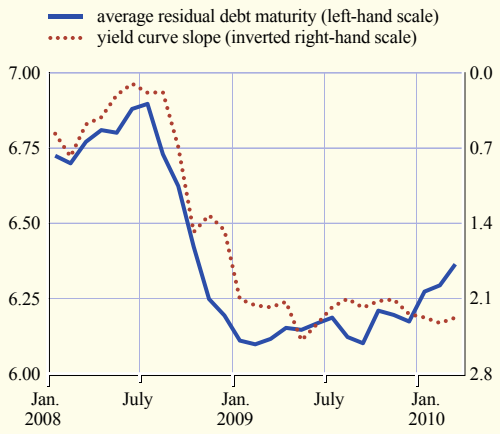
The slope of the yield curve and the issuance behaviour of governments

Government interest expenditure is also affected by the level and shape of the yield curve and the share of outstanding government debt instruments paying a floating or variable interest rate. Variable interest rate debt instruments are typically linked to 6- or 12-month money market rates and are therefore particularly sensitive to changes in monetary policy rates. A variable interest rate instrument links interest payments to short-term interest rates, but avoids the short roll-over frequency of short-term debt and the associated higher refinancing risk.

The recent tendency towards shorter-term borrowing by governments may reflect both the favourable financing conditions at the short end of the yield curve as well as a concentration of investor demand in the short-maturity segment during the crisis. Most of the shortening in the average residual maturity took place in the second half of 2008, i.e. at the height of the financial crisis and coinciding with a sharp steepening of the yield curve (see Chart B). As shown in Chart C, from mid-2008 to mid-2009, the share of new borrowing with an initial maturity of less than one year grew markedly faster than the share of outstanding debt with a residual maturity of less than one year, suggesting that the maturity shortening was not purely mechanical, but resulted from an active choice by sovereign debt managers.

Chart B Government debt maturity and the slope of the yield curve

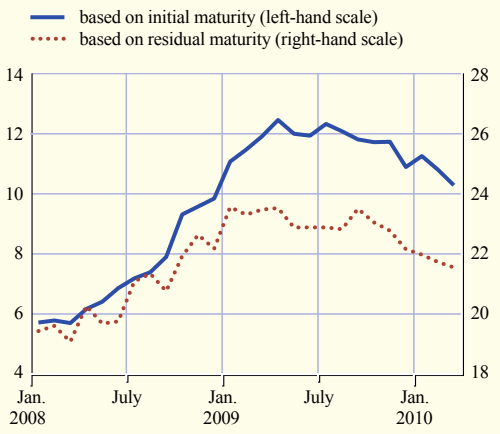
(years; percentage points)



Source: ECB calculations.
Notes: The average debt maturity is calculated as the simple average for the 11 largest euro area countries. The yield curve slope is the ten-year minus two-year euro area term spread.

Chart C Average share of short-term government debt

(percentages)



Source: ECB calculations.
Note: The chart shows, for the euro area, the share of government debt with less than one year to maturity.

While potentially reducing governments' current borrowing costs, increased reliance on short-term borrowing exposes governments to greater refinancing risk, which, if taken beyond a certain level, may not be in the broader interests of macroeconomic and financial stability. From the point of view of monetary policy, the larger the stock of short-term and variable interest rate debt, the higher the sensitivity of government interest expenditure with respect to changes in monetary policy rates. A larger share of short-term and variable interest rate government debt may therefore contribute to tensions in public finances at a time when an exit from an expansionary orientation of monetary policy may become necessary.

Conclusions

All in all, ambitious fiscal consolidation strategies need to be swiftly adopted and implemented in order to reverse the rapid increase in general government debt-to-GDP ratios in the euro area and limit its detrimental long-term impact on private investment and potential economic growth. In the future, government debt management strategies should pay more attention to the macroeconomic and financial stability aspects than in the past.

2.3 MONEY MARKET INTEREST RATES

Money market interest rates increased marginally across all maturities in April and early May 2010. This reflects recent tensions relating to financial market participants' concerns about sovereign risks in some euro area countries, in spite of the continued ample liquidity conditions. On 28 April 2010 the ECB conducted a three-month longer-term refinancing operation (LTRO) by means of a variable rate tender procedure. At the same time, 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.

In April and early May 2010 unsecured money market rates increased marginally across all maturities. On 5 May the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.417%, 0.672%, 0.976% and 1.242% respectively – i.e. around 1, 3, 3 and 2 basis points higher than the levels observed on 7 April. Overall, the slope of the money market yield curve was almost unchanged, with the spread between the twelve-month and one-month EURIBOR standing at around 83 basis points on 5 May (see Chart 10).

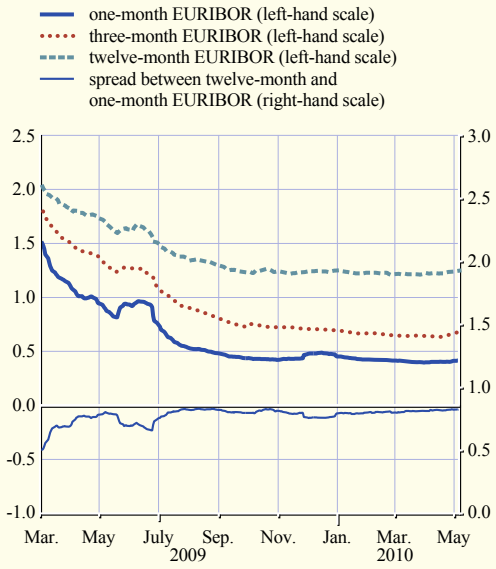
Between 7 April and 5 May secured money market rates, such as those derived from the three-month EONIA swap index, increased by slightly more than the corresponding unsecured rates. The three-month EONIA swap rate stood at 0.417% on 5 May, around 4 basis points higher than on 7 April. As a result, the spread between this secured money market rate and the corresponding unsecured EURIBOR declined marginally to stand at around 26 basis points on 5 May, around 1 basis point lower than on 7 April (remaining relatively wide by comparison with the level prevailing prior to the onset of the financial market turmoil in August 2007).

The interest rates implied by the prices of three-month EURIBOR futures contracts maturing in June, September and December 2010 and March 2011 stood at 0.82%, 0.91%, 0.97% and 1.01% respectively on 5 May. The rates implied by contracts maturing in June and September 2010 were 9 and 1 basis points higher respectively than the levels observed on 7 April, while those implied by contracts maturing in December 2010 and March 2011 were 11 and 25 basis points lower respectively.

The EONIA was broadly stable in April and early May. It remained at levels around 10 basis points above the deposit facility rate of 0.25% (see Chart 11), with the exception of 13 April. This was the final day of the third maintenance period of 2010, when the EONIA rose to 0.658% as a result of

Chart 10 Money market interest rates

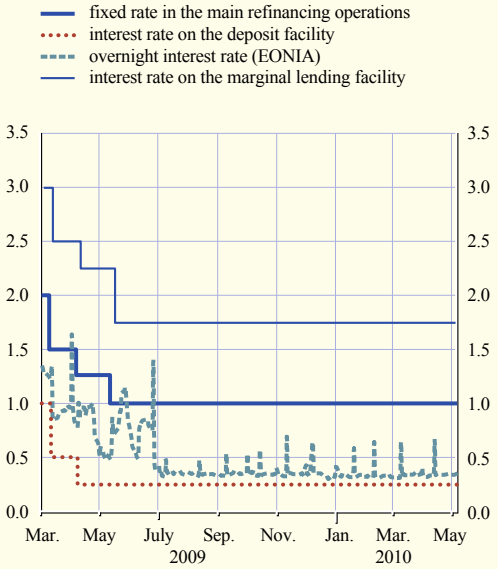
(percentages per annum; spread in percentage points; daily data)



Sources: ECB and Reuters.

Chart 11 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



Sources: ECB and Reuters.

the Eurosystem conducting a liquidity-absorbing fine-tuning operation by means of a variable rate tender procedure. The operation absorbed €292.3 billion, with a maximum rate of 0.90%, a marginal rate of 0.80% and a weighted average rate of 0.76%. On 5 May the EONIA stood at 0.344%.

In the main refinancing operations of 6, 13, 20 and 27 April and 4 May, the ECB allotted €71.5 billion, €70.6 billion, €70.2 billion, €75.6 billion and €90.3 billion respectively. As regards its longer-term operations, the ECB conducted two LTROs in April: a one-month operation with a fixed rate of 1% and full allotment on 14 April (in which it allotted €15.7 billion); and a three-month operation with a variable rate tender procedure on 28 April (in which it allotted €4.8 billion).

In line with the increase in the liquidity surplus in the euro area money market following the settlement of the final one-year LTRO, average daily recourse to the deposit facility rose to stand at €209.7 billion in the period from 14 April to 5 May. This was slightly higher than the €200.7 billion observed in the previous maintenance period, which ended on 13 April.

The covered bond purchase programme that began on 6 July 2009 has also proceeded further. The total value of purchases of euro-denominated covered bonds issued in the euro area stood at €50.9 billion on 5 May, with €60 billion worth of bonds set to be purchased by the end of June 2010.

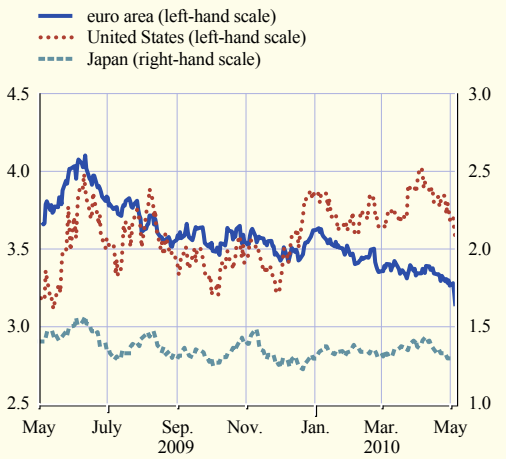
2.4 BOND MARKETS

Yields on long-term government bonds in the euro area and the United States declined in April and early May. The release of mostly positive macroeconomic data showing a gradual recovery in economic activity were countered by flight-to-quality flows into highly rated government bonds triggered by the intensification of the Greek fiscal crisis. Intra-euro area sovereign bond spreads vis-à-vis Germany widened considerably in Greece and noticeably in a number of other euro area countries. Inflation expectations for the euro area derived from inflation-linked bonds remained broadly unchanged and continued to point to well-anchored inflation expectations over the medium term. Euro area corporate bond spreads increased across sectors and rating classes.

Compared with end-March, ten-year government bond yields in the euro area declined by 20 basis points, standing at 3.1% on 5 May. In the United States, ten-year government bond yields declined by around 30 basis points to stand at 3.6% on the same date. Accordingly, the interest rate differential between ten-year nominal US and euro area government bonds narrowed to 50 basis points (see Chart 12).

Chart 12 Long-term government bond yields

(percentages per annum; daily data)



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

At the same time, bond market implied volatility, after remaining unchanged for most of April, increased both in the euro area and the United States towards the end of April and in the first week of May. Developments in long-term government bond yields in the euro area and the United States failed to reflect the release of mostly positive macroeconomic data showing improvements in economic activity. Instead, these developments were driven by flight-to-quality behaviour triggered primarily by the Greek fiscal crisis, and also by expectations that policy rates would remain low over the medium term.

The gradual intensification of the crisis of confidence in the sustainability of the Greek fiscal situation was reflected in flight-to-quality behaviour which involved heavy reallocation flows towards AAA-rated euro area government bonds. The release of Consensus Economics forecasts showed inflation as being well contained over the long-term horizon and, as a result, expectations of an early tightening of monetary policy conditions have declined. Using long-term overnight index swap rates as a source of complementary information, current levels of long-term government bond yields on both sides of the Atlantic indeed reflect expectations that short-term interest rates will remain exceptionally low over the medium term. The current financial crisis has triggered episodes of strong flight-to-quality behaviour, which have resulted in increased home bias in investment decisions. Box 5 describes the impact of the financial crisis on the integration of financial markets.

Box 5

FINANCIAL INTEGRATION AND THE FINANCIAL CRISIS IN 2008: A CROSS-BORDER PORTFOLIO ALLOCATION PERSPECTIVE

This box studies the impact of the financial crisis on home bias (i.e. the tendency to favour investing in domestic assets even if the risk is distributed more efficiently if foreign assets are held in an investor's portfolio)[1]. To carry out the analysis, we compile quantity measures based on end-of-period cross-border portfolio assets and liabilities and employ the Coordinated Portfolio Investment Survey (CPIS) of the IMF, which encompasses almost all international investment assets, mostly held by private agents. As data are collected with some lag starting from end-1997, the box reviews developments over the period 1997-2008.

Financial integration and home bias

Quantity-based measures have been used in the literature to show that financial capital is not sufficiently mobile across developed countries (the "Feldstein-Horioka puzzle"),[2] and that investors have a tendency to give too much weight to domestic assets in their portfolio, relative to an optimally diversified portfolio (i.e. they have a home bias). Measuring the degree of home bias across countries and asset classes, as well as monitoring its evolution over time, is therefore important in enhancing the understanding of the global financial integration process.[3]

1 K. R. French and J. M. Poterba (1991), "Investor Diversification and International Equity Markets", *American Economic Review*, 81, pp. 222-26; G. Huberman (2001), "Familiarity Breeds Investment", *Review of Financial Studies*, 14, pp. 659-80.
2 M. Feldstein and C. Y. Horioka (1980), "Domestic Savings and International Capital Flows", *Economic Journal*, 90, pp. 314-29.
3 A commonly used index to measure home bias is one minus the Foreign Asset Acceptance Ratio (FAAR). FAAR measures the extent to which the share of foreign assets in an investor's portfolio diverges from the share of foreign assets that would be held in a "borderless" global portfolio. By this metric, home bias is higher, the further FAAR is from unity. See IMF (2005), *Global Financial Stability Report*, September, Chapter 3, and C. Bertaut and W. Grivier (2004), "Recent developments in cross-border investments in securities", *Federal Reserve Bulletin*, Winter, pp. 19-31.

Despite the large cross-border portfolio allocation over the last fifteen years, portfolio home bias remains generally high across countries. However, it has decreased clearly on average across all developed countries and asset classes over the period 1997-2007, with the decrease being more pronounced for bond holdings than for equity holdings. These developments support the common view that financial integration was well advanced globally before the 2008 financial crisis.

Among the countries under consideration, Japan and Spain have the highest measured home bias in equity markets, amounting to 84% and 83% respectively in 2008 (see Chart A), while the United States and Japan have the largest home bias in fixed income markets, standing at 91% and 83% respectively in 2008 (see Chart B).

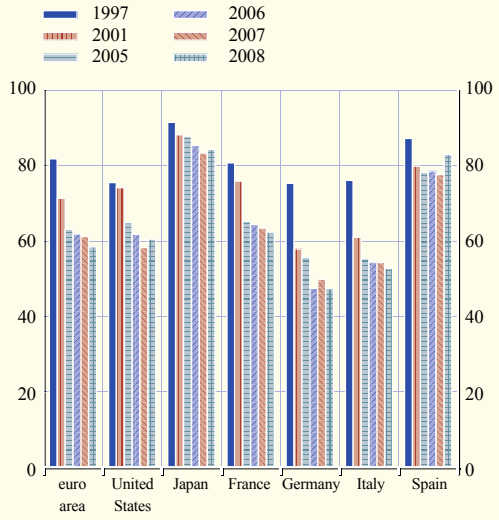
In 2008 the equity home bias for euro area residents (59%) was of the same order of magnitude as for US investors (61%), but the home bias for bond holdings by euro area investors was considerably lower.[4] This, however, masks different developments across individual euro area representative investors. For example, German investors hold relatively more foreign stocks and bonds than the representative euro area resident. Conversely, Spanish and Italian investors hold respectively relatively more domestic stocks and bonds than other euro area residents. French investors have a lower home bias in debt instruments than in equity.

Cross-border portfolio flows have increased among euro area countries since end-1997 also because EMU acted as a catalyst for further portfolio transactions (i.e. through the reduction

4 The figures in this box refer to 12 euro area countries (i.e. Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain).

Chart A Equity home bias in selected economies

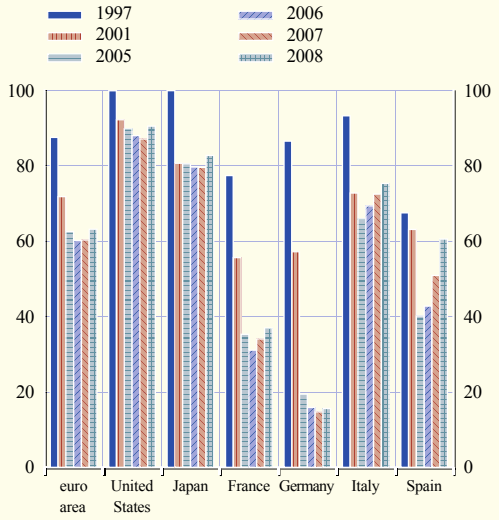
(percentages; end of period)



Sources: IMF, Thomson Financial Datastream, ECB staff calculations.

Chart B Debt home bias in selected economies

(percentages; end of period)



Sources: BIS, IMF, Thomson Financial Datastream, ECB staff calculations.

of legal barriers, in particular the implicit removal of intra-euro area currency matching rules,[5] the sharing of common platforms (e.g. Euronext) and the simplification of cross-border regulations).[6] This explains why some euro area countries have a lower home bias than the euro area as a whole.

The impact of the financial crisis on indicators of global financial integration in 2008

Investigating the reallocation of financial capital across the major advanced countries during the financial crisis (in particular in 2008) may provide important elements to better understand how the recent financial crisis might have affected the global financial integration process.

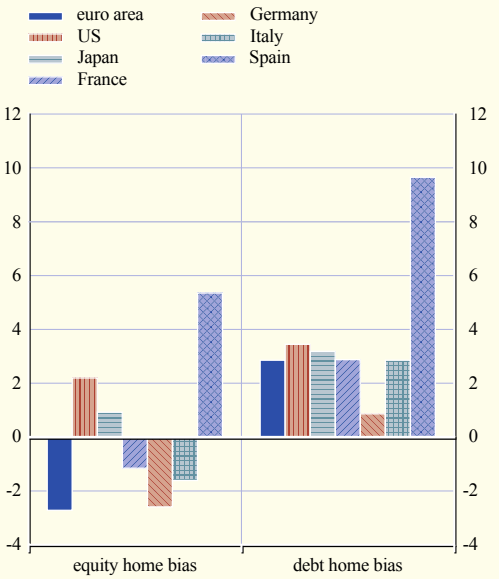
Typically, in times of financial and economic distress, the risk premium on equities relative to bonds increases, as investors move from more risky equity investments into the safer fixed income markets. Accordingly, the flight to quality that resulted from the crisis affected home bias in 2008.

During the financial crisis in 2008, home bias in debt markets rose significantly across all countries investigated in this box, with Spain recording the largest increase (by 10 percentage points; see Chart C).[7] Home bias in equity markets increased to a lesser extent for US and Japanese investors and decreased for the euro area as a whole. The general trend increase in home bias in debt markets is due to the sharp rise in bond issuance in 2008, with debt being mostly subscribed by domestic investors. Conversely, the lower degree of equity home bias in the euro area is attributable to the larger fall in domestic market capitalisation. Overall, cross-border integration of debt markets seems much more vulnerable to financial instability, possibly owing to institutional features such as being less transparent and less liquid than stock markets.

Against this backdrop, a natural question to ask is whether the financial crisis affected the decision by financial investors to invest in the

Chart C Change in equity and debt home bias in 2008 relative to 2007

(percentage points; end of period)



Sources: BIS, IMF, Thomson Financial Datastream and ECB staff calculations.

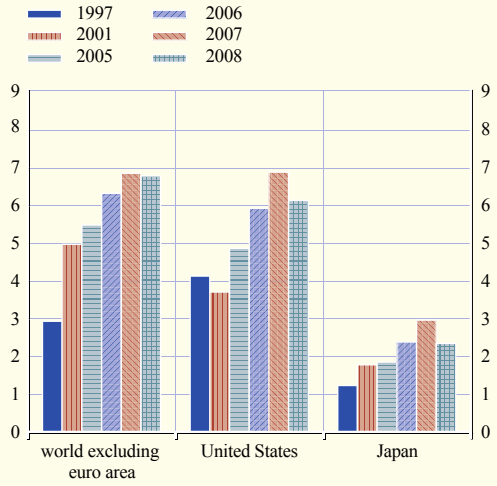
5 The role of EMU is stronger in fixed income markets because insurance corporations and pension funds, which purchase primarily fixed income securities, are subject to some form of restrictions on the level of their non-domestic investment and, therefore, on the level of their assets in foreign currencies. Since the introduction of the euro in January 1999, the intra-euro area currency matching rule has shifted from national currencies to the euro. The resulting greater flexibility allowed individual euro area country portfolios to secure better diversification of investment risk by purchasing more non-domestic euro area assets.

6 B. Gerard and R. A. De Santis (2010), "International portfolio reallocation: Diversification benefits and European monetary union", *European Economic Review*, 2009, 53, pp. 1010-27. R. A. De Santis (2010), "The geography of international portfolio flows, international CAPM and the role of monetary policy frameworks", *International Journal of Central Banking*, forthcoming in the June 2010 issue.

7 Home bias in debt markets in France, Italy and Spain increased at the end of 2007 possibly due to the outbreak of the financial crisis in August 2007.

Chart D Euro area equity securities held abroad

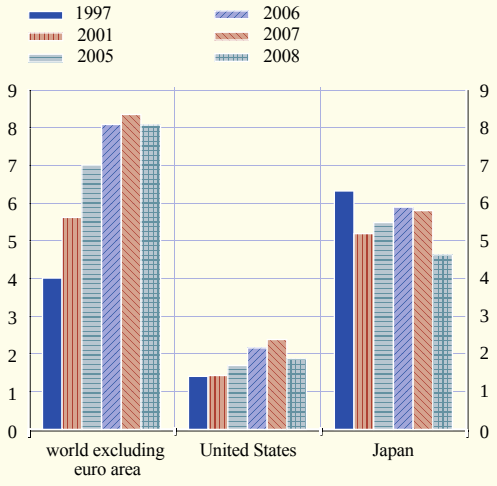
(percentage share of the foreign total equity portfolio; end of period)



Sources: IMF, Thomson Financial Datastream, ECB staff calculations.

Chart E Euro area debt securities held abroad

(percentage share of the foreign total debt portfolio; end of period)



Sources: BIS, IMF, Thomson Financial Datastream, ECB staff calculations.

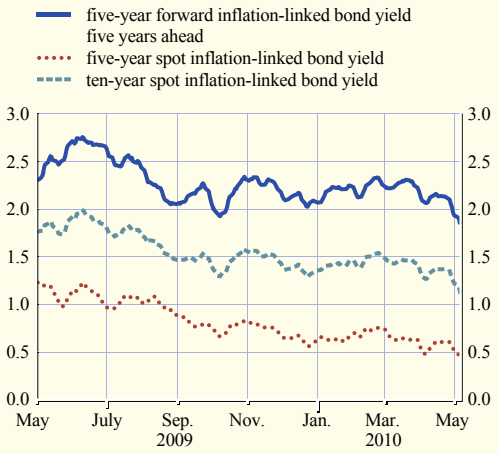
euro area in 2008. As reflected in Charts D and E, overall, foreign investors reduced only slightly their relative holdings of euro area equity and debt securities in 2008. However, the United States and Japan reduced their exposure to both types of euro area assets in 2008 to a greater extent. If the increase in US and Japanese investors' home bias turns out to be of a more permanent nature, real returns on euro area assets would have to increase in order to attract the same amount of capital from these countries.

The increase in home bias in 2008 is most likely due to a temporary rise in the risk of holding foreign assets, as a consequence of the plunge in global financial wealth in 2008. However, if it is due to information asymmetries, transaction costs or other non-pecuniary motives to invest abroad, the more lasting increase in home bias could have important negative implications for global financial market efficiency and, ultimately, for the real cost of finance.

Euro area ten-year sovereign bond spreads (vis-à-vis Germany) widened considerably for Greece. Five-year credit default swap premia also increased for this country. The support package for Greece that had been agreed during the weekend of 10-11 April induced a temporary decline in bond market-based measures of Greek sovereign credit risk. However, shortly afterwards, market commentators were voicing concerns about the implementation of the support programme and of the domestic austerity measures, and consequently spreads on Greek government bonds started surging again. In addition, the support package was considered as focusing on short-term financial assistance, so that concerns about the long-term solvency of Greece persisted. Towards the end of April, the downgrading of Greece to the speculative grade category (with a negative outlook) by Standard & Poor's contributed to panic selling of Greek bonds and the ten-year government bond yield spread reaching record high levels, standing at 730 basis points on 5 May. Potential spillovers to other euro area sovereign issuers (especially Portugal and Ireland) attracted increasing attention from market commentators.

Chart 13 Euro area zero coupon inflation-linked bond yields

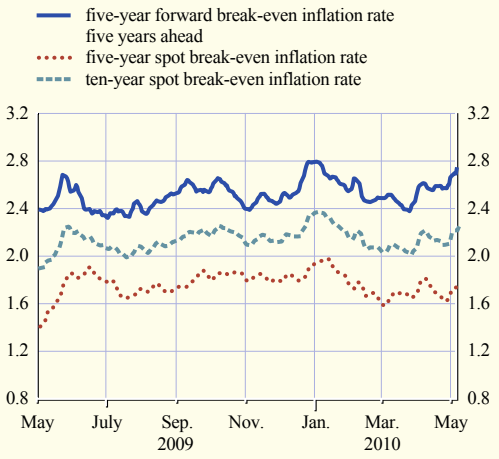
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Reuters and ECB calculations.

Chart 14 Euro area zero coupon break-even inflation rates

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



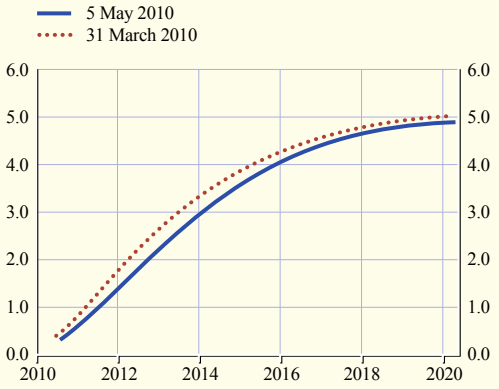
Sources: Reuters and ECB calculations.

Yields on euro area inflation-linked government bonds declined by around 20 and 40 basis points for the five and ten-year maturities, standing at 0.3% and 1.0% respectively on 5 May (see Chart 13). Compared with end-March, implied five-year forward break-even inflation rates five years ahead in the euro area increased by 30 basis points, standing at 2.8% on 5 May (see Chart 14). This was on account of changes in break-even inflation rates beyond the five-year horizon. The increase in break-even inflation rates is most likely associated with the increased volatility in bond markets seen towards the end of April. Long-term forward inflation swap rates, which are not affected by liquidity conditions or flight-to-quality behaviour, remained unchanged. Overall, financial market data continue to suggest that inflation expectations remain anchored, with no signs of a significant increase in either (market) inflation expectations or the inflation risk premium during April. At the same time, measures of inflation expectations derived from financial markets remain volatile.

The implied forward overnight interest rate curve for euro area government bonds moved slightly lower at all maturity horizons in comparison with the situation at the end of March and continued to suggest that markets expect monetary policy rates to stay low for some time (see Chart 15). This, as already mentioned above, is one of the factors explaining the current low level of government bond yields in the euro area.

Chart 15 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.

Euro area corporate bond spreads narrowed further during most of April. Towards the end of the month, however, amid concerns regarding the implementation of the financial support package for Greece, spreads increased across sectors and rating classes. The increase (of around 60 basis points) was more pronounced for lower-rated financial sector debt and primarily reflected concerns about possible write-downs on banks' portfolio holdings of euro area government debt securities. However, current corporate bond spreads remain well below the peaks recorded following the collapse of Lehman Brothers and the levels recorded prior to the start of the Greek sovereign debt crisis in October 2009.

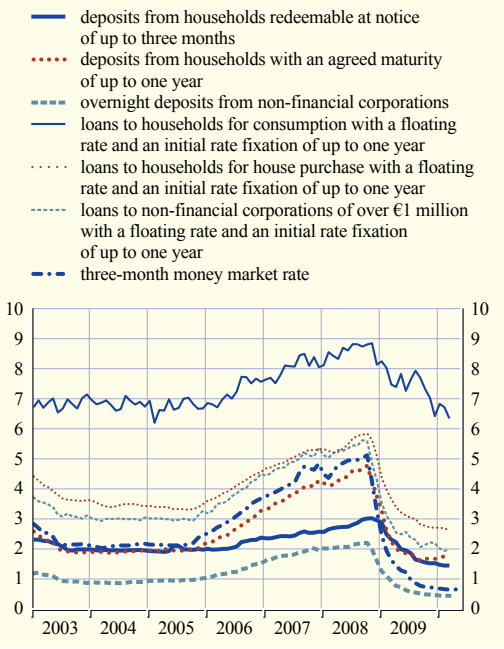
2.5 INTEREST RATES ON LOANS AND DEPOSITS

Most MFI lending and deposit rates declined or remained broadly unchanged in March 2010, for both households and non-financial corporations and across most maturities. On average, the interest rates on loans to non-financial corporations, as well as short-term rates on loans to households for house purchase and for consumer credit, continued to stand close to their historical lows, while other rates on household loans remained somewhat above the lows reached in 2005. All in all, the process of pass-through of past reductions in key ECB interest rates to bank customers is coming to an end.

Short-term MFI interest rates on deposits increased in March 2010. Most short-term rates on loans to households declined, whereas short-term rates on loans to non-financial corporations increased slightly or remained unchanged (see Chart 16). More precisely, average rates on overdrafts extended to households fell by 15 basis points to 8.9%, while short-term rates on loans to households for house purchase declined by 6 basis points to 2.6%, recording a historical low. The more volatile short-term rates on consumer credit also reached a historical low of 6.3%, falling by 37 basis points. Regarding non-financial corporations, banks' rates on overdrafts and short-term rates on small loans (i.e. less than €1 million) declined slightly to 4.0% and 3.2% respectively. Lending rates on large loans (i.e. more than €1 million) increased by 4 basis points to 2%. Rates on both small and large loans to non-financial corporations are at historical lows (see Chart 16). Since the EURIBOR decreased by only 2 basis points in March 2010, the spreads between most short-term MFI lending rates and the three-month money market rate remained broadly unchanged (see Chart 17).

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

(percentages per annum; rates on new business)

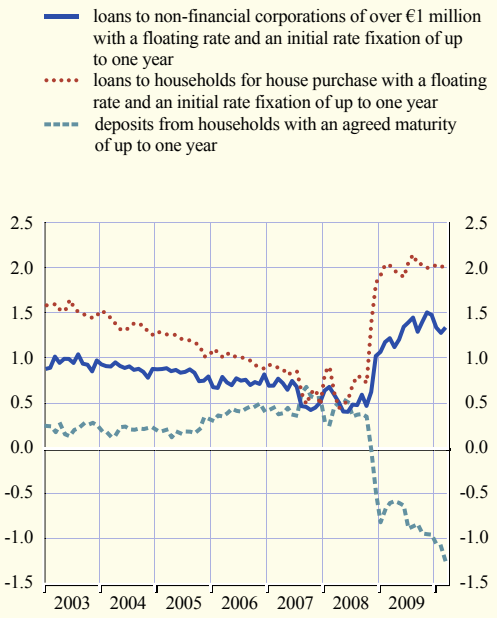


Sources: Reuters and ECB.

Taking a longer-term perspective, between September 2008 (i.e. immediately prior to the beginning of the cycle of monetary policy

Chart 17 Spreads of short-term MFI interest rates vis-à-vis the three-month money market rate

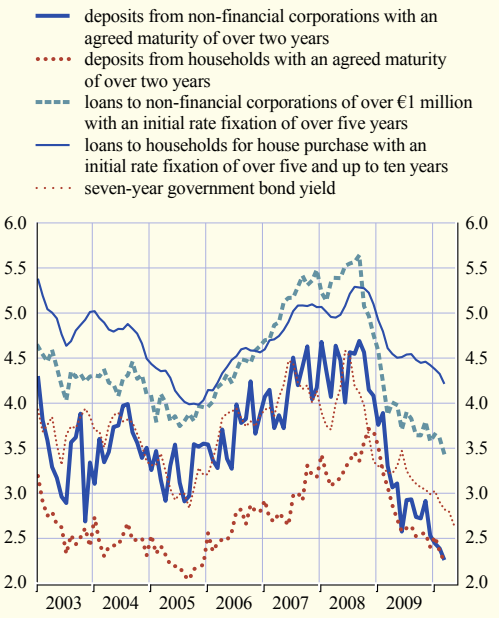
(percentage points; rates on new business)



Source: ECB.
Notes: For the loans, the spreads are calculated as the lending rate minus the three-month money market rate. For the deposits, the spread is calculated as the three-month money market rate minus the deposit rate.

Chart 18 Long-term MFI interest rates and a long-term market rate

(percentages per annum; rates on new business)



Sources: EuroMTS and ECB.

easing) and March 2010, short-term rates on both loans to households for house purchase and loans to non-financial corporations declined by 318 and 350 basis points respectively. This compares with a decline of 437 basis points in the three-month EURIBOR and indicates a considerable pass-through of market rate changes to bank lending rates.

As regards longer maturities, most MFI interest rates on longer-term loans to households and non-financial corporations declined in March 2010 (see Chart 18). More precisely, interest rates on loans to households for house purchase with an initial rate fixation of over five and up to ten years declined by 11 basis points to 3.7%, while rates on loans to households for house purchase with an initial rate fixation of over ten years decreased by 3 basis points to 4.2%. Developments in long-term interest rates on loans to non-financial corporations were slightly less favourable for small loans than for large loans. Indeed, average rates on small loans with an initial rate fixation of over one year and up to five years remained broadly unchanged at 4.2%, while rates on small loans with an initial rate fixation of over five years declined by 5 basis points to 4%. By contrast, the average rates on large loans declined by 49 basis points to 2.4% for loans with an initial rate fixation of over one year and up to five years and by 17 basis points to 3.4% for loans with an initial rate fixation of over five years.

Viewed from a longer-term perspective, since September 2008 euro area banks have adjusted their rates on long-term loans to non-financial corporations more or less in line with the decline in long-term government bond yields. By contrast, long-term rates on loans to households have not

fallen by as much over the same period, reflecting a more incomplete and sluggish pass-through for households but also increased credit risk concerns in some parts of the euro area.

Recent developments in loan-deposit margins on both outstanding amounts and new business signal the ongoing improvements in euro area banks' profitability. These margins, which had declined in the early part of 2009, recovered gradually thereafter, thus contributing to the pick-up in euro area banks' profitability during the second half of 2009 and the first quarter of 2010.

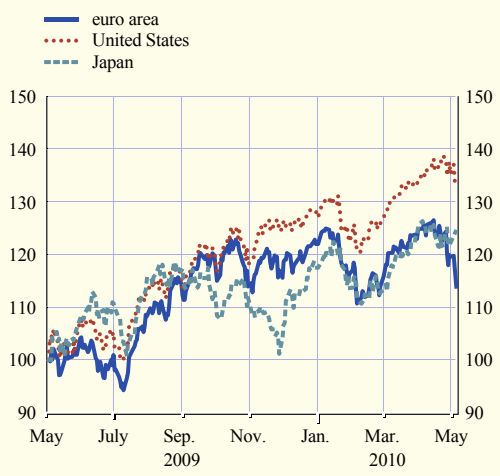
2.6 EQUITY MARKETS

Stock price indices decreased by 7.6% in the euro area and by 0.3% in the United States between the end of March and 5 May. Despite positive releases of macroeconomic data showing a gradual improvement in economic conditions on both sides of the Atlantic, and despite the release of earnings announcements of euro area and US listed companies which surprised on the upside, developments in euro area stock markets were dominated by the Greek fiscal crisis. In particular, market concerns regarding the implementation of the financial support package and the enforceability of domestic austerity programmes in Greece intensified considerably. Implied stock market volatility increased both in the euro area and in the United States.

Between end-March and 5 May stock price indices decreased by 7.6% in the euro area and by 0.3% in the United States (see Chart 19). Developments in euro area stock prices over this period were dominated by market concerns over the implementation of the financial support package for Greece. Euro area financial stock prices were affected by the intensifying fiscal solvency concerns and declined strongly in April, reflecting concerns about possible write-downs on banks' portfolio holdings of euro area government debt securities. Stock market uncertainty in the euro area and the United States, as measured by implied volatility, increased in late April and early May (see Chart 20). Between end-March and 5 May, stock prices in Japan, as measured by the Nikkei 225 index, declined by about 0.3%.

Chart 19 Stock price indices

(index: 1 May 2009 = 100; daily data)

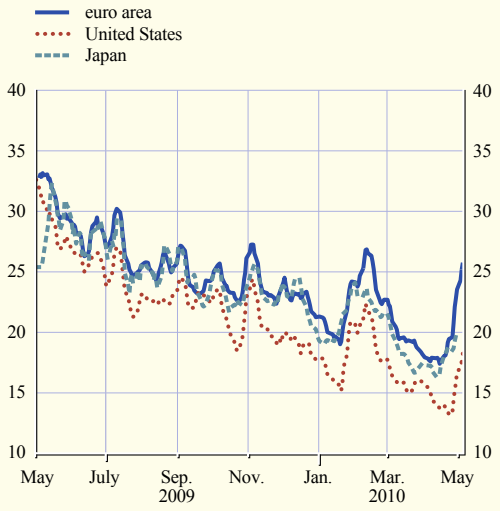


Sources: Reuters and Thomson Financial Datastream.
Note: The indices used are the Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 index for the United States and the Nikkei 225 index for Japan.

For euro area listed companies, the growth of actual earnings per share remained depressed in April 2010. The actual earnings per share of firms included in the Dow Jones EURO STOXX index declined by 13%. The pace of the decline, however, continued to moderate. Expected growth of earnings per share 12 months ahead remained unchanged at 24% in April. Looking at earnings announcements in April for firms listed in the EURO STOXX index, the number of positive surprises was much higher than the number of negative surprises. Earnings announcements surprised on the upside across all sectors of the economy, with the only exception of the technology sector. The car industry and

Chart 20 Implied stock market volatility

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



Source: Bloomberg.
Notes: The implied volatility series reflects the expected standard deviation of percentage changes in stock prices over a period of up to three months, as implied in the prices of options on stock price indices. The equity indices to which the implied volatilities refer are the Dow Jones EURO STOXX 50 for the euro area, the Standard & Poor's 500 for the United States and the Nikkei 225 for Japan.

the banking sector, which were badly hit during the recent economic and financial crisis, also posted more favourable earnings than previously expected. As a consequence, earnings data contributed positively to developments in euro area stock prices in March.

In April, macroeconomic data mostly continued to surprise positively on both sides of the Atlantic. Indicators of economic activity were positive and confidence indicators, including the thus far relatively subdued consumer confidence indicator, came out better than anticipated. During April, conditions in housing markets also improved, as reflected in house sales data in the United States and mortgage loan data for the euro area, the latter of which mainly improved due to developments in Spain. Stock markets were further supported by the latest Consensus Economics forecasts, which showed that inflation risks in the euro area and the United States over the medium to long term remain contained and that expectations of interest rates remaining low and supportive of economic growth over a protracted period continued to be strong. In the euro area, however, these positive developments were overshadowed by the Greek fiscal crisis and its possible ramifications. The intensification of this crisis during the last week of April following the sovereign credit rating downgrade of Portugal, Spain and Greece prompted a sell-off not only in euro area stock markets, but also in the US and Asian equity markets. This highlights the need to provide financial support to Greece to safeguard financial stability. Box 6 reviews the main features of the economic and financial adjustment programme signed by the Greek authorities.

Box 6

THE GREEK ECONOMIC AND FINANCIAL ADJUSTMENT PROGRAMME

Greece has committed itself to a very significant correction of its fiscal position, which, according to the latest data release by Eurostat, amounted to a general government deficit of 13.6% of GDP in 2009. On 2 May 2010, the Eurogroup Ministers concurred with the European Commission and the ECB that the ability of the Greek government to finance itself in the market is not sufficient and that financial support is warranted to safeguard financial stability in the euro area as a whole. The euro area financial support to Greece, combined with IMF financing, will be provided under strong policy conditionality, on the basis of an ambitious economic and financial adjustment programme submitted by the Greek authorities.[1] This box presents the main features of the Greek

1 The joint financial package amounts to €110 billion to cover the financing needs of Greece over the programme's three-year horizon. Euro area countries stand ready to contribute for their part €80 billion, of which up to €30 billion in the first year.

programme, as described in the Memorandum on Economic and Financial Policies (MEFP) for the years 2010-2013. The box also briefly discusses the experience of other EU countries with large fiscal adjustments.

The main objectives of the Greek economic and financial adjustment programme are to correct fiscal and external imbalances and to restore confidence in the longer-term sustainability of public finances. The programme highlights four areas:

– Fiscal adjustment is the cornerstone of the programme. In this respect, the Greek government is committed to the implementation of durable fiscal consolidation measures of some 11% of GDP in cumulative terms through 2013. The programme envisages additional remedial measures if the deficit were not on course to fall below 3% in 2014. This large fiscal adjustment is needed to put the government debt-to-GDP ratio on a downward trajectory from 2013 onward.

– Incomes policy and a reform of the social security system are to be undertaken to support fiscal adjustment. Realigning incomes to sustainable levels is also deemed necessary to support a reduction in inflation well below the euro area average, and to improve price and cost competitiveness on a lasting basis.

– Financial sector policies are to be implemented to safeguard financial stability. While currently capital buffers are seen as reassuring, bank supervisors will need to monitor closely liquidity and non-performing loans at individual banks. The Bank of Greece and the government are committed to further strengthening the financial crisis management framework, inter alia by establishing a Financial Stability Fund (FSF). The objective of the FSF is to maintain the stability of the Greek banking system by providing equity capital in the event of a significant decline in capital buffers.

– Structural reforms are to be adopted, focusing on modernising the public sector and making product and labour markets more efficient and flexible. This will serve to create a more open and accessible domestic environment for foreign investors, and to reduce the state's involvement in economic activities. All these measures will contribute to enhancing potential growth.

The Governing Council of the ECB welcomed the economic and financial adjustment programme. The ambitious fiscal consolidation and structural reforms under the programme are appropriate to achieve the programme's objectives of stabilising the fiscal and economic situation over time and addressing the fiscal and structural challenges of the Greek economy. The programme is comprehensive and supported by strong conditionality. It deals with the relevant policy challenges in a decisive manner. Accordingly, it will help to restore confidence and safeguard financial stability in the euro area. The Governing Council also considered essential that the Greek public authorities stand ready to take any further measures that may become appropriate to achieve the objectives of the programme.

Large fiscal adjustments in other EU countries

The economic and financial adjustment programme to which Greece is committed requires strong fiscal consolidation. Judging from past experience in euro area countries, large

Periods of sizeable government debt reduction in selected euro area countries

(general government; percentage of GDP)

Country/period of sizeable debt reduction	Debt		Expenditure		Revenue		Primary expenditure	
	Peak	Trough	Peak	Trough	Peak	Trough	Peak	Trough
Belgium (1994-2007)	134.2	84.2	54.9	48.4	47.5	48.2	44.2	44.5
Ireland (1994-2006)	94.1	24.9	44.6	34.4	41.9	37.4	38.0	33.4
Spain (1997-2007)	67.4	36.2	43.2	39.2	38.4	41.1	38.0	37.6
Netherlands (1994-2007)	78.5	45.5	55.7	45.5	52.9	45.7	49.6	43.3
Finland (1995-2008)	57.7	34.2	63.5	49.4	56.8	53.6	59.4	48.0

Memo item: fiscal position in Greece	Debt	Expenditure	Revenue	Primary expenditure
2009	115.1	50.5	36.9	45.4

Source: European Commission Spring 2010 Forecast.
Notes: Since budgetary figures for Spain according to ESA 95 definitions are available only from 1995 onwards, previous values have been interpolated. The peak of the respective fiscal aggregate refers to the year prior to the start of the period of sizeable debt reduction.

reductions in government debt are feasible. Such reforms indeed require a firm longer-term commitment.[2] In particular Belgium, Ireland, Spain, the Netherlands and Finland have in the past implemented substantial budgetary adjustments (complemented by structural reforms) and successfully reduced their debt-to-GDP ratios. The budgetary adjustment in these countries mainly occurred on the expenditure side (see table). The periods of large debt reductions in Ireland, the Netherlands and Finland were accompanied by decreases in the respective government expenditure ratios of more than 10 percentage points. While part of this decline may be explained by the reduction in interest payments, primary expenditure ratios also fell markedly over these periods. These sharp declines even allowed countries to reduce their revenue ratios and still achieve budgetary improvements over the respective debt reduction periods. In Belgium and Spain, expenditure ratios also declined, but fiscal adjustment consisted of increases in revenue ratios too.

Recent experience in several non-euro area Member States participating in ERM II also demonstrates that adverse budgetary developments can be counteracted through decisive fiscal adjustment. For example, the consolidation packages adopted by the Estonian authorities in the course of 2009 amounted to over 9% of GDP, according to the latest European Commission estimates.[3] Lithuania implemented consolidation measures of around 8% of GDP in 2009, with further fiscal adjustment envisaged for 2010. Similarly, after adopting a highly restrictive supplementary budget in 2009, Latvia's 2010 budget contains a further consolidation effort amounting to more than 4% of GDP. These adjustments are crucial in the context of sharp declines in revenues as a result of the economic downturn.

Overall, the ambitious Greek economic and financial adjustment programme, if carried out with determination, can be expected to deliver the necessary correction of fiscal and external imbalances and to restore confidence in the longer-term sustainability of public finances.

2 See the box entitled "Experience with government debt reduction in euro area countries" in the September 2009 issue of the Monthly Bulletin.
3 See European Commission Spring 2010 Forecast.

Box 7

INTEGRATED EURO AREA ACCOUNTS FOR THE FOURTH QUARTER OF 2009[1]

The integrated euro area accounts up to the fourth quarter of 2009 released on 30 April 2010 offer comprehensive and consistent information on the income, spending, financing and portfolio decisions of institutional sectors of the euro area. These accounts show the economy continuing to rebound from the trough reached in the second quarter of 2009, further signs of normalisation, as well as a return of risk appetite in favour of market instruments.

Euro area income and net lending/net borrowing

The further rebound in nominal disposable income of the euro area, to an annual rate of change of -0.5% in the fourth quarter of 2009 from -2.7% in the third quarter, benefited all sectors. Household income growth picked up, income of non-financial corporations (NFCs) continued to expand rapidly, and the decline, in annual terms, of government income moderated (Chart A).

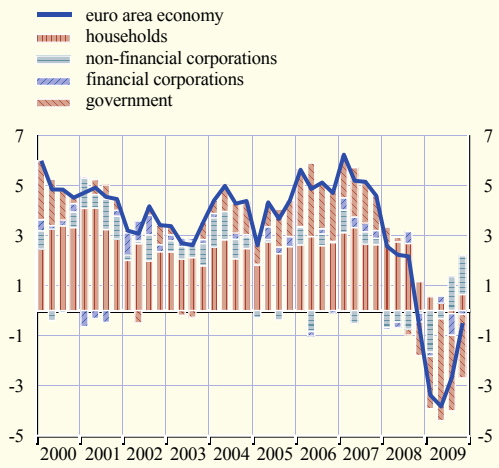
In this context, the annual decline in euro area saving further moderated (to -5.8% in the fourth quarter of 2009), on the back of dynamic NFC retained earnings and less rapid annual contractions in government saving (government dissaving remaining stable at a high level over the last three quarters). In parallel, the year-on-year decline in gross capital formation also moderated (to -13.9% in the fourth quarter from -19% in the second quarter).

With a less pronounced decline in saving than in capital formation, euro area net borrowing fell again in the fourth quarter of 2009 (to a deficit of 0.8% of GDP, on a four-quarter moving sum basis). From a sectoral viewpoint, this improvement reflects the very rapid reduction

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

Chart A Euro area gross disposable income – contribution by sector

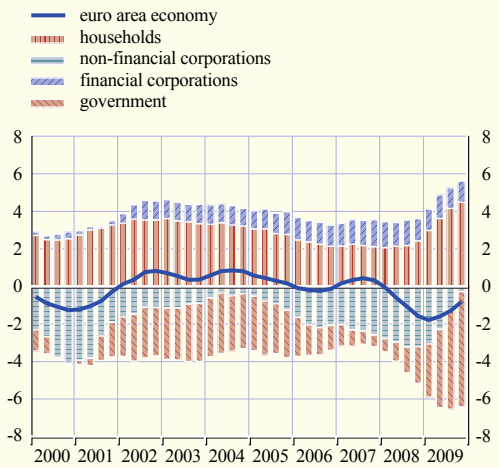
(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB.

Chart B Euro area net lending/net borrowing

(as a percentage of GDP; four-quarter moving sum)



Sources: Eurostat and ECB.

in net borrowing of NFCs (on a four-quarter moving sum basis, with even surpluses in the second half of 2009, after record financial deficits in mid-2008) which, together with a further increase in households' net lending (financial savings), absorbed the additional deterioration in government deficits on a four-quarter moving sum basis.[2] The latter reached a record 6.1% of GDP for the year 2009 as a whole (with some stabilisation noted since the second quarter of 2009 on a seasonally adjusted basis; Chart B).

The mirror image of these developments can be seen in the external accounts, with an improving current account balance. The fallout from the financial crisis continued to dampen "gross" cross-border transactions for many types of financial instruments, although a shift towards more risky equity instruments can be observed. The flows of interbank deposits between euro area MFIs and foreign banks remained negative for the fifth quarter in a row, as repatriation of funds continued.

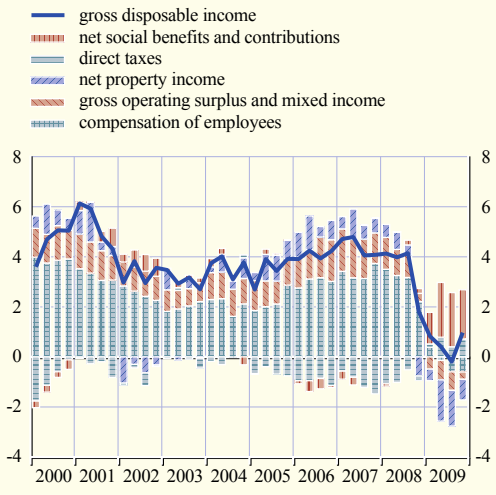
Behaviour of institutional sectors

In the fourth quarter of 2009, *household* nominal income growth turned positive, after having been in negative territory in the third quarter. This recovery was largely driven by a marked slowdown in the rate of contraction of dividends as well as of mixed income earned, while social benefits received net of social contributions and taxes paid continued to strongly support household income growth. Compensation of employees remained subdued, on the back of falling employment and slowing wages (Chart C). The household savings rate fell marginally in the fourth quarter of 2009 on a seasonally adjusted basis (to 15.1%) by 0.1 percentage point, after a

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.

Chart C Household nominal gross disposable income

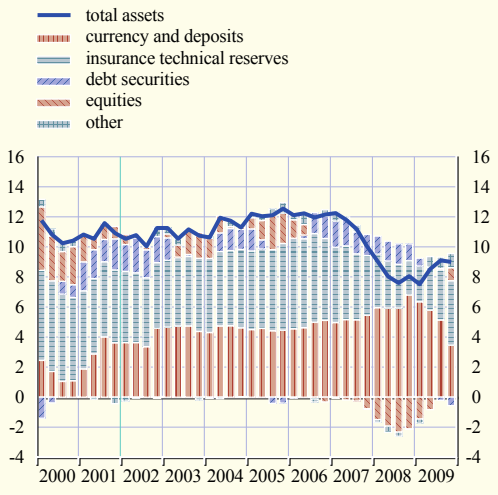
(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB.

Chart D Household financial investment

(four-quarter moving sum; percentage of gross disposable income)



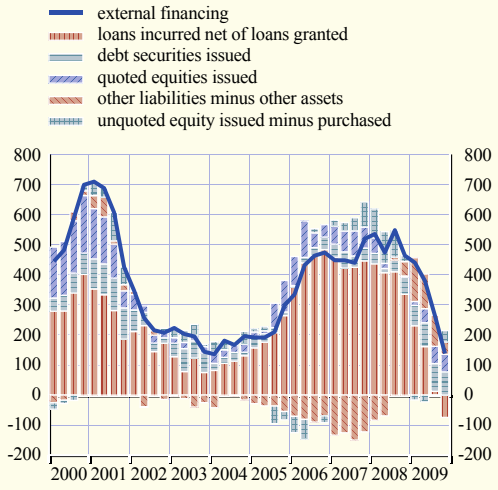
Sources: Eurostat and ECB.

fall of 0.5 percentage point in the third quarter, in conjunction with a further increase in financial wealth driven by equity markets and notwithstanding an adverse outlook for employment and public finances. Household net lending stabilised in the fourth quarter (while still expanding on a year-on-year basis), as investment bottomed out. Loan growth stabilised at subdued levels. On the asset side, patterns of portfolio allocation point to liquidity preference receding further, a renewed search for yields and a return of risk appetite. In particular, purchases of equity, notably non-money market mutual funds, expanded to the detriment of low-yielding deposits (Chart D).

The gross operating surplus of *non-financial corporations* continued to recover in the fourth quarter, and its annual decline moderated rapidly to -1.7% (from -14.2% in the second quarter of 2009). The ratio of gross operating surplus to value added (a measure of profit margins) rose again, on a seasonally adjusted basis, to 37.9% in the fourth quarter, up 0.4 percentage point, after reaching a trough in the first quarter of 2009. NFCs also benefited again from rapidly falling net interest paid, while taxes and net dividends distributed stabilised in the fourth quarter at very low levels. The sharp rebound in saving (and disposable income) observed in the third quarter was thus confirmed, resulting in a large year-on-year increase to the fourth quarter. At the same time, the annual contraction of NFC fixed capital formation moderated further in the fourth quarter (to -9.9%). Destocking continued in the fourth quarter at a still rapid pace. In total, with stronger saving than capital investment, the net borrowing position of NFCs continued improving, having turned into a net lending position, on a quarterly basis, in the third quarter of 2009. The annual growth rate of external financing of NFCs slowed further, with still pronounced substitution effects, as market financing (debt securities and quoted shares) more than offset net redemptions in MFI loans: +135 billion euro versus -105 billion euro respectively for 2009 as a whole (Chart E). Growth in trade credits and loans granted by NFCs (mostly "intra-sector" funding) continued to decelerate,

Chart E NFC external financing by source of funds

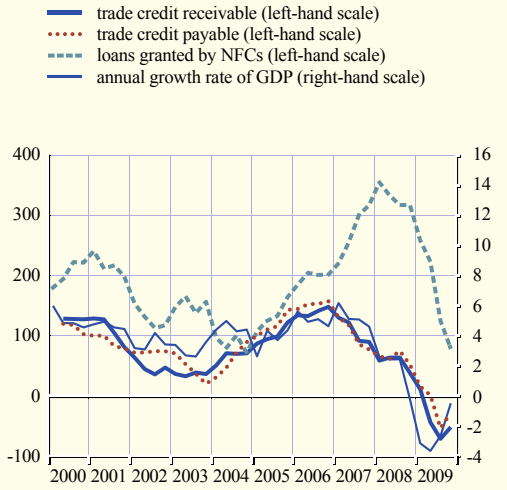
(four-quarter moving sum; EUR billions)



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

Chart F NFC loans granted and trade credit receivable and payable

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



Sources: Eurostat and ECB.
Note: Trade credit receivable and payable are estimated by the ECB based on partial information.

despite the pick-up in nominal GDP growth, which suggests a normalisation in the buffering role played during the crisis so far, in view of improving cash flow positions of businesses and some relaxation in bank financing (Chart F). Against this background, NFCs substantially replenished their liquidity buffers (deposits but also debt securities).

While *general government* accounts deteriorated further on a four-quarter moving sum basis, the improvement in year-on-year change terms points to some stabilisation of the deficit close to a trough, possibly reached in the second quarter of 2009. This stabilisation likely reflects the ongoing impact of automatic stabilisers in a moderately recovering economy as well as some unwinding of stimulus measures. Less marked annual contractions in most revenue items are reported, except for taxes and social contributions paid by households. Debt issuance, though still high, was not as massive in the last two quarters as in the previous nine months, when governments had to fund substantial purchases of financial assets in the context of financial rescues. The still high government debt securities issuance continued to be largely absorbed by MFIs and non-residents.

The disposable income of *financial corporations* fell year on year, though less rapidly than before. The ongoing contraction in net interest earned (which outweighs the solid growth in gross operating surplus stemming from increased bank margins and falling compensation of employees) was mitigated in this quarter by more pronounced cutbacks in net dividends distributed. In addition to sizeable net retained earnings of around €100 billion in 2009, financial corporations benefited from substantial holding gains in recent quarters (Chart G). Gains on equity and debt securities held compensated for the large write-downs initially incurred on "toxic" assets, and price gains for a number of structured products started to be even more frequently reported.[3] Despite pressure to deleverage, additions to their balance sheets (excluding interbank deposits) remained positive, amounting to an average of €200 billion per quarter, after a trough in the fourth quarter of 2008, compared with up to €1 trillion during the preceding leverage boom. The shift towards safer assets continued, favouring government securities, diminishing cross-border exposures and limiting loans. The reinforced role of market instruments amongst the assets of financial corporations points to some signs of disintermediation in the wake of the crisis. Similarly, NFCs are expanding debt issuance on the markets, and households are favouring again market instruments (in particular via collective investment vehicles).

Financial markets

On the *debt securities* market, the considerable expansion of net transactions in debt securities in the fourth quarter of 2008 and the first quarter of 2009 receded further in the last quarter of 2009, although government issuance remained elevated. NFCs resumed purchases. The net buyer position of other financial intermediaries (OFIs) reflects heavy purchases by mutual funds (on the back of a return of investors searching for yield), compensating for still large issuance by special-purpose vehicles, notably in the context of ad hoc securitisation (for use as collateral in ECB refinancing operations). MFIs resumed issuance and at the same time disposed of debt securities held. The rest of the world remains a net buyer, with large purchases by non-residents. On the *mutual funds* market, issuance of non-money market mutual fund shares accelerated again on the back of household appetite for riskier and longer-

3 It should be noted that, in the case of loans, which are valued at nominal value in the euro area accounts, impairment only has an impact on the financial wealth of creditors at the time when they are actually written off, i.e. with a considerable delay, and not at the time they are written down.

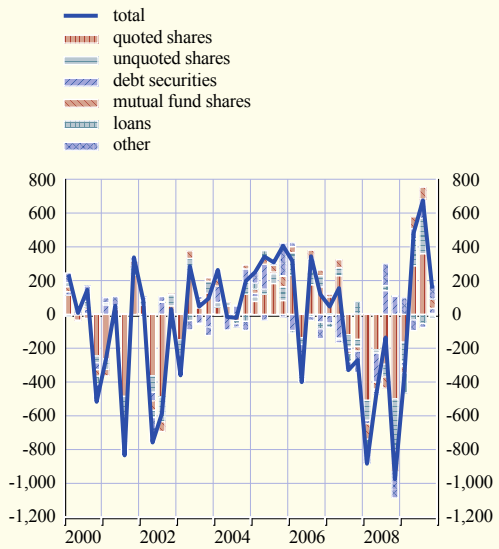
term assets. On the *quoted shares* market, net issuance remained strong, in the context of capital enhancement needs of MFIs and of a progressive move of NFCs towards non-bank financing. NFCs were net sellers of equity held, and investment funds (in the OFI sector) were prominent buyers. On the *loan market*, NFCs continued redeeming MFI loans, in particular in the short-term segment, replacing them with other liability classes, while growth in household loan borrowing bottomed out moderately.

Balance sheet dynamics

In the fourth quarter of 2009, the annual change in household net worth turned positive, after two years of negative readings. Although the influence of net saving (9% of income) is still largely neutralised by holding losses, the latter now concern mostly real estate, whereas equity has been generating holding gains, on the back of a stock market rally (Chart H). The increase in market prices is also boosting the balance sheets of banks, which are heavy in equity, and gains generated far exceed write-offs on loans (Chart G).

Chart G Holding gains and losses on financial corporations' assets

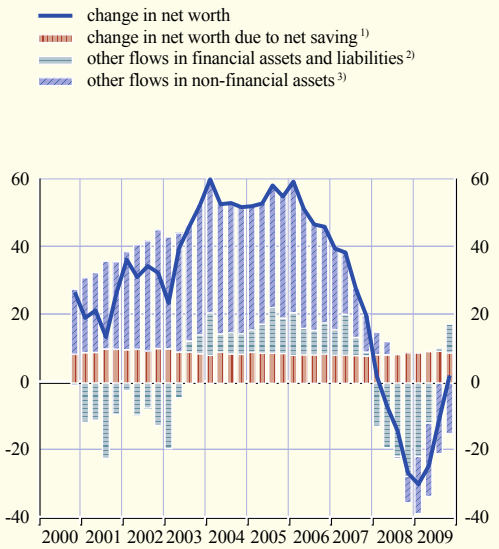
(quarterly flow; EUR billions)



Sources: Eurostat and ECB.
Note: "Total" refers to "Other economic flows", which mainly relate to holding gains and losses (including loan write-offs).

Chart H Change in net worth of households

(four-quarter moving sum; percentage of gross disposable income)



Sources: Eurostat and ECB.
Notes: Data on non-financial assets are estimates by the ECB.
1) This item comprises net saving, net capital transfers received, and the discrepancy between the non-financial and the financial accounts.
2) Mainly holding gains and losses on shares and other equity.
3) Mainly holding gains and losses on real estate and land.

3 PRICES AND COSTS

Euro area annual HICP inflation was 1.5% in April 2010, according to Eurostat's flash estimate, after standing at 1.4% in March. The rise in inflation over recent months mostly reflects higher energy prices. Looking ahead, global inflationary pressures may increase, driven mainly by price developments in commodity markets and in fast-growing economic regions of the world, while euro area domestic price pressures are still expected to remain contained. As a result, overall inflation is expected to remain moderate over the policy-relevant horizon. While short-term risks to the HICP inflation outlook are tilted slightly to the upside, risks to the price outlook over the medium term are broadly balanced.

3.1 CONSUMER PRICES

According to Eurostat's flash estimate, the euro area annual HICP inflation rate stood at 1.5% in April 2010, up from 1.4% in March (see Table 4). Official estimates of the breakdown of HICP inflation in April are not yet available, but the increase may be related to continued high annual growth in energy prices.

In March the annual HICP inflation rate jumped sharply, by 0.5 percentage point, compared with February. The sectoral breakdown for March indicates that this hike was mainly driven by energy and food prices, as well as by some volatile services components (see Chart 21).

The annual rate of change in HICP energy prices accelerated strongly in March. The annual growth rate rose to 7.2%, up from 3.3% in February, mainly reflecting a sharp increase, in month-on-month terms, in oil-related items (such as liquid fuels and fuels for transportation). In turn, these increases reflected the sharp rises recorded in oil prices in March, as well as higher refining and retail margins. Base effects also contributed to the increase in the annual growth rate of this component.

After hovering in negative territory for seven months, the annual growth rate of total food prices (including alcohol and tobacco) rose in March to 0.3%, up from -0.1% in February. As for the sub-components, the annual rate of change in unprocessed food prices, although still negative, rose

Table 4 Price developments

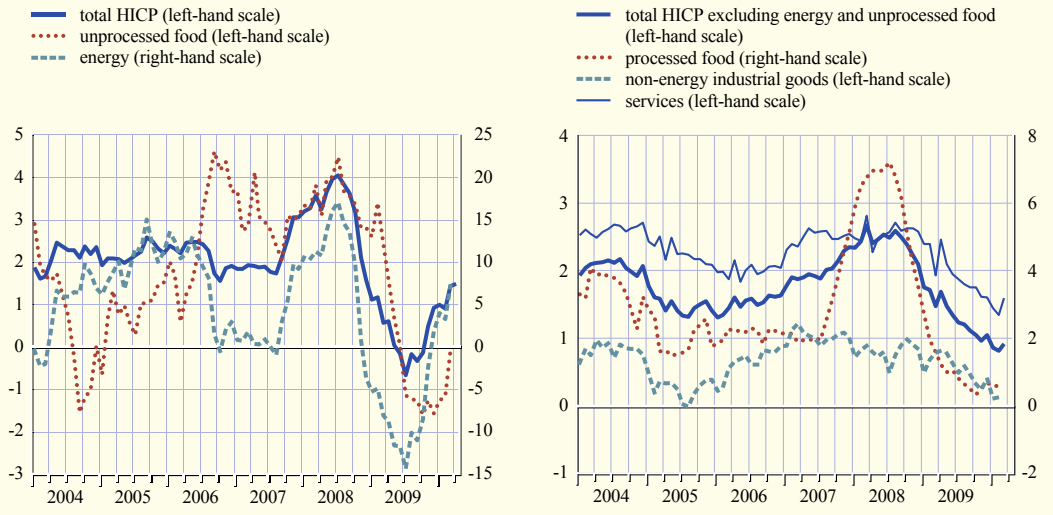
(annual percentage changes, unless otherwise indicated)

	2008	2009	2009 Nov.	2009 Dec.	2010 Jan.	2010 Feb.	2010 Mar.	2010 Apr.
HICP and its components								
Overall index[1)]	3.3	0.3	0.5	0.9	1.0	0.9	1.4	*1.5*
Energy	10.3	-8.1	-2.4	1.8	4.0	3.3	7.2	.
Unprocessed food	3.5	0.2	-1.3	-1.6	-1.3	-1.2	-0.1	.
Processed food	6.1	1.1	0.5	0.7	0.6	0.6	0.5	.
Non-energy industrial goods	0.8	0.6	0.2	0.4	0.1	0.1	0.1	.
Services	2.6	2.0	1.6	1.6	1.4	1.3	1.6	.
Other price indicators								
Industrial producer prices	6.1	-5.1	-4.4	-2.9	-1.0	-0.4	0.9	.
Oil prices (EUR per barrel)	65.9	44.6	52.1	51.6	54.0	54.5	59.1	64.0
Non-energy commodity prices	2.1	-18.5	-0.8	19.0	26.8	25.0	33.9	35.3

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 April 2010 refers to Eurostat's flash estimate.

Chart 21 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

from -1.2% in February to -0.1% in March, owing to increases in fish and vegetable prices. The annual growth rate of processed food prices fell marginally in March, standing at 0.5%. Items such as bread and cereals, dairy products and oil and fats still recorded negative annual growth rates.

Excluding all food and energy items, which represent around 30% of the HICP basket, annual HICP inflation increased from 0.9% in February to 1.0% in March, mainly owing to higher services price inflation. The annual rate of services price inflation was 1.6% in March, 0.3 percentage point higher than in February. The acceleration reflected higher recreational and transport services inflation. While the higher inflation in transport services seems to be related to the higher energy prices, the increase in recreational services prices was partly related to calendar effects affecting package holiday prices in the HICP basket. The annual rate of change in non-energy industrial goods prices remained unchanged at the level of 0.1%. Within this component, the prices of durable goods (cars, electronic appliances, etc.) continued to record negative annual growth rates in March.

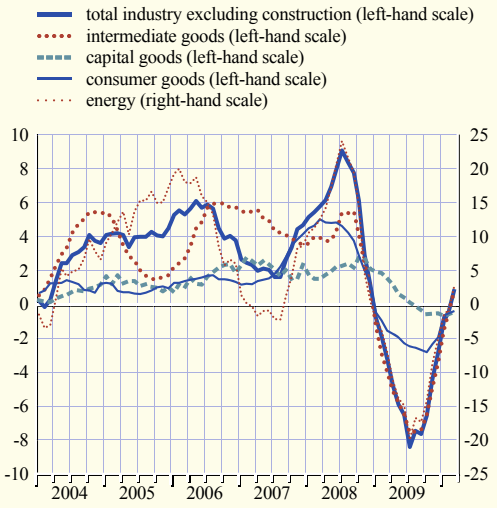
3.2 INDUSTRIAL PRODUCER PRICES

Recent data show that, after more than one year, the downward trend in industrial producer prices has bottomed out. In March the annual rate of change in industrial producer prices (excluding construction) rose to 0.9%, from -0.4% in February. This was the first positive reading since December 2008 and was mainly driven by the energy and intermediate goods components, on account of strong positive base effects and recent increases in prices for energy and raw materials (see Chart 22).

Developments in survey indicators also signal the unwinding of underlying downward price pressures. With regard to the Purchasing Managers' Index (PMI), all price indices moved up again in

Chart 22 Breakdown of industrial producer prices

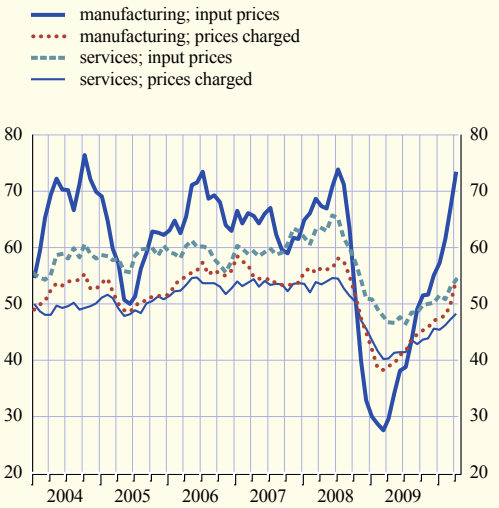
(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

Chart 23 Producer input and output price surveys

(diffusion indices; monthly data)

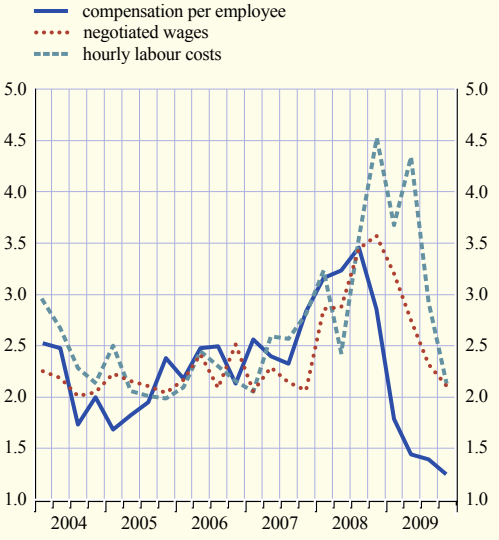


Source: Markit.
Note: An index value above 50 indicates an increase in prices, whereas a value below 50 indicates a decrease.

April (see Chart 23). PMI data on prices charged in the manufacturing sector indicate price increases in April, for the first time since October 2008. In the services sector, however, the prices charged index remains below the level of 50, thus indicating falling prices (albeit at lower rates than in the previous few months). Input price indices for the manufacturing sector increased further in April, probably on account of commodity price increases, while the increase in those for the services sector was modest, mainly reflecting moderate wage developments. Overall, the survey indicators seem to suggest that firms are having some difficulty in passing on the higher input prices to consumers.

Chart 24 Selected labour cost indicators

(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

3.3 LABOUR COST INDICATORS

Few new data for labour cost indicators have become available since the last issue of the Monthly Bulletin. Overall, the most recent data available on the annual growth rate of labour cost indicators show continued declines in the fourth quarter of 2009, extending the trend that started in late 2008 (see Chart 24 and Table 5). Box 8 takes a longer perspective and compares wage developments in the euro area with those in the United States.

Table 5 Labour cost indicators

(annual percentage changes, unless otherwise indicated)

	2008	2009	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4
Negotiated wages	3.2	2.6	3.6	3.2	2.8	2.3	2.1
Total hourly labour costs	3.5	3.3	4.5	3.6	4.3	3.0	2.2
Compensation per employee	3.2	1.5	2.9	1.8	1.4	1.4	1.2
Memo items:							
Labour productivity	-0.1	-2.2	-1.7	-3.7	-3.0	-1.9	-0.1
Unit labour costs	3.3	3.8	4.7	5.7	4.6	3.4	1.3

Sources: Eurostat, national data and ECB calculations.

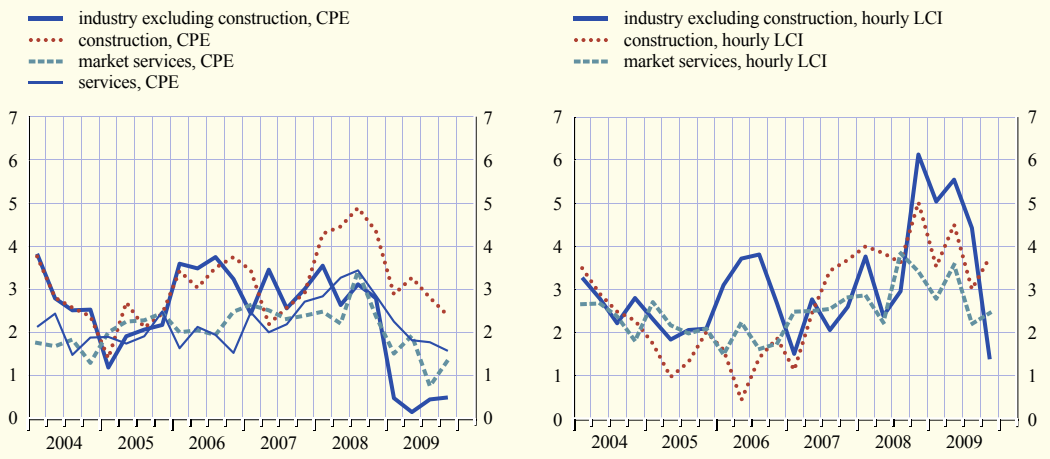
The annual rate of growth of negotiated wages in the euro area declined to 2.1% in the final quarter of 2009, from 2.3% in the third quarter. This decline confirms that negotiated wage growth in the euro area remains on the downward path that it has been following since the beginning of 2009. Available information suggests that the annual rate of growth of negotiated wages may have stabilised at the beginning of 2010.

In the final quarter of 2009, annual hourly labour cost growth in the euro area fell further to 2.2%, from 3.0% in the third quarter, reaching a rate close to the lows observed in 2005. The deceleration observed in annual labour cost growth primarily reflects a slower pace of decline in hours worked per employee, in particular in the industrial sector (see Chart 25). In fact, in quarter-on-quarter terms, hours worked at the whole economy level rose in the last quarter of 2009, suggesting that the strong adjustment in hours during the recession (in particular, through short-time working in the industrial sector as a result of usage of working-time accounts and government-sponsored schemes) has started to unwind.

The annual growth rate of compensation per employee slowed somewhat further, to 1.2% in the fourth quarter of 2009, from 1.4% in the previous quarter. Together with a further substantial

Chart 25 Sectoral labour cost developments

(annual percentage changes; quarterly data)



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

improvement in productivity per capita, this slowdown in the annual rate of growth of compensation per employee resulted in a further significant slowdown in unit labour cost growth. In the final quarter of 2009, the annual growth rate of unit labour costs dropped to 1.3% (from 3.4% in the previous quarter), a level that was well below the peak of nearly 6% reached in the first quarter of that year. Looking ahead, unit labour costs are expected to continue to decelerate – and even to fall – in 2010, mainly as a result of productivity gains.

Box 8

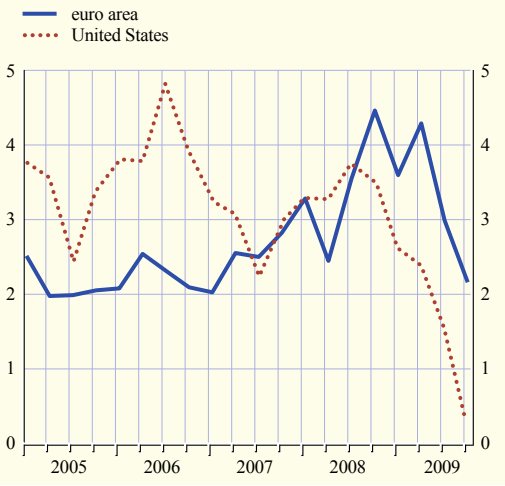
WAGE DEVELOPMENTS IN THE EURO AREA AND THE UNITED STATES DURING THE RECENT ECONOMIC DOWNTURN: A COMPARATIVE ANALYSIS

The recent economic downturn has translated into a sharp deterioration in labour markets in both the euro area and the United States. In the presence of negative or subdued growth in demand and overall activity, employers in both regions attempted to adjust overall wage costs, in terms of both quantities of labour used and wage rates. This box discusses the comparative developments in the latter, with a focus on the private sector.

At the outset, it should be noted that institutional differences as well as differences in the coverage and definitions of economic activities, employment and labour costs impair the comparability of data in the two economies. This box focuses on developments in hourly labour costs, which seem to be the closest available statistics. Euro area hourly labour costs are measured by the labour cost index, whereas for the United States the comparable indicator of employer costs for employee compensation is used. Overall, hourly wages adjusted earlier and more sharply in the United States than in the euro area. This may be partly explained by the earlier economic slowdown in the United States, which started in the final quarter of 2007, while euro area GDP growth remained relatively resilient until the second quarter of 2008. However, different labour market policies and a greater degree of wage flexibility also played a role.

Chart A Hourly labour cost growth in the euro area and the United States

(annual percentage changes)



Sources: Eurostat and Bureau of Labor Statistics.
Note: The data refer to the non-agricultural private sector.

Hourly labour costs

Both in the euro area and in the United States, the deterioration in labour market conditions has encouraged wage restraint over recent quarters, as illustrated by the developments in hourly labour costs (see Chart A).[1] In the United States, growth in wage costs

1 Comparing wage developments in the United States and the euro area raises the question of how these developments compare with the Japanese labour market. However, such a comparison is not straightforward, as the Japanese labour market is characterised by a number of idiosyncratic features. This notwithstanding, wage growth in Japan has been weak (or even negative), although recently the pace of decrease has slowed considerably.

decelerated throughout 2009. At 0.3%, annual wage growth in the final quarter of 2009 was substantially lower than the average prior to the downturn (3.4%). In the euro area, growth in hourly labour costs started to decline later than in the United States. It remained robust at around 4% in the second half of 2008 and early 2009. More recently, in the fourth quarter of 2009, annual hourly labour cost growth returned to levels closer to those observed before the downturn, somewhat above 2%.

Structural differences

The more pronounced deceleration in hourly labour cost growth recorded in the United States as compared with the euro area during the downturn reflects, first, the greater degree of wage flexibility. Wages in the euro area adjusted at a slower pace owing to the longer duration of contractual wage agreements of about two years on average.[2] In the United States, the most common wage-setting interval is about one year, which has allowed US employers to react more quickly in reducing labour costs. In addition, employers in the United States appear to have made larger adjustments to wages during the downturn. For instance, 5% of businesses reduced salaries in 2009, according to a recent survey by the Society for Human Resource Management, and a record 48% of US companies imposed freezes[3]. In the euro area, 2% of reporting firms cut base wages and 37% froze them between the onset of the financial crisis and the summer of 2009, according to a recent survey in the context of the Wage Dynamics Network (WDN).[4] In addition, the extensive use of variable pay plans in the United States (representing 11.2% of payroll in 2009) allowed employers to easily rein in wage growth during the recession. In the euro area, bonuses are only relevant in some sectors, such as financial services, while wage increases are still largely determined at the central or sectoral level. Information available from the relevant WDN survey confirms this picture, as only around 12% of firms asked used available flexible wage components to adjust overall costs.

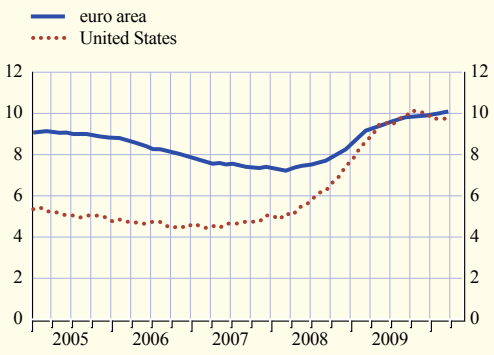
Second, in the United States, the wages or benefits of about half of the labour force are tied to changes in the Consumer Price Index. Consumer prices fell by 0.4%, year on year, in 2009, implying stagnation or even a decrease in the wages indexed to inflation. In the euro area, while formal or informal indexation also typically affects a large proportion of contracts, recent wage agreements suggest that the adjustment is not necessarily symmetric when inflation is low or even negative.[5] While, for example, wage indexation in Belgium indeed resulted in negative wage adjustments for 2010, the downward impact of such clauses is not automatic and needs to be agreed upon by employers and employees. The effect of indexation schemes in other euro area countries is, as of yet, unclear.

Third, unemployment increased earlier and more sharply in the United States than in the euro area, dampening wage growth. The US unemployment rate started to increase in late 2007, rising by more than 5 percentage points to 9.7% in March 2010. By contrast, the unemployment rate in the euro area started to increase only in 2008 and rose by less than 3 percentage points (see Chart B). In March 2010 it stood at 10%, the highest rate for more than a decade. The larger change in the

2 See P. Du Caju, E. Gautier, D. Momferatou and M. Ward-Warmedinger, "Institutional features of wage bargaining in 23 European countries, the US and Japan", ECB Working Paper No 974, 2008.
3 According to Hewitt Associates, a US human resources firm.
4 See "Wage dynamics in Europe: final report of the Wage Dynamics Network", ECB, December 2009.
5 Around 35% of euro area firms surveyed in the context of the WDN reported some kind of inflation adjustment, formal or informal. See M. Druant, S. Fabiani, G. Kezdi, A. Lamo, F. Martins and R. Sabbatini, "How are firms' wages and prices linked: survey evidence in Europe", ECB Working Paper No 1084, 2009.

Chart B Unemployment rate in the euro area and the United States

(percentage of labour force)



Sources: Eurostat and Bureau of Labor Statistics.

US unemployment rate during the crisis may be explained by looser employment protection legislation compared with the euro area, as well as by the relatively larger sectoral shocks in the construction, real estate and financial sectors.[6] In addition, the extensive use of short-time working schemes supported employment in the euro area during the downturn.

Finally, the slower adjustment in wages in the euro area also reflected a mechanical boost to hourly wage growth owing to working-time arrangements during the downturn. The extensive use of flexible time accounts, particularly in Germany, allowed employees to work for fewer hours, thereby reducing overtime accumulated in the past without a decrease in their overall regular compensation. In addition, short-time working schemes subsidised by the government gave firms the opportunity to reduce the hours worked by their employees, while national governments complemented employees' overall pay. As companies still had to pay for fixed employment costs and in most cases agreed to provide a further top-up to their employees' pay (in addition to the government's subsidy), this also implied increases in wages on a per hour basis. Both flexible time accounts and the short-time working schemes were mostly used in industry, and, therefore, hourly labour costs in the industrial sector were the most affected.

By contrast, the usage of short-time compensation programmes in the United States is limited and, thus, has only had a marginal impact on hourly wages. In addition, the reduction in working hours under the US programmes entails a proportional reduction in weekly pay. Thus, the decrease in average hours worked per head in the United States did not feed through into higher hourly labour cost growth, as was the case in the euro area.

Conclusion

The recent economic downturn has led to a smaller adjustment in labour input in the euro area than in the United States. In parallel, hourly labour costs have adjusted less and apparently with a delay in the euro area, compared with a relatively strong and rapid adjustment in the United States. The more decentralised wage system in the United States, compared with those existing in a number of euro area countries, has probably facilitated a stronger downward adjustment in wage growth, driven by wage cuts, wage freezes and restraint in variable pay. In addition, the downward impact of indexation at times of low inflation appears to have been stronger in the United States, while a greater response in terms of unemployment increases further limited wage growth. By contrast, in the euro area, hourly labour cost growth first increased in 2009, reflecting both the impact of earlier agreed contractual increases and the more limited use of flexible wage components, as well as a mechanical boost, as hours fell owing to the government-subsidised short-time working schemes without a proportionate fall in overall compensation per head. More recently, hourly wage growth has also moderated in the euro area.

6 "World Economic Outlook", IMF, April 2010.

Looking ahead, hourly labour cost growth is likely to remain weak in the United States and decrease further in the euro area, where further downward adjustment is also expected in terms of employment in the context of a continued lagged response to the recent recession. While labour market rigidities and pro-employment policies in the euro area have warded off a sharper reduction in employment, the necessary adjustment in labour costs may have only been delayed and might thus extend further into the recovery.

3.4 EURO AREA RESIDENTIAL PROPERTY PRICES

According to the latest data, in the second half of 2009 euro area house prices fell by 3.1% on an annual basis, following a decline of the same magnitude in the first half of the year. For more details, see Box 9.

Box 9

RECENT HOUSING MARKET DEVELOPMENTS IN THE EURO AREA

Euro area residential property prices have exhibited a strong cyclical dynamic over the last decade. Strong price rises prior to 2005 have been followed by a steady slowdown in growth in recent years, culminating in a contraction in 2009. This box reviews the latest price developments, examines selected housing supply and demand factors, and, on this basis, assesses the outlook for house prices.[1]

According to the latest data,[2] in the second half of 2009 euro area house prices fell by 3.1% on an annual basis, following a decline of the same magnitude in the first half of the year (see Chart A, left panel). This year-on-year decline in euro area house prices is the steepest seen since 1982 (see Chart A, right panel) and appears to form part of a correction in house prices following the strong increases recorded between 1999 and 2005 (when the average annual increase was 6.4%; see the table).

The reduction in euro area house prices has been geographically broad-based, with residential property prices falling in almost all euro area countries in 2009. Decreases in house prices in excess of 5% were observed in 2009 for Ireland, Spain, France, Cyprus, Slovenia and Slovakia. More generally, the countries experiencing the most pronounced corrections have tended to be those that exhibited the strongest house price increases in the period prior to 2005. An asset-pricing approach to assessing housing developments suggests that house prices are still relatively high compared with rents for the euro area aggregate as well as four of the five largest euro area countries, with the ratio of the euro area house price index to the rent component of the HICP index remaining elevated compared with its level a decade ago (see Chart B).[3] That said, higher frequency house price data indicate that the pace of the decline appears to have abated somewhat at the end of 2009 and early in 2010, which may be an early signal suggesting that the situation could be stabilising in some countries.

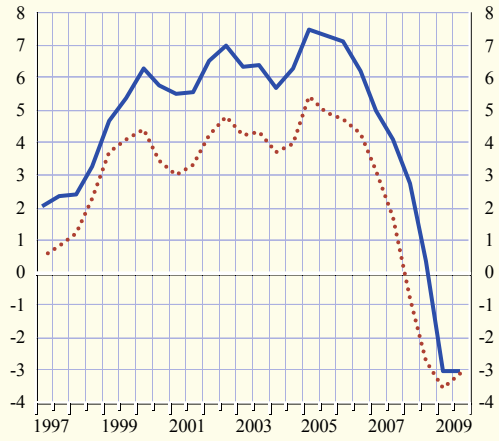
1 For a detailed analysis of approaches used to assess house prices applied in the box, see the article entitled "Assessing house price developments in the euro area" in the February 2006 issue of the Monthly Bulletin.
2 It should be noted that there is a high degree of uncertainty surrounding the data used to assess house price developments. This stems, in particular, from issues related to coverage, quality control and representativeness.
3 This ratio of house prices to rents for the euro area has also remained elevated compared with its longer-term average, which may provide a better benchmark of equilibrium valuation. See, for instance, OECD Economic Outlook, No 86, November 2009.

Chart A Euro area residential property prices

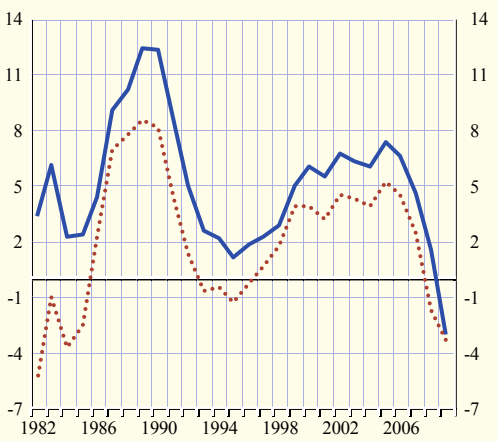
(annual percentage changes)

nominal
real[1)]

a) Biannual data



b) Annual data



Source: ECB calculations based on national data.
Notes: Estimates, including ECB estimates for selected countries, cover more than 90% of the euro area. The euro area residential property price aggregate is calculated from national series covering more than 90% of euro area GDP for the whole period.
1) "Real" residential property price growth is obtained by subtracting annual HICP inflation from the nominal growth of residential property prices.

Residential property prices (nominal) in the euro area

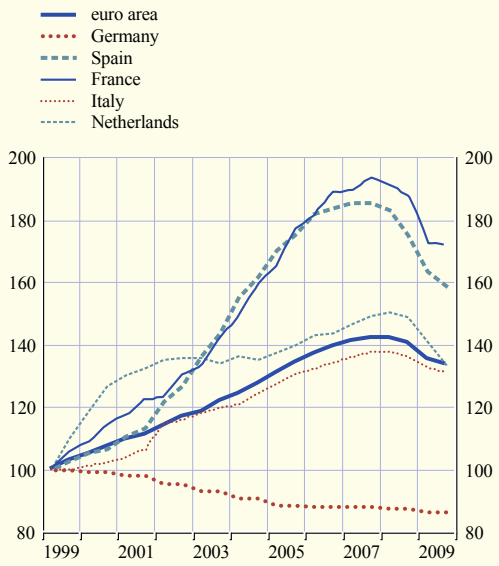
(annual percentage changes)

	Weight	1999-2005	2006	2007	2008	2009	2009		2009				2010
		Average annual change					First half	Second half	Q1	Q2	Q3	Q4	Q1
	%												
Belgium[1)]	3.7	7.5	11.8	9.3	4.8	-0.3	-0.6	-0.1	0.9	-2.1	-1.4	1.2	..
Germany[2)]	27.0	-0.9	0.2	0.7	1.0	-0.2	..	..	..	..	..	..	..
Ireland[2)]	2.1	12.0	13.6	-0.5	-9.1	-13.7	-11.3	-16.1	-11.0	-11.6	-13.8	-18.5	-18.9
Greece[2)]	2.5	9.5	13.0	6.2	1.5	-4.7	-4.1	-5.2	-4.2	-4.1	-5.2	-5.3	..
Spain[2)]	11.7	13.8	10.4	5.8	0.7	-7.4	-7.6	-7.1	-6.8	-8.3	-8.0	-6.3	-4.7
France[1)]	21.1	11.2	12.1	6.6	1.2	-7.1	-8.1	-6.2	-6.9	-9.3	-7.9	-4.4	..
Italy[2)]	17.1	6.9	5.8	5.0	2.6	-0.5	-0.3	-0.7	..	..	..	..	..
Cyprus[2),3)]	0.2	-	10.0	15.0	13.0	-6.0	..	..	..	..	..	..	..
Luxembourg[2)]	0.4	11.1	10.8	10.1	..	..	..	..	..	..	..	..	..
Malta[2)]	0.1	10.8	3.5	1.1	-2.7	-5.0	-7.9	-2.0	-9.9	-6.0	-2.5	-1.4	..
Netherlands[1)]	6.3	7.8	4.6	4.2	2.9	-3.3	-1.5	-5.1	-0.3	-2.8	-5.1	-5.0	-4.3
Austria[2),4)]	3.0	0.7	4.0	4.1	1.3	..	4.6	..	4.3	4.9	3.4	..	..
Portugal[2)]	1.8	2.9	2.1	1.3	3.9	0.4	1.5	-0.7	2.7	0.3	-0.8	-0.6	..
Slovenia	0.4	-	17.6	22.6	3.1	-8.2	-8.4	-8.0	-7.1	-9.8	-10.9	-5.1	..
Slovakia[1)]	0.6	-	16.8	23.9	22.1	-11.1	-8.9	-13.3	-4.3	-13.4	-14.3	-12.3	..
Finland[1)]	2.0	..	-	5.5	0.6	-0.3	-4.5	4.1	-5.5	-3.6	0.4	7.9	11.3
Euro area	100.0	6.4	6.6	4.5	1.5	-3.1	-3.1	-3.1	..	..	..	..	..

Sources: National sources and ECB calculations.
Note: Weights are based on nominal GDP in 2007.
1) Existing dwellings (houses and flats); whole country.
2) All dwellings (new and existing houses and flats); whole country.
3) The property price index is estimated by the Central Bank of Cyprus using data on valuations of property received from several MFIs and other indicators relevant to the housing market.
4) Data up to 2000 cover Vienna only.

Chart B House price/rental yield ratio in the euro area and selected euro area countries

(index: 1999 = 100; percentages; biannual data)

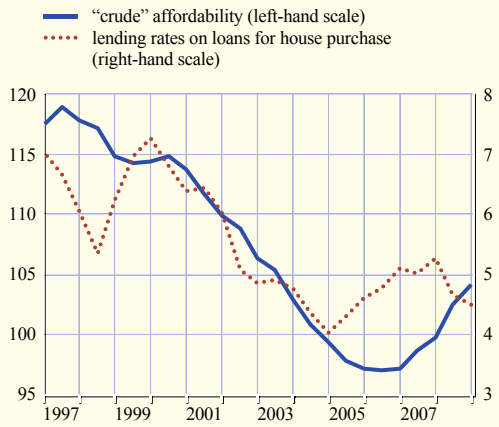


Sources: Eurostat and ECB calculations.

The contraction in house prices has been associated with muted housing supply and demand developments. One demand determinant is affordability, which can be approximated using a "crude" or narrow housing affordability measure. This measure, defined as the ratio of nominal household disposable income to the nominal house price index, recorded a further increase at the end of 2009 (see Chart C), continuing the trend improvement in affordability seen since the end of 2007. It should be taken into account, however, that this improvement follows a lengthy deterioration that began in 2001 when income growth failed to keep pace with strong house price increases. In terms of credit developments related to housing, this improvement in crude affordability has recently been supported by a concurrent improvement in borrowing conditions, given the decrease in nominal interest rates on loans to households for house purchase in 2009. At the same time, the annual growth rate of these loans has steadily increased, rising from 0.6% in September 2009 to 2.6% in March 2010. While this factor could indicate that the housing market is stabilising, the growth rate of these loans is much lower than the level seen at the peak of the last house price cycle in mid-2006,

Chart C "Crude" housing affordability and borrowing conditions

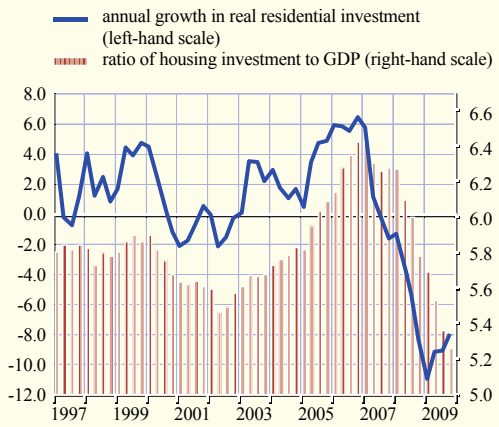
(index: 2005 = 100; percentages per annum)



Sources: Eurostat and ECB calculations.
Notes: "Crude" housing affordability is defined as the ratio of nominal household disposable income to the nominal house price index. Lending rates are calculated as the rate on loans to households for house purchase with an initial rate-fixation period of over five and up to ten years.

Chart D Residential investment in the euro area

(percentages; annual percentage changes)



Sources: Eurostat and ECB calculations.

when loans grew at an annual rate of over 12%. Taken together, these income and credit developments suggest that euro area housing demand is stabilising.

On the supply side of the housing market, the contraction in real housing investment has continued to abate, while nonetheless remaining severe, in the context of the moderation in house price growth. Annual real residential investment in the euro area contracted by 8.0% in the fourth quarter of 2009. While less severe than the 11.0% reduction witnessed in the first quarter of 2009, this rate was still far from the average historical growth rate of 0.5% seen since 1996 and the peak growth rate of 6.4% recorded in the last quarter of 2006 (see Chart D). This decline in residential investment has contributed to a steady reduction in the share of resources devoted to housing construction in the economy, as illustrated by the fact that the ratio of nominal housing investment to nominal GDP fell to around 5¼% of economic resources at the end of 2009 from its elevated level of 6½% in 2006. Developments in building permits, which are often used as a leading indicator for housing investment, suggest that the gradual easing in the pace of the contraction will continue in the coming months. The number of permits issued fell by 20.8% in the last quarter of 2009, compared with a contraction of 27.6% in the first quarter of 2009.

All in all, housing supply and demand dynamics, as well as a cross-check with other valuation approaches, suggest that the contraction in euro area house prices is likely to continue in the near term, albeit possibly at a moderating pace.

3.5 THE OUTLOOK FOR INFLATION

HICP inflation is expected to remain moderate over the policy-relevant horizon. In line with a slow recovery in domestic and foreign demand, overall price, cost and wage developments are expected to remain subdued.

The latest ECB Survey of Professional Forecasters (SPF; see Box 10) shows that forecasters have not substantially changed their outlook for inflation in 2010 and 2011 compared with the previous round. The SPF inflation expectations for 2010 and 2011 are within the ranges reported in the latest staff macroeconomic projections for the euro area. Longer-term inflation expectations (for the year 2014) have remained stable at 1.9%.

In the near term, given the developments in energy prices, risks to earlier projections for HICP inflation are tilted somewhat towards the upside, while risks to price stability over the medium term are viewed as still remaining broadly balanced. Upside risks over the medium term relate, in particular, to the evolution of commodity prices. Furthermore, increases in indirect taxation and administered prices may be greater than currently expected, owing to the need for fiscal consolidation in the coming years. At the same time, risks to domestic price and cost developments are contained.

Box 10

RESULTS OF THE ECB SURVEY OF PROFESSIONAL FORECASTERS FOR THE SECOND QUARTER OF 2010

This box reports the results of the ECB Survey of Professional Forecasters (SPF) for the second quarter of 2010. The survey was conducted between 16 and 20 April 2010. There were 54 responses from forecasters. The SPF collects information on expectations for euro area inflation, real GDP growth and the unemployment rate from experts affiliated with financial or non-financial institutions that are based in the EU.[1]

Inflation expectations for 2010, 2011 and 2012

For the second consecutive SPF round, forecasters have not substantially changed their outlook for inflation, which is expected to be at 1.4% in 2010 (up by 0.1 percentage point compared with the results for the first quarter of 2010) and to be at 1.5% in 2011 unchanged (see table below).[2] In their comments, several respondents reported that an upward revision in their inflation forecasts for 2010 was due to the higher than expected headline inflation data for the first quarter of 2010 as a result of a rebound in commodity prices (in particular energy and food prices) and a weakening in the exchange rate. Forecasters commented that the effects of this increase should be temporary and are expected to be balanced in the medium term by an easing of underlying inflation. For the first time, respondents were also asked to provide an inflation forecast for 2012. According to the responses, inflation expectations for 2012 stand, on average, at 1.7%.

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.

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

(annual percentage changes; unless otherwise indicated)

			Survey horizon			
HICP inflation	**2010**	**March 2011**	**2011**	**March 2012**	**2012**	**Longer-term[2)]**
SPF Q2 2010	1.4	1.4	1.5	1.7	1.7	1.9
Previous SPF (Q1 2010)	*1.3*	-	*1.5*	-	-	*1.9*
ECB staff macroeconomic projections	0.8-1.6		0.9-2.1	-	-	-
Consensus Economics (Apr. 2010)	1.2	-	1.4	-	1.5	1.9
Euro Zone Barometer (Apr. 2010)	1.2	-	1.5	-	1.7	2.1
Real GDP growth	**2010**	**Q4 2010**	**2011**	**Q4 2011**	**2012**	**Longer-term[2)]**
SPF Q2 2010	1.1	1.4	1.5	1.6	-	1.8
Previous SPF (Q1 2010)	*1.2*	-	*1.6*	-	-	*1.8*
ECB staff macroeconomic projections	0.4-1.2	-	0.5-2.5	-	-	-
Consensus Economics (Apr. 2010)	1.2	-	1.5	-	-	1.8
Euro Zone Barometer (Apr. 2010)	1.1	-	1.6	-	-	2.0
Unemployment rate[1)]	**2010**	**February 2011**	**2011**	**February 2012**	**2012**	**Longer-term[2)]**
SPF Q2 2010	10.3	10.4	10.3	10.0	-	8.5
Previous SPF (Q1 2010)	*10.5*	-	*10.5*	-	-	*8.6*
Consensus Economics (Apr. 2010)	10.4	-	10.4	-	-	-
Euro Zone Barometer (Apr. 2010)	10.4	-	10.3	-	-	8.9

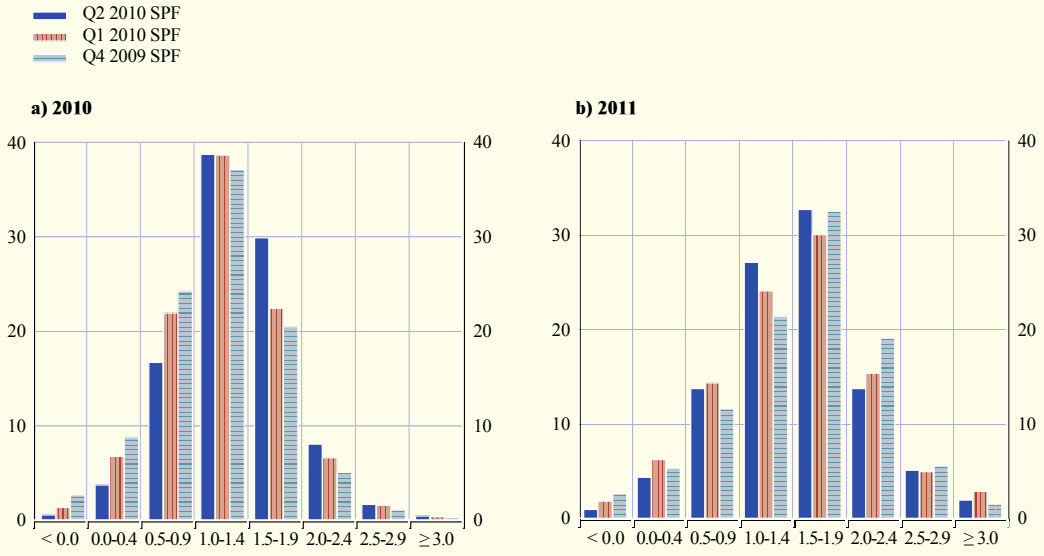
1) As a percentage of the labour force.
2) Longer-term inflation expectations refer to 2014 in the SPF, Consensus Economics and the Euro Zone Barometer.

The SPF inflation expectations for 2010 and 2011 are within the ranges reported in the March 2010 ECB staff macroeconomic projections for the euro area. Compared with the forecasts in the April 2010 releases by Consensus Economics and the Euro Zone Barometer, SPF inflation expectations are higher for 2010 (by 0.2 percentage point) and broadly similar for 2011. The SPF inflation expectations for 2012 are in line with those of the Euro Zone Barometer and are 0.2 percentage point higher than those of Consensus Economics.

The SPF participants were also asked to assess the probability of inflation falling within specific intervals. Compared with the previous round, the aggregate probability distribution for 2010 has shifted towards higher inflation outcomes. The probability of inflation being below 1% has declined (to 21% from 30%), while a higher probability has been assigned to an inflation outcome in the range between 1.5% and 1.9% (30% compared with 22% previously). The highest probability (39%) remains for inflation being in the range between 1.0% and 1.4% in 2010. The probability distribution for 2011 has remained broadly stable compared with the previous SPF, with a slight increase in the probability of inflation outcomes being in the range from 1.0% to 1.9% (see Chart A). Based on the individual probability distributions, the balance of risks to these forecasts is assessed by respondents to be on the downside. This is reflected in the fact that the majority of respondents provided a point forecast which is above the mean forecast from their probability distribution, implying that they assign a higher probability to outcomes below this point forecast than to those above it. Low capacity utilisation and subdued wage growth owing to high unemployment were mentioned as factors posing downside risks to the inflation outlook. Many respondents commented that the main upward risks for inflation are further increases in commodity prices, mainly in oil and food prices, as well as increases in indirect taxes and administered prices.

Chart A Probability distribution for average annual inflation in 2010 and 2011 in the latest SPF rounds [1)]

(probability in percentages)



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

Indicators of longer-term inflation expectations

Longer-term inflation expectations (for 2014) have remained stable at 1.9%. The average point forecast is in line with the long-term inflation forecast provided by Consensus Economics (at 1.9%) and below that of the Euro Zone Barometer (at 2.1%), both published in April 2010.

The stability of longer-term inflation expectations is combined with a broadly stable disagreement among forecasters in their longer-term inflation expectations, as measured by the standard deviation of their point forecasts. Aggregate uncertainty surrounding these inflation expectations, as measured by the standard deviation of the aggregate probability distribution, also remained at a similar level compared with the previous SPF round.[3] The majority of respondents provided a point forecast for longer-term inflation expectations in the range from 1.8% to 2.0%, with the highest forecast at 2.5% and the lowest at 1.5% (see Chart B). Finally, the probability of longer-term inflation standing at 2% or above remained broadly stable at 43% after 44% in the previous SPF round.

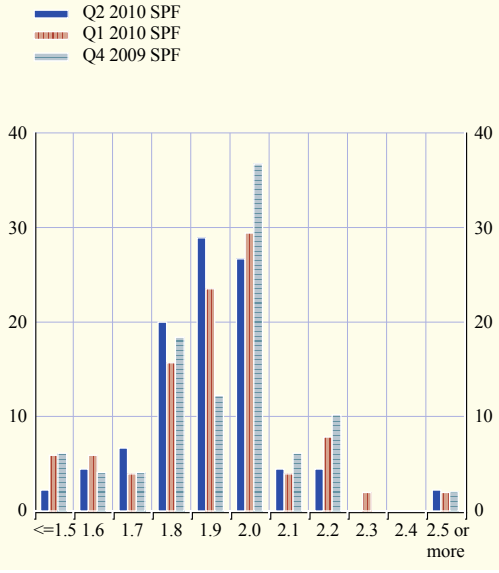
Measures of inflation expectations derived from financial markets have generally been higher and more volatile than survey-based measures (see Chart C).[4] Particularly in the recent period, this has been primarily a reflection of the sharp deterioration in liquidity conditions in 2008 and the first half of 2009. Since then, liquidity conditions have improved and are expected to normalise further during the course of 2010. The volatility observed in these measures should

3 For a discussion regarding uncertainty measures, see the box entitled "Measuring perceptions of macroeconomic uncertainty" in the January 2010 issue of the Monthly Bulletin.

4 See also the article entitled "Measures of inflation expectations in the euro area" in the July 2006 issue of the Monthly Bulletin.

Chart B Cross-sectional distribution of longer-term (2014) inflation expectations among SPF respondents

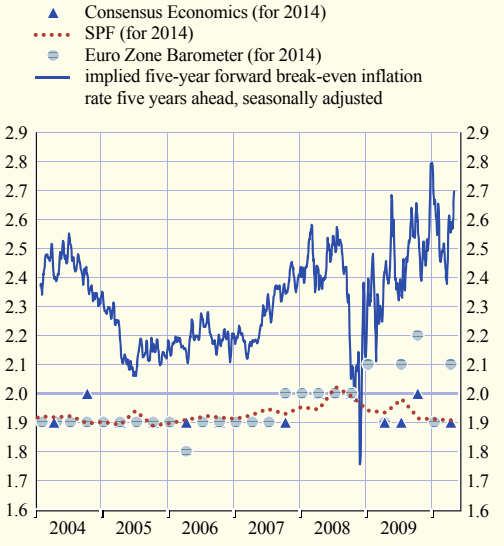
(percentage of respondents)



Source: ECB.

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

(average annual percentage changes; five-day moving averages of daily data)



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

thus be treated with some caution and should not be mechanically interpreted as reflecting revisions in market participants' long-term inflation expectations.[5]

Real GDP growth expectations

On average, the SPF respondents now expect euro area real GDP to grow by 1.1% in 2010 and 1.5% in 2011. This represents a downward revision (by 0.1 percentage point for each year) to their assessment in the previous SPF round. Several respondents commented that the economic recovery will continue, albeit at a moderate pace. Growth is expected to be mostly driven by a quite robust recovery in world trade, together with positive effects from the reversal of the euro appreciation of late 2009.

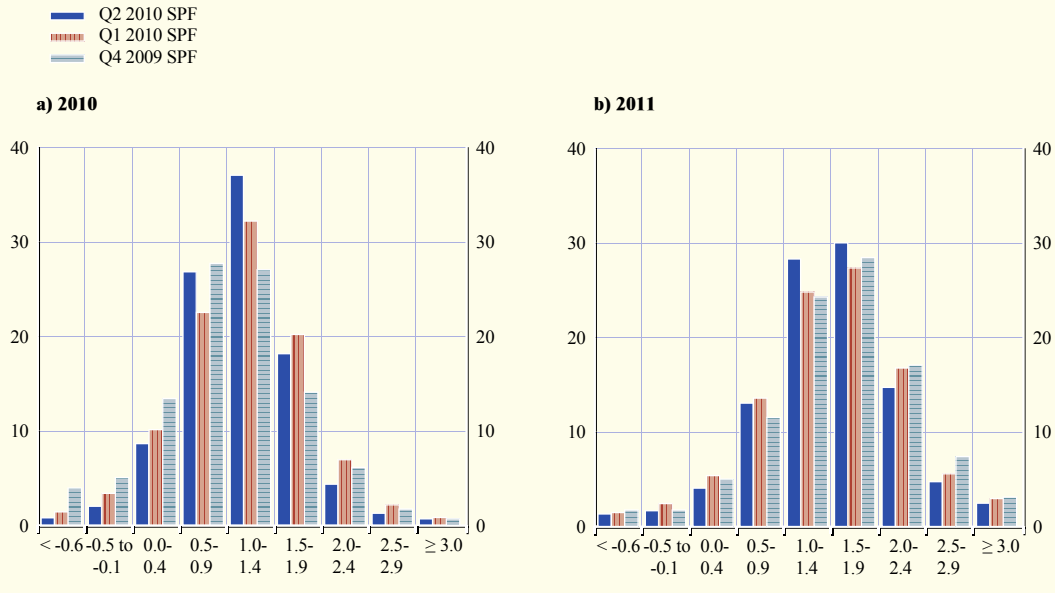
The SPF growth expectations for 2010 are close to the upper bound of the range reported in the March 2010 ECB staff macroeconomic projections for the euro area, while they are in the middle of the range for 2011. The SPF growth expectations are broadly in line with the latest Consensus Economics and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

The aggregate probability distribution for 2010 is concentrated in the range between 0.5% and 1.4%. In particular, the respondents have assigned a 37% probability that real GDP growth will be between 1.0% and 1.4%. The aggregate probability distribution for 2011 is concentrated in

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

Chart D Probability distribution for average annual real GDP growth in 2010 and 2011 in the latest SPF rounds [1)]

(probability in percentages)



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

the interval between 1.0% and 1.9%, with 58% of the probability assigned to outcomes in this range (see Chart D).

The balance of risks to the average point forecast of real GDP growth appears to be on the upside for 2010 and slightly on the downside for 2011. According to forecasters' comments, the main upside risk to the baseline scenario is related to a better than expected external environment and, in particular, to positive spillovers from emerging economies. The main downside risk for the growth outlook is a perceived negative short-term impact of tighter fiscal policies on consumption and investment.

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

Expectations for the euro area unemployment rate

Unemployment rate expectations have been revised down by 0.2 percentage point for both 2010 and 2011 and now stand at 10.3% for both years. The balance of risks to short and medium-term expectations is assessed to be on the upside for 2010 and also, but to a lesser extent, for 2011. Longer-term unemployment rate expectations (for 2014) have been revised slightly downwards, by 0.1 percentage point, to 8.5%, but the balance of risks to the longer-term outlook is assessed to be clearly on the upside.

4 OUTPUT, DEMAND AND THE LABOUR MARKET

Economic activity in the euro area has been expanding since the middle of 2009, benefiting from the ongoing recovery in the world economy, the significant macroeconomic stimulus provided and the measures adopted to restore the functioning of the banking system. Recent economic data and especially information from business surveys indicate that the economic recovery in the euro area is continuing in 2010. While adverse weather conditions, in particular, dampened growth at the beginning of the year, some strengthening appears to be taking place during the spring.

Looking ahead, euro area real GDP is expected to continue to expand at a moderate pace, but growth patterns could be uneven in an environment of unusually high uncertainty. The ongoing recovery at the global level, and its impact on the demand for euro area exports, should provide support to the euro area economy. At the same time, the financial crisis is expected to have a dampening effect on economic growth given the ongoing process of balance sheet adjustment in various sectors and the expectation of low capacity utilisation and weak labour market prospects. The risks to the economic outlook remain broadly balanced.

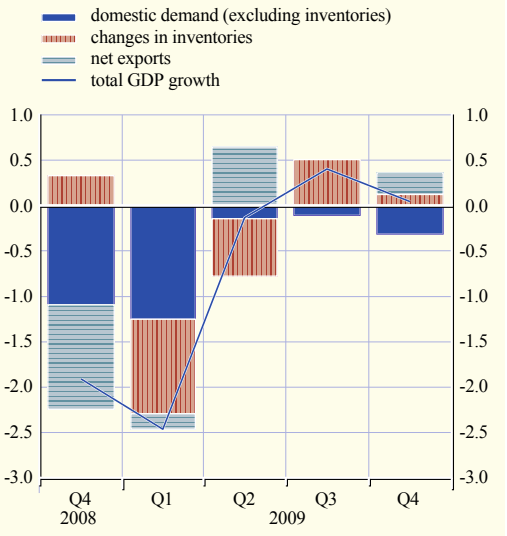
4.1 REAL GDP AND DEMAND COMPONENTS

Euro area real GDP was stable in the final quarter of 2009, compared with a quarter-on-quarter increase of 0.4% in the previous three-month period (see Chart 26). This has confirmed that the euro area recovery is following an uneven path, after GDP contracted in five consecutive quarters from the second quarter of 2008 to the same quarter of 2009. Available indicators suggest that the recovery continued in the first few months of 2010.

Domestic demand excluding inventories contributed negatively to GDP developments in the fourth quarter of 2009, whereas the contributions from net trade and changes in inventories were both positive. The negative contribution from domestic demand excluding inventories, of 0.3 percentage point, reflected flat private consumption and a decline in both government consumption and investment.

Chart 26 Real GDP growth and contributions

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



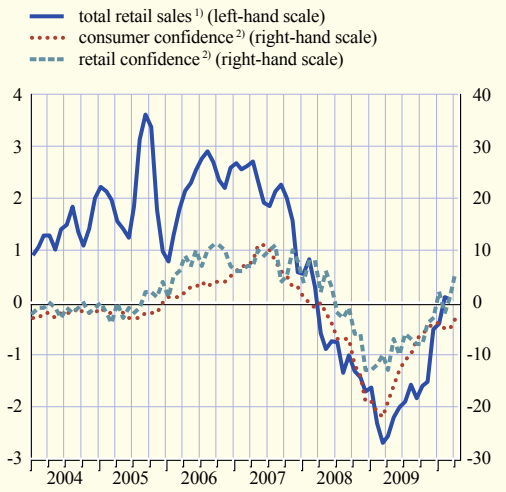
Sources: Eurostat and ECB calculations.

Private consumption stagnated on a quarterly basis in the fourth quarter of 2009, after declining by 0.1% in the third quarter of the year. The continued weakness in household real disposable income, which has mainly reflected a decline in employment, together with a rise in the saving rate, have been the key factors behind the lack of dynamism in consumption in recent quarters. Available indicators suggest that consumer spending remained subdued in the first quarter of 2010. In March 2010 retail sales remained unchanged month on month, after falling in February and January by 0.2% and 0.3% respectively (see Chart 27). New passenger car registrations grew by 7.2% month on month in March, following a 2.8% increase in February and a 9.2% drop in January. Retail sales including car registrations, which together represent about half of consumption,

declined by 0.7% quarter on quarter in the first three months of 2010, whereas this indicator had slightly increased in the final quarter of 2009. All in all, the latest developments in consumption indicators point towards subdued private consumption in the first quarter of 2010. As regards the second quarter of the year, only very limited information is available. Surveys with a bearing on consumption suggest a moderate improvement in consumer sentiment. For instance, the European Commission's indicator of consumer confidence increased marginally in April, after remaining stable in March and declining in February.

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

(monthly data)



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

Gross fixed capital formation fell by 1.3% quarter on quarter in the last quarter of 2009, following a decline of 0.9% in the previous quarter. Investment has been contracting since the second quarter of 2008 on account of weak demand, low business confidence, negative earnings growth, historically low capacity utilisation and tight lending standards. The breakdown of investment shows that the decline in the aggregate recorded in the fourth quarter of 2009 was again largely due to the construction component, which fell by 1.3% quarter on quarter – a sharper contraction than in the previous quarter. Non-construction investment declined by 0.8% in the final quarter of 2009, whereas it had remained flat in the previous quarter.

Available indicators of investment in the euro area at the beginning of 2010 present a mixed picture. Construction production declined by 3.3% month on month in February, continuing the downward trend observed since the beginning of 2008. The contraction in February was particularly sharp in Spain, while in Germany construction production rebounded only moderately following the sharp drop in the previous month, which was partly due to unusually severe weather conditions there. Weather conditions are expected to have had a negative impact on investment in the first quarter of 2010; however, this dampening is likely to be reversed in the second quarter. Conversely, industrial production of capital goods – an indicator of future developments in non-construction investment – increased slightly month on month in February, after declining in January. On average in the first two months of 2010 this indicator was somewhat above the level recorded in the final quarter of 2009. Investment, especially the non-construction component, is likely to strengthen further in the coming quarters, but to remain subdued overall.

As regards trade developments, the rebound in trade slowed somewhat in the final quarter of 2009, with growth rates in exports and imports volumes standing at 1.9% and 1.3% respectively, compared with rates of close to 3% in the previous quarter. Due to the more pronounced slowdown in import growth, net trade made a positive contribution of 0.2 percentage point to real GDP growth in the final quarter of 2009. Recent data indicate that euro area trade growth remained broadly stable in early 2010.

Inventories contributed positively to quarter-on-quarter real GDP growth in the third quarter of 2009 and also made a small positive contribution of 0.1 percentage point in the final quarter. Both surveys and anecdotal evidence suggest that the pace of destocking has slowed further since then in the euro area. As a result, inventories may make a positive contribution to euro area GDP growth in the first half of 2010. The size of that contribution, however, remains highly uncertain, as it depends on how quickly demand has picked up and on the extent to which firms have revised their expectations regarding economic activity. In addition, there is some statistical uncertainty linked to the way inventories are estimated.

4.2 OUTPUT, SUPPLY AND LABOUR MARKET DEVELOPMENTS

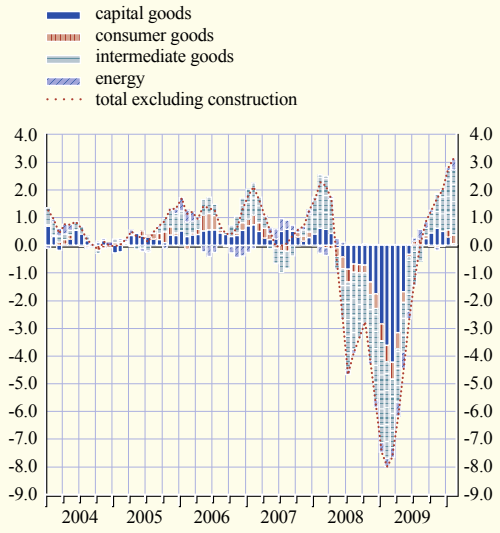
Real value added recorded no change, in quarter-on-quarter terms, in the fourth quarter of 2009, reflecting broadly flat activity in the industrial sector and a slight increase in activity in the services sector, while the downturn in construction continued. In particular, value added in the industrial sector (excluding construction) declined by 0.1% on a quarterly basis, while its robust increment, of 2.4% quarter on quarter, was the source of the 0.4% increase in value added in the previous quarter. Services value added increased by 0.2% in the fourth quarter, as activity in the sector improved only marginally, after having stagnated in the previous quarter. Value added in construction fell by 1.2% in the fourth quarter, a rate broadly similar to the declines recorded in the first three quarters of the year, but far lower than at the end of 2008.

As regards developments in the first quarter of 2010, industrial production expanded in February, by 0.9% month on month, following a 1.6% increase in January. As a consequence of these increases, industrial production in the first two months of 2010 was on average substantially above its level in the final quarter of 2009 (see Chart 28). That would suggest, prima facie, a significant contribution from industrial activity to GDP growth in the first quarter of 2010. However, there are uncertainties concerning seasonal adjustments on account of the large swings in the data during the economic downturn and the subsequent recovery. Due to these uncertainties, the increase in industrial value added in the first quarter of 2010 may prove to be more moderate than suggested by the industrial production data, as already occurred in the final quarter of 2009. Industrial new orders excluding heavy transport equipment rose by 2.5% month on month in February, following a decline of 1.3% in the previous month; the three-month moving average growth rate of new orders eased further in February.

Information from surveys points towards expanding economic activity in the first quarter of 2010 and in April. The Purchasing Managers' Index (PMI) for the manufacturing sector increased further, to above 57, in April (a reading above 50 indicates that activity is increasing in the sector), with the index for manufacturing output reaching levels not seen since 2000. As regards the services sector, the PMI index for business activity increased again in April, confirming that activity has continued to expand in that sector too, although at a more moderate rate than in the manufacturing sector (see Chart 29). Other business surveys, such as the European Commission's business surveys, confirm the evidence of the PMI suggesting that sentiment regarding the economy has improved. In particular, confidence rose in April in the industrial, retail and services sectors, while it remained stable in the construction sector.

Chart 28 Industrial production growth and contributions

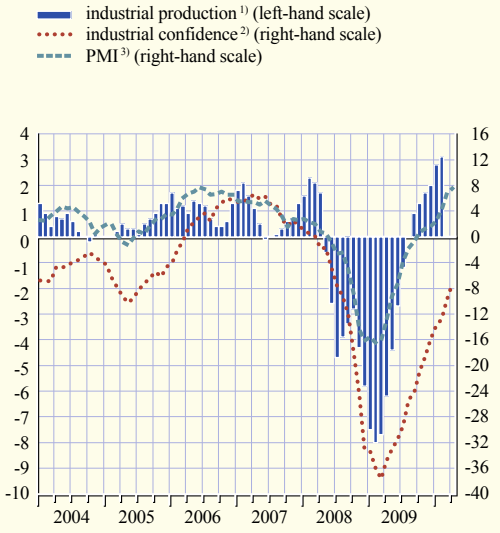
(growth rate and percentage point contributions; monthly data; seasonally adjusted)



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

Chart 29 Industrial production, industrial confidence and the PMI

(monthly data; seasonally adjusted)



Sources: Surveys, Markit and ECB calculations.
Note: Survey data refer to manufacturing.
1) Three-month-on-three-month percentage changes.
2) Percentage balances.
3) Purchasing Managers' Index; deviations from an index value of 50.

LABOUR MARKET

Conditions in the euro area labour markets have deteriorated further in recent months, as changes in employment often lag behind business cycle fluctuations. In the final quarter of 2009 euro area employment fell by 0.3% quarter on quarter. However, this decline was less marked compared with previous quarters when employment fell at substantially higher rates.

Table 6 Employment growth

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

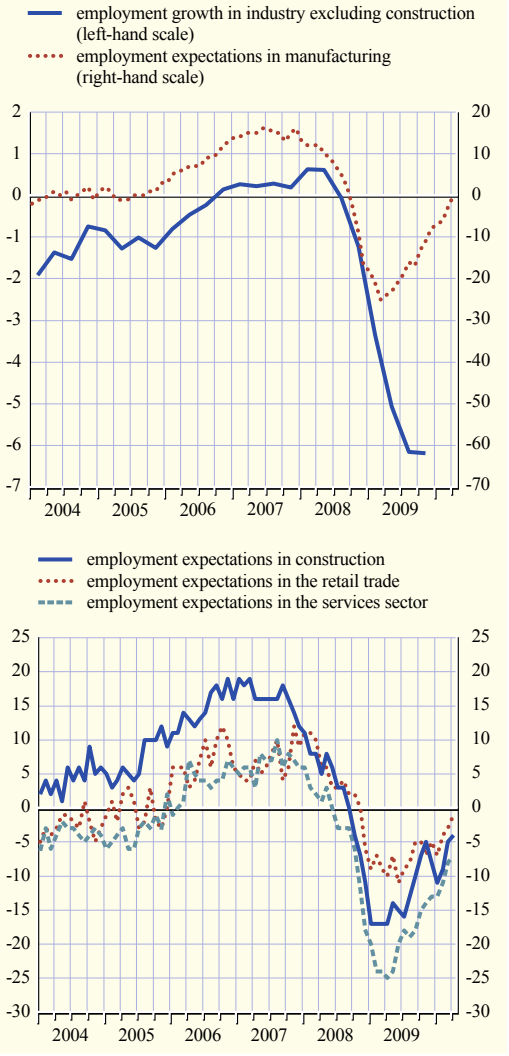
	Annual rates		Quarterly rates				
	2008	2009	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4
Whole economy	0.7	-1.9	-0.4	-0.8	-0.5	-0.5	-0.3
of which:							
Agriculture and fishing	-1.4	-2.6	0.0	-0.8	-0.9	-1.2	0.5
Industry	-0.7	-5.7	-1.5	-1.8	-1.7	-1.7	-0.9
Excluding construction	0.0	-5.2	-1.1	-1.6	-1.8	-1.7	-1.1
Construction	-2.1	-6.9	-2.3	-2.3	-1.3	-1.7	-0.4
Services	1.3	-0.5	0.0	-0.4	-0.1	-0.1	-0.1
Trade and transport	1.3	-1.8	-0.4	-0.8	-0.5	-0.2	-0.5
Finance and business	2.2	-2.2	-0.5	-0.9	-0.8	-0.5	-0.1
Public administration 1)	0.9	1.5	0.6	0.2	0.6	0.2	0.2

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

At the sectoral level, manufacturing (industry excluding construction) continued to bear the brunt of the reduction in aggregate employment. In the final quarter of 2009 employment in this sector continued to decline, albeit at a lower rate, falling by 1.1% quarter on quarter, compared with 1.7% in the third quarter. The fourth quarter of the year saw a slowdown in the rate of job shedding observed in the construction sector, which recorded a quarterly decline of 0.4% in employment, after a 1.7% drop in the previous quarter. As in previous quarters, services sector employment changed little overall in the fourth quarter of 2009, falling by 0.1% quarter on quarter, although the services aggregate masks sizeable differences across sub-sectors. Employment in the trade and transport sub-sector recorded a strong decline in the last quarter of the year, falling by 0.5% compared with a decline of 0.2% in the third quarter, while the contraction in employment in the finance and business sub-sector recorded a further considerable moderation, declining by 0.1% in the four quarter, compared with a fall of 0.5% in the third quarter (see Table 6 and Chart 30). For the first time, Eurostat released quarterly data on hours worked in the euro area. These data point to the first signs of positive growth since June 2008 in total hours worked. The aggregate euro area figure, a 0.2% quarter-on-quarter increase in the final quarter of 2009, masks a reduction in total hours worked in manufacturing, which was offset by stronger growth in hours worked in services, particularly in the finance and business sub-sector, as well as in the public administration sub-sector.

Chart 30 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)



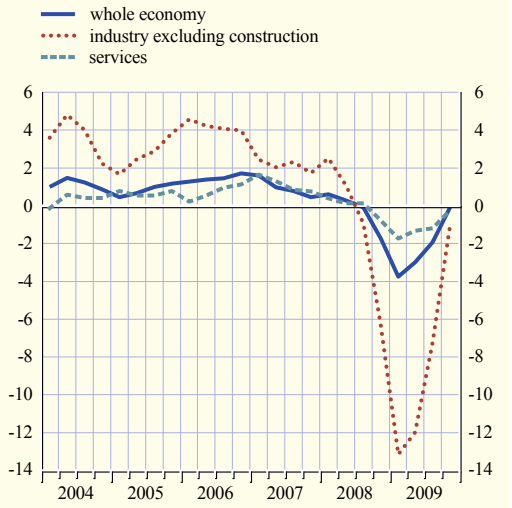
Sources: Eurostat and European Commission Business and Consumer Surveys.
Note: Percentage balances are mean-adjusted.

Together with the recovery in euro area output growth, the job losses seen in recent quarters have contributed to an inflection in the decline in productivity. In year-on-year terms, aggregate euro area productivity (measured as output per person employed) improved further in the final quarter of 2009, declining by only 0.1% year on year, which is a substantial improvement on the 1.9% drop seen in the previous quarter and the record contractions seen in the first half of the year (see Chart 31). Developments in productivity per hour worked have exhibited a similar pattern and, in particular, recorded the first positive result since the third quarter of 2008, rising by 0.3% in the final quarter of 2009.

Following an interruption around the turn of the year, the euro area unemployment rate rose to 10.0% in the first quarter of 2010, compared with 9.8% in the final quarter of 2009

Chart 31 Labour productivity

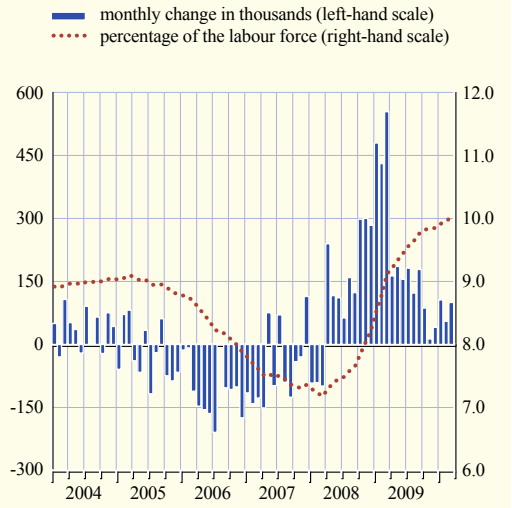
(annual percentage changes)



Sources: Eurostat and ECB calculations.

Chart 32 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

(see Chart 32). The euro area unemployment rate currently stands at the highest level recorded since August 1998. Looking ahead, survey indicators have improved from their lows, but still suggest that further increases in euro area unemployment are possible in the months ahead, albeit at a slower pace than in 2009.

4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

Euro area real GDP is expected to continue to expand at a moderate pace, but growth patterns could be uneven in an environment of unusually high uncertainty. The ongoing recovery at the global level, and its impact on the demand for euro area exports, should provide support to the euro area economy. At the same time, the financial crisis is expected to have a dampening effect on economic growth given the ongoing process of balance sheet adjustment in various sectors and the expectation of low capacity utilisation and weak labour market prospects.

The risks to the economic outlook continue to be viewed as broadly balanced. On the upside, both the global economy and foreign trade may recover more strongly than projected and confidence may improve more than expected, with the result that the recovery becomes self-sustained. On the downside, concerns remain with respect to renewed tensions in some financial market segments. In addition, a stronger or more protracted than expected negative feedback loop between the real economy and the financial sector, renewed increases in oil and other commodity prices, and the intensification of protectionist pressures, as well as the possibility of a disorderly correction of global imbalances may weigh on the downside.

5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

5.1 EXCHANGE RATES

Over the three months to 5 May the euro depreciated in nominal effective terms by 4.5%, moving further below its average level in 2009. The weakening of the euro was broadly based.

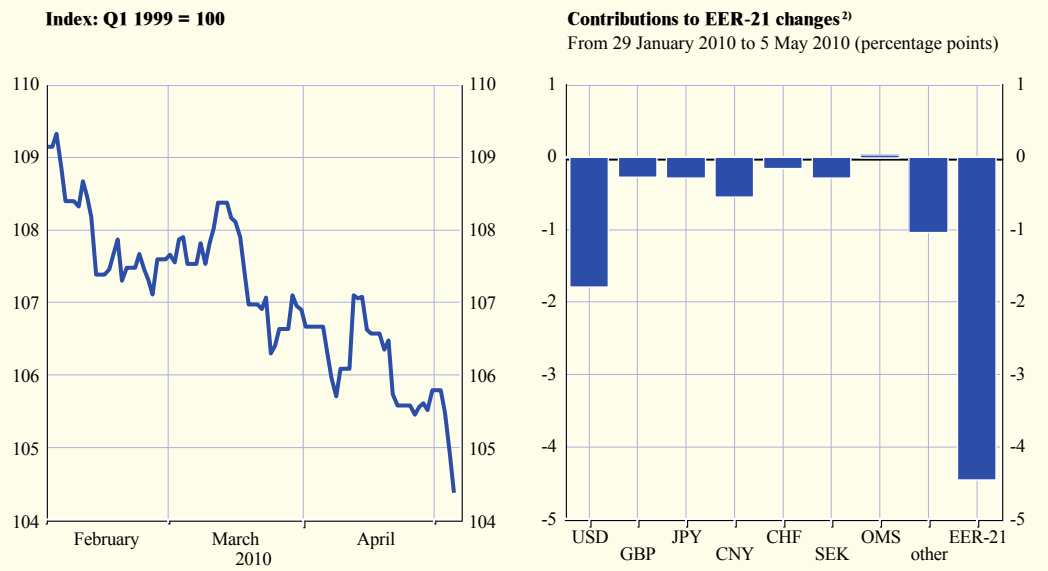
EFFECTIVE EXCHANGE RATE OF THE EURO

On 5 May the nominal effective exchange rate of the euro – as measured against the currencies of 21 of the euro area's most important trading partners – was 4.5% lower than at the end of January and 6.6% below its average level in 2009 (see Chart 33). The depreciation of the euro was broadly based and accompanied by an increase in the average implied volatility of the bilateral exchange rates of the euro vis-à-vis other major currencies.

Against the backdrop of the movements in the effective exchange rate of the euro in 2009 and early 2010, Box 11 reviews the evidence on exchange rate pass-through into extra-euro area export prices.

Chart 33 Euro effective exchange rate (EER-21) and its decomposition [1]

(daily data)



Source: ECB.
1) An upward movement of the index represents an appreciation of the euro against the currencies of 21 of the most important trading partners of the euro area (including all non-euro area EU Member States).
2) Contributions to EER-21 changes are displayed individually for the currencies of the six main trading partners of the euro area. The category "Other Member States" (OMS) refers to the aggregate contribution of the currencies of the non-euro area Member States (except the pound sterling and the Swedish krona). The category "Other" refers to the aggregate contribution of the remaining six trading partners of the euro area in the EER-21 index. Changes are calculated using the corresponding overall trade weights in the EER-21 index.

Box 11

EXTRA-EURO AREA EXPORT PRICES AND EXCHANGE RATE PASS-THROUGH

In 2009 extra-euro area export prices of goods were subject to significant downward pressure stemming from domestic and global economic conditions. Substantial spare capacity worldwide as well as developments in input costs led to a decline in euro area export prices. In early 2010 the year-on-year change in export prices returned to positive territory, partly owing to base effects (see the chart). Apart from developments in input costs and foreign demand, export prices were also influenced by significant exchange rate movements. Against this background, this box reviews the impact of exchange rate movements on extra-euro area export prices of goods.

Empirical evidence shows that exchange rate pass-through into export prices is generally incomplete. In other words, export prices in the producer currency generally do not move one to one with exchange rates. In the euro area, the exchange rate pass-through into extra-euro area export prices of goods – in euro terms – amounts to around 40-50%, with most of the impact occurring in the first year. For example, a 10% appreciation of the euro in nominal effective terms leads to a 4-5% decrease in export prices in euro terms and a 5-6% increase in foreign-currency export prices. This is reflected in the chart below, which shows that an appreciation of the euro in nominal effective terms tends to be associated with lower year-on-year growth in export prices in euro terms.[1] Exporters try to absorb part of the impact of an appreciation of the euro on their foreign-currency export prices by reducing their profit margins, in order to reduce the loss in price competitiveness. Meanwhile, depreciations allow exporters to increase their profit margins by raising prices (in euro), while still enjoying an improvement in their competitiveness in terms of foreign-currency prices.

The degree of exchange rate pass-through is determined by a number of factors. In the short term, the behaviour of export prices is affected by the choice of invoicing currency. If a contract is invoiced in the producer currency, the exchange rate pass-through is normally lower. Moreover, a high price elasticity of export demand – corresponding to a high degree of substitutability of exported goods – implies that small price changes will have a large impact on foreign sales. This makes it difficult to increase prices in foreign currency in response to an exchange rate appreciation.

Extra-euro area export prices of goods and the nominal effective exchange rate of the euro (NEER-21)

(annual percentage changes)

Sources: ECB, Eurostat and ECB staff calculations.
Notes: Export prices are measured as unit values (in euro terms). For the period 1994-1999 unit values refer to the aggregate of 12 euro area countries. Export prices for the first quarter of 2010 are based on data for January 2010.

1 See also 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*, Cambridge University Press, 2007; and H. Faruqee, "Exchange rate pass-through in the euro area", IMF Staff Papers, Vol. 53, No 1, 2006.

The price elasticity of export demand varies across goods categories. It tends to be higher for standardised low-technology goods (e.g. some intermediate and consumption goods), which can be substituted more easily, and lower for high-technology goods (e.g. capital goods). This might result in different levels of exchange rate pass-through across goods categories. In other words, export prices of low-technology goods in the producer currency might react more sensitively to exchange rate movements, as the corresponding foreign-currency pricing might follow pricing-to-market strategies. This appears to be supported by empirical evidence.[2] Differences in the exchange rate pass-through across goods categories imply that the aggregate pass-through can change with the composition of exports.

Movements in exchange rates may also affect export prices via the cost side, particularly when the import content of exports is high. Given that the import content of exports has risen significantly over time, partly owing to the international fragmentation of production and the increasing use of imported intermediate inputs, one would expect imports to be an increasingly important component of exporters' costs.[3] An appreciation of the euro would then reduce exporters' costs to a greater extent and thus allow export prices (in euro) to be lower.

In summary, there are various factors which may affect the degree of exchange rate pass-through into export prices. Although the exchange rate pass-through for extra-euro area export prices is incomplete, even in the long run, it still remains sizeable. Overall, an appreciation is associated with downward pressure on extra-euro area export prices in euro, as export profit margins are reduced in order to mitigate the loss in price competitiveness. This suggests that exchange rate movements might have contributed to the subdued extra-euro area export price developments in 2009, particularly in the light of the euro appreciation in the second half of the year. Likewise, the recent increase in export prices (in euro) may partly reflect the depreciation of the euro that started in late 2009.

2 See G. Gaulier, A. Lahrèche-Révil and I. Méjean, "Structural determinants of the exchange-rate pass-through", *CEPII Working Paper* 2006-03, 2006.
3 For more details on the import content of exports and related differences across sectors, see Box 6 in "Competitiveness and the export performance of the euro area", *Occasional Paper Series*, No 30, ECB, 2005.

US DOLLAR/EURO

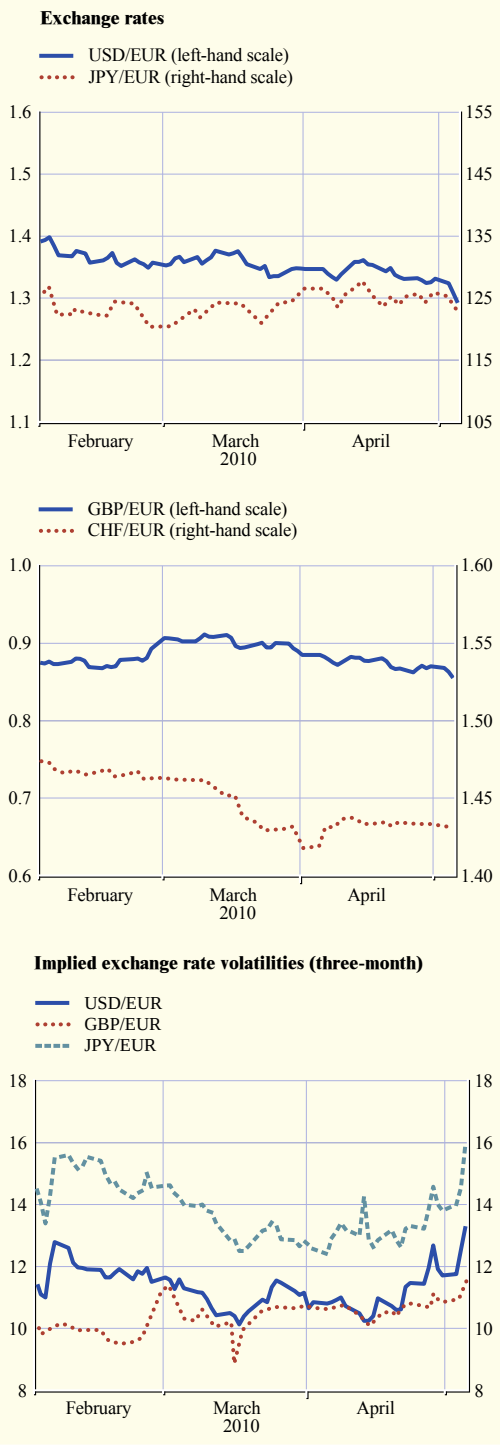
Over the three months to 5 May the euro weakened against the US dollar, partly reversing the appreciation seen in 2009 (see Chart 34). Over the same period the implied volatility of the USD/EUR exchange rate increased, especially at the short horizon (see Chart 34). On 5 May the euro traded at USD 1.29, 7.5% lower than at the end of January and around 7.3% below its 2009 average.

JAPANESE YEN/EURO

Over the three months to 5 May the euro depreciated vis-à-vis the Japanese yen. On 5 May it stood at JPY 122.7, 2.8% weaker than at the end of January and 5.9% below its 2009 average. Over the same three-month period the implied volatility of the JPY/EUR exchange rate increased, especially at the short horizon (see Chart 34).

Chart 34 Patterns in exchange rates and implied volatilities

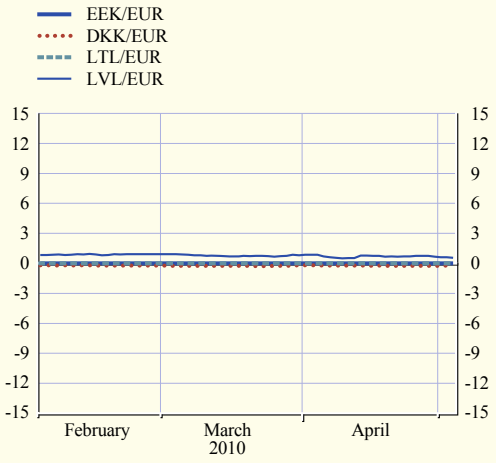
(daily data)



Source: Bloomberg and ECB.

Chart 35 Patterns in exchange rates in ERM II

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



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

EU MEMBER STATES' CURRENCIES

Over the three-month period to 5 May the currencies participating in ERM II remained broadly stable against the euro, trading at, or close to, their respective central rates (see Chart 35). At the same time the Latvian lats remained on the weak side of the unilaterally set fluctuation band of +/-1%.

As regards the currencies of the EU Member States not participating in ERM II, the euro depreciated slightly (by 1.3%) vis-à-vis the pound sterling in the three months to 5 May, trading at GBP 0.85 on that date. At the same time, the implied volatility of the GBP/EUR exchange rate increased, especially at the short-term horizon (see Chart 34). Over the same period the euro also weakened against the currencies of other EU Member States, with the depreciation being most pronounced vis-à-vis the Swedish krona (5.8%).

OTHER CURRENCIES

The euro weakened vis-à-vis the Swiss franc, falling by around 2.3% over the three months to 5 May, to CHF 1.43. Over the same period the bilateral euro exchange rates vis-à-vis the

Chinese renminbi and the Hong Kong dollar moved in line with the USD/EUR exchange rate. Over this period the euro continued to weaken against major commodity currencies, such as the Canadian dollar (by 11%), the Australian dollar (by 8.9%) and the Norwegian krone (by 4.8%).

5.2 BALANCE OF PAYMENTS

Extra-euro area trade in goods continued to recover in the three-month period to February. The 12-month cumulated current account deficit of the euro area narrowed to €41.5 billion in February (around 0.4% of GDP). In the financial account, lower net outflows in direct investment accounted for the rise in net inflows in combined direct and portfolio investment to a cumulative €213.7 billion in the year to February.

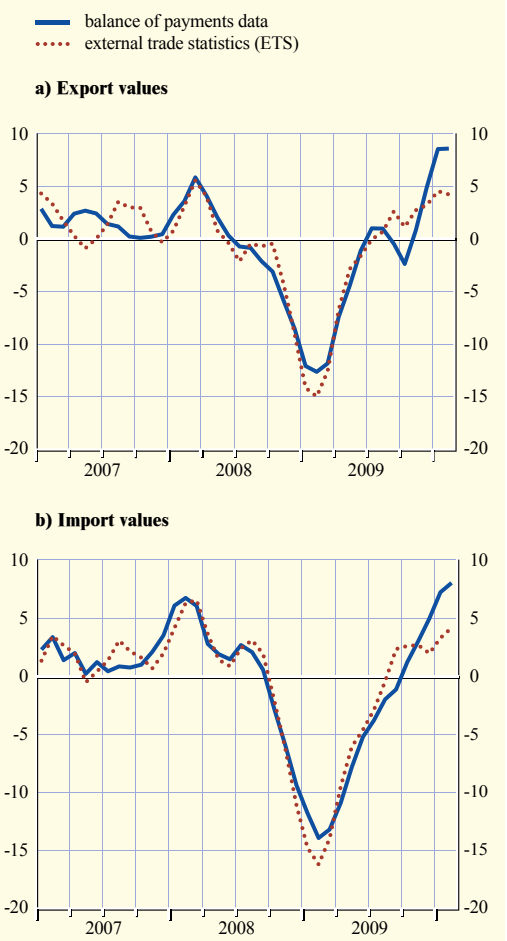
TRADE AND THE CURRENT ACCOUNT

Extra-euro area trade in goods continued to recover in the three-month period to February, although the pace of increase is subject to some uncertainty. According to balance of payments data, export values of goods increased by 8.6% in three-month-on-three-month terms, following a rise of 8.5% in January (revised upwards from 4.4%). By contrast, Eurostat's external trade statistics point to a significantly lower – though still solid – growth rate of 4.2% (see Chart 36). The difference between these rates mainly stems from seasonal adjustment methodologies. This notwithstanding, both data sources clearly show that euro area goods exports continued to recover. Strengthening foreign import demand – partly owing to temporary factors such as fiscal stimuli and the inventory cycle – was the most important driver of this expansion. However, euro area exporters may also have benefited from improved price competitiveness in view of the depreciation of the euro that started in late 2009.

Extra-euro area import values of goods also increased in the three-month period to February, by 8.0% compared with the previous three-month period according to balance of payments statistics. Again, Eurostat data point to a lower growth rate of 4.2% (see Chart 36). As euro area firms benefited from buoyant sales in export markets, their increased demand for imported inputs appears to have counterbalanced the dampening effect of the euro depreciation on domestic import demand.

Chart 36 Extra-euro area trade in goods

(three-month-on-three-month percentage change; seasonally adjusted)



Sources: Eurostat and ECB.

Table 7 Main items of the euro area balance of payments

(seasonally adjusted, unless otherwise indicated)

	2010 Jan.	2010 Feb.	Three-month moving average figures ending 2009 May	2009 Aug.	2009 Nov.	2010 Feb.	12-month cumulated figures ending 2009 Feb.	2010 Feb.
				EUR billions				
Current account	**-1.7**	**-3.9**	**-5.6**	**-1.7**	**-4.6**	**-1.9**	**-160.3**	**-41.5**
Goods balance	2.4	5.5	2.6	5.6	3.5	4.3	-24.8	48.1
Exports	117.1	118.9	105.5	106.5	107.4	116.6	1,518.7	1,307.6
Imports	114.6	113.4	102.9	100.8	103.9	112.2	1,543.5	1,259.5
Services balance	3.1	3.2	2.5	2.0	2.7	3.7	36.6	32.5
Exports	39.3	38.9	39.5	38.1	38.7	39.6	511.8	468.0
Imports	36.2	35.6	37.1	36.1	36.0	36.0	475.2	435.5
Income balance	-2.2	-1.4	-2.2	-3.0	-3.5	-2.3	-72.9	-32.9
Current transfers balance	-5.0	-11.3	-8.5	-6.4	-7.2	-7.6	-99.3	-89.1
Financial account[1]	**14.5**	**7.2**	**12.8**	**-15.6**	**7.3**	**4.5**	**183.9**	**27.0**
Combined net direct and portfolio investment	-3.8	10.9	26.5	8.6	12.6	23.6	149.2	213.7
Net direct investment	-3.1	0.2	-0.8	-5.3	-14.4	-0.1	-194.8	-61.6
Net portfolio investment	-0.7	10.7	27.3	13.8	27.0	23.7	344.0	275.3
Equities	21.2	1.3	5.3	33.7	-17.8	23.6	-106.7	134.1
Debt instruments	-21.9	9.4	22.0	-19.8	44.8	0.1	450.6	141.3
Bonds and notes	-12.4	5.3	14.3	-33.9	24.7	-0.3	216.2	14.5
Money market instruments	-9.5	4.1	7.7	14.1	20.1	0.4	234.4	126.8
Net other investment	11.7	0.9	-22.4	-22.1	-6.9	-22.4	50.4	-216.3
				Percentage changes from previous period				
Goods and services								
Exports	1.3	0.9	-4.2	-0.3	1.0	7.0	-0.8	-12.6
Imports	4.3	-1.2	-6.4	-2.1	2.1	5.9	3.5	-16.0
Goods								
Exports	3.0	1.6	-4.5	1.0	0.8	8.6	-1.7	-13.9
Imports	5.6	-1.1	-7.8	-2.0	3.0	8.0	3.0	-18.4
Services								
Exports	-3.5	-1.2	-3.6	-3.6	1.5	2.5	1.9	-8.6
Imports	0.6	-1.6	-2.1	-2.5	-0.3	-0.2	5.3	-8.4

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.

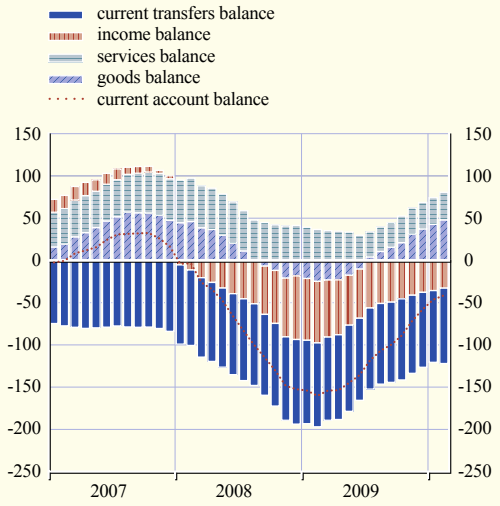
Meanwhile, growth in services trade slowed down somewhat on the export side, to 2.5% in February (in three-month-on-three month terms). Following positive growth of 3.0% in the three-month period to January, imports of services declined by 0.2% in February (see Table 7), reflecting an uneven recovery in the euro area.

Turning to the current account balance, the euro area recorded a cumulated deficit of €41.5 billion in the year to February (around 0.4% of GDP), around a quarter of the figure recorded a year earlier (see Chart 37). This mainly reflected a shift from deficit to surplus in the goods balance and lower deficits in the income balance and current transfers, which were only partly offset by a lower surplus in services trade.

Looking ahead, available indicators suggest that extra-euro area exports of goods will continue to recover in the near term. The Purchasing Managers' Index of new export orders in the euro area manufacturing sector was virtually unchanged in April and remained at a ten-year high. However,

Chart 37 Main items of the current account

(EUR billions; 12-month cumulated flows; monthly data; working day and seasonally adjusted)



Source: ECB.

some loss of momentum may be expected as the impact of temporary factors supporting foreign demand fades.

FINANCIAL ACCOUNT

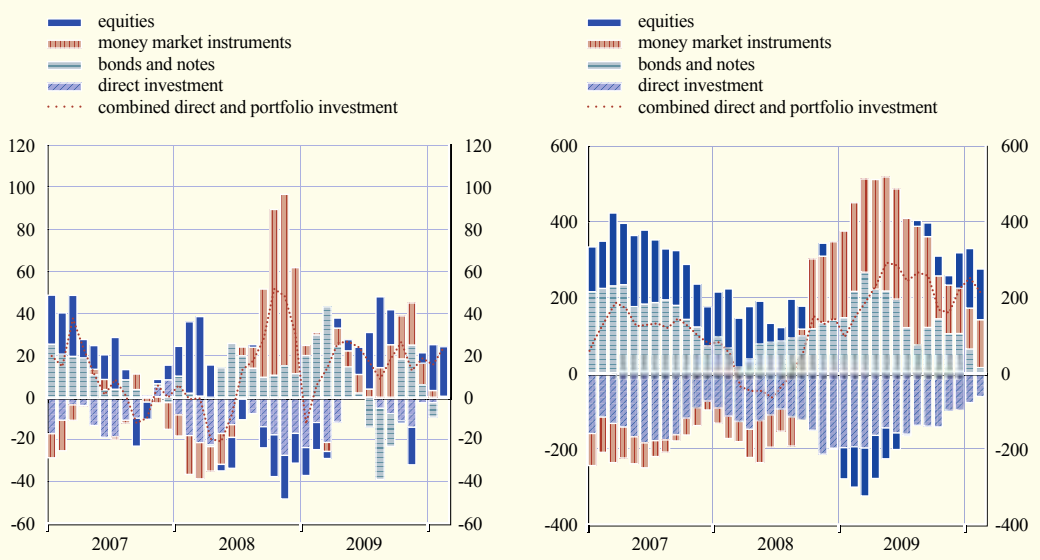
In the year to February the euro area recorded net inflows in combined direct and portfolio investment of €213.7 billion, compared with net inflows of €149.2 billion a year earlier (see Chart 38). This increase mainly reflects lower net outflows in direct investment, largely driven by steadily increasing direct investment in the euro area by non-residents.

At the same time, in the 12-month period to February the euro area recorded lower net inflows in portfolio investment than in the same period one year earlier. The shift from net outflows to net inflows in equities was more than offset by significantly lower net inflows in debt instruments, particularly bonds and notes. The decrease in net inflows in debt securities partly reflects renewed risk appetite on the part of global investors, following portfolio reallocation from equities to debt during the financial crisis (see also Box 12).

Chart 38 Main items of the financial account

(EUR billions; net flows; three-month moving averages; monthly data)

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



Source: ECB.

Overall, the euro area recorded a decrease in net inflows in the financial account in the 12-month period to February, to €27.0 billion (see Table 7). The increase in net inflows in combined direct and portfolio investment was more than offset by a shift from net inflows to net outflows in other investment, an item which mainly comprises loans and deposits. The cross-border deleveraging of the banking and non-banking sectors continued, albeit at a decelerating pace, against the backdrop of extensive balance sheet restructuring by corporations and households.

Turning to the most recent developments, combined direct and portfolio investment recorded average monthly net inflows of €23.6 billion in the three-month period to February, compared with net inflows of €12.6 billion in the preceding three-month period (see Chart 38). This increase is mainly related to lower net outflows in direct investment.

Box 12

RECENT DEVELOPMENTS IN THE GROSS EXTERNAL DEBT OF THE EURO AREA

On the basis of newly compiled data recently released by the ECB, this box reviews the latest developments in the level and composition of the gross external debt of the euro area and compares them with those in other major advanced economies.[1] The box shows that the gross external debt positions of major advanced economies have increased considerably since the start of the financial crisis in the summer of 2007. In the euro area, for example, total gross external debt vis-à-vis the rest of the world increased by 15 percentage points in the period from the end of 2006 to the end of 2009, to 116.5% of GDP (see the table). Similarly, gross external debt positions widened in most of the other advanced economies, particularly in the United States, the United Kingdom, Canada and Japan. A notable exception was Switzerland, the gross external debt position of which decreased slightly compared with 2006.

The gross external debt of an economy represents the outstanding amount of its actual (i.e. non-contingent) current liabilities that require payment of principal or interest to foreign investors. These liabilities include debt assets, such as bonds and notes, money market instruments, loans and currency deposits, as well as trade credits and advances due to non-residents. For the euro area as a whole, the stock of gross external debt excludes debt holdings by residents in other euro area countries. These intra-euro area debt holdings account for about one-third of the total unconsolidated gross external debt of all euro area countries. As a result, the gross external debt-to-GDP ratios of the individual euro area countries are generally higher than the euro area aggregate ratio.

Part of the rise in gross external debt in major advanced economies in the period from 2006 to 2009 reflects the increased borrowing undertaken by many governments as a result of the financial crisis. Over this period, the gross external debt of the general government sector in the euro area increased by 8.3 percentage points of GDP, to reach around 21.3% of GDP at the end of 2009 (see the table). In the United States the increase was more pronounced (9.5 percentage points of GDP); in addition, the gross external debt of the general government at the end of 2009 was higher than in the euro area, at 26% of GDP. The increase in gross external debt positions of the general government in major advanced economies between 2006 and 2009 may also reflect a

1 See the ECB press release entitled "Euro area balance of payments in February 2010 and international investment position at the end of 2009" of 20 April 2010 and Table 7.3.8 in the "Euro area statistics" section of this issue of the Monthly Bulletin.

External debt indicators for selected economies

(percentage of GDP)

	2006	2007	2008	2009
Gross external debt				
Canada	54.3	56.5	52.1	70.4
Japan	34.7	40.4	45.6	42.0
Switzerland	266.2	334.6	245.9	245.0
United Kingdom	378.2	402.1	339.3	419.2
United States	83.6	95.4	95.2	96.6
Euro area	101.5	110.8	118.2	116.5
Gross external debt of general government				
Canada	11.3	10.3	9.4	15.3
Japan	9.5	13.8	14.6	13.3
Switzerland	7.1	6.1	4.5	3.9
United Kingdom	11.5	12.1	12.2	18.4
United States	16.5	17.4	21.5	26.0
Euro area	13.0	13.8	18.3	21.3
Net external debt				
Canada	21.4	20.7	18.2	-
Japan	-50.6	-55.7	-48.4	-
Switzerland	-130.1	-143.3	-115.8	-
United Kingdom	70.3	60.3	44.4	-
United States	42.6	49.6	52.5	-
Euro area	6.4	6.6	14.6	12.6
Net interest payments				
Canada	1.4	1.4	1.2	1.2
Japan	-1.9	-2.3	-2.2	-
Switzerland	-2.7	-3.1	-3.0	-
United Kingdom	1.7	1.9	1.6	-
United States	1.3	1.5	1.5	-
Euro area	0.0	0.1	0.2	0.2

Sources: ECB, IMF and ECB staff calculations.

portfolio reallocation on the part of investors from equities to debt against the backdrop of higher global risk aversion at the time.

Turning to the composition of the euro area's gross external debt by instrument type, debt securities with an original maturity of over one year and intra-group lending comprised almost half of the total gross external debt at the end of 2009. Moreover, around two-thirds of the euro area long-term debt securities held by non-residents were denominated in euro. This was partly the result of strong foreign demand for euro-denominated securities, including for international reserve purposes. The euro denomination eliminates the currency risk associated with the issuance of debt by euro area residents.[2]

It is important to note that gross external debt per se only captures one dimension of an economy's exposure to external creditors. In effect, the net external debt position, obtained by subtracting gross external debt assets from the liabilities, provides additional insights into debt (re)financing and the external debt sustainability of an economy. The net external debt position of the euro area at the end of 2008 (about 14.6% of GDP) was significantly lower than its gross external debt position and well below the net positions of the United States and the United Kingdom. Countries in which the financial sector is relatively large and has an important

2 For further details on euro-denominated debt securities see "The international role of the euro", ECB, July 2009.

international role, such as the United Kingdom and Switzerland, tend to have high levels of gross external debt. However, the financial sector of such countries usually also holds a large amount of assets in the form of cross-border debt securities, which means that the level of net external debt is substantially lower. In this context, the net interest payments (i.e. interest payments minus interest receipts originated by the debt positions) are critical, as they show how much of the income generated by an economy in one year is to be allocated to servicing the costs of net external debt. The net interest payments of the euro area amounted to 0.2% of GDP in 2008 (and also in 2009), which was significantly lower than the respective net interest payments of 1.5% of GDP for the United States and 1.6% of GDP for the United Kingdom (see the table).

In summary, the global financial crisis was associated with an increase in gross external debt in most of the major advanced economies, including the euro area. This increase was partly driven by higher financing needs on the part of governments as a result of the financial crisis, but also by heightened global risk aversion on the part of investors.

ARTICLES

MONETARY POLICY TRANSMISSION IN THE EURO AREA, A DECADE AFTER THE INTRODUCTION OF THE EURO

By removing risks associated with movements in intra-euro area exchange rates and having a central bank with a clear mandate to maintain price stability over the medium term, the introduction of the euro has made a central contribution to the firmer anchoring of inflation expectations in the euro area as a whole and a more effective stabilisation of price and economic developments.

At the same time, over the last ten years a number of additional factors, mainly related to changes in the financial sector, are likely to have affected the properties of monetary policy transmission in the euro area. The first decade of the monetary union coincided with an intense process of financial innovation. The fact that banks could easily securitise part of their loan portfolios and have proven increasingly capable of obtaining financing directly from financial markets has rendered the bank lending channel of monetary policy less effective in normal times. Furthermore, the advent of securitisation and, in general, the enhanced ability of banks to transfer credit risk have also led to more intense, sometimes excessive, risk-taking behaviour by banks, as exemplified by laxer lending standards and the proliferation of complex financial structures. These transformations in the financial system may in fact have amplified the impact of monetary policy, in particular as regards its impact on risk-taking attitudes in the financial system. The potential intensification of this transmission channel has posed challenges for the conduct of monetary policy, since monetary policy must focus on price stability as its primary objective. While individually important, all of these different changes are likely to have had offsetting effects on the overall transmission mechanism. In fact, available empirical evidence at the aggregate level suggests that the short to medium-term dynamics of real output and inflation in response to monetary policy changes have not been fundamentally altered.

During the recent episode of financial turmoil, it was clear that, in order to keep the interest rate pass-through channel operational, there was a need to introduce non-standard monetary policy measures in a timely manner. The available evidence suggests that these policies have been effective in this regard. Looking ahead, ongoing efforts to enhance the regulatory and supervisory frameworks and the resilience of the financial system will probably also induce certain changes in the properties of monetary policy transmission by curtailing systemic risk and thereby containing macroeconomic fluctuations. While the nature and extent of possible changes in monetary policy transmission are very difficult to assess at the current juncture, regulatory proposals that aim to ensure that banks have more prudent capital ratios and liquidity management should temper banks' risk-taking behaviour over the business cycle, thus diminishing the amplitude of financially induced acceleration mechanisms. The monitoring of such developments and the impact of regulatory changes on the economy as a whole, and the transmission mechanism in particular, is warranted.

1 INTRODUCTION

The Governing Council of the ECB is responsible for making monetary policy decisions aimed at maintaining price stability over the medium term. The monetary policy transmission mechanism refers to the process through which these decisions affect the economy in general and, in particular, the level of prices. In a very simplified framework, monetary policy is transmitted, via the central bank's intervention in the money markets, to bank lending and deposit rates. Subsequently, changes in these interest rates affect decisions on consumption and investment, which, in turn, ultimately determine the level of prices. This channel, commonly known as the interest rate channel, can be complemented by the additional effects

of monetary policy on, among other things, the behaviour of banks, the exchange rate and agents' expectations.[1]

In 1999 the Eurosystem launched a research network to study the transmission of monetary policy. The Monetary Transmission Network (MTN) assembled a comprehensive set of studies on how the ECB's monetary policy decisions were affecting the then newly formed euro area, thus providing an exhaustive overview of the information on the transmission mechanism that was available at the time.[2] Its main conclusions can be summarised as follows. Monetary policy affects the economy mainly through the interest rate channel: a tightening of monetary policy was found to lead to a transitory decrease in output, which was estimated to reach its maximum between one and two years after the change in monetary policy. Prices were estimated to decline gradually, responding much more slowly to the change in monetary policy than output. Beyond these aggregate effects, and in line with the credit channel of monetary policy, it was found that interest rate changes could also affect economic activity via its impact on firms' cash flows and the supply of bank loans. The supply of bank loans was found to be related mainly to the impact of these changes on the availability of liquid funds, while other channels, such as the potential role of bank capital in the transmission of monetary policy, were not found to be significant.

Four important developments which are likely to have had an impact on the transmission of monetary policy have occurred in the global and euro area economies since the MTN studies were conducted. The first is the continuous process of structural reform, particularly in the labour and product markets, witnessed in the euro area since its creation. Second, the launch of the euro itself, which brought about important changes, notably the removal of risks associated with movements in intra-euro area exchange rates and the centralisation of monetary policy decisions on behalf of all euro area countries. Third, there has been a rapid pace of financial innovation, as well as important changes to the regulatory framework governing banks. Financial innovation has been reflected, in particular, in the widespread use of securitisation and new financial instruments to manage risks. Finally, the recent financial crisis posed a serious threat to the proper functioning of the transmission mechanism.

In addition to these developments, research methodologies have progressed considerably over the last decade: new areas, such as the "risk-taking channel" of monetary policy, have been studied in the field of monetary policy transmission, and new and more accurate datasets are now available. The most obvious change in this respect is the availability of more than one decade's worth of genuine euro area data, in contrast with the data employed in the MTN studies, which relied on aggregates of national data from the pre-EMU period.

Thus, the aim of this article is to document what has been learned over the past decade and to assess how and to what extent the transmission of monetary policy in the euro area may have changed in comparison with the findings of the MTN.[3] To this end, the next three sections discuss structural reforms in the euro area labour market, the introduction of a new monetary regime and the process of financial innovation and bank regulation. An assessment of the overall impact of these factors on the transmission mechanism is provided in Section 5. Section 6 discusses the changes in the transmission mechanism caused by the financial crisis. Finally, Section 7 concludes and discusses the potential changes to monetary policy

1 For a detailed description of the various channels through which monetary policy can affect the economy and the price level, see the article entitled "Monetary policy transmission in the euro area" in the July 2000 issue of the Monthly Bulletin.

2 See the webpage of the Eurosystem's Monetary Transmission Network at http://www.ecb.europa.eu/home/html/researcher_mtn.en.html.

3 With a view to understanding the implications that these four major developments have had for the transmission of monetary policy, the ECB held a workshop entitled "Monetary policy transmission mechanism in the euro area in its first ten years" in Frankfurt am Main on 28-29 September 2009. The articles presented at this workshop can be found at http://www.ecb.europa.eu/events/conferences/html/moneymechanism.en.html.

transmission that can be expected from the new regulatory framework currently under discussion.

2 STRUCTURAL REFORMS IN THE LABOUR MARKET AND THE RESPONSE OF REAL WAGES TO MONETARY POLICY SHOCKS

The implementation of much needed reforms in labour and product markets was part of the guidelines put forward in the Lisbon agenda to promote a competitive and knowledge-based economy. Progress with structural reforms since the introduction of the euro has materialised in the form of strong employment growth and record low levels of unemployment in many euro area countries prior to the economic downturn. Importantly, reforms in labour and product markets which affect the reduction of nominal rigidities have a crucial impact on the conduct of monetary policy.

According to the predictions of standard textbook models, in a model where wage stickiness is the dominant friction, real wages should fall in response to an expansionary monetary policy shock, because demand shocks lead to an increase in prices and output. In a model with a non-Walrasian labour market and rigid nominal wages, the resulting increase in the level of prices generates a decline in real wages. By contrast, in a model where price stickiness is the dominant friction, monetary policy shocks should have the opposite effect on real wages.

An early study found a small negative response of real wages to monetary policy shocks in the euro area.[4] While in that study the confidence bands were large, this result would suggest that, prior to the introduction of the euro, wage stickiness may have been the dominant friction. Interestingly, studies which have repeated the exercise using more recent data and improved methodologies have found that the sign of the response may have changed. Two studies in particular found that real wages increased in response to expansionary monetary policy shocks.[5, 6] This change in the response of real wages might therefore suggest that, over the years, the relative importance of wage stickiness could have decreased. One possible explanation is that, in the light of the labour market reforms and globalisation that have taken place over the past two decades, real wages have become more responsive to cyclical conditions.

According to standard models, a lower degree of wage rigidity makes monetary policy more effective.[7] In other words, monetary policy changes are transmitted more quickly to inflation, while generating lower fluctuations in economic activity.

The available empirical evidence, however, suggests that downward wage rigidity remains a key feature of the euro area.[8] The impact of this kind of wage rigidity on the overall transmission of monetary policy is currently an active area of research.[9]

3 THE IMPACT OF THE INTRODUCTION OF THE EURO ON THE TRANSMISSION OF MONETARY POLICY

The introduction of the euro was a major structural change that transformed Europe's financial architecture. The available empirical evidence suggests that it has had two particularly relevant effects: first, the elimination of risks associated with intra-euro area exchange rates

4 F. Smets and G. Peersman, "The monetary transmission mechanism in the euro area: more evidence from VAR analysis", *Working Paper Series*, No 091, ECB, 2001.
5 A. McCallum and F. Smets, "Real wages and monetary policy transmission in the euro area", *Kiel Working Papers*, No 1360, 2007.
6 See also F. Smets and R. Wouters, "An estimated dynamic stochastic general equilibrium model of the euro area", *Journal of the European Economic Association*, 1(5), 2003, pp. 1123-1175.
7 See K. Christoffel, K. Kuester and T. Linzert, "The role of labor markets for euro area monetary policy", *European Economic Review*, 53(8), 2009, pp. 908-936.
8 See the Wage Dynamics Network at http://www.ecb.int/home/html/researcher_wdn.en.html.
9 See, for instance, S. Fahr and F. Smets, "Downward wage rigidities and optimal monetary policy in a monetary union", presented at the conference entitled "Wage dynamics in Europe: findings from the Wage Dynamics Network" in Frankfurt am Main on 24 June 2008.

and the subsequent removal of the exchange rate risk premium, thereby fostering trade and financial integration among the euro area countries; and second, the introduction of a new monetary regime firmly oriented towards maintaining price stability, which has contributed to a better anchoring of inflation expectations across the euro area.

THE ELIMINATION OF INTRA-EURO AREA EXCHANGE RATES

The elimination of intra-euro area exchange rates was perhaps the most immediate consequence of the introduction of the euro. The previous monetary arrangement allowed for bilateral realignments vis-à-vis the anchor currency. As a result, changes in interest rates in the anchor country were often associated with differential effects on the exchange and domestic interest rates of ERM countries. With the irrevocable fixing of exchange rates and the single monetary policy, this phenomenon has been eliminated and, as a result, the exchange rate channel is more uniform across countries.[10]

The elimination of the intra-euro area exchange rate risk has implied a reduction in transaction costs and higher capital market integration. While the exact magnitude differs across studies, most of them confirm that the euro has contributed to a significant increase in trade, the aggregate impact of which has been estimated to be in the range of 5-10%.[11, 12] The increase in cross-border bank holdings and transactions has also been significant, an effect that can essentially be attributed to the elimination of currency risk.[13]

A NEW MONETARY REGIME

The centralisation of monetary policy decisions and the creation of a common central bank in charge of the euro area's single monetary policy brought with them a new monetary regime characterised by a high degree of credibility and a clear focus on maintaining price stability. An immediate impact of this was better and more solidly anchored inflation expectations. Measures of inflation expectations extracted from both survey-based data and long-term government bonds corroborate this fact.[14, 15]

In addition, there is evidence of a flattening of the Phillips curve over recent years, i.e. a weaker relationship between the output gap and inflation.[16] One possible explanation for this is that monetary policy has become more credible since the introduction of the euro. As a result, a rise in economic activity is less likely to lead to an increase in expected inflation. Instead, households and businesses expect monetary authorities to take the necessary steps to ensure that inflation is kept in line with price stability. Upside pressures on wages and prices are therefore more easily contained.

Overall, while evaluating precisely how these documented changes could have modified the transmission mechanism remains difficult, there is agreement on the benefits of central bank credibility. In this respect, economic literature finds that the perceived credibility of central banks can indeed affect the transmission of monetary policy, by making

10 J. Boivin, M.P. Giannoni and B. Mojon, "How has the euro changed the monetary transmission?", *NBER Working Papers*, No 14190, 2008.
11 See for instance R. Baldwin, V. DiNino, L. Fontagné, R. A. De Santis and D. Taglioni, "Study on the impact of the euro on trade and foreign direct investment", *Economic Papers 321*, European Commission, 2008.
12 R.E. Baldwin, "The euro's trade effect", *Working Paper Series*, No 594, ECB, 2006.
13 See S. Kalemli-Ozcan, E. Papaioannou and J.L. Peydró, "What lies beneath the euro's effect on financial integration: currency risk, legal harmonization, or trade?", *NBER Working Papers*, No 15034, 2009.
14 M. Ehrmann, M. Fratzscher, R.S. Gürkaynak and E.T. Swanson, "Convergence and anchoring of yield curves in the euro area", *Working Paper Series*, No 817, ECB, 2007.
15 M.J. Beechey, B.K. Johannsen and A. Levin, "Are long-run inflation expectations anchored more firmly in the euro area than in the United States?", *CEPR Discussion Papers*, No 6536, 2007.
16 A. Calza, "Globalisation, domestic inflation and global output gaps", *Working Paper Series*, No 890, ECB, 2008.

stabilisation policies more effective and less costly to implement.[17, 18]

4 FINANCIAL INNOVATION, CHANGES TO THE REGULATORY FRAMEWORK AND BANKS' RESPONSE TO MONETARY POLICY CHANGES

Economic literature analysing the transmission of monetary policy has suggested that, in addition to their direct effect on final demand, investment and prices, interest rate changes may also have an impact on the real economy through their indirect effect on the cost to firms of obtaining external financing and on banks' ability to lend.[19] The impact of monetary policy changes on the supply of bank loans is known as the bank lending channel. The following is a traditional textbook example of this channel: an increase in the policy-driven interest rates leads, over time, to a reduction in the availability of bank deposits (especially those with a short maturity). Unless banks are able to increase their funding via other sources, the reduction in the availability of bank funds may induce a downward adjustment of bank assets, including loans, independent of changes in the demand for loans. Such an effect is more likely to affect banks of a smaller size, with lower capital positions and insufficient liquidity buffers.

As regards this transmission channel, partly reflecting developments in financial markets, recent literature has highlighted new dimensions that enrich the current understanding of how monetary policy affects banks' capacity to grant loans and their willingness to bear risks. In this respect, particular attention has recently been devoted to analysing the implications of securitisation, market funding and financial innovation in general for the transmission of monetary policy, as well as the impact of supervisory regulations governing the capital adequacy of banks' and their incentives to take on risk as determinants of banks' loan supply. The study of these aspects is of particular importance in the case of the euro area, where financing by banks constitutes the most important source of external financing for households and non-financial corporations.[20] The following two sub-sections analyse these aspects in detail.

SECURITISATION, MARKET FINANCING AND THE BANK LENDING CHANNEL

Leaving aside the financial market turmoil, the process of financial innovation in credit markets has been widespread across developed financial systems over the last ten years. This process was particularly rapid and dramatic in the euro area, favoured by the introduction of the euro and the associated increase in financial market integration. It was characterised by a dramatic expansion of securitisation activities and an increased reliance on market-based sources of funding.[21]

The possibility of securitising bank loans (i.e. issuing fixed-income securities backed by a pool of bank loans), together with an increasing recourse to other non-deposit sources of funding, such as bonds and covered bonds, opens up the opportunity for banks to obtain extra funds, thereby reducing the weight of deposits as a liability-side constraint to the expansion of bank loans. This is complemented with the possibility of moving risk off balance sheet via derivative instruments, such as credit default swaps, which further facilitates the provision of credit by helping to relieve capital constraints. As a

17 M. Darracq Pariès and S. Moyen, "Monetary policy and inflationary shocks under imperfect credibility", *Working Paper Series*, No 1065, ECB, 2009.

18 C.J. Erceg and A.T. Levin, "Imperfect credibility and inflation persistence", *Journal of Monetary Economics*, 50(4), 2003, pp. 915-944.

19 Monetary policy may have effects on variables that are typically used by lenders to assess borrowers' net worth and creditworthiness. This could, therefore, affect the cost to borrowers and their ability to obtain external financing. This is commonly referred to as the balance sheet channel of monetary policy.

20 See, in particular, the following articles in recent issues of the Monthly Bulletin: "The role of banks in the monetary policy transmission mechanism", August 2008; "The external financing of households and non-financial corporations: a comparison of the euro area and the United States", April 2009; and "Monetary policy and loan supply in the euro area", October 2009.

21 See the article entitled "Securitisation in the euro area" in the February 2008 issue of the Monthly Bulletin.

result, financial innovation tends to render the bank lending channel less effective under normal conditions, which was indeed in evidence in the euro area prior to 2007.[22, 23]

However, while a lower dependence on bank deposits can shelter banks from potential funding constraints, it also increases the impact of financial market conditions on banks' ability to obtain funds. As suggested by the financial crisis, there is a risk that the role of securitisation as a shock absorber for bank lending could reverse when financial markets are experiencing difficulties. In fact, recent evidence suggests that the impact of supply-side constraints, especially those related to disruptions to banks' access to wholesale funding and their liquidity positions, has intensified since the onset of the financial crisis.[24]

SUPERVISORY REGULATIONS, THE ROLE OF BANK CAPITAL AND THE RISK-TAKING CHANNEL

The level of a bank's own resources, or bank capital, has also been identified by economic literature as a factor with the potential to affect the supply of bank loans. The basic argument is that banks with higher capital have easier access to finance, thus allowing them to grant more credit to firms. Poorly capitalised banks would, therefore, be more strongly affected by a tightening of monetary policy, as this would increase their marginal cost for obtaining external finance. This mechanism, which reinforces the bank lending channel, is usually referred to as the bank capital channel of monetary policy.

This channel is particularly relevant in bad times, when capital is scarcer and banks find it more difficult to raise capital. In fact, recent evidence supports the view that banks with lower capital grant fewer loans when GDP growth is lower.[25]

The capital adequacy of banks is closely steered by supervisory regulations. In this respect, the Basel II accord published in June 2004, which aimed to create international standards on supervisory regulations governing the capital adequacy of banks, is likely to have brought non-negligible changes to the transmission of monetary policy.

A new stream of literature has recently developed which suggests that monetary policy may also affect banks' incentive to bear risk when providing loans. This mechanism, usually referred to as the risk-taking channel of monetary policy, complements the understanding of the bank lending channel. While the traditional bank lending channel focuses on the quantity of loans supplied, the risk-taking channel emphasises the effects of monetary policy on the risks that banks are willing to accept when granting loans.

The risk-taking channel is thought to operate mainly via two mechanisms. First, low interest rates boost asset and collateral values. This, in conjunction with the belief that the increase in asset values is sustainable, leads both borrowers and banks to accept higher risks. Second, low interest rates makes riskier assets more attractive, as agents search for higher yields. In the case of banks, these two effects usually translate into a softening of credit standards, which can lead to an excessive increase in loan supply. From a policy perspective, an intensification of the risk-taking channel could pose challenges for the conduct of monetary policy, since monetary policy must focus on price stability as its primary objective.

While the empirical testing of this transmission channel is subject to a number of challenges,

22 See Y. Altunbas, L. Gambacorta and D. Marquéz-Ibañez, "Securitisation and the bank lending channel", *European Economic Review*, 53(8), November 2009, pp. 996-1009.

23 See E. Loutskina and P.E. Strahan, "Securitisation and the declining impact of bank finance on loan supply: evidence from mortgage acceptance rates", *NBER Working Papers*, No 11983, 2006.

24 See H.S. Hempell and C. Kok Sørensen, "The impact of supply constraints on bank lending in the euro area: crisis-induced crunching?", presented at the ECB workshop on "Challenges to monetary policy implementation beyond the financial market turbulence" in Frankfurt am Main on 30 November 2009.

25 See Y. Altubas, G. de Bondt and D. Marquéz-Ibañez, "Bank capital, bank lending and monetary policy in the euro area", *Kredit und Kapital*, May 2004; and A. Maddaloni and J.L. Peydró, "Bank lending standards and the origins and implications of the current banking crisis", ECB Research Bulletin No 9, March 2010.

there does seem to be evidence – for both the euro area and the United States – of a link between monetary policy stance and the degree to which banks take risks.[26] According to this literature, low short-term interest rates lead to an increase in banks' appetite for risk in terms of both quantity (increase in size and number of loans granted) and prices (lower interest rates on loans granted). This effect is stronger when focusing on short-term interest rates, and also increases with higher levels of securitisation activity.[27]

The advent of securitisation and, in general, the possibility of transferring credit risk observed over the past ten years may have contributed to more risk-taking by banks, as exemplified by laxer lending standards and insufficient monitoring. Indeed, according to the Eurosystem's bank lending survey, one of the main drivers of the cumulative net tightening of euro area banks' credit standards since the beginning of the financial turmoil was the disruption of the securitisation market. In this respect, it is worth recalling that the proliferation of complex financial structures not subject to sound regulatory supervision and prone to high levels of financial leverage was one of the factors that triggered the financial crisis. On the other hand, more prudent capital and liquidity management by banks induced by regulatory changes, such as those put forward in the Basel II Accord published in June 2004 or improvements to national regulatory frameworks in general, reduce banks' risk-taking behaviour over the cycle. As a result the relevance of the risk-taking channel is likely to have been alleviated somewhat.[28, 29]

5 THE TRANSMISSION OF MONETARY POLICY TO INFLATION AND OUTPUT

The various developments identified in the previous sections are likely to have individually led to changes in the transmission mechanism of monetary policy. However, these developments may affect the transmission in different ways, with some tending to strengthen the impact of interest rate changes on output and prices, while others would tend to diminish these effects. In order to assess the overall effect, empirical macroeconomic analysis, based on either vector autoregressive analysis or the use of structural models, can be employed. In fact, analysis suggests that the evidence regarding changes in the overall transmission mechanism is ambiguous. This is illustrated in Chart 1, which compares the effects of a change in monetary policy on real GDP and inflation before and after the introduction of the euro.[30] Panel A suggests that the impact of monetary policy on economic activity would have been somewhat less in the period after 1999, while inflation seems to respond faster. However, as shown by Panel B, the differences between the two periods are not statistically significant. Based on this empirical evidence, it is therefore difficult to conclude that the overall impact of monetary policy on output and inflation has changed over the past decade.

Empirical analysis based on DSGE models suggests larger and more significant changes in the overall response of the economy to monetary policy actions.[31] However, it should be stressed that the results are very much dependent on the specific model employed, with different models giving different results. In summary, it is fair to say that the empirical evidence regarding changes in the overall effects of monetary policy on the economy is ambiguous.

26 Y. Altunbas, L. Gambacorta and D. Marquéz-Ibañez, "Does monetary policy affect bank risk-taking?", *BIS Working Papers*, No 298, Bank for International Settlements, 2010.
27 See A. Maddaloni and J.L. Peydró, "Bank risk-taking, securitisation, supervision and low interest rates: evidence from lending standards", *Working Paper Series*, ECB, forthcoming.
28 Prominent among those changes to the national regulatory frameworks in the euro area is the prudential regulatory mechanism of dynamic provisioning introduced by the Bank of Spain in the late 1990s.
29 See A. Maddaloni and J.L. Peydró, "Bank risk-taking, securitisation, supervision and low interest rates: evidence from lending standards", *Working Paper Series*, ECB, forthcoming.
30 R. Gerke, A. Weber and A. Worms, "Has the monetary transmission process in the euro area changed? Evidence based on VAR estimates", *BIS Working Papers*, No 276, Bank for International Settlements, 2009.
31 See M. Cecioni and S. Neri, "The monetary transmission mechanism in the euro area: has it changed and why?", presented at a joint lunchtime seminar at the ECB on 31 March 2010.

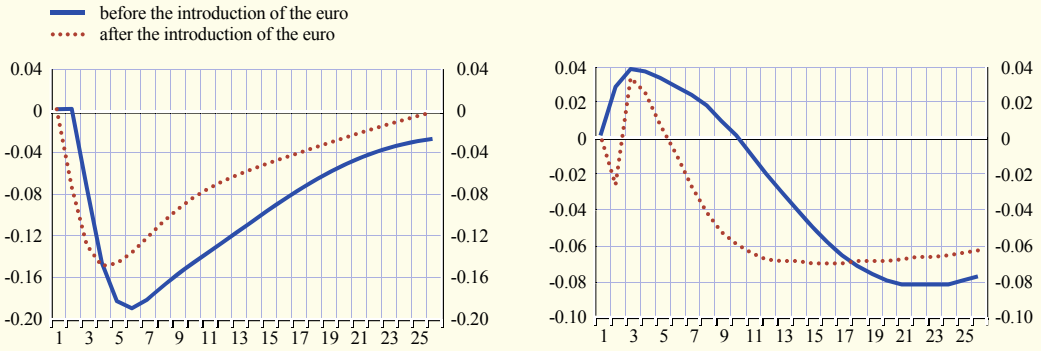
Chart 1 Impulse response of output and inflation to an unexpected increase in short-term interest rates

(percentage points)

Panel A

Impulse response of euro area real GDP to an unexpected increase in the short-term interest rate

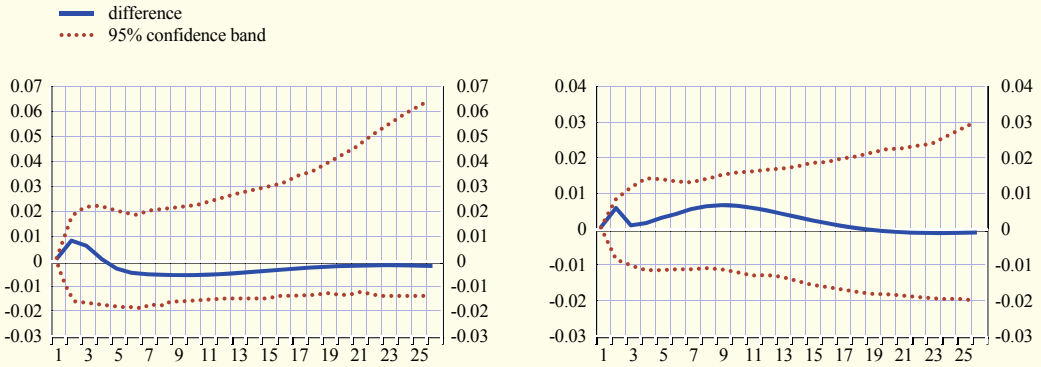
Impulse response of the euro area inflation rate to an unexpected increase in short-term interest rate



Panel B

Differences between the response of euro area real GDP to an unexpected increase in the short-term interest rate before and after the introduction of the euro

Differences between the response of euro area real GDP growth rate to an unexpected increase in the short-term interest rate before and after the introduction of the euro



Notes: The periods before and after the introduction of the euro area are 1980-1996 and 1999-2006 respectively. The size of the increase in the short-term interest rate is equal to one standard deviation. Changes in real GDP and the inflation rate are expressed in percentage points. The horizontal axes refer to the number of quarters following the change in the short-term interest rate.

6 MONETARY POLICY TRANSMISSION UNDER FINANCIAL DISTRESS

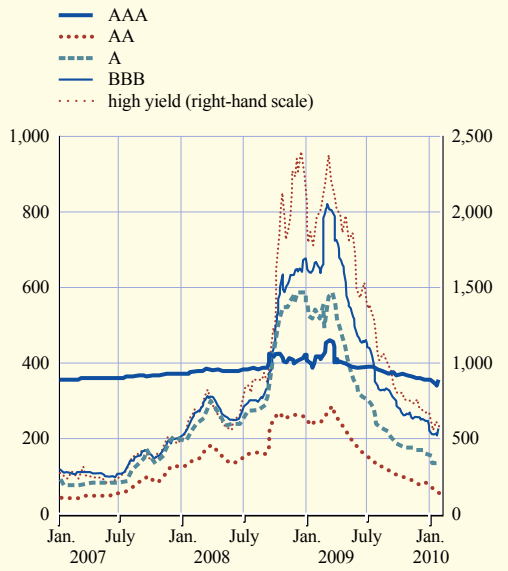
The financial turmoil first manifested itself late in the summer of 2007 as risk premia on interbank loans soared and transactions within the interbank market declined rapidly. Uncertainty among banks about counterparts' creditworthiness became widespread.[32,33] By September 2008, when the possibility emerged of a failure of the financial system at large, key financial market spreads reached historically high levels. The worsening of conditions in the money markets was also reflected in higher estimates of interest rate volatility, making it difficult to measure or even assess the stance of monetary policy. As a result, there was a severe

32 See N. Cassola et al, "A research perspective on the propagation of the credit market turmoil", ECB Research Bulletin No 7, June 2008.

33 See C. Holthausen and H. Pill, "The forgotten markets: how understanding money markets helped us to understand the financial crisis", ECB Research Bulletin No 9, March 2010.

Chart 2 Euro area corporate bond spreads

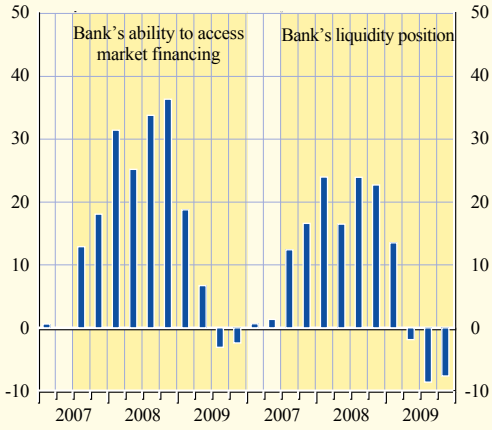
(basis points; daily data)



Source: Reuters.

Chart 3 Liquidity-related factors affecting credit standards in the euro area

(net percentages of banks reporting a contribution to the tightening of credit standards; quarterly data)



Source: ECB bank lending survey.
Note: Credit standards applied to the approval of loans and credit lines to enterprises.

risk that the first link in the transmission chain between the central bank and credit institutions could become broken or impaired. Importantly, given that a considerable fraction of bank loans are indexed to unsecured money markets, the widening of the spread had a direct impact on lending rates. The impact of the financial turmoil was equally visible in the increased cost of market financing. Euro area credit spreads in the corporate bond market widened to historic levels in the fourth quarter of 2008 (see Chart 2). Non-financial firms faced some increases in corporate bond yields, but the widening of credit spreads was most pronounced for financial firms. As a result of the decline in banks' ability to raise funds, the credit standards applied to the approval of loans and credit lines to enterprises were raised significantly (see Chart 3).

In an economic environment where the monetary policy transmission channels had been hampered, the standard monetary policy response alone (i.e. to reduce key ECB interest rates) might have been insufficient to ensure the maintenance of price stability.

Three main issues needed to be promptly addressed. First, tensions in money markets (the first link in the transmission chain) needed to be alleviated. Second, policy interest rates had to be rapidly adjusted to very low levels. Third, the situation of the banking system, including the tightening of credit standards by banks – which was also affected by supply factors, namely banks' impaired ability to raise funds – required the implementation of non-standard monetary policy measures if the further links of the transmission chain (from banks to households and corporations) were to be kept fully operational.[34]

34 The strengthening of banks' balance sheets has also come to the fore as a key condition for the effective transmission of the monetary policy stance to households' and corporations' financing costs.

THE PASS-THROUGH OF REDUCTIONS IN KEY ECB INTEREST RATES

The adjustment of retail bank interest rates in response to changes in policy rates, usually referred to as the interest rate pass-through process, appears to have remained effective during the financial turmoil.[35]

Banks' short-term lending rates, which are generally affected by movements in the three-month EURIBOR, declined by 341 basis points between September 2008 and February 2010, while the three-month EURIBOR declined by around 436 basis points during the same period. Long-term bank lending rates declined over this period by 151 basis points, while seven-year government bond yields declined by 121 basis points.

Turning to the cost of bank financing in nominal terms, euro area MFI bank lending rates to non-financial corporations declined almost in parallel with the key ECB interest rates (see Chart 4).[36] Most bank interest rates on loans to households for house purchase and consumer credit also declined, albeit to a lesser extent than rates on loans to non-financial corporations (see Chart 5).[37]

However, the reductions in money market rates which followed the cuts to key ECB interest rates passed through to bank lending rates with a significant lag, in line with past regularities. This was primarily reflected in the widening of the spread between money market rates and bank lending rates. The level of this spread is,

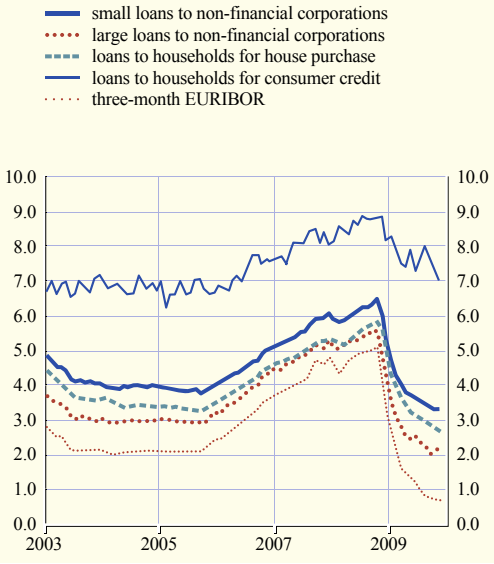
35 See the article entitled "Recent developments in the retail bank interest rate pass-through in the euro area" in the August 2009 issue of the Monthly Bulletin.

36 Short-term euro area MFI interest rates on loans to non-financial corporations with a floating rate and an initial rate fixation period of up to one year decreased by around 330 basis points between September 2008 and February 2010. In the same period, long-term MFI interest rates on loans to non-financial corporations with an initial rate fixation period of over five years declined slightly less, by around 150-200 basis points.

37 Short-term MFI interest rates on loans to households with a floating rate and an initial rate fixation period of up to one year declined by around 200-300 basis points between September 2008 and February 2010. In the same period, long-term MFI interest rates on loans to households with an initial rate fixation period of over five years declined less, by around 90-120 basis points.

Chart 4 Short-term MFI bank lending rates

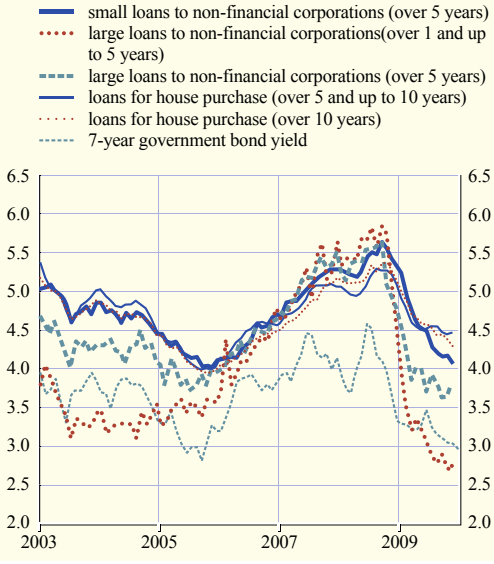
(percentages per annum; rates on new business)



Source: ECB.

Chart 5 Long-term MFI bank lending rates

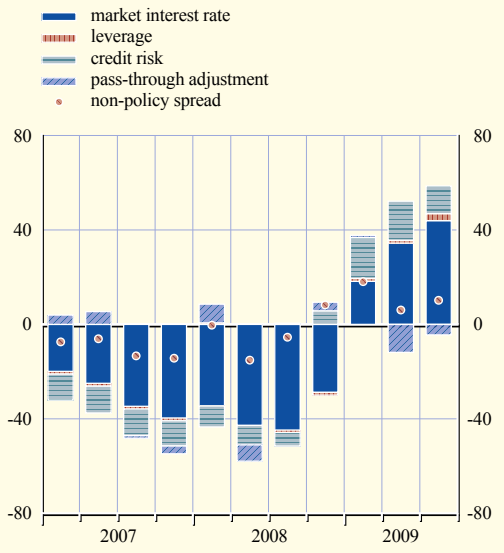
(percentages per annum; rates on new business)



Source: ECB.

Chart 6 Short-term composite bank lending rate spread of loans to non-financial corporations

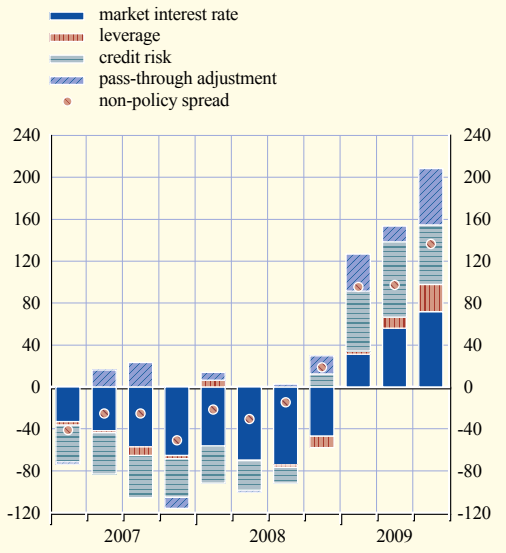
(basis points; quarterly data)



Source: ECB and ECB calculations.
Note: The contributions from the market interest rate, leverage and credit risk components are mean-adjusted, which explains the negative contributions over certain periods.

Chart 7 Short-term composite bank lending rate spread of loans to households for private consumption

(basis points; quarterly data)



Source: ECB and ECB calculations.

however, dependent on the level of market interest rates, which are controlled by the central bank.[38] It is, therefore, of interest to disentangle the component of the bank lending rate spread which may not be dependent on the actions of the central bank. A simple econometric model allows the computation of the different components that add up to the bank lending rate spread.[39] These are shown in Charts 6 and 7. The bank lending rate can be split into two major components: the equilibrium spread and the "pass-through adjustment term". The pass-through adjustment term reflects temporary departure from an equilibrium and hence does not represent a fundamental value. The equilibrium spread has been defined as having three main components: the effect resulting from changes in the market interest rate, the effect resulting from changes in credit risk, and the effect resulting from changes in banks' capital-to-assets ratio. The component of the bank lending rate spread which may not be dependent on the actions of the central bank is defined as the "non-policy spread" in Charts 6 and 7. The non-policy spread is the sum of the pass-through adjustment term, the leverage effect and the credit risk effect.

Several conclusions can be drawn from this decomposition of the bank lending rate spread. First, the short-term bank lending rate spreads observed during the financial turmoil increased

38 In particular, euro area spreads are usually wider when money market rates are low. This may be explained by the fact that whenever the volume of loans increases following a reduction of market rates, unit operating costs may decline but banks' risk aversion may increase with the increase in leverage. Declining unit operating costs would allow banks to operate with smaller margins (smaller bank lending rate spread). On the other hand, increased risk aversion would lead to a demand for greater margins (larger bank lending rate spread).

39 The model employed is an extension of the error correction mechanism (ECM) model of the interest rate pass-through shown in Box 1 of the article entitled "Recent developments in the retail bank interest rate pass-through in the euro area" in the August 2009 issue of the Monthly Bulletin. The extension adds proxies for the cost of equity financing (CE_t) and credit risk (CR_t) to the ECM model, as follows: $\Delta BR_t = \mu + \gamma(BR_{t-1} - \beta_1 MR_{t-1} - \beta_2 CE_{t-1} - \beta_3 CR_{t-1}) + \alpha_1 \Delta MR_t + \alpha_2 \Delta BR_{t-1}$, where BR_t denotes the bank lending rate, and MR_t refers to the market interest rate.

significantly from the fourth quarter of 2008 onwards, after having remained broadly constant between the second quarter of 2007 and the third quarter of 2008. Second, the decline in the EURIBOR that began in October 2008 has made a significant contribution to the widening of the short-term bank lending rate spreads. Third, credit risk has also been an important factor behind the widening of the bank lending rate spreads, particularly since the third quarter of 2008.

In this respect, empirical evidence on the evolution of the spreads for bank lending rates to households suggests that the widening of these spreads primarily reflects higher levels of credit risk than those recorded under normal economic conditions. Recent studies also suggest that the recent financial turmoil may have contributed to an increase in the heterogeneity of the pass-through of short-term rates across euro area countries.[40] This notwithstanding, the interest rate pass-through remained operational during the financial turmoil, and the nature of the transmission did not differ much from that displayed during periods of economic and financial stability.

THE ROLE OF NON-STANDARD MONETARY POLICY MEASURES

As mentioned earlier, tensions in money markets meant that banks' ability to provide funding to the economy was hampered. Furthermore, securitisation activity, which had been an important source of loans prior to the financial turmoil, came to a halt. All in all, this suggests that without the enhanced credit support policies introduced by the ECB, the reduction in the key ECB policy rates would have been less effective.

The enhanced credit support policies had a direct effect on both interest rates and the supply of credit. The effect on interest rates was first reflected in a clear decline in the key money market rates that euro area banks typically use as benchmarks to reset floating rate loans and price new short-term loans, which in turn led to sharp declines in these types of loan to both households and firms. The impact on credit supply, meanwhile, may be best gauged through two complementary channels. First, all measures contributed to the expansion of credit by improving banks' funding liquidity. Second, the outright purchase of covered bonds (one of the credit support policies implemented) facilitated the funding of banks in a key segment of the capital market. In particular, the measures helped, therefore, to unclog the bank lending channel in an environment in which some banks were experiencing problems in their recourse to the capital markets and where the functioning of the money markets was severely hampered.

7 CONCLUSIONS AND OUTLOOK

The monetary policy transmission mechanism in the euro area has been affected by a number of developments since the introduction of the euro. At the macro level, a new and credible monetary policy regime for the area as a whole and the removal of intra-euro area exchange rates have contributed to a firmer anchoring of long-term inflation expectations.

The introduction of the euro also coincided with an acceleration of the process of financial innovation. This process has expanded banks' range of possibilities for funding. Financial innovation has also increased banks' risk-taking options, thereby giving greater prominence to the risk-taking channel of monetary policy. However, the financial turmoil demonstrated that the situation may reverse in times of financial distress, when market-based funding options are squeezed or even disappear, with the excessive risks previously acquired materialising.

The recent financial turmoil put the first link in the monetary policy transmission chain, namely

40 See C. Kok Sørensen and T. Werner, "Bank interest rate pass-through in the euro area: a cross country comparison", presented at the ECB workshop on "The monetary policy transmission mechanism in the euro area in its first ten years" in Frankfurt am Main on 28 September 2009.

the link between ECB policy rates and interbank rates, at severe risk of impairment. The above-mentioned developments necessitated the implementation of non-standard monetary policy measures in order to complement the standard monetary policy measures, namely those based on ECB interest rate decisions.

Looking ahead, it is still premature to assess to what extent the transmission mechanism may be more permanently affected by the consequences of the crisis. It may be argued in this respect that the current attempts to set up a more comprehensive, stricter regulatory framework and to strengthen the resilience of the banking sector may contribute to banks playing a more stable role in the transmission of monetary policy.[41] This may be so for a number of reasons. First, more stringent capital requirements might strengthen the bank capital channel of monetary policy transmission,[42] as a larger number of banks would become less well capitalised and might, as a consequence, react more strongly to changes in policy rates by adjusting their loan supply. However, it might also be expected that banks will respond to the new, more stringent capital requirements by simply increasing their capital buffers and hence reducing the need to adjust loan supply in response to changes in monetary policy rates.

Second, the introduction of higher requirements with regard to securitisation should lead to more limited funding opportunities, thereby reinforcing the strength of the traditional bank lending channel.[43] The interest rate channel may also be affected as previous studies have found that securitisation speeds up the pass-through of policy rates to bank lending rates.[44]

Third, more prudent capital and liquidity management by banks may reduce banks' risk-taking behaviour over the cycle and hence the relevance of the risk-taking channel might be alleviated somewhat. However, were the new measures to contribute to improving the quality of securitisation by banks, it cannot be excluded that the net effect, in terms of the impact of monetary policy on bank lending, would be reinforced.

Fourth, the introduction of more stringent requirements regarding banks' liquidity management is likely to imply that banks will operate with higher liquidity buffers in the future. A common finding in literature on this subject is that banks with higher liquidity ratios are typically better able to shield their borrowers from changes in monetary policy.[45] However, ceteris paribus, more stringent liquidity requirements would, by definition, make liquidity more scarce, thus having the same effect as an increase in interest rates on average, with restrictive implications for the economy of a magnitude very difficult to gauge.

Finally, aligning banks' internal credit risk models with regulatory requirements was one of the main purposes of Basel II. It was argued

41 For example, in December 2009 the Basel Committee on Banking Supervision published two consultative documents outlining a set of new global regulatory standards enhancing the current Basel II capital adequacy framework and also introducing a new global liquidity standard. The new regulatory proposals include: i) raising the quality of regulatory capital; ii) enhancing the risk coverage of the capital framework (including more stringent requirements for complex securitisation exposures); iii) introducing a leverage ratio; iv) reducing pro-cyclicality and promoting counter-cyclical buffers; v) possibly imposing additional capital requirements on systemically important banks; and vi) introducing a global liquidity standard. See Basel Committee on Banking Supervision, "Strengthening the resilience of the banking sector", December 2009; and Basel Committee on Banking Supervision, "International framework for liquidity risk measurement, standards and monitoring", December 2009.

42 See, for example, Y. Altunbas, G. de Bondt and D. Marqués, "Bank capital, bank lending, and monetary policy in the euro area", *Kredit und Kapital*, May 2004; L. Gambacorta and P.E. Mistrulli, "Does bank capital affect lending behaviour?", *Journal of Financial Intermediation*, 13(4), 2004, pp. 436-457; and C. Merkl and S. Stolz, "Banks' regulatory buffers and monetary policy transmission", *Applied Economics*, 41(16), 2009, pp. 2013-2024.

43 See Y. Altunbas, L. Gambacorta and D. Marquéz-Ibañez, "Securitisation and the bank lending channel", *Working Paper Series*, No 838, ECB, 2007.

44 See A. Estrella, "Securitization and the efficacy of monetary policy", *Economic Policy Review*, 8(1), Federal Reserve Bank of New York, May 2002, pp. 243-255.

45 See, in particular, A.N. Kashyap and J.C Stein, "What do a million observations on banks say about the transmission of monetary policy?", *American Economic Review*, 90(3), 2000, pp. 407-28.

that, as a consequence, banks' pricing of credit would become more discriminatory in the sense of better reflecting the actual underlying risks pertaining to individual exposures.[46] In this sense, it might be assumed that, under the more risk-sensitive Basel II framework, banks' provision of credit is more sensitive to the actual borrower net worth. This might suggest that the balance sheet channel was reinforced with the introduction of Basel II. To the extent that the new proposals somewhat sever this close link between required capital and underlying risk, some relaxation of the borrower balance sheet channel could be observed.

46 See, for example, R. Repullo and J. Suarez, "Loan pricing under Basel capital requirements", *Journal of Financial Intermediation*, 13(4), 2004, pp. 496-521.

THE "GREAT INFLATION": LESSONS FOR MONETARY POLICY

This article discusses the key underlying causes of the "Great Inflation" of the 1970s and identifies its main lessons for monetary policy. Evidence points towards a crucial role played by policy mistakes in generating the Great Inflation. First, a comparison between the US experience and that of Germany[1] and Switzerland – which, during the 1970s, followed a "hard-money" monetary policy explicitly aimed at keeping inflation under control – casts serious doubt on the "bad luck" explanation of conventional wisdom, according to which the Great Inflation was simply the result of a series of large negative supply shocks. Second, the fact that the beginning of the Great Inflation in the United States, in the mid-1960s, pre-dates the large negative supply shocks of the early 1970s, poses a fundamental problem for explanations ascribing the inflationary outburst to such shocks. Third, a convincing case has been made that OPEC's oil price increases of 1973 and 1979 could only have occurred under the conditions of global liquidity expansion associated with the collapse of Bretton Woods.

The Great Inflation therefore holds several important lessons for monetary policy-making. First, a strong and credible nominal anchor is essential to keep inflation expectations firmly pinned down. Indeed, a key reason for Germany's success during the 1970s was that, following the collapse of Bretton Woods, it swiftly adopted a new nominal anchor in the form of monetary targeting. The stability of inflation expectations, however, should never be taken for granted, and requires continuous and careful monitoring by the monetary authority. The US experience of the second half of the 1960s, in particular, clearly shows that a few years of systematically disappointing inflation outcomes, in the absence of a clear definition of the monetary policy objective, can rapidly unanchor inflation expectations. A second important lesson concerns the dangers associated with an excessive reliance, for monetary policy purposes, on unobserved – and therefore intrinsically poorly measured – indicators, such as the output gap. In this respect, the German experience during the 1970s is especially interesting: Germany's output gap mismeasurement problems were similar in magnitude to those of the United States in this period, but the very nature of the monetary policy strategy adopted by the Deutsche Bundesbank was such as to minimise their impact on monetary policy. Finally, the experience of the Great Inflation decisively refuted the notion of an exploitable trade-off between inflation and economic activity, which was part of the conventional wisdom in macroeconomics during the 1960s.

1 INTRODUCTION

Together with the Great Depression, the Great Inflation was one of the most serious monetary policy failures of the twentieth century. With a few notable exceptions (first and foremost, Germany and Switzerland), annual inflation rates during the 1970s reached levels of over 10% across the OECD. Chart 1 shows annual CPI inflation rates for the euro area's four largest countries for the period January 1958-December 2009. Whereas German inflation peaked at 7.8%, the peaks for France, Italy, and Spain were 15.2%, 25.2% and 28.5% respectively. A quarter of a century after it ended with the disinflation of the early 1980s, the Great Inflation is still one of the most intensively investigated episodes in economic history,[2] and the impact of its lessons on policy-making cannot be overstated.

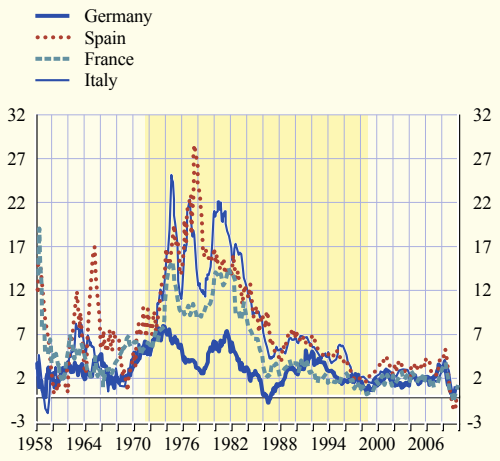
This article discusses the key underlying causes of the Great Inflation of the 1970s and identifies its main lessons for monetary policy. Overall, evidence points towards a critical role played by policy mistakes in generating the Great Inflation. First, a comparison between the US experience and that of Germany and Switzerland – which, during the 1970s, followed a "hard-money" monetary policy explicitly aimed at keeping inflation under control – casts serious doubt

1 "Germany" is used throughout this article to refer to the Federal Republic of Germany.

2 See for example Bordo, M. and Orphanides, A. (eds.), *The Great Inflation*, The University of Chicago Press for the National Bureau of Economic Research, forthcoming.

Chart 1 CPI inflation rates in selected euro area countries

(annual percentage changes)



Sources: Bundesbank and the IMF's *International Financial Statistics*.
Note: The shaded area represents the period between the collapse of Bretton Woods and the start of Stage Three of Economic and Monetary Union.

on the "bad luck" explanation of conventional wisdom, according to which the Great Inflation was simply the result of a series of large negative supply shocks. Second, the fact that the beginning of the Great Inflation in the United States, in the mid-1960s, pre-dates the large negative supply shocks of the 1970s constitutes a fundamental problem for explanations ascribing the inflationary outburst to such shocks. Third, a convincing case has been made that OPEC's oil price increases of 1973 and 1979 could only have occurred under the conditions of global liquidity expansion associated with the collapse of Bretton Woods.

The Great Inflation episode holds several important lessons for monetary policy-making. In particular, it clearly highlights the vital role played by a credible nominal anchor in firmly pinning down inflation expectations, and the dangers associated with an excessive reliance, for monetary policy purposes, on unobserved – and therefore intrinsically poorly measured – indicators, such as the output gap. Finally, the Great Inflation decisively refuted the notion of an exploitable trade-off between inflation and economic activity relative to some "natural" level, which was part of the conventional wisdom in macroeconomics in the 1960s.

2 CAUSES OF THE GREAT INFLATION

The Great Inflation of the 1970s is a historically unique episode. Although episodes of high inflation, and even hyperinflation, had occurred previously, they had always been associated with wars, civil wars or revolutions, and with the resulting need, on the part of governments, to finance massive budget deficits through seigniorage (in other words, by printing money).[3] In contrast, as stressed, for example, by Bradford De Long with reference to the United States,[4] the Great Inflation is the only historical instance of a major, prolonged and persistent inflationary episode during peacetime. As emphasied by Robert Barro[5] in his historical excursus of the evolution of US monetary regimes since the Civil War (1861-1865), the Great Inflation coincided with the complete severance of any link between money and a commodity base, such as gold or silver, which had for centuries provided a strong nominal anchor and thus stabilised inflation expectations: "In earlier periods before roughly 1965, the monetary regime guaranteed some long-run stability in monetary growth, and therefore in long-term inflation, which in turn restricted the effects of shifting inflationary expectations […]. Although there were earlier periods when the United States did not adhere to a gold or silver standard, these episodes typically occurred in times of war and could reasonably be perceived as temporary. The period since 1971 seems to be the first time that we have completely severed, both currently and prospectively, the link between our money and a commodity base. […] If the above

3 See, first and foremost, Dornbusch, R. and Fischer S., "Stopping Hyperinflation, Past and Present", *Weltwirtschaftliches Archiv*, April 1986.
4 See De Long, B.J., "America's Peacetime Inflation: the 1970s", in Romer, C. and Romer, D. (eds.), *Reducing Inflation: Motivation and Strategy*, The University of Chicago Press 1997.
5 See Barro, R.J., "United States Inflation and the Choice of a Monetary Standard", in Hall, R.E. (ed.), *Inflation: Causes and Effects*, University of Chicago Press 1982.

scenario is correct, the inflation problem must be analysed in terms of changes to the basic monetary structure."

In this passage, Barro points to a fundamental lesson of the Great Inflation episode, i.e. the need to design monetary institutions in such a way as to provide a strong anchor for inflation expectations. As will be discussed below, both Germany's success during the 1970s and advanced countries' ability to keep inflation low and stable following the disinflation of the early 1980s have crucially hinged on the existence of such an anchor. Furthermore, the design of monetary frameworks such as Economic and Monetary Union and inflation-targeting regimes precisely reflects this key lesson of the Great Inflation.

KEY MACROECONOMIC FACTS FOR THE UNITED STATES AND GERMANY

Charts 2 and 3 show, for the period between January 1965 and December 1984, for the United States and Germany respectively, annual CPI inflation, nominal interest rates, ex post real interest rates (which provide a simple and model-independent measure of the monetary policy stance), the annual rates of change of the food and energy components of the CPI, real GDP growth and the nominal effective exchange rate (NEER).[6]

The upper left-hand panel of Chart 2 highlights a key stylised fact of the Great Inflation in the United States: starting in early 1965, inflation increased from slightly above 1% to a peak of 6.4% in February 1970. After temporarily decreasing to a trough of 2.9% in August 1972 it accelerated again, and in October 1973 (the date of the first oil price shock) it was running at 8.1%. This clearly suggests that the US economy was already on a path of instability well before it was hit by the oil price shocks.

As discussed by Levin and Taylor,[7] this upward drift in inflation was accompanied by a progressive unanchoring of inflation expectations not only at short, but also at long horizons. Specifically, after remaining very stable until about 1965, US long-term inflation expectations started to drift progressively upwards during the second half of the 1960s, exhibited a temporary decrease in the first half of the 1970s, and then moved decisively towards 10% during the second half of the 1970s, when inflation itself was dramatically accelerating towards its peak of 14.6%, which was reached in March 1980. The take-off in inflation expectations in the second half of the 1960s was reflected in nominal wage growth. The annual rate of growth of compensation per hour in the non-farm business sector, for example, increased from 3.6% in 1965 Q1 to a peak of 8.4% in 1968 Q4. During subsequent years it further accelerated, reaching peaks of 11.3% in both 1975 Q1 and 1980 Q4.

Speeches and statements to the US Congress by Chairmen of the Federal Reserve System during the second half of the 1960s and the early 1970s confirm the existence of widespread fears that the United States was at risk of entering a dangerous inflationary spiral. In his statement to the Joint Economic Committee (JEC) of the US Congress in March 1969, for example, Federal Reserve Chairman Martin remarked that "since mid 1965, except for a brief respite in early 1967, we have had an overheated economy, and growing expectations of inflation. [...] It is clear that inflation, and the widespread expectation of it, is our most serious current economic problem."[8]

And in May 1970, just a few weeks after becoming Chairman of the Federal Reserve System, Arthur Burns remarked to the American Bankers Association: "We are living now in an inflationary climate. […] In these circumstances, it should not be surprising that many

6 Ex post real interest rates have been computed as the difference between nominal rates and CPI inflation. For the sake of readability, the chart includes a filtered version of the series, from which high frequency components have been removed. Filtering has been performed using the band-pass filter proposed in Christiano, L.J. and Fitzgerald T., "The Band-Pass Filter", *International Economic Review*, 44 (2), 435-465, 2003.

7 See Levin, A. and Taylor, J., "Falling Behind the Curve: A Positive Analysis of Stop-Start Monetary Policies and the Great Inflation", in Bordo and Orphanides, op cit.

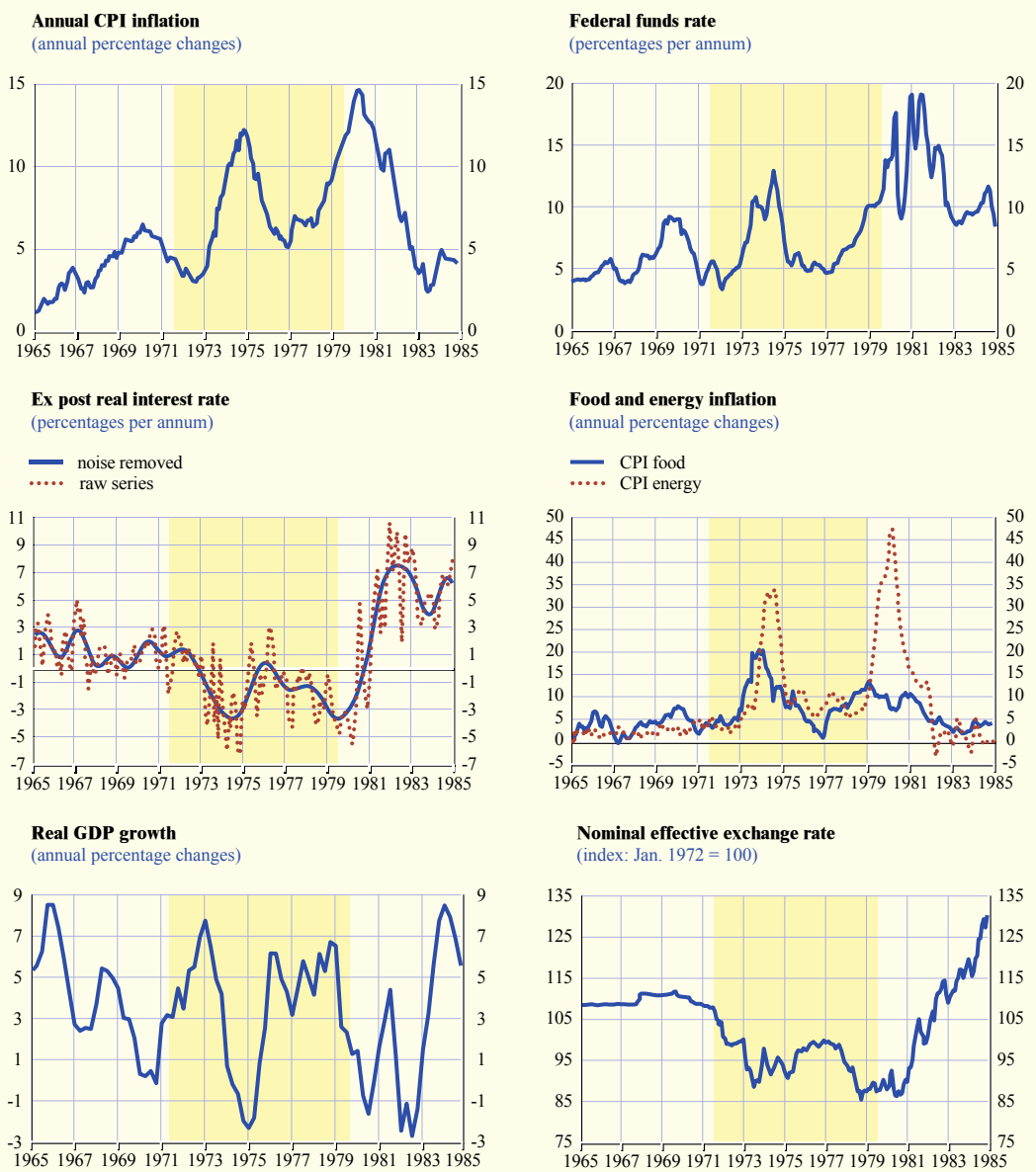
8 See McChesney Martin, W., Jr., *Statement Before the Joint Economic Committee*, March 25, 1969.

businessmen and consumers believe that inflation is inevitable."[9]

What was the origin of such inflationary pressures? The evidence from the middle right-hand panel of Chart 2 suggests that the contribution of energy prices to the inflationary upsurge of the second half of the 1960s was comparatively minor, with the

9 See Burns, A.F., *Inflation: The Fundamental Challenge to Stabilisation Policies*, remarks by Arthur F. Burns, Chairman of the Board of Governors of the Federal Reserve System, before the 17th Annual Monetary Conference of the American Bankers Association, Hot Springs, Virginia, May 18, 1970.

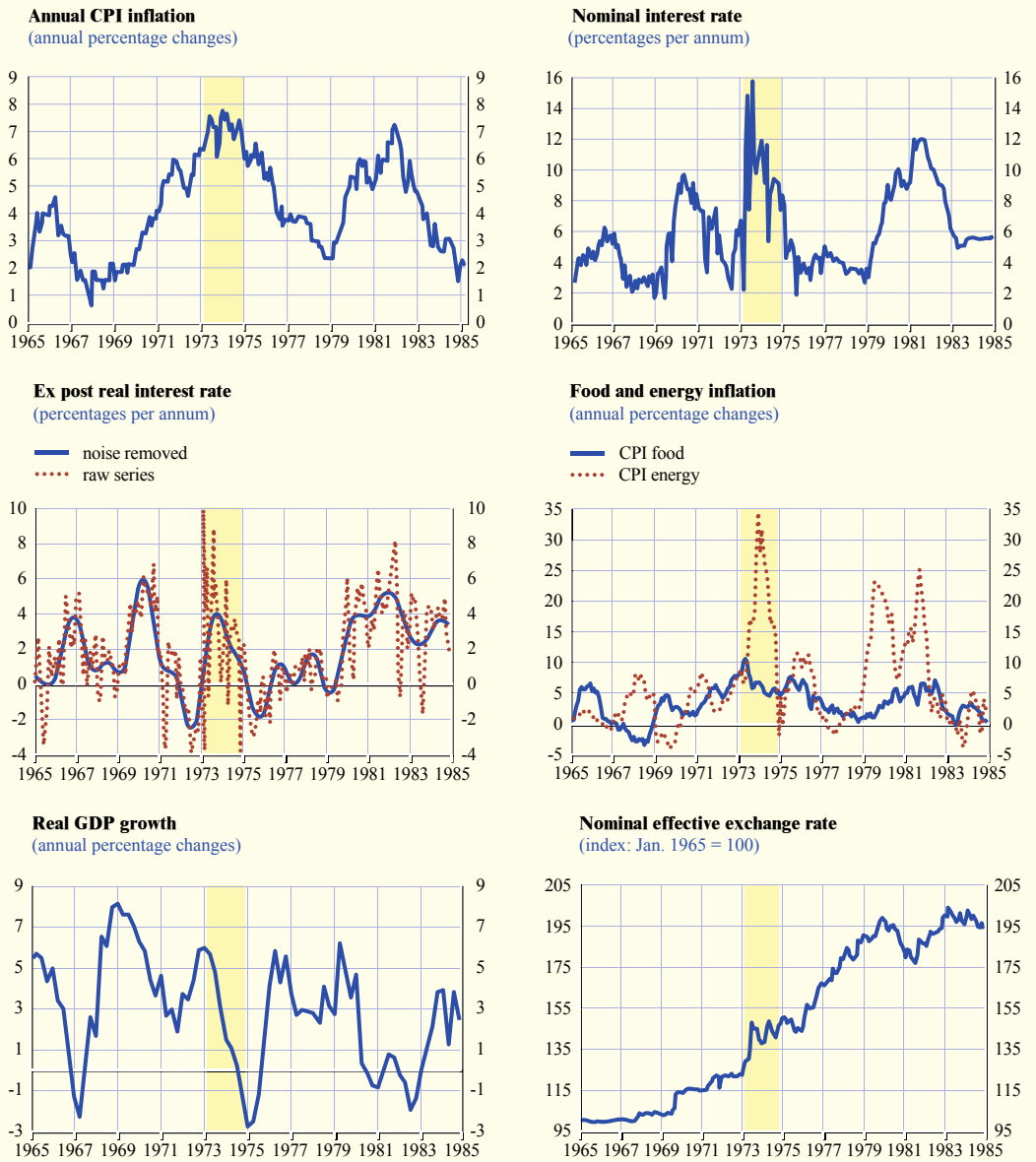
Chart 2 Selected macroeconomic data for the United States



Sources: Federal Reserve System, the IMF's *International Financial Statistics* and ECB calculations.
Note: The shaded area represents the period between the collapse of Bretton Woods and the beginning of Paul Volcker's chairmanship of the Federal Reserve System.

annual rate of change of the energy component of the CPI oscillating between 0.0% and 3.7%, and exhibiting very little variation. Food prices, on the other hand, appear to have contributed to a non-negligible extent to inflation's escalation. First, the 1965-66 inflation hump (when overall CPI inflation increased from 1.3% in January 1965 to a peak of 3.8% in September 1966) was preceded by a similar hump in food inflation, which reached a peak of 6.6% in March 1966. Second, the subsequent hump in CPI inflation was accompanied by a rapid acceleration in food inflation, which increased from

Chart 3 Selected macroeconomic data for Germany



Sources: Bundesbank, BIS, the IMF's *International Financial Statistics* and ECB calculations.
Note: The shaded area represents the period between the abandonment by Germany of its dollar peg and the announcement by the Bundesbank of its first monetary target.

-0.3% in April 1967 to a peak of 7.8% in February 1970. Thereafter food prices continued to exert strong inflationary pressures on the US economy (especially in 1974, when food price inflation reached a peak of more than 20%), but their impact was dwarfed by that of energy, with the impact of the 1973 and 1979 oil price shocks being clearly visible in the data.

Fiscal policy's contribution to igniting the Great Inflation in the United States should not be understated either. In the second half of the 1960s President Johnson's determination to proceed with both the Vietnam war and the "Great Society" spending programmes, without a corresponding increase in taxation, contributed to increasing inflationary pressures across the board.[10] The figures for the cyclically adjusted budget deficit net of interest payments published by the Congressional Budget Office (a simple measure of the fiscal stimulus imparted to the economy), having oscillated between 0.1% and 0.3% of potential GDP between 1962 and 1965, rapidly increased to 1.6% in 1966 and peaked at 3.7% in 1968, before decreasing during subsequent years. During the 1970s it oscillated between 0.4% and 1.8% of potential output. Accordingly, the fiscal policy stance appears to have been stimulative overall, throughout the Great Inflation episode.

In the case of Germany, the pattern of inflationary pressures during the second half of the 1960s appears to have been roughly the opposite of that in the United States, with stronger pressures stemming from energy, and comparatively milder ones originating from food (indeed there were even several months in which the food component of the CPI decreased). A fundamental difference between the United States and Germany during the Great Inflation episode is that, whereas Germany's NEER appreciated strongly during most of the decade, the United States' NEER depreciated significantly, with the result that, towards the end of the 1970s Germany's NEER was almost twice as high as it had been in January 1965, whereas the United States' NEER was about 20% lower. The important role played by the appreciation of the NEER in (partially) protecting the German economy from inflationary pressures originating on world commodity markets is clearly revealed by a comparison of the increases in the "electricity, gas, and fuel" component of the German CPI around the time of the first and of the second oil price shocks. After the dollar peg was abandoned in March 1973, Germany's NEER appreciated swiftly, but then fluctuated comparatively little until 1976, which saw the beginning of a period of rapid appreciation that lasted until the end of 1979. The relative stability of the German NEER around the time of the first oil price shock, and its rapid appreciation around the time of the second explain why, even though CPI energy inflation was higher in the United States in the latter episode than in the former, for Germany the opposite was the case. The contrasting behaviour of the German and US NEERs during the Great Inflation episode illustrates the important role played by a strong exchange rate in shielding the domestic production cost structure from negative supply shocks originating on world markets: between the collapse of Bretton Woods and December 1979, the food and energy components of the US CPI increased by 104% and 187% respectively, whereas the food and the electricity, gas and fuel components of the German CPI increased by 42% and 108% respectively. The key role played by the exchange rate naturally shifts the focus of attention to differences between the monetary policy strategies followed by the respective central banks during the Great Inflation.

As the middle left-hand panel of Chart 2 shows, the ex post real interest rate in the United States was positive, although comparatively quite low, during most of the period between January 1965 and the collapse of Bretton Woods in August 1971. It then turned negative and

10 The notion that the take-off of US inflation in the second half of the 1960s was partly due to the excessive pressure on resources created by the "Great Society" spending programmes is most notably associated with Federal Reserve Chairman Arthur Burns. See in particular several of the speeches collected in Burns, A.F., *Reflections of an Economic Policy Maker: Speeches and Congressional Statements, 1969-1978*, Washington: American Enterprise Institute, AEI Studies No 217, 1978.

remained so for the entire period between August 1971 and the beginning of the disinflation in October 1979. The fact that the US monetary policy stance was so loose as to systematically produce negative real interest rates throughout the Great Inflation episode gives rise to two considerations. First, it provides an explanation for the depreciation of the US NEER referred to above following the collapse of Bretton Woods: as Chart 2 shows, indeed, the US NEER is very strongly correlated with the evolution of the ex post real interest rate throughout the period under consideration, with the NEER appreciating decisively only following the interest rates hikes associated with the Volcker disinflation. Second, as stressed by Clarida, Gali, and Gertler[11] in their influential analysis of the Great Inflation in the United States, the looseness of US monetary policy during the 1970s strongly suggests that – in spite of the obvious inflationary impact of food, and especially oil price shocks during that decade – an excessively accommodative monetary policy might have played a crucial role in allowing US inflation to take off and endure. Clarida et al., in particular, first documented a fundamental weakness of US monetary policy during the period preceding the appointment of Paul Volcker as Chairman of the Federal Reserve System, namely its failure to satisfy the so-called "Taylor principle" (named after the American macroeconomist John Taylor),[12] which states that nominal interest rates should move more than one-for-one with (expected) inflation.[13] The finding that, before Volcker's appointment, US monetary policy had not been fighting inflation with sufficient vigour has subsequently been confirmed by several significantly more sophisticated analyses,[14] and represents one of the key elements in interpreting and explaining the Great Inflation in the United States.

Turning to Germany, during the period leading up to the collapse of Bretton Woods, ex post real interest rates were systematically higher in that country than in the United States, highlighting the firmer stance adopted by the Bundesbank during those years. Following the first oil price shock the Bundesbank tried to avoid second round effects through "moral suasion", but with little success. The social partners essentially ignored the signals coming from the central bank and agreed to significant increases in nominal wages, which caused increases in both inflation and unemployment.[15] As Chart 3 makes clear, however, Germany's mid-1970s inflation spike, at 7.8%, was significantly lower than the corresponding US one of 12.2%. Over subsequent years the Bundesbank fully exploited the freedom of action it had gained when it was relieved of its obligation to defend the parity with the dollar, in March 1973, by pursuing a counter-inflationary policy that was appropriate for the conditions it was facing domestically.[16] This allowed it to bring inflation down to 2.1% in September 1978, and to limit the subsequent inflationary peak, which followed the second oil price shock, to 7.5%, in October 1981. In this respect, the successful management of the impact of the second oil price shock crucially hinged on the lessons learned from the failure of "moral suasion" to rein in second-round effects following the 1973 shock.[17] Mindful of that experience, the Bundesbank adopted a significantly tougher policy stance, which was reflected in the (filtered) ex post real interest rate, which peaked at about 6% in 1982. In line with the above discussion of the evolution of the US NEER during the 1970s, the firmer monetary policy stance adopted by the Bundesbank during those years provides

11 See Clarida, R., Gali, J. and Gertler, M., "Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory", *Quarterly Journal of Economics*, CXV(1), 2000, pp.147-180.
12 See Taylor, J.B., "Discretion Versus Policy Rules in Practice", *Carnegie-Rochester Conference Series on Public Policy*, 39, 1993, pp.195-214.
13 The rationale behind the "Taylor principle" is that, in order to stabilise inflation, any (expected) inflationary upsurge should be countered by an increase in the (expected) real rate of interest.
14 See in particular Lubik, T. and Schorfheide, F., "Testing for Indeterminacy: An Application to U.S. Monetary Policy", *American Economic Review*, 94(1), 2004, pp.190-217.
15 See the discussion in Issing, O. "Why Did the Great Inflation Not Happen in Germany?", Federal Reserve Bank of St. Louis *Review*, March/April 2005, 87(2, Part 2), pp.329-35.
16 In fact, Germany had not been pegging to the dollar since the beginning of Bretton Woods at the same exchange rate. Specifically, the Deutsche Mark was revalued in 1961 and again in 1969, when it was allowed to float for six months and then re-pegged at a higher exchange rate.
17 This point is emphasised by Issing, op cit., 2005.

an explanation for the strong appreciation of Germany's NEER shown in Chart 3.

A key element of the Bundesbank's monetary policy strategy was the announcement, starting from December 1974, of targets for the annual rate of growth of the money supply. There were two rationales for this.[18] First, there was the intention of restraining inflation by controlling the rate of growth of monetary aggregates. Second, the announcement of quantitative monetary targets was considered to be a means of directly steering agents' inflationary expectations. Whereas the first rationale was specific to the monetary policy strategy adopted by the Bundesbank from 1974, the need to provide a strong nominal anchor to serve as a "focal point" for agents' inflation expectations is both a general principle of monetary policy and one of the most enduring lessons of the Great Inflation. Indeed, a key reason why Germany largely avoided the Great Inflation is that, following the collapse of the nominal anchor provided by the Bretton Woods regime, it swiftly provided agents with another anchor, in the guise of monetary targets. Most other countries, by contrast, "limped through" the 1970s without any clear anchor, with the result that inflation kept accelerating.

The objective of containing inflation by controlling the rate of growth of the money supply reflected the Bundesbank's explicit recognition that inflation is ultimately a monetary phenomenon. Such recognition was, however, far from universal during the 1970s. In their extensive analysis of the broad intellectual climate surrounding monetary policy-making in the United Kingdom during the 1960s and 1970s, for example, Nelson and Nikolov[19] point out that "monetary policy was not seen as essential for inflation control; the latter, instead, was largely delegated to incomes policy (wage and price controls). [...] Essentially, UK policymakers viewed monetary policy as disconnected from inflation for two reasons. First, inflation was perceived as largely driven by factors other than the output gap; secondly, policymakers were highly sceptical about the ability of monetary policy to affect aggregate demand or the output gap appreciably."

As stressed by Nelson and Nikolov, this led to both a loose monetary policy and attempts to control inflation by non-monetary means, and contributed decisively to the UK's inflationary outburst of the 1970s. Only when, in 1979, monetary policy began to be based on an explicit recognition of the monetary nature of the inflationary process, could the Great Inflation in the United Kingdom be brought to an end.

Although this section focuses on a comparison between the macroeconomic performances of Germany and the United States, it is worth stressing that the Swiss experience during the 1970s was similar to Germany's, both in terms of monetary policy strategy – which placed great importance on the rates of growth of monetary aggregates – and in terms of overall inflationary performance. The main difference was that, following the first oil price shock, Swiss inflation peaked at 11.9%, a significantly higher rate than in Germany and close to the peak in the United States. Subsequently, however, precisely as in Germany, the tough counter-inflationary stance adopted by the Swiss National Bank led to a sharp deceleration of inflation, which remained below 2% between mid-1976 and early 1979. Following the second oil price shock, inflation peaked at 7.5% in the second half of 1981, before falling over subsequent years.

Productivity developments provide a further, important perspective on the differing macroeconomic performances of the United States and Germany during the 1970s. A crucial shortcoming of US monetary policy during those years was its inability to detect the 1970s productivity slowdown in real time, which resulted in a systematic over-estimation

18 See, again, Issing, op cit., 2005.

19 See Nelson, E. and Nikolov, K., "Monetary Policy and Stagflation in the UK", *Journal of Money, Credit and Banking*, 36(3), 2004, pp. 293-318, and also Batini, N. and Nelson, E., "The U.K's Rocky Road to Stability", *Working Paper Series*, No 2005-020A, Federal Reserve Bank of St. Louis, 2005.

of the actual extent of slack existing in the economy.[20] Given the extensive reliance of US policy-makers on output gap measures as indicators of future inflationary pressures, such over-estimation automatically translated into the excessively loose monetary policy discussed above.

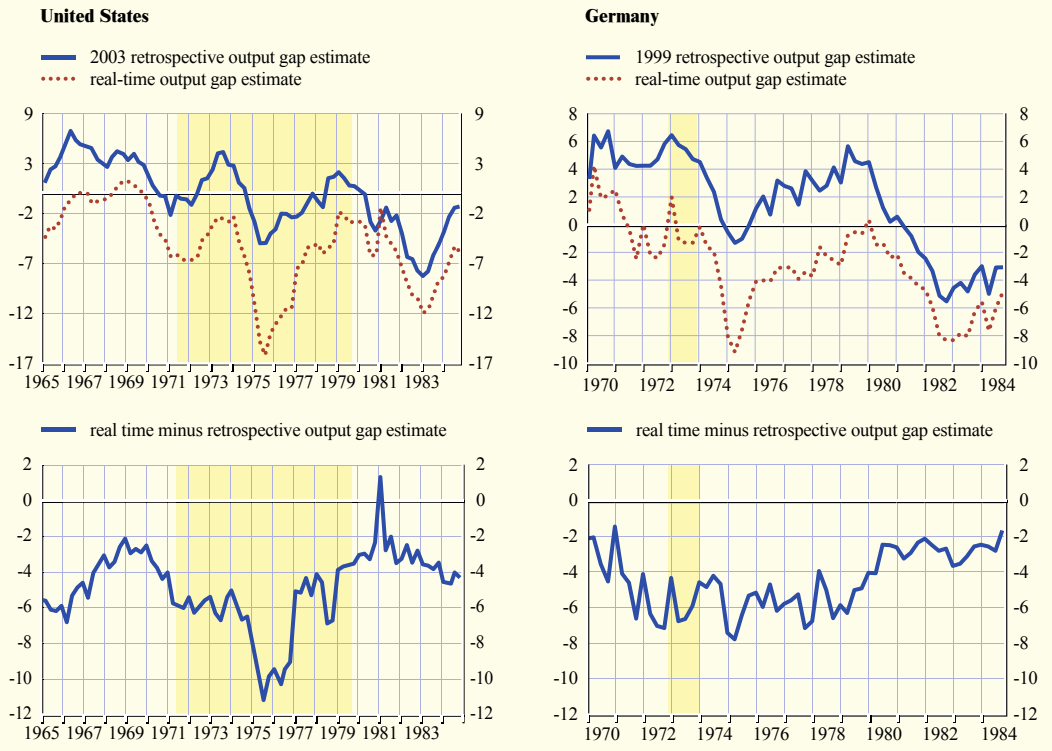
A comparison with Germany, in this respect, is intriguing. The upper panels of Chart 4 show real-time and retrospective estimates of the US and German output gaps between January 1965 and December 1984, and the lower panels the extent of real-time output gap mismeasurement, which is defined as the difference between the series in the upper panels.[21] As the chart clearly shows, with the single exception of 1975-76 (when US output gap mismeasurement dramatically worsened to an average of around 10 percentage points), the extent of mismeasurement in these two countries was quite similar during the entire Great Inflation episode. However, the two countries' inflationary performances were markedly different, with CPI annual inflation peaking at 7.8% in Germany and 14.6% in the United States. What can account for this difference?

20 See in particular Orphanides, A., "Monetary Policy Rules and the Great Inflation", *American Economic Review, Papers and Proceedings*, 92(2), 2002, pp. 115-120, Orphanides, A., "The Quest for Prosperity Without Inflation", *Journal of Monetary Economics*, 50, 2003, pp. 633-663, and Orphanides, A., "Historical Monetary Policy Analysis and the Taylor rule", *Journal of Monetary Economics*, 50, 2003, pp. 983-1022.

21 The data shown in Chart 4 are the original data used in Orphanides, A., "Historical Monetary Policy Analysis and the Taylor Rule", op. cit. and in Beyer, A., Gaspar, V., Gerberding, C. and Issing, O., "Opting out of the Great Inflation: German monetary policy after the break down of Bretton Woods", *Working Paper Series* No 1020, ECB, March 2009. The data have been kindly provided by Orphanides and Beyer.

Chart 4 Output gap mismeasurement in the United States and Germany

(percentages of GDP)



Sources: Orphanides, A., "Historical Monetary Policy Analysis and the Taylor Rule", op. cit. and Gerberding, C., Seitz, F. and Worms, A., "How the Bundesbank really conducted monetary policy", *North American Journal of Economics and Finance*, 16(3), 2005, pp. 277-292.
Note: The shaded areas in the left-hand panels represent the period between the collapse of Bretton Woods and the beginning of Paul Volcker's chairmanship of the Federal Reserve System, while those in the right-hand panels represent the period between the abandonment by Germany of its dollar peg and the announcement by the Bundesbank of its first monetary target.

As extensively discussed by Beyer, Gaspar, Gerberding and Issing,[22] a key reason for Germany's superior inflation performance during the 1970s has to do with the very nature of the monetary targeting strategy adopted by the Bundesbank from 1974. A crucial feature of a money growth targeting rule, indeed, is that under such a rule the nominal interest rate reacts to estimates of the change in the output gap, rather than to estimates of the output gap itself. Although this might appear, at first sight, to be a minor difference, it is not: the extent of mismeasurement of real-time estimates of the change in the output gap is significantly smaller than the extent of output gap mismeasurement.[23] This provides a straightforward explanation for why a comparable degree of output gap mismeasurement in these two countries was accompanied by vastly different macroeconomic performances.

The fact that, under its monetary targeting strategy, the Bundesbank disregarded the output gap when setting interest rates is also supported by the empirical evidence of Beyer et al. Specifically, their results show that whereas German interest rates reacted to the perceived output gap during the period before monetary targeting (i.e. before 1974), such reaction essentially ceased to exist under monetary targeting.

SUMMING UP: BAD POLICY OR BAD LUCK?

The traditional, "popular" explanation for the Great Inflation, which ascribes it predominantly to the oil price shocks of 1973 and 1979, was originally associated with the work of Alan Blinder,[24] and of Michael Bruno and Jeffrey Sachs.[25] In a nutshell, the essence of this position is that, as stated by Blinder, "the 1970s really were different. Energy shocks are quite clearly a product of the brave, new post-OPEC world."[26]

There are three main reasons, however, why explanations of the Great Inflation ascribing it to misguided monetary policies appear to be significantly more plausible than those attributing it to an adverse sequence of exogenous shocks.

First, a fact that is often overlooked in discussions about the Great Inflation (which usually focus on the US experience alone) is that neither Germany nor Switzerland experienced it (or at least not to the same extent as elsewhere). This fact is difficult to square with the "bad luck" explanation. A fundamental reason why stability-oriented central banks were able to spare their economies from the Great Inflation was a "stability culture". According to this view, the ultimate reason for the diverging macroeconomic performances of the United States and Germany around the time of the Great Inflation lies in a fundamentally different attitude towards inflation on the part of their respective societies.

Second, as previously pointed out, the Great Inflation in the United States started around 1965, well before the food and oil price shocks of the 1970s. This fact is fundamentally at odds with the logic of "bad luck" explanations.

Third, a convincing case has been made that OPEC's dramatic oil price increases of 1973 and 1979 could only have occurred under the conditions of expansion in global liquidity associated with the collapse of Bretton Woods. This position – associated, around the time of the Great Inflation, with Milton Friedman, Phillip Cagan, and Ronald McKinnon[27] – has recently been revived by Barsky and Kilian,[28] who argue that a significant portion of the

22 See Beyer et al., op cit.
23 See Orphanides, A., "The Quest for Prosperity Without Inflation", op. cit.
24 See in particular Blinder, A., "The Anatomy of Double Digit Inflation in the 1970s", in Hall, R.E. (ed.), *Inflation: Causes and Effects*, University of Chicago Press for NBER, 1982, pp. 26l-282.
25 See Bruno, M. and Sachs, J., *Economics of Worldwide Stagflation*, Harvard University Press, 1985.
26 See Blinder (1982, op cit.).
27 See Friedman, M., "Perspective on Inflation", *Newsweek*, June 24 1974, Cagan, P., *Persistent Inflation: Historical and Policy Essays*, New York: Columbia University Press, 1979, and McKinnon, R. I., "Currency Substitution and Instability in the World Dollar Standard", *American Economic Review*, 72(3), 1982, pp. 320-333.
28 Barsky, R. B., and Kilian L., "Do We Really Know That Oil Caused the Great Stagflation? A Monetary Alternative", in *NBER Macroeconomics Annuals 2001*, 16, 2001, pp. 137-183, Cambridge, Mass., The MIT Press.

commodity price rises of the 1970s should be characterised as the endogenous market response to the global monetary forces unleashed by the collapse of Bretton Woods. Under this interpretation, the collapse of Bretton Woods should not be regarded as simply being chronologically coincidental with the Great Inflation, but should rather be seen as playing a fundamental causal role, first in destroying a nominal anchor for inflation expectations, and then in unleashing an upsurge in global liquidity.

3 LESSONS FROM THE GREAT INFLATION

The Great Inflation holds several important lessons for monetary policy-making. First, it highlights the crucial role played by a strong and credible nominal anchor in firmly pinning down inflation expectations. A key reason for Germany's success during the 1970s was that, following the collapse of Bretton Woods, it swiftly adopted a new nominal anchor in the form of monetary targeting. This allowed Germany to avoid the fate of countries, such as the United States, in which inflationary expectations during the 1970s became progressively unanchored at all horizons.

An equally important lesson is that the stability of inflation expectations should never be taken for granted. The US experience of the second half of the 1960s is, in this respect, especially illuminating and sobering: with inflation steadily increasing, from slightly above 1% at the beginning of 1965, to more than 5% in the early 1970s, inflation expectations, which had remained remarkably stable until the mid-1960s, started to drift progressively upwards, in reaction to actual inflation outcomes. This clearly shows that just a few years of systematically disappointing inflation outcomes can rapidly unanchor inflation expectations.

This automatically leads to a further key lesson, namely the importance of the reputation and credibility of the central bank which, according to Alan Blinder's well-known definition,[29] simply depends on "matching words with deeds", i.e. validating policy announcements with actual outcomes. In fact, policy-makers of the 1960s and 1970s were perfectly aware of the crucial importance, for the purpose of keeping inflation expectations firmly anchored, of maintaining a strong anti-inflationary reputation, and that the only way to achieve that was to actually deliver low and stable inflation. In his February 1965 testimony to the JEC, for example, Federal Reserve Chairman Martin warned about the dangers associated with an upward drift in inflation, and with the resulting, likely loss of credibility and dislocation of inflation expectations, warning that failure to prevent an upward drift in inflation might set off an inflationary spiral.[30] His words proved prescient, to the point that only four years later, in the same venue, he concluded that "public skepticism about the Government's ability to "do something" about prices has its roots in this history of ever-quickening inflation."[31]

In this respect, the experience of the Great Inflation did not reveal to central bankers any new, fundamental and previously unknown principles of monetary policy-making, but rather burnished into their consciousness, by means of a dramatic example, the dangers associated with allowing an inflationary spiral to develop.

The Great Inflation also illustrated the dangers associated with an excessive reliance, for monetary policy purposes, on unobserved – and therefore intrinsically poorly measured – indicators such as the output gap. This lesson is especially relevant at the current conjuncture, as the economic contraction associated with the financial crisis has generated a significant degree of uncertainty concerning current potential output levels – and therefore output gaps – in several countries. In this respect, the German experience during the 1970s is, once again, especially interesting, as it clearly

29 See Blinder, A., *Central Banking in Theory and Practice*, MIT Press, 1998.
30 See McChesney Martin, W., Jr., *Statement Before the Joint Economic Committee*, February 26, 1965.
31 McChesney Martin (1969, op cit.).

shows that the deleterious macroeconomic consequences potentially associated with output gap mismeasurement are not inevitable, and whether they do or do not materialise crucially depends on the monetary policy strategy followed by the central bank.

Finally, the experience of the Great Inflation decisively refuted the notion of a permanent, exploitable trade-off between inflation and economic activity, which had become part of the conventional wisdom of macroeconomics following the publication of A.W. Phillips' seminal 1958 article.[32] Phillips' discovery, based on almost a century of British data, of a negative correlation between inflation and the rate of unemployment was interpreted by many as offering policy-makers a range of combinations of inflation and unemployment to choose from. In particular, it was thought that society could opt to trade off a permanently higher inflation rate against a permanently lower level of unemployment. The experience of the Great Inflation, when higher inflation was systematically associated with a dismal macroeconomic performance on the real side of the economy, laid to rest once and for all the notion of an exploitable trade-off between inflation and real activity, and decisively contributed to the reaffirmation of the "classic", pre-Phillips position that inflation, by distorting price signals, impairs the functioning of market economies and therefore ultimately exerts a negative impact on overall macroeconomic performance.[33] This position, which had been eloquently expressed, around the time of the Great Inflation, by the winner of the 1974 Nobel Prize in Economics, Friedrich Von Hayek,[34] is today one of the crucial elements of monetary policy's conventional wisdom, and represents one more key lesson of the Great Inflation episode.

4 CONCLUSION

Three main points should be stressed with regard to the causes of the Great Inflation and its lessons for monetary policy. First, contrary to the "popular", bad-luck explanation, according to which the inflationary upsurge of the 1970s was simply due to a sequence of adverse supply shocks, the Great Inflation was mainly a result of crucial monetary policy mistakes. This emerges especially starkly from a comparison between the experiences of the United States (which was at the epicentre of the inflationary episode and experienced it in a particularly strong form) and of Germany and Switzerland which, thanks to the adoption of an appropriate counter-inflationary policy, largely succeeded in escaping it. Second, as a logical corollary of this, inflationary outbursts of such magnitude are not inevitable, and can indeed be avoided in the future, provided that the lessons of the Great Inflation are kept firmly in mind. Third, in this respect, both the institutional design of Economic and Monetary Union, with the clear guidance it provides to agents' inflation expectations, and the ECB's monetary policy strategy, with the prominent role it assigns to the monetary analysis, clearly take into account the most important lessons of the Great Inflation.

32 Phillips, A.W., "The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957", *Economica*, 25(100), 1958, pp. 283-99

33 See, for example, the article entitled "Price Stability and Growth", in the May 2008 issue of the *Monthly Bulletin*.

34 In condemning the inflationary policies of the 1970s, Hayek pointed out that "the chief harm that inflation causes [is] that it gives the whole structure of the economy a distorted, lopsided character, which sooner or later makes a more extensive unemployment inevitable than that which that policy was intended to prevent." See Hayek, F. von, "Inflation's Path to Unemployment", *The Daily Telegraph*, 15-16 October 1974, reprinted in Hayek, F. von, *New Studies in Philosophy, Politics, Economics, and the History of Ideas*, The University of Chicago Press, 1978.

EURO AREA STATISTICS

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

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Conventions used in the tables

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

EURO AREA OVERVIEW

Summary of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates [1]

	M1 [2]	M2 [2]	M3 [2,3]	M3 [2,3] 3-month moving average (centred)	MFI loans to euro area residents excluding MFIs and general government [2]	Securities other than shares issued in euro by non-MFI corporations [2]	3-month interest rate (EURIBOR; % per annum; period averages)	10-year spot rate (% per annum; end of period) [4]
	1	2	3	4	5	6	7	8
2008	2.4	9.6	9.7	-	9.5	18.9	4.64	3.69
2009	9.5	4.8	3.3	-	1.6	24.7	1.22	3.76
2009 Q2	8.1	5.6	4.4	-	2.1	27.7	1.31	3.99
Q3	12.2	4.5	2.7	-	0.4	25.2	0.87	3.64
Q4	12.3	2.2	0.3	-	-0.6	20.4	0.72	3.76
2010 Q1	11.3	1.7	-0.2	-	-0.4	.	0.66	3.46
2009 Nov.	12.5	1.8	-0.2	-0.1	-0.7	19.6	0.72	3.57
Dec.	12.4	1.6	-0.3	-0.2	-0.2	12.9	0.71	3.76
2010 Jan.	11.4	1.8	0.1	-0.2	-0.6	13.0	0.68	3.66
Feb.	11.0	1.6	-0.3	-0.1	-0.4	10.3	0.66	3.49
Mar.	10.9	1.7	-0.1	.	-0.2	.	0.64	3.46
Apr.	.	.	.	.	.	.	0.64	3.40

2. Prices, output, demand and labour markets

	HICP [1]	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (%)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2008	3.3	6.1	3.5	0.6	-1.7	81.8	0.7	7.5
2009	0.3	-5.1	3.3	-4.1	-15.0	71.1	-1.9	9.4
2009 Q3	-0.4	-7.8	3.0	-4.1	-14.5	70.3	-2.3	9.7
Q4	0.4	-4.6	2.2	-2.2	-7.6	71.7	-2.1	9.8
2010 Q1	1.1	-0.2	.	.	.	73.9	.	10.0
2009 Nov.	0.5	-4.4	-	-	-7.0	-	-	9.8
Dec.	0.9	-2.9	-	-	-3.9	-	-	9.9
2010 Jan.	1.0	-1.0	-	-	1.5	72.3	-	9.9
Feb.	0.9	-0.4	-	-	4.0	-	-	10.0
Mar.	1.4	0.9	-	-	.	-	-	10.0
Apr.	1.5	.	-	-	.	75.5	-	.

3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net transactions)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: EER-21 [5] (index: 1999 Q1 = 100)		USD/EUR exchange rate
	Current and capital accounts	Goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
	1	2	3	4	5	6	7	8
2008	-144.0	-19.1	-198.7	344.1	374.2	110.5	110.1	1.4708
2009	-47.8	39.5	-95.7	317.9	462.4	111.7	110.6	1.3948
2009 Q2	-19.8	14.0	0.3	70.8	381.5	111.1	110.2	1.3632
Q3	-2.2	13.8	-23.7	78.2	430.9	112.1	110.9	1.4303
Q4	9.9	19.4	-7.8	63.1	462.4	113.8	112.2	1.4779
2010 Q1	.	.	.	.	498.6	108.7	106.9	1.3829
2009 Nov.	-1.0	5.0	-7.4	-6.2	463.9	114.0	112.5	1.4914
Dec.	10.9	5.9	2.7	61.1	462.4	113.0	111.3	1.4614
2010 Jan.	-13.0	-7.4	-3.1	-0.7	468.7	110.8	108.9	1.4272
Feb.	-4.3	5.3	0.2	10.7	492.6	108.0	106.0	1.3686
Mar.	.	.	.	.	498.6	107.4	105.7	1.3569
Apr.	.	.	.	.	.	106.1	104.4	1.3406

Sources: ECB, European Commission (Eurostat and Economic and Financial Affairs DG) and Reuters.
Note: For more information on the data, see the relevant tables later in this section.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) Annual percentage changes for monthly data refer to the end of the month, whereas those for quarterly and yearly data refer to the annual change in the period average. See the Technical Notes for details.
3) M3 and its components exclude holdings by non-euro area residents of money market fund shares/units and debt securities with a maturity of up to two years.
4) Based on AAA-rated euro area central government bond yield curves. For further information, see Section 4.7.
5) For a definition of the trading partner groups and other information, please refer to the General Notes.

MONETARY POLICY STATISTICS

1.1 Consolidated financial statement of the Eurosystem

(EUR millions)

1. Assets

	9 April 2010	16 April 2010	23 April 2010	30 April 2010
Gold and gold receivables	286,699	286,699	286,698	286,699
Claims on non-euro area residents in foreign currency	209,389	209,896	209,276	211,695
Claims on euro area residents in foreign currency	28,501	28,367	28,041	27,216
Claims on non-euro area residents in euro	17,150	16,752	17,336	17,503
Lending to euro area credit institutions in euro	730,854	736,282	735,937	743,631
Main refinancing operations	71,535	70,577	70,228	75,597
Longer-term refinancing operations	659,283	665,669	665,670	667,245
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	1	1	2	754
Credits related to margin calls	35	35	37	36
Other claims on euro area credit institutions in euro	29,025	31,733	32,735	32,748
Securities of euro area residents in euro	348,494	351,004	352,127	354,744
Securities held for monetary policy purposes	46,107	47,216	48,546	50,243
Other securities	302,387	303,788	303,581	304,501
General government debt in euro	36,122	36,122	36,120	35,576
Other assets	250,421	243,134	244,989	247,007
Total assets	1,936,654	1,939,989	1,943,260	1,956,819

2. Liabilities

	9 April 2010	16 April 2010	23 April 2010	30 April 2010
Banknotes in circulation	797,516	794,451	792,846	798,145
Liabilities to euro area credit institutions in euro	427,223	430,869	421,473	449,106
Current accounts (covering the minimum reserve system)	177,926	259,749	204,112	197,496
Deposit facility	249,291	171,114	217,361	251,609
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	7	5	0	0
Other liabilities to euro area credit institutions in euro	578	485	675	489
Debt certificates issued	0	0	0	0
Liabilities to other euro area residents in euro	120,445	125,615	137,804	113,086
Liabilities to non-euro area residents in euro	36,480	36,390	36,197	40,120
Liabilities to euro area residents in foreign currency	932	1,128	1,006	1,077
Liabilities to non-euro area residents in foreign currency	12,986	13,392	12,988	14,466
Counterpart of special drawing rights allocated by the IMF	53,033	53,033	53,033	53,033
Other liabilities	161,598	158,765	161,376	161,435
Revaluation accounts	249,205	249,205	249,205	249,205
Capital and reserves	76,655	76,655	76,655	76,657
Total liabilities	1,936,654	1,939,989	1,943,260	1,956,819

Source: ECB.

1.2 Key ECB interest rates

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

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

Source: ECB.

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

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

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

4) As of 9 October 2008 the ECB reduced the standing facilities corridor from 200 basis points to 100 basis points around the interest rate on the main refinancing operations. The standing facilities corridor was restored to 200 basis points as of 21 January 2009.

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

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

(EUR millions; interest rates in percentages per annum)

1. Main and longer-term refinancing operations [3), 4)]

Date of settlement	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	Variable rate tender procedures			Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate [5)]	Weighted average rate	
	1	2	3	4	5	6	7	8
	Main refinancing operations							
2010 6 Jan.	54,023	100	54,023	1.00	-	-	-	7
13	60,077	102	60,077	1.00	-	-	-	7
20	58,020	101	58,020	1.00	-	-	-	7
27	63,435	83	63,435	1.00	-	-	-	7
3 Feb.	55,824	74	55,824	1.00	-	-	-	7
10	76,083	79	76,083	1.00	-	-	-	7
17	81,935	78	81,935	1.00	-	-	-	7
24	81,421	71	81,421	1.00	-	-	-	7
3 Mar.	80,455	65	80,455	1.00	-	-	-	7
10	78,402	71	78,402	1.00	-	-	-	7
17	79,032	79	79,032	1.00	-	-	-	7
24	81,062	81	81,062	1.00	-	-	-	7
31	78,266	73	78,266	1.00	-	-	-	7
7 Apr.	71,535	67	71,535	1.00	-	-	-	7
14	70,577	68	70,577	1.00	-	-	-	7
21	70,228	67	70,228	1.00	-	-	-	7
28	75,624	66	75,624	1.00	-	-	-	7
5 May	90,317	76	90,317	1.00	-	-	-	7
	Longer-term refinancing operations							
2009 10 Dec.	1,728	21	1,728	1.00	-	-	-	182
17	2,558	21	2,558	1.00	-	-	-	105
17 [6)]	96,937	224	96,937	.	-	-	-	371
2010 20 Jan.	5,739	7	5,739	1.00	-	-	-	21
28	3,268	22	3,268	1.00	-	-	-	91
10 Feb.	2,757	14	2,757	1.00	-	-	-	28
25	10,205	23	10,205	1.00	-	-	-	91
10 Mar.	9,315	11	9,315	1.00	-	-	-	35
1 Apr.	2,015	11	2,015	1.00	-	-	-	91
1 [6)]	17,876	62	17,876	.	-	-	-	182
14	15,730	12	15,730	1.00	-	-	-	28
29	4,846	24	4,846	-	1.00	1.00	1.15	91

2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tender procedures	Variable rate tender procedures				Running for (...) days
					Fixed rate	Minimum bid rate	Maximum bid rate	Marginal rate [5)]	Weighted average rate	
	1	2	3	4	5	6	7	8	9	10
2009 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
10 Nov.	Collection of fixed-term deposits	191,883	165	191,379	-	-	1.00	0.80	0.76	1
7 Dec.	Collection of fixed-term deposits	130,896	147	129,709	-	-	1.00	0.80	0.76	1
2010 19 Jan.	Collection of fixed-term deposits	259,013	188	258,907	-	-	1.00	0.80	0.75	1
9 Feb.	Collection of fixed-term deposits	270,783	187	270,566	-	-	1.00	0.80	0.76	1
9 Mar.	Collection of fixed-term deposits	295,461	193	294,486	-	-	1.00	0.80	0.76	1
13 Apr.	Collection of fixed-term deposits	292,470	186	292,295	-	-	1.00	0.80	0.76	1

Source: ECB.

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

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

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

4) 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.

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

6) In the final one-year longer-term refinancing operation, which was settled on 17 December 2009, and in the six-month longer-term refinancing operation which was settled on 1 April 2010, the rate at which all bids were satisfied was indexed to the average minimum bid rate in the main refinancing operations over the life of the operation.

1.4 Minimum reserve and liquidity statistics

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

1. Reserve base of credit institutions subject to reserve requirements

Reserve base as at: [1]	Total	Liabilities to which a 2% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied		
		Overnight deposits and deposits with an agreed maturity or notice period of up to 2 years	Debt securities issued with a maturity of up to 2 years	Deposits with an agreed maturity or notice period of over 2 years	Repos	Debt securities issued with a maturity of over 2 years
	1	2	3	4	5	6
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 Oct.	18,260.1	9,766.9	763.3	2,420.9	1,224.8	4,084.2
Nov.	18,285.8	9,743.0	756.6	2,436.5	1,245.0	4,104.6
Dec.	18,318.2	9,808.5	760.4	2,475.7	1,170.1	4,103.5
2010 Jan.	18,454.5	9,829.1	766.1	2,465.6	1,225.0	4,168.7
Feb.	18,516.5	9,828.4	759.3	2,479.5	1,282.5	4,166.8

2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2007	195.9	196.8	1.0	0.0	4.17
2008	217.2	218.7	1.5	0.0	3.25
2009	210.2	211.4	1.2	0.0	1.00
2009 10 Nov.	211.8	212.8	1.0	0.0	1.00
7 Dec.	210.2	211.4	1.2	0.0	1.00
2010 19 Jan.	210.1	211.2	1.2	0.0	1.00
9 Feb.	209.5	210.9	1.4	0.0	1.00
9 Mar.	210.9	211.8	1.0	0.0	1.00
13 Apr.	211.4	212.5	1.2	0.0	1.00
11 May	211.2	.	.	.	.

3. Liquidity

Maintenance period ending on:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts	Base money
		Monetary policy operations of the Eurosystem										
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations [2]	Deposit facility	Other liquidity-absorbing operations [3]	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net)		
	1	2	3	4	5	6	7	8	9	10	11	12
2007	327.5	173.0	278.6	0.3	0.0	0.4	2.2	644.6	61.9	-126.6	196.8	841.9
2008	580.5	337.3	457.2	2.7	0.0	200.9	4.9	731.1	107.8	114.3	218.7	1,150.7
2009	407.6	55.8	593.4	0.7	24.6	65.7	9.9	775.2	150.1	-130.2	211.4	1,052.3
2009 10 Nov.	413.0	52.3	626.1	0.3	20.1	86.5	12.0	770.7	148.7	-118.9	212.8	1,070.0
7 Dec.	407.6	55.8	593.4	0.7	24.6	65.7	9.9	775.2	150.1	-130.2	211.4	1,052.3
2010 19 Jan.	413.0	60.6	648.4	0.4	28.4	147.0	8.1	796.8	119.8	-132.1	211.2	1,155.0
9 Feb.	425.6	59.7	662.2	0.2	33.5	168.3	13.3	783.6	122.6	-117.5	210.9	1,162.8
9 Mar.	426.9	80.5	641.1	0.9	38.0	186.4	10.5	784.6	113.2	-119.3	211.8	1,182.9
13 Apr.	439.8	77.7	650.5	0.4	43.6	200.7	8.4	792.9	113.6	-116.1	212.5	1,206.1

Source: ECB.

1) End of period.

2) Includes liquidity provided under the Eurosystem's covered bond purchase programme.

3) 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

2 MONEY, BANKING AND INVESTMENT FUNDS

2.1 Aggregated balance sheet of euro area MFIs [1]

(EUR billions; outstanding amounts at end of period)

1. Assets

	Total	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Money market fund shares/ units [2]	Holdings of shares/ other equity issued by euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Eurosystem													
2007	2,046.2	1,029.6	19.9	0.6	1,009.1	300.7	257.2	1.9	41.6	-	17.4	431.1	8.9	258.4
2008	2,982.9	1,803.0	20.6	0.6	1,781.8	362.3	319.6	2.4	40.3	-	14.4	484.7	8.6	309.9
2009 Q4	2,830.4	1,475.6	19.5	0.7	1,455.4	451.7	368.3	3.6	79.8	-	16.5	557.7	8.5	320.5
2010 Q1 (p)	2,880.9	1,476.1	19.6	0.7	1,455.9	472.4	376.1	4.1	92.2	-	16.6	583.0	8.4	324.4
2009 Oct.	2,693.0	1,397.5	19.4	0.7	1,377.5	438.5	361.6	3.6	73.3	-	16.0	528.9	8.8	303.2
Nov.	2,659.4	1,332.2	19.4	0.7	1,312.1	445.2	363.4	3.7	78.2	-	16.1	557.0	8.8	300.0
Dec.	2,830.4	1,475.6	19.5	0.7	1,455.4	451.7	368.3	3.6	79.8	-	16.5	557.7	8.5	320.5
2010 Jan.	2,823.5	1,464.9	19.5	0.7	1,444.8	451.7	364.3	3.8	83.6	-	16.2	563.2	8.4	319.1
Feb.	2,867.1	1,479.4	19.5	0.7	1,459.3	465.4	373.7	3.9	87.9	-	16.1	585.8	8.4	312.0
Mar. (p)	2,880.9	1,476.1	19.6	0.7	1,455.9	472.4	376.1	4.1	92.2	-	16.6	583.0	8.4	324.4
	MFIs excluding the Eurosystem													
2007	29,500.2	16,893.0	954.5	10,144.3	5,794.2	3,950.6	1,197.1	1,013.2	1,740.3	93.5	1,293.8	4,878.9	205.7	2,184.7
2008	31,835.8	18,052.0	968.0	10,771.4	6,312.6	4,630.9	1,244.7	1,406.7	1,979.5	98.7	1,199.5	4,754.3	211.4	2,888.9
2009 Q4	31,153.9	17,701.6	1,002.2	10,744.4	5,955.0	5,061.2	1,483.5	1,496.9	2,080.8	85.1	1,235.5	4,257.1	220.4	2,592.9
2010 Q1 (p)	31,544.8	17,745.1	1,032.3	10,759.0	5,953.8	5,103.2	1,552.1	1,456.9	2,094.2	77.6	1,227.7	4,422.0	218.0	2,751.2
2009 Oct.	31,212.0	17,658.7	1,014.3	10,722.5	5,921.9	5,101.9	1,517.6	1,490.2	2,094.1	88.7	1,224.9	4,264.0	217.1	2,656.8
Nov.	31,333.6	17,673.6	1,006.7	10,751.8	5,915.1	5,106.7	1,519.5	1,490.7	2,096.5	88.2	1,239.0	4,243.2	218.1	2,764.7
Dec.	31,153.9	17,701.6	1,002.2	10,744.4	5,955.0	5,061.2	1,483.5	1,496.9	2,080.8	85.1	1,235.5	4,257.1	220.4	2,592.9
2010 Jan.	31,385.0	17,719.6	1,013.7	10,733.0	5,972.9	5,050.9	1,497.6	1,467.3	2,086.1	86.9	1,250.3	4,388.1	219.7	2,669.4
Feb.	31,497.9	17,714.2	1,009.1	10,736.4	5,968.7	5,065.6	1,522.6	1,470.3	2,072.7	85.6	1,232.8	4,423.3	218.2	2,758.4
Mar. (p)	31,544.8	17,745.1	1,032.3	10,759.0	5,953.8	5,103.2	1,552.1	1,456.9	2,094.2	77.6	1,227.7	4,422.0	218.0	2,751.2

2. Liabilities

	Total	Currency in circulation	Deposits of euro area residents				Money market fund shares/ units [3]	Debt securities issued [4]	Capital and reserves	External liabilities	Remaining liabilities
			Total	Central government	Other general government/ other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11
	Eurosystem										
2007	2,046.2	697.0	739.1	23.9	19.1	696.2	-	0.1	238.0	113.9	258.1
2008	2,982.9	784.7	1,240.7	68.8	16.6	1,155.2	-	0.1	273.8	377.8	305.9
2009 Q4	2,830.4	829.3	1,185.7	102.6	22.6	1,060.5	-	0.1	321.1	140.2	354.1
2010 Q1 (p)	2,880.9	819.9	1,222.8	101.2	22.0	1,099.6	-	0.1	353.0	135.4	349.6
2009 Oct.	2,693.0	794.1	1,098.0	152.8	26.0	919.2	-	0.1	297.3	144.9	358.7
Nov.	2,659.4	798.7	1,037.9	129.3	27.7	880.9	-	0.1	321.4	143.9	357.4
Dec.	2,830.4	829.3	1,185.7	102.6	22.6	1,060.5	-	0.1	321.1	140.2	354.1
2010 Jan.	2,823.5	806.2	1,204.1	116.3	23.5	1,064.2	-	0.1	328.4	133.5	351.3
Feb.	2,867.1	807.0	1,225.9	107.0	23.6	1,095.2	-	0.1	344.7	138.1	351.4
Mar. (p)	2,880.9	819.9	1,222.8	101.2	22.0	1,099.6	-	0.1	353.0	135.4	349.6
	MFIs excluding the Eurosystem										
2007	29,500.2	-	15,141.9	126.9	8,927.5	6,087.5	754.1	4,630.9	1,683.6	4,538.6	2,751.1
2008	31,835.8	-	16,741.8	191.0	9,690.9	6,860.0	824.8	4,848.3	1,767.6	4,402.7	3,250.6
2009 Q4	31,153.9	-	16,464.2	144.3	10,014.5	6,305.4	732.3	4,919.6	1,921.1	4,098.8	3,017.9
2010 Q1 (p)	31,544.8	-	16,394.2	166.2	9,978.0	6,250.0	706.3	5,013.0	1,928.9	4,292.1	3,210.3
2009 Oct.	31,212.0	-	16,346.2	164.9	9,898.7	6,282.7	823.8	4,929.5	1,890.5	4,084.8	3,137.1
Nov.	31,333.6	-	16,356.8	174.8	9,897.0	6,285.0	810.2	4,931.7	1,902.2	4,072.5	3,260.2
Dec.	31,153.9	-	16,464.2	144.3	10,014.5	6,305.4	732.3	4,919.6	1,921.1	4,098.8	3,017.9
2010 Jan.	31,385.0	-	16,436.8	161.1	9,962.1	6,313.6	744.1	4,975.6	1,921.2	4,221.0	3,086.4
Feb.	31,497.9	-	16,434.8	166.5	9,965.3	6,302.9	733.1	4,961.0	1,916.9	4,281.5	3,170.6
Mar. (p)	31,544.8	-	16,394.2	166.2	9,978.0	6,250.0	706.3	5,013.0	1,928.9	4,292.1	3,210.3

Source: ECB.

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

2.2 Consolidated balance sheet of euro area MFIs [1]

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

1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
2007	22,380.4	11,119.4	974.4	10,144.9	2,469.4	1,454.3	1,015.1	882.2	5,310.0	214.6	2,384.7
2008	24,116.3	11,760.6	988.6	10,772.0	2,973.4	1,564.3	1,409.1	786.1	5,239.1	220.0	3,137.1
2009 Q4	23,828.6	11,766.7	1,021.7	10,745.1	3,352.3	1,851.8	1,500.5	811.7	4,814.8	228.9	2,854.2
2010 Q1 (p)	24,250.2	11,811.5	1,051.8	10,759.6	3,389.2	1,928.2	1,461.0	793.6	5,005.0	226.4	3,024.5
2009 Oct.	23,859.1	11,756.8	1,033.6	10,723.2	3,373.0	1,879.2	1,493.8	799.1	4,792.9	225.9	2,911.4
Nov.	24,010.8	11,778.6	1,026.1	10,752.5	3,377.3	1,882.9	1,494.4	811.6	4,800.3	226.9	3,016.1
Dec.	23,828.6	11,766.7	1,021.7	10,745.1	3,352.3	1,851.8	1,500.5	811.7	4,814.8	228.9	2,854.2
2010 Jan.	24,034.4	11,766.8	1,033.2	10,733.7	3,333.0	1,861.9	1,471.1	815.7	4,951.3	228.1	2,939.4
Feb.	24,196.0	11,765.6	1,028.5	10,737.0	3,370.4	1,896.3	1,474.1	801.4	5,009.1	226.6	3,023.0
Mar. (p)	24,250.2	11,811.5	1,051.8	10,759.6	3,389.2	1,928.2	1,461.0	793.6	5,005.0	226.4	3,024.5
	Transactions										
2007	2,622.1	1,014.3	-10.0	1,024.4	289.0	-38.3	327.3	55.5	833.8	-1.2	431.1
2008	1,698.2	597.8	12.3	585.5	498.5	88.3	410.2	-56.1	-56.8	-3.0	718.9
2009 Q4	-122.5	-3.0	10.2	-13.2	-5.8	-11.0	5.2	8.9	-36.1	3.9	-90.3
2010 Q1 (p)	255.0	25.8	29.7	-3.9	31.1	75.1	-43.9	-11.9	62.7	-2.6	149.8
2009 Oct.	-38.9	-18.6	19.6	-38.2	9.9	14.3	-4.4	2.9	10.8	0.8	-44.5
Nov.	152.5	26.2	-4.8	31.0	3.6	2.4	1.2	12.6	6.0	1.0	103.1
Dec.	-236.2	-10.7	-4.7	-6.0	-19.2	-27.7	8.5	-6.6	-52.9	2.1	-148.9
2010 Jan.	107.2	-20.2	11.3	-31.5	-21.5	10.9	-32.4	5.7	69.7	-0.7	74.3
Feb.	113.4	-2.2	-4.8	2.5	32.0	30.3	1.6	-11.7	6.5	-1.8	90.7
Mar. (p)	34.4	48.3	23.2	25.1	20.7	33.8	-13.2	-5.9	-13.5	0.0	-15.2

2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units [2]	Debt securities issued [3]	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities over inter-MFI assets
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2007	22,380.4	638.6	150.8	8,946.6	660.4	2,849.1	1,492.7	4,652.5	3,009.2	-19.7
2008	24,116.3	722.9	259.8	9,707.5	725.7	2,828.6	1,613.6	4,780.5	3,556.5	-79.3
2009 Q4	23,828.6	770.1	246.9	10,037.1	646.9	2,759.0	1,801.8	4,239.1	3,372.0	-44.6
2010 Q1 (p)	24,250.2	768.9	267.4	9,999.9	628.7	2,826.7	1,831.3	4,427.6	3,559.9	-60.1
2009 Oct.	23,859.1	745.5	317.7	9,924.7	734.9	2,762.2	1,745.9	4,229.7	3,495.8	-97.6
Nov.	24,010.8	750.1	304.1	9,924.6	721.8	2,757.1	1,780.2	4,216.3	3,617.6	-61.3
Dec.	23,828.6	770.1	246.9	10,037.1	646.9	2,759.0	1,801.8	4,239.1	3,372.0	-44.6
2010 Jan.	24,034.4	757.2	277.4	9,985.6	657.1	2,806.0	1,798.8	4,354.5	3,437.7	-39.9
Feb.	24,196.0	759.6	273.5	9,988.9	647.5	2,800.5	1,814.1	4,419.5	3,522.0	-29.8
Mar. (p)	24,250.2	768.9	267.4	9,999.9	628.7	2,826.7	1,831.3	4,427.6	3,559.9	-60.1
	Transactions									
2007	2,622.1	45.8	-13.4	887.5	54.5	269.3	143.4	857.8	447.4	-70.4
2008	1,698.2	83.3	106.1	700.7	29.4	-30.1	138.5	91.5	602.6	-24.0
2009 Q4	-122.5	29.4	-48.5	103.1	-46.1	-22.6	53.2	-88.6	-137.7	35.3
2010 Q1 (p)	255.0	-1.2	20.5	-59.1	-13.6	41.4	8.1	82.8	185.2	-9.1
2009 Oct.	-38.9	4.8	22.3	-0.5	-4.8	-10.6	1.9	1.2	-26.4	-26.8
Nov.	152.5	4.6	-13.6	2.3	-15.0	1.1	14.4	12.3	110.8	35.5
Dec.	-236.2	20.0	-57.2	101.3	-26.3	-13.2	36.8	-102.1	-222.1	26.7
2010 Jan.	107.2	-12.9	30.6	-59.7	9.6	31.3	-4.4	51.2	70.9	-9.4
Feb.	113.4	2.5	-3.9	-9.6	-9.6	-13.6	2.5	31.4	98.0	15.7
Mar. (p)	34.4	9.2	-6.1	10.2	-13.6	23.7	10.0	0.2	16.2	-15.5

Source: ECB.

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

2) Amounts held by euro area residents.

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

2.3 Monetary statistics [1]

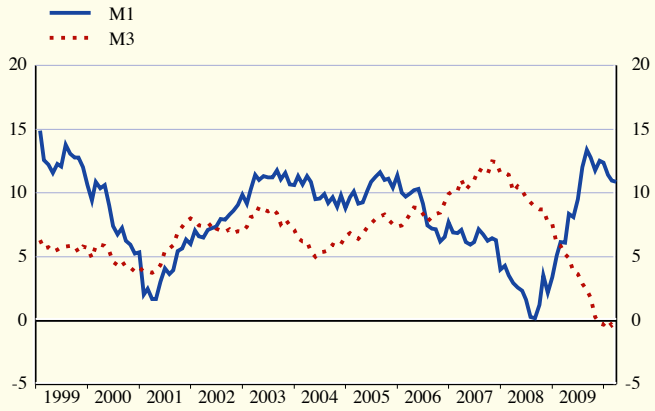
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

1. Monetary aggregates [2] and counterparts

	M3					M3 3-month moving average (centred)	Longer-term financial liabilities	Credit to general government	Credit to other euro area residents			Net external assets [3]
	M2			M3-M2						Loans	Memo item: Loans adjusted for sales and securitisation [4]	
	M1	M2-M1										
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts											
2007	3,831.9	3,508.3	7,340.2	1,302.6	8,642.8	-	6,019.1	2,449.9	12,053.7	10,153.6	-	638.7
2008	3,980.2	4,033.5	8,013.7	1,372.0	9,385.8	-	6,282.3	2,574.6	12,966.9	10,776.5	-	438.9
2009 Q4	4,490.8	3,685.6	8,176.4	1,147.9	9,324.3	-	6,740.5	2,899.3	13,047.6	10,743.3	-	555.7
2010 Q1 (p)	4,571.1	3,650.5	8,221.6	1,100.1	9,321.7	-	6,853.8	2,979.2	13,028.7	10,764.7	-	589.1
2009 Nov.	4,460.1	3,709.6	8,169.6	1,175.0	9,344.6	-	6,719.8	2,908.5	13,047.5	10,745.2	-	560.7
Dec.	4,490.8	3,685.6	8,176.4	1,147.9	9,324.3	-	6,740.5	2,899.3	13,047.6	10,743.3	-	555.7
2010 Jan.	4,536.7	3,661.5	8,198.2	1,104.5	9,302.6	-	6,799.1	2,898.3	13,035.9	10,736.8	-	580.8
Feb.	4,561.3	3,655.6	8,216.9	1,096.2	9,313.0	-	6,829.4	2,928.5	13,053.8	10,758.4	-	568.0
Mar. (p)	4,571.1	3,650.5	8,221.6	1,100.1	9,321.7	-	6,853.8	2,979.2	13,028.7	10,764.7	-	589.1
	Transactions											
2007	148.3	528.6	676.9	220.2	897.1	-	507.7	-51.0	1,403.5	1,024.8	1,115.4	-25.1
2008	130.2	484.4	614.5	44.8	659.3	-	257.4	100.8	928.0	581.2	737.0	-149.2
2009 Q4	88.2	-101.5	-13.3	-23.4	-36.7	-	52.2	17.5	-20.2	-4.3	-5.7	27.3
2010 Q1 (p)	76.4	-45.6	30.8	-42.3	-11.5	-	57.0	77.9	-35.5	3.0	-6.1	11.6
2009 Nov.	1.8	-30.3	-28.5	-14.1	-42.6	-	34.0	-2.6	16.4	16.3	16.1	-12.9
Dec.	27.8	-28.8	-1.0	24.8	23.8	-	15.6	-5.9	-2.9	-0.6	-4.0	52.4
2010 Jan.	43.9	-27.9	15.9	-42.7	-26.8	-	37.4	-0.5	-33.1	-26.5	-29.6	22.5
Feb.	22.7	-12.1	10.6	-8.6	2.0	-	4.8	25.9	18.3	20.8	17.0	-30.3
Mar. (p)	9.9	-5.6	4.3	9.0	13.3	-	14.7	52.5	-20.7	8.8	6.6	19.5
	Growth rates											
2007	4.0	17.8	10.2	20.1	11.6	11.9	9.3	-2.2	13.2	11.2	12.1	-25.1
2008	3.4	13.7	8.3	3.4	7.6	7.1	4.3	4.1	7.7	5.7	7.1	-149.2
2009 Q4	12.4	-9.1	1.6	-11.3	-0.3	-0.2	6.7	12.1	0.6	-0.2	0.2	122.2
2010 Q1 (p)	10.9	-8.0	1.7	-10.8	-0.1	-0.1	5.5	9.9	-0.1	-0.2	-0.1	156.9
2009 Nov.	12.5	-8.7	1.8	-12.3	-0.2	-0.1	7.1	14.0	0.6	-0.7	0.1	26.4
Dec.	12.4	-9.1	1.6	-11.3	-0.3	-0.2	6.7	12.1	0.6	-0.2	0.2	122.2
2010 Jan.	11.4	-8.1	1.8	-10.8	0.1	-0.2	6.0	9.9	0.0	-0.6	-0.3	210.0
Feb.	11.0	-8.1	1.6	-12.3	-0.3	-0.1	5.3	9.3	0.0	-0.4	-0.2	137.4
Mar. (p)	10.9	-8.0	1.7	-10.8	-0.1	.	5.5	9.9	-0.1	-0.2	-0.1	156.9

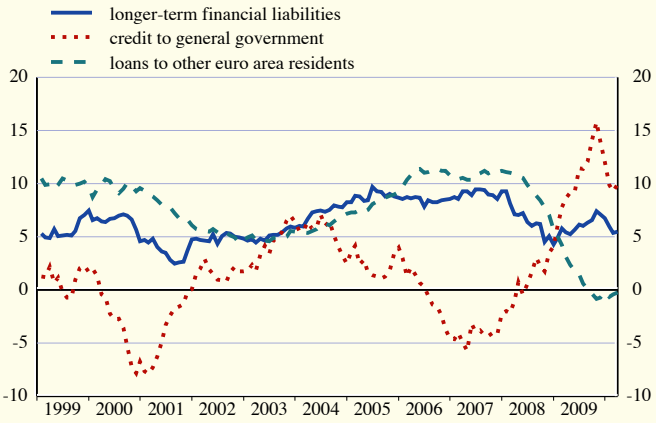
C1 Monetary aggregates [1]

(annual growth rates; seasonally adjusted)



C2 Counterparts [1]

(annual growth rates; seasonally adjusted)



Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
Monthly and other shorter-term growth rates for selected items are available at: http://www.ecb.europa.eu/stats/money/aggregates/aggr/html/index.en.html

2) Monetary liabilities of MFIs and central government (post office, treasury, etc.) vis-à-vis non-MFI euro area residents excluding central government.
For definitions of M1, M2 and M3, see glossary.

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

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

2.3 Monetary statistics [1]

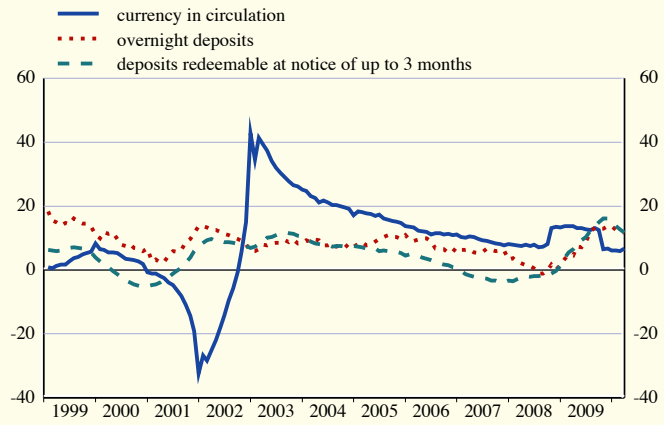
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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

	Currency in circulation	Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits redeemable at notice of up to 3 months	Repos	Money market fund shares/units	Debt securities with a maturity of up to 2 years	Debt securities with a maturity of over 2 years	Deposits redeemable at notice of over 3 months	Deposits with an agreed maturity of over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
2007	625.9	3,206.0	1,966.8	1,541.5	304.6	685.8	312.2	2,548.1	119.6	1,867.6	1,483.7
2008	710.6	3,269.7	2,464.9	1,568.6	350.3	754.9	266.8	2,573.9	121.6	1,984.4	1,602.3
2009 Q4	755.3	3,735.5	1,879.6	1,806.0	341.5	673.5	132.9	2,638.6	131.9	2,181.4	1,788.7
2010 Q1 (p)	775.6	3,795.5	1,814.8	1,835.7	340.3	625.8	133.9	2,694.5	132.2	2,197.6	1,829.5
2009 Nov.	753.6	3,706.5	1,917.4	1,792.1	313.1	727.4	134.5	2,626.7	133.3	2,180.7	1,779.1
Dec.	755.3	3,735.5	1,879.6	1,806.0	341.5	673.5	132.9	2,638.6	131.9	2,181.4	1,788.7
2010 Jan.	760.8	3,775.9	1,840.9	1,820.6	308.7	663.8	132.0	2,690.5	131.7	2,183.4	1,793.5
Feb.	764.8	3,796.5	1,826.1	1,829.5	324.3	645.6	126.3	2,681.6	131.2	2,201.5	1,815.1
Mar. (p)	775.6	3,795.5	1,814.8	1,835.7	340.3	625.8	133.9	2,694.5	132.2	2,197.6	1,829.5
	Transactions										
2007	46.7	101.6	580.6	-52.0	41.0	58.5	120.6	149.3	9.8	207.3	141.3
2008	83.6	46.5	463.8	20.5	46.9	32.6	-34.7	6.0	0.7	114.6	136.2
2009 Q4	8.8	79.4	-147.4	45.9	13.6	-23.6	-13.4	4.3	-1.1	4.4	44.7
2010 Q1 (p)	20.3	56.1	-74.2	28.6	-1.3	-43.0	2.0	28.4	0.3	8.8	19.5
2009 Nov.	6.4	-4.6	-41.0	10.6	5.0	-15.9	-3.2	12.4	-0.9	6.4	16.1
Dec.	1.7	26.1	-42.6	13.7	28.1	-3.4	0.1	-5.0	-1.4	-2.5	24.6
2010 Jan.	5.5	38.4	-41.5	13.5	-32.9	-10.2	0.4	34.5	-0.2	-0.3	3.5
Feb.	4.0	18.7	-21.0	8.9	15.6	-18.3	-6.0	-16.7	-0.5	13.3	8.7
Mar. (p)	10.8	-1.0	-11.8	6.2	16.0	-14.5	7.5	10.6	1.0	-4.2	7.3
	Growth rates										
2007	8.1	3.3	41.2	-3.3	15.5	9.2	62.1	6.3	9.6	12.4	10.8
2008	13.3	1.4	23.3	1.3	15.3	4.7	-11.6	0.3	0.5	6.1	9.3
2009 Q4	6.1	13.7	-24.4	15.2	-2.5	-1.8	-49.5	2.9	7.2	9.6	9.2
2010 Q1 (p)	6.8	11.8	-22.0	11.8	0.5	-10.9	-30.4	3.2	5.5	5.7	8.8
2009 Nov.	6.7	13.8	-23.9	16.2	-6.0	-0.9	-50.9	4.0	11.3	11.0	7.0
Dec.	6.1	13.7	-24.4	15.2	-2.5	-1.8	-49.5	2.9	7.2	9.6	9.2
2010 Jan.	6.2	12.6	-22.7	13.7	-4.9	-5.0	-38.8	3.8	6.1	7.2	7.9
Feb.	6.0	12.0	-22.5	12.7	-1.0	-8.9	-41.1	2.7	5.9	6.8	7.7
Mar. (p)	6.8	11.8	-22.0	11.8	0.5	-10.9	-30.4	3.2	5.5	5.7	8.8

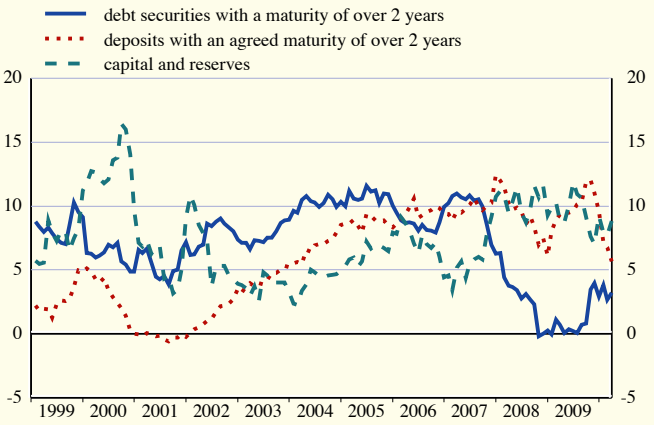
C3 Components of monetary aggregates [1]

(annual growth rates; seasonally adjusted)



C4 Components of longer-term financial liabilities [1]

(annual growth rates; seasonally adjusted)



Source: ECB.

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

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

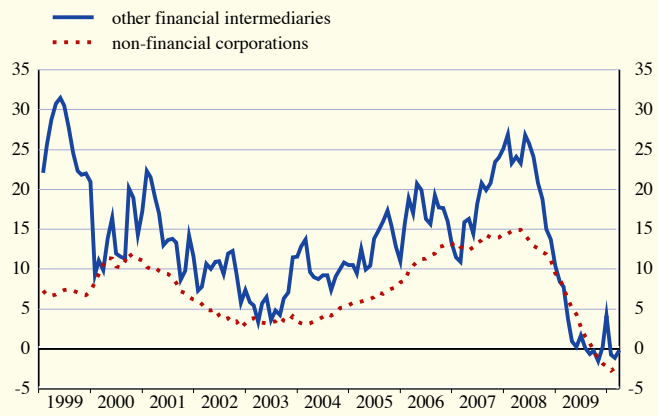
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

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

	Insurance corporations and pension funds	Other financial intermediaries [3)]	Non-financial corporations				Households [4)]			
	Total	Total	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Consumer credit	Loans for house purchase	Other loans
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2007	107.5	876.6	4,384.6	1,282.9	859.8	2,241.9	4,784.9	616.7	3,421.0	747.3
2008	104.2	972.6	4,822.8	1,381.9	961.2	2,479.7	4,876.9	631.0	3,482.3	763.6
2009 Q4	90.0	1,023.8	4,686.0	1,185.8	936.9	2,563.3	4,943.5	631.2	3,541.8	770.6
2010 Q1 [(p)]	87.4	1,012.0	4,683.0	1,174.2	922.5	2,586.3	4,982.3	622.0	3,580.5	779.8
2009 Nov.	86.3	1,004.4	4,723.3	1,212.2	939.9	2,571.1	4,931.3	628.7	3,526.2	776.4
Dec.	90.0	1,023.8	4,686.0	1,185.8	936.9	2,563.3	4,943.5	631.2	3,541.8	770.6
2010 Jan.	87.5	1,012.7	4,680.2	1,185.2	929.1	2,565.9	4,956.4	627.1	3,554.8	774.6
Feb.	91.3	1,005.2	4,694.7	1,183.9	931.1	2,579.7	4,967.2	624.9	3,565.4	777.0
Mar. [(p)]	87.4	1,012.0	4,683.0	1,174.2	922.5	2,586.3	4,982.3	622.0	3,580.5	779.8
	Transactions									
2007	16.7	175.2	554.9	145.6	155.7	253.6	278.0	31.4	226.5	20.0
2008	-4.4	86.8	418.9	87.1	119.9	212.0	79.8	10.4	52.2	17.2
2009 Q4	-3.4	10.3	-46.2	-45.4	-15.1	14.2	35.0	1.3	29.6	4.2
2010 Q1 [(p)]	-2.7	-33.4	-0.7	-1.9	-11.2	12.4	39.9	-5.3	36.3	8.8
2009 Nov.	-3.0	13.2	-9.4	-10.6	-6.9	8.1	15.5	0.3	7.4	7.7
Dec.	3.7	6.3	-22.3	-18.9	-2.7	-0.8	11.8	2.4	14.3	-4.8
2010 Jan.	-2.5	-29.8	-7.0	-1.1	-7.0	1.1	12.8	-2.7	12.1	3.3
Feb.	3.7	-7.3	13.3	-1.8	2.4	12.7	11.1	-1.6	10.1	2.7
Mar. [(p)]	-3.9	3.7	-7.0	0.9	-6.5	-1.4	16.0	-0.9	14.1	2.8
	Growth rates									
2007	18.2	24.7	14.5	12.8	22.0	12.8	6.2	5.4	7.1	2.7
2008	-4.1	9.9	9.5	6.8	13.9	9.4	1.7	1.7	1.5	2.3
2009 Q4	-12.4	3.7	-2.2	-13.1	-1.9	3.8	1.3	0.0	1.4	1.6
2010 Q1 [(p)]	-10.8	-0.1	-2.4	-10.6	-4.4	2.7	2.2	-1.1	2.6	2.9
2009 Nov.	-14.2	0.3	-1.9	-12.1	-1.3	3.6	0.5	-1.0	0.3	2.5
Dec.	-12.4	3.7	-2.2	-13.1	-1.9	3.8	1.3	0.0	1.4	1.6
2010 Jan.	-9.7	-0.5	-2.7	-12.9	-3.5	3.1	1.6	-0.5	1.8	2.2
Feb.	-4.7	-0.8	-2.4	-12.0	-3.5	3.1	1.8	-0.8	2.1	2.7
Mar. [(p)]	-10.8	-0.1	-2.4	-10.6	-4.4	2.7	2.2	-1.1	2.6	2.9

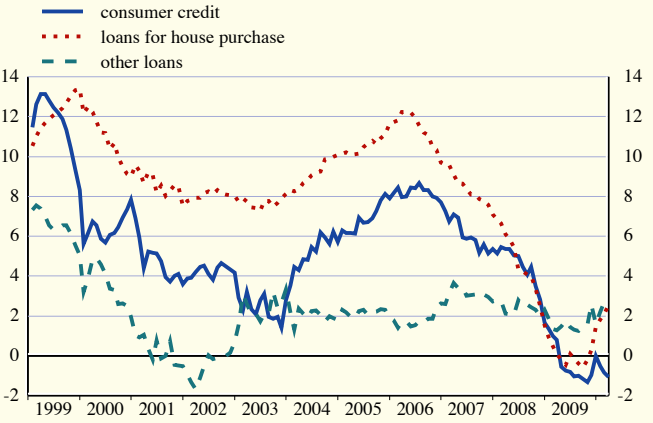
C5 Loans to other financial intermediaries and non-financial corporations [2)]

(annual growth rates; not seasonally adjusted)



C6 Loans to households [2)]

(annual growth rates; not seasonally adjusted)



Source: ECB.

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

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

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

2. Loans to financial intermediaries and non-financial corporations

	Insurance corporations and pension funds				Other financial intermediaries [3)]				Non-financial corporations			
	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts											
2008	93.0	69.3	5.7	18.0	962.1	555.0	169.0	238.0	4,828.4	1,377.6	961.4	2,489.4
2009 Q4	80.3	57.4	7.0	15.9	1,016.9	592.6	173.4	250.9	4,692.3	1,181.7	937.3	2,573.3
2010 Q1 (p)	87.1	65.4	5.8	15.9	1,019.7	593.8	172.6	253.3	4,679.5	1,170.9	923.7	2,584.9
2010 Jan.	86.0	62.4	7.3	16.3	1,007.0	584.5	170.3	252.2	4,685.7	1,185.7	928.7	2,571.3
Feb.	88.2	66.5	5.7	16.0	998.9	574.5	171.1	253.2	4,689.8	1,180.1	929.7	2,580.0
Mar. (p)	87.1	65.4	5.8	15.9	1,019.7	593.8	172.6	253.3	4,679.5	1,170.9	923.7	2,584.9
	Transactions											
2008	-4.0	-3.1	-1.8	0.9	89.7	27.3	20.1	42.4	419.5	86.4	120.1	213.0
2009 Q4	-14.0	-14.2	-0.8	1.0	-9.8	-5.4	-5.2	0.8	-29.3	-46.1	-12.4	29.2
2010 Q1 (p)	6.6	7.9	-1.3	0.0	-18.8	-15.1	-5.4	1.7	-10.6	-1.1	-10.4	1.0
2010 Jan.	5.7	5.0	0.3	0.4	-28.6	-26.7	-3.7	1.8	-7.8	3.5	-7.8	-3.5
Feb.	2.2	4.0	-1.6	-0.3	-8.0	-8.3	-0.1	0.5	2.8	-6.1	1.4	7.6
Mar. (p)	-1.2	-1.1	0.0	-0.1	17.8	20.0	-1.6	-0.6	-5.6	1.4	-4.0	-3.1
	Growth rates											
2008	-4.1	-4.3	-23.7	5.0	10.5	5.4	13.5	22.0	9.5	6.7	13.9	9.4
2009 Q4	-12.5	-17.1	23.4	-3.7	4.1	4.4	4.4	3.1	-2.2	-13.2	-1.9	3.8
2010 Q1 (p)	-10.6	-12.5	-6.8	-2.1	-0.2	-0.7	-5.6	4.9	-2.4	-10.6	-4.4	2.7
2010 Jan.	-9.7	-13.9	12.5	1.7	-0.7	-2.0	-3.4	4.3	-2.7	-12.9	-3.4	3.2
Feb.	-4.9	-4.9	-11.5	-0.7	-1.1	-2.0	-4.1	3.3	-2.4	-12.0	-3.5	3.1
Mar. (p)	-10.6	-12.5	-6.8	-2.1	-0.2	-0.7	-5.6	4.9	-2.4	-10.6	-4.4	2.7

3. Loans to households [4)]

	Total	Consumer credit				Loans for house purchase				Other loans			
		Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Outstanding amounts												
2008	4,887.9	633.0	138.8	196.2	298.0	3,490.3	17.2	67.5	3,405.7	764.5	155.0	90.5	519.0
2009 Q4	4,954.9	633.2	135.6	195.0	302.7	3,550.2	14.8	60.9	3,474.5	771.5	146.3	87.3	538.0
2010 Q1 (p)	4,972.7	619.8	130.5	191.1	298.1	3,574.8	14.8	60.7	3,499.4	778.1	147.4	85.6	545.1
2010 Jan.	4,954.2	624.1	133.6	192.1	298.4	3,556.3	14.8	60.9	3,480.6	773.8	146.9	85.8	541.1
Feb.	4,959.4	619.9	130.6	191.2	298.0	3,564.3	14.6	60.8	3,488.8	775.3	146.8	85.6	542.8
Mar. (p)	4,972.7	619.8	130.5	191.1	298.1	3,574.8	14.8	60.7	3,499.4	778.1	147.4	85.6	545.1
	Transactions												
2008	80.2	10.4	1.0	-9.1	18.6	52.6	1.1	-3.8	55.3	17.2	2.5	-5.3	20.1
2009 Q4	39.9	1.5	3.0	-1.1	-0.5	33.9	-0.4	-1.6	35.9	4.6	-2.3	0.0	6.9
2010 Q1 (p)	18.9	-9.6	-3.5	-2.6	-3.5	22.2	0.0	0.1	22.2	6.2	0.6	-1.0	6.7
2010 Jan.	-0.9	-7.7	-1.5	-2.8	-3.3	5.3	0.0	0.0	5.3	1.6	0.2	-0.8	2.2
Feb.	5.6	-3.7	-3.0	-0.5	-0.2	7.4	-0.1	-0.2	7.7	1.8	0.0	-0.2	2.0
Mar. (p)	14.2	1.8	1.0	0.7	0.1	9.5	0.1	0.2	9.2	2.8	0.4	-0.1	2.5
	Growth rates												
2008	1.7	1.7	0.7	-4.4	6.7	1.5	7.0	-5.2	1.7	2.3	1.7	-5.1	4.0
2009 Q4	1.3	0.0	-0.9	-2.2	1.9	1.5	-15.3	-12.0	1.8	1.6	-5.0	-1.9	4.2
2010 Q1 (p)	2.2	-1.0	-1.7	-2.4	0.1	2.6	-10.4	-7.4	2.8	2.9	-2.0	-1.4	5.1
2010 Jan.	1.6	-0.5	-0.4	-3.0	1.1	1.8	-15.5	-9.7	2.1	2.2	-3.0	-1.7	4.4
Feb.	1.8	-0.8	-1.9	-2.8	1.0	2.1	-15.2	-9.4	2.4	2.7	-1.8	-1.6	4.7
Mar. (p)	2.2	-1.0	-1.7	-2.4	0.1	2.6	-10.4	-7.4	2.8	2.9	-2.0	-1.4	5.1

Source: ECB.

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

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

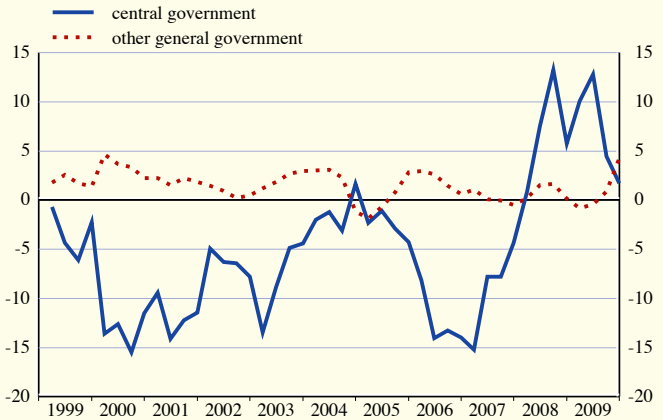
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

4. Loans to government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [3)]	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2007	954.5	213.4	217.6	494.1	29.4	3,300.2	2,344.5	955.7	59.8	895.9
2008	968.0	227.0	210.1	508.6	22.2	3,247.8	2,282.0	965.8	57.8	908.1
2009 Q1	971.0	232.9	205.6	511.5	21.0	3,057.1	2,101.0	956.1	59.2	896.9
Q2	998.5	249.3	206.5	514.1	28.6	2,949.3	1,999.7	949.6	57.2	892.3
Q3	994.7	235.9	209.7	518.3	30.7	2,808.0	1,894.0	914.0	47.7	866.2
Q4 [(p)]	1,002.2	230.9	211.0	528.0	32.3	2,826.2	1,913.2	915.0	46.5	868.5
	Transactions									
2007	-8.0	-4.5	-13.0	6.0	3.6	540.7	381.4	159.3	0.3	159.0
2008	13.2	12.3	-8.1	16.2	-7.2	-59.3	-85.8	26.4	0.3	26.1
2009 Q1	2.0	5.5	-4.4	2.2	-1.2	-234.0	-208.5	-25.7	0.3	-26.0
Q2	28.0	16.9	0.9	2.6	7.6	-72.1	-79.0	7.2	-1.0	8.2
Q3	-3.8	-13.3	3.2	4.2	2.1	-75.3	-69.9	-5.4	0.6	-6.0
Q4 [(p)]	10.1	-5.2	1.3	11.4	1.6	-4.2	6.5	-9.4	-1.2	-8.2
	Growth rates									
2007	-1.0	-4.3	-5.6	1.3	13.8	18.6	18.5	18.8	0.5	20.2
2008	1.4	5.8	-3.7	3.3	-24.5	-1.8	-3.6	2.8	0.5	3.0
2009 Q1	1.5	10.0	-3.6	3.5	-43.5	-14.3	-16.7	-8.7	-3.6	-9.0
Q2	2.6	12.8	-4.1	3.9	-31.9	-13.8	-16.5	-7.5	-7.6	-7.5
Q3	1.7	4.5	-0.2	4.4	-32.3	-18.2	-21.9	-9.4	-1.3	-9.8
Q4 [(p)]	3.8	1.7	0.5	4.0	45.4	-11.8	-15.3	-3.5	-2.8	-3.6

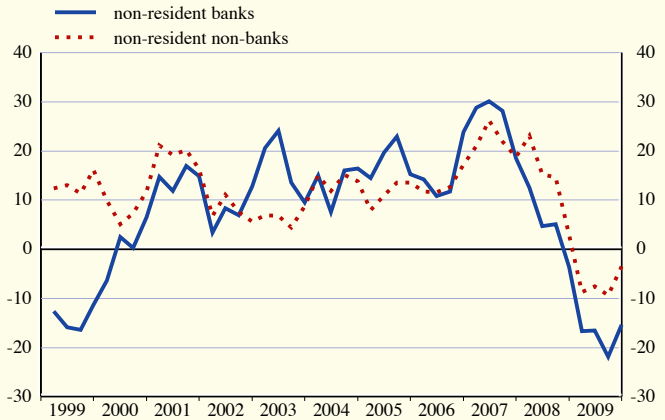
C7 Loans to government [2)]

(annual growth rates; not seasonally adjusted)



C8 Loans to non-euro area residents [2)]

(annual growth rates; not seasonally adjusted)



Source: ECB.

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

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

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

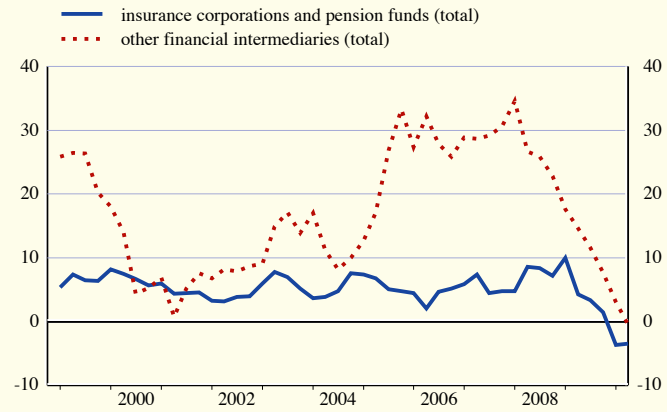
2.5 Deposits held with MFIs: breakdown [1), 2)]

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

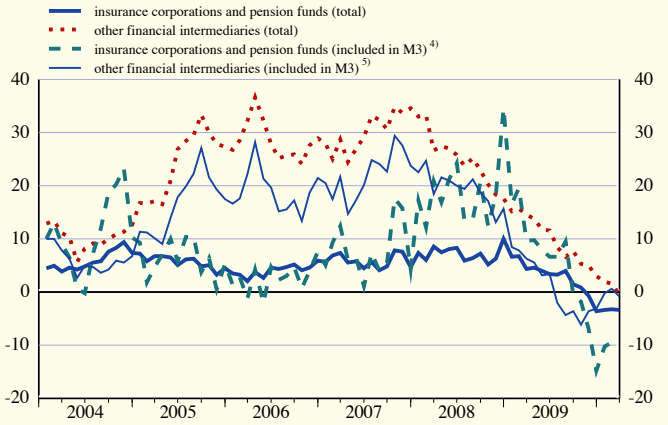
1. Deposits by financial intermediaries

	Insurance corporations and pension funds							Other financial intermediaries [3)]						
	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Outstanding amounts													
2007	689.5	70.8	69.6	526.4	0.8	1.1	20.8	1,525.0	311.8	345.5	708.1	12.2	0.3	147.1
2008	761.9	84.4	114.3	537.5	1.1	1.5	23.1	1,803.5	320.2	421.0	852.9	12.3	0.1	197.0
2009 Q4	738.3	84.2	87.0	543.3	2.2	1.4	20.2	1,852.4	311.9	331.8	940.7	15.9	0.0	252.1
2010 Q1 [p]	735.9	87.1	85.0	539.7	2.5	1.4	20.2	1,839.2	331.0	308.5	913.2	17.1	0.1	269.3
2009 Nov.	734.5	84.6	79.1	545.7	2.0	1.4	21.6	1,850.3	325.9	332.3	938.0	16.1	0.0	237.9
Dec.	738.3	84.2	87.0	543.3	2.2	1.4	20.2	1,852.4	311.9	331.8	940.7	15.9	0.0	252.1
2010 Jan.	743.0	93.8	82.9	540.2	2.3	1.4	22.3	1,830.2	341.7	319.7	918.1	17.1	0.0	233.6
Feb.	736.4	90.3	85.6	539.5	2.3	1.4	17.3	1,850.0	334.5	323.4	919.4	17.0	0.2	255.5
Mar. [p]	735.9	87.1	85.0	539.7	2.5	1.4	20.2	1,839.2	331.0	308.5	913.2	17.1	0.1	269.3
	Transactions													
2007	31.3	0.8	10.4	24.7	-0.3	-0.3	-4.1	394.9	33.9	98.7	236.3	1.7	0.1	24.1
2008	69.4	12.4	42.8	12.3	-0.3	0.1	2.2	269.3	4.5	72.2	142.3	-0.3	-0.3	51.0
2009 Q4	-4.6	0.6	0.8	-7.3	0.3	0.0	1.1	-17.8	-3.4	-4.1	-10.3	1.4	-0.1	-1.2
2010 Q1 [p]	-2.9	2.7	-2.2	-3.7	0.3	0.0	0.0	-29.8	16.9	-30.1	-34.9	1.0	0.1	17.1
2009 Nov.	-8.1	-4.1	-4.9	-2.3	0.0	0.0	3.2	7.1	7.2	-4.4	0.0	0.3	-0.1	4.0
Dec.	1.0	-1.1	5.7	-2.4	0.2	0.0	-1.3	-3.7	-14.9	-2.1	-0.5	-0.3	0.0	14.1
2010 Jan.	4.4	9.5	-4.2	-3.1	0.2	0.0	2.1	-26.6	28.8	-13.1	-24.8	1.1	0.0	-18.6
Feb.	-6.8	-3.5	2.6	-0.8	0.0	0.0	-5.0	9.0	-8.0	-1.2	-3.6	-0.1	0.1	21.9
Mar. [p]	-0.5	-3.2	-0.6	0.2	0.2	0.0	3.0	-12.2	-3.8	-15.7	-6.5	0.0	0.0	13.8
	Growth rates													
2007	4.8	1.1	17.5	4.9	-25.3	-	-16.4	34.5	12.0	39.7	49.5	16.4	-	19.1
2008	10.0	17.3	60.0	2.3	-23.4	-	10.5	17.6	1.4	21.1	20.0	-2.5	-	34.6
2009 Q4	-3.6	-1.1	-26.5	1.0	96.8	-	-12.3	3.1	1.5	-22.1	10.0	30.0	-	28.0
2010 Q1 [p]	-3.4	-4.4	-15.6	-1.1	53.8	-	-5.6	-0.4	3.2	-15.4	0.0	18.1	-	14.7
2009 Nov.	-0.8	-0.3	-17.5	1.6	89.8	-	9.6	5.0	7.9	-24.6	15.1	37.9	-	23.1
Dec.	-3.6	-1.1	-26.5	1.0	96.8	-	-12.3	3.1	1.5	-22.1	10.0	30.0	-	28.0
2010 Jan.	-3.3	-7.9	-18.0	-0.5	89.2	-	10.8	2.0	4.0	-13.1	4.4	33.7	-	14.1
Feb.	-3.2	-3.0	-14.6	-0.8	64.7	-	-18.9	1.6	2.2	-13.1	2.6	21.8	-	20.6
Mar. [p]	-3.4	-4.4	-15.6	-1.1	53.8	-	-5.6	-0.4	3.2	-15.4	0.0	18.1	-	14.7

C9 Total deposits by sector [2)]
(annual growth rates)



C10 Total deposits and deposits included in M3 by sector [2)] (annual growth rates)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on the ESA 95.
2) Data refer to the changing composition of the euro area. For further information, see the General Notes.
3) Includes investment funds.
4) Covers deposits in columns 2, 3, 5 and 7.
5) Covers deposits in columns 9, 10, 12 and 14.

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

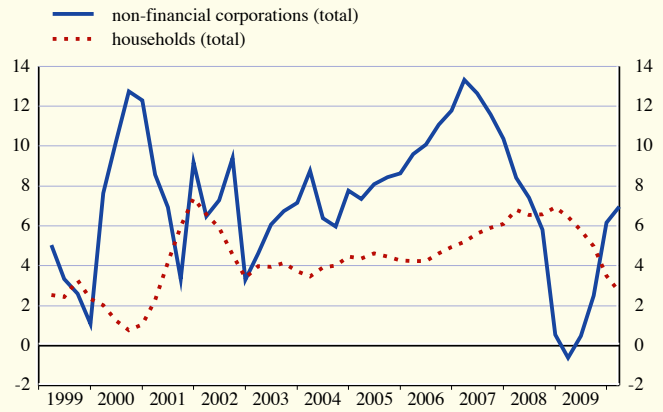
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

2. Deposits by non-financial corporations and households

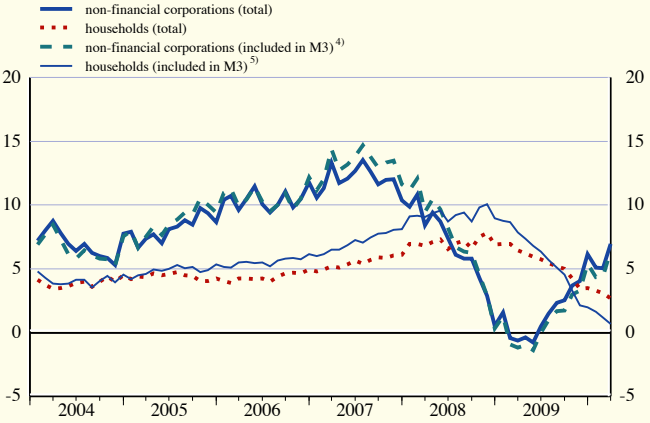
	Non-financial corporations							Households [3)]						
	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos	Total	Overnight	With an agreed maturity of:		Redeemable at notice of:		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Outstanding 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	1,502.9	883.4	502.2	64.4	27.9	1.3	23.7	5,368.6	1,813.3	1,350.0	517.9	1,490.2	113.6	83.7
2009 Q4	1,603.3	1,001.2	434.6	80.7	68.7	1.7	16.3	5,591.6	2,155.7	988.6	605.5	1,680.8	123.7	37.3
2010 Q1 [p]	1,578.1	982.4	425.5	83.0	72.9	1.8	12.6	5,593.4	2,157.7	924.9	631.6	1,721.4	121.7	36.1
2009 Nov.	1,564.1	971.3	435.6	79.7	61.2	1.6	14.8	5,507.6	2,098.9	1,010.6	584.2	1,650.7	124.7	38.5
Dec.	1,603.3	1,001.2	434.6	80.7	68.7	1.7	16.3	5,591.6	2,155.7	988.6	605.5	1,680.8	123.7	37.3
2010 Jan.	1,548.0	964.2	418.5	81.7	68.7	1.7	13.2	5,611.4	2,174.0	953.8	615.5	1,708.9	122.2	37.0
Feb.	1,534.7	954.1	414.7	81.7	70.7	1.8	11.7	5,612.4	2,176.5	935.8	624.9	1,715.9	121.6	37.7
Mar. [p]	1,578.1	982.4	425.5	83.0	72.9	1.8	12.6	5,593.4	2,157.7	924.9	631.6	1,721.4	121.7	36.1
	Transactions													
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 Q4	51.6	49.4	-10.0	2.7	10.4	0.2	-1.1	91.5	102.5	-96.3	44.9	43.9	2.3	-5.8
2010 Q1 [p]	-27.5	-20.3	-10.4	2.5	4.2	0.1	-3.7	-0.5	2.1	-64.8	25.8	39.6	-2.0	-1.2
2009 Nov.	3.5	8.3	-6.7	1.1	1.1	0.0	-0.3	-3.1	14.0	-29.6	10.5	2.5	0.9	-1.4
Dec.	37.5	28.8	-1.5	1.0	7.6	0.1	1.5	83.0	56.4	-22.6	21.3	30.0	-1.0	-1.1
2010 Jan.	-57.3	-38.2	-17.0	1.1	0.0	0.0	-3.1	18.3	18.7	-35.5	9.8	27.1	-1.5	-0.3
Feb.	-14.2	-10.7	-4.2	0.1	2.0	0.0	-1.4	0.0	2.2	-18.6	9.4	6.9	-0.6	0.7
Mar. [p]	44.0	28.7	10.9	1.3	2.2	0.1	0.9	-18.8	-18.8	-10.7	6.6	5.6	0.1	-1.6
	Growth rates													
2007	10.4	4.0	35.1	-11.8	-26.3	-31.6	-4.4	6.1	1.3	47.7	-7.5	-3.3	11.2	24.4
2008	0.5	-0.6	2.8	5.3	-11.0	-16.2	0.0	6.9	1.6	33.2	-7.7	1.9	1.5	-3.9
2009 Q4	6.1	12.9	-13.9	23.1	146.6	28.3	-31.2	3.5	17.5	-27.3	16.4	12.8	7.5	-55.4
2010 Q1 [p]	7.0	12.7	-10.5	17.8	89.6	37.1	-29.4	2.7	13.6	-27.8	20.5	9.9	5.3	-41.2
2009 Nov.	4.0	11.5	-15.2	20.6	134.4	19.5	-40.7	3.5	16.8	-25.5	13.4	14.0	12.2	-59.5
Dec.	6.1	12.9	-13.9	23.1	146.6	28.3	-31.2	3.5	17.5	-27.3	16.4	12.8	7.5	-55.4
2010 Jan.	5.1	10.6	-12.8	20.8	115.1	32.9	-33.4	3.3	17.1	-28.4	17.8	11.6	6.3	-51.6
Feb.	5.1	11.3	-12.9	18.1	100.9	32.4	-45.1	3.1	15.6	-28.4	19.7	10.8	5.8	-46.1
Mar. [p]	7.0	12.7	-10.5	17.8	89.6	37.1	-29.4	2.7	13.6	-27.8	20.5	9.9	5.3	-41.2

C11 Total deposits by sector [2)]

(annual growth rates)



C12 Total deposits and deposits included in M3 by sector [2)] (annual growth rates)



Source: ECB.

1) MFI sector excluding the Eurosystem; sectoral classification is based on the ESA 95.
2) Data refer to the changing composition of the euro area. For further information, see the General Notes.
3) Including non-profit institutions serving households.
4) Covers deposits in columns 2, 3, 5 and 7.
5) Covers deposits in columns 9, 10, 12 and 14.

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

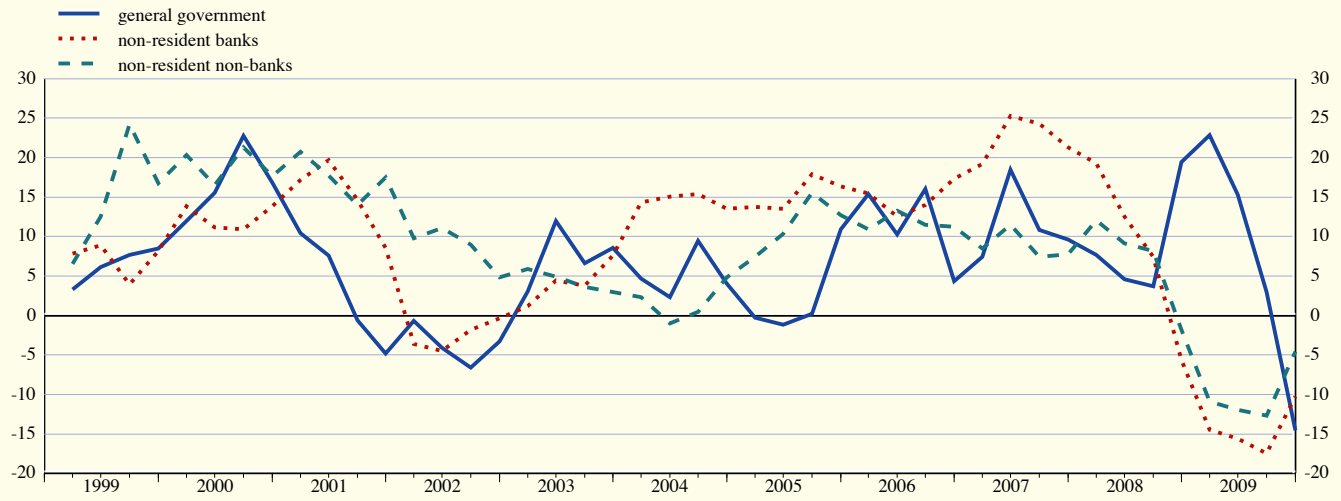
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

3. Deposits by government and non-euro area residents

	General government					Non-euro area residents				
	Total	Central government	Other general government			Total	Banks [3)]	Non-banks		
			State government	Local government	Social security funds			Total	General government	Other
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2007	373.7	126.9	59.0	107.6	80.3	3,862.1	2,953.9	908.2	143.3	764.9
2008	445.0	191.0	52.3	115.9	85.8	3,713.9	2,816.9	897.0	65.8	831.2
2009 Q1	464.4	216.4	50.6	114.5	83.0	3,665.7	2,786.7	879.0	63.6	815.4
Q2	476.6	227.3	48.9	118.9	81.4	3,565.2	2,685.4	879.9	64.3	815.6
Q3	403.0	157.0	51.2	123.0	71.8	3,422.4	2,564.0	858.5	63.5	794.9
Q4 [p]	373.2	144.3	45.1	113.1	70.8	3,369.6	2,518.5	850.9	60.1	790.8
	Transactions									
2007	31.9	-3.1	13.6	9.8	11.6	609.4	542.6	66.8	20.2	46.6
2008	72.8	63.5	-6.5	8.7	7.1	-185.1	-167.0	-18.0	-36.9	18.9
2009 [p]	-64.8	-38.1	-7.2	-3.6	-15.4	-330.8	-290.0	-41.0	-1.3	-39.7
2009 Q1	15.7	22.5	-1.7	-2.3	-2.9	-108.9	-77.7	-31.3	-2.6	-28.7
Q2	11.8	10.9	-1.6	4.5	-2.0	-60.5	-67.6	7.1	0.9	6.1
Q3	-62.1	-58.9	2.3	4.1	-9.6	-80.1	-73.0	-7.1	-0.2	-6.9
Q4 [p]	-30.1	-12.7	-6.1	-9.9	-0.8	-81.2	-71.8	-9.7	0.6	-10.3
	Growth rates									
2007	9.7	-2.4	29.9	10.7	16.9	17.9	21.3	7.7	15.8	6.3
2008	19.5	49.9	-11.0	8.1	8.8	-4.7	-5.6	-1.8	-25.6	2.6
2009 Q1	22.8	52.6	2.2	5.7	6.5	-13.6	-14.5	-10.9	-24.1	-8.8
Q2	15.3	43.7	-13.0	5.3	-4.9	-14.7	-15.6	-11.9	-21.9	-10.4
Q3	2.9	18.6	-16.6	8.2	-15.4	-16.3	-17.4	-12.7	-27.0	-10.3
Q4 [p]	-14.6	-20.0	-13.7	-3.1	-17.9	-8.9	-10.3	-4.6	-2.0	-4.8

C13 Deposits by government and non-euro area residents [2)]

(annual growth rates)



Source: ECB.

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

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

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

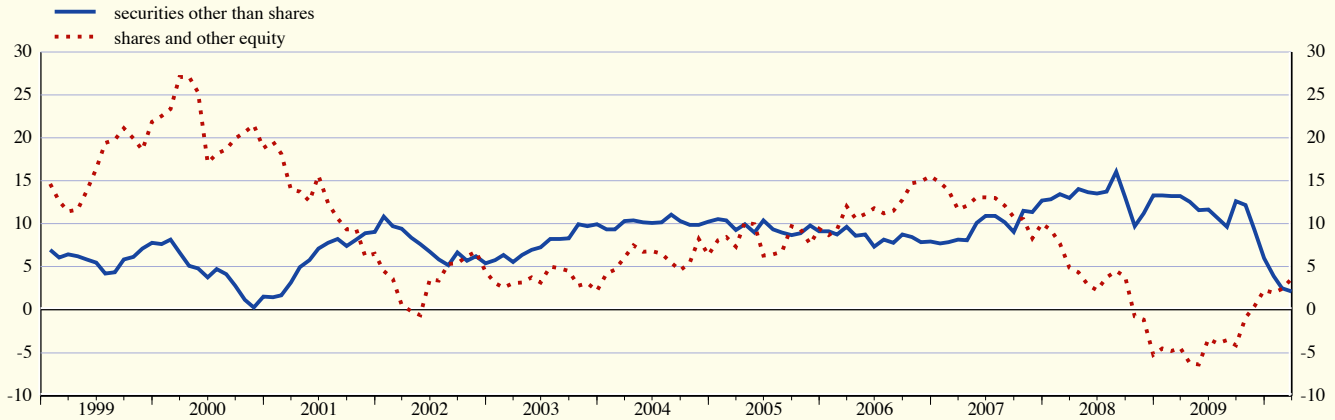
2.6 MFI holdings of securities: breakdown [1), 2)]

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

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts											
2007	5,185.3	1,656.4	84.0	1,180.5	16.6	979.9	33.3	1,234.7	1,636.5	424.5	869.3	342.7
2008	5,858.4	1,887.1	92.4	1,225.4	19.3	1,355.5	51.2	1,227.5	1,476.9	423.2	776.3	277.4
2009 Q4	6,209.2	1,971.7	109.2	1,467.4	16.1	1,457.5	39.4	1,148.0	1,515.7	435.4	800.1	280.2
2010 Q1 (p)	6,277.2	1,980.2	114.0	1,535.4	16.7	1,416.8	40.1	1,174.0	1,515.3	445.8	781.9	287.6
2009 Nov.	6,256.3	1,993.5	102.9	1,503.8	15.7	1,449.0	41.7	1,149.6	1,515.3	438.6	800.4	276.3
Dec.	6,209.2	1,971.7	109.2	1,467.4	16.1	1,457.5	39.4	1,148.0	1,515.7	435.4	800.1	280.2
2010 Jan.	6,224.2	1,974.4	111.7	1,478.5	19.1	1,426.2	41.1	1,173.2	1,531.3	445.9	804.4	281.0
Feb.	6,246.3	1,961.8	110.9	1,506.4	16.2	1,429.6	40.7	1,180.7	1,514.9	442.6	790.2	282.2
Mar. (p)	6,277.2	1,980.2	114.0	1,535.4	16.7	1,416.8	40.1	1,174.0	1,515.3	445.8	781.9	287.6
	Transactions											
2007	592.4	136.0	18.1	-86.2	1.5	318.3	9.5	195.2	147.8	51.3	55.4	41.0
2008	692.8	212.4	5.9	36.5	1.9	390.7	19.0	26.4	-84.2	22.9	-56.6	-50.5
2009 Q4	-97.7	-44.2	4.4	-17.4	-2.2	12.2	-7.3	-43.3	13.4	1.7	8.6	3.2
2010 Q1 (p)	29.5	7.6	-0.1	68.5	-0.3	-42.4	-2.0	-1.8	15.2	13.4	-11.9	13.8
2009 Nov.	-8.8	-0.9	1.4	2.3	-1.6	1.4	-0.3	-11.2	14.3	2.4	12.6	-0.7
Dec.	-64.9	-20.9	2.9	-33.9	0.1	12.2	-3.6	-21.7	-6.9	-2.6	-6.7	2.5
2010 Jan.	-8.7	2.7	-0.7	12.2	2.5	-33.0	0.4	7.3	20.5	12.4	5.7	2.4
Feb.	6.2	-14.5	-1.9	25.0	-3.2	2.7	-1.1	-0.8	-11.1	-2.5	-11.8	3.2
Mar. (p)	32.0	19.4	2.5	31.2	0.5	-12.2	-1.3	-8.3	5.8	3.5	-5.9	8.2
	Growth rates											
2007	12.7	8.7	25.4	-6.8	10.7	50.2	33.4	17.7	10.0	13.7	6.9	13.9
2008	13.3	12.7	8.1	3.1	9.9	40.0	57.2	2.2	-5.3	5.4	-6.7	-15.3
2009 Q4	6.0	4.3	17.4	19.0	-16.0	7.5	-23.2	-5.4	2.3	5.0	1.3	0.9
2010 Q1 (p)	2.1	-0.3	7.9	12.4	-18.9	1.4	-23.1	-3.9	3.6	7.4	0.4	6.8
2009 Nov.	9.3	5.8	10.8	23.1	-3.9	14.3	-9.2	-3.3	0.4	7.4	-2.0	-2.9
Dec.	6.0	4.3	17.4	19.0	-16.0	7.5	-23.2	-5.4	2.3	5.0	1.3	0.9
2010 Jan.	3.9	1.3	12.2	15.1	-12.5	5.4	-22.7	-4.7	2.0	6.9	0.6	-1.5
Feb.	2.5	-0.7	6.7	13.8	-19.0	4.0	-24.6	-5.0	2.5	7.0	0.1	2.2
Mar. (p)	2.1	-0.3	7.9	12.4	-18.9	1.4	-23.1	-3.9	3.6	7.4	0.4	6.8

C14 MFI holdings of securities [2)]

(annual growth rates)



Source: ECB.

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

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

2.7 Revaluation of selected MFI balance sheet items [1), 2)]

(EUR billions)

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

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
2007	-4.2	-1.2	-1.4	-1.6	-2.7	-0.2	-0.2	-2.3	-6.9	-0.8	-2.3	-3.7
2008	-4.6	-1.1	-1.5	-1.9	-2.7	0.0	-0.2	-2.5	-6.7	-1.2	-2.3	-3.2
2009	-7.4	-1.8	-2.2	-3.4	-3.9	-0.1	-0.2	-3.7	-7.4	-1.6	-1.3	-4.5
2009 Q3	-1.7	-0.3	-0.5	-0.9	-0.8	0.0	0.0	-0.7	-1.6	-0.3	-0.2	-1.0
Q4	-2.4	-0.8	-0.7	-0.9	-1.0	0.0	-0.1	-0.9	-2.3	-0.4	-0.6	-1.2
2010 Q1 [p]	-1.9	-1.1	-0.6	-0.2	-0.8	0.0	0.0	-0.7	-2.3	-0.5	-0.3	-1.4
2010 Jan.	-0.6	-0.4	0.0	-0.2	-0.4	0.0	0.0	-0.4	-1.1	-0.4	-0.2	-0.6
Feb.	-0.3	0.0	-0.1	-0.2	-0.2	0.0	0.0	-0.2	-0.6	-0.1	-0.1	-0.4
Mar. [p]	-1.0	-0.7	-0.5	0.2	-0.2	0.0	0.0	-0.1	-0.6	-0.1	-0.1	-0.4

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

	Non-financial corporations				Non-euro area residents		
	Total	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2007	-12.5	-2.1	-5.4	-4.9	-5.2	-3.4	-1.8
2008	-17.8	-4.1	-9.1	-4.6	-6.6	-3.4	-3.2
2009	-35.5	-12.7	-12.5	-10.3	-6.8	-2.6	-4.2
2009 Q3	-7.0	-2.2	-2.1	-2.7	-1.0	-0.5	-0.5
Q4	-15.4	-5.3	-6.3	-3.8	-2.1	-0.5	-1.6
2010 Q1 [p]	-9.4	-7.1	-4.0	1.7	-1.0	-0.4	-0.6
2010 Jan.	-3.6	-1.2	-1.0	-1.3	-0.5	-0.4	-0.2
Feb.	-1.7	-0.5	-1.0	-0.2	-0.4	0.0	-0.4
Mar. [p]	-4.1	-5.4	-2.0	3.2	-0.1	0.0	-0.1

3. Revaluation of securities held by MFIs

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
2007	-14.2	-3.3	0.1	-0.4	-0.2	-3.2	-0.6	-6.7	27.6	3.8	11.7	12.1
2008	-56.4	-8.0	0.0	5.2	0.0	-20.1	-2.2	-31.2	-60.6	-8.2	-44.1	-8.2
2009	2.5	7.5	0.2	-3.5	-0.1	-0.1	0.9	-2.4	6.6	1.6	3.2	1.8
2009 Q3	17.3	4.6	0.1	3.6	0.0	3.4	0.2	5.3	16.0	4.9	9.2	1.9
Q4	1.7	1.2	0.1	-1.8	-0.1	1.0	0.0	1.4	-0.5	-2.2	0.8	0.9
2010 Q1 [p]	13.5	3.8	0.2	3.5	0.1	2.2	0.1	3.7	-6.2	-2.5	-1.2	-2.5
2010 Jan.	-0.1	-0.1	0.1	-1.2	0.0	0.4	0.1	0.5	-4.9	-1.9	-1.4	-1.6
Feb.	6.5	1.4	0.0	2.9	0.1	0.7	0.0	1.4	-5.3	-0.8	-2.5	-2.0
Mar. [p]	7.1	2.4	0.1	1.8	0.0	1.1	0.0	1.8	4.0	0.2	2.7	1.1

Source: ECB.

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

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

3) Including non-profit institutions serving households.

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

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

1. Deposits

	MFIs [3)]							Non-MFIs						
	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies					All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	By euro area residents													
2007	6,087.5	92.1	7.9	4.8	0.4	1.1	1.0	9,054.4	95.8	4.2	2.2	0.4	0.1	0.5
2008	6,860.0	89.7	10.3	7.3	0.4	1.2	0.8	9,881.8	96.9	3.1	1.9	0.5	0.1	0.4
2009 Q1	6,607.9	90.9	9.1	6.3	0.3	1.2	0.7	9,989.5	96.9	3.1	1.9	0.4	0.1	0.5
Q2	6,625.7	92.2	7.8	5.1	0.3	1.1	0.8	10,145.9	97.0	3.0	1.9	0.3	0.1	0.5
Q3	6,287.5	92.4	7.6	4.8	0.4	1.1	0.8	10,061.2	97.0	3.0	1.9	0.3	0.1	0.4
Q4 [(p)]	6,305.4	93.0	7.0	4.4	0.3	1.1	0.7	10,158.8	97.0	3.0	1.9	0.2	0.1	0.4
	By non-euro area residents													
2007	2,953.9	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	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
Q2	2,685.4	49.0	51.0	33.2	1.6	2.6	10.7	879.9	51.9	48.1	32.5	1.8	1.8	7.8
Q3	2,564.0	49.1	50.9	34.3	1.5	2.5	9.5	858.5	54.1	45.9	30.6	1.5	1.6	7.7
Q4 [(p)]	2,518.5	49.3	50.7	34.1	1.6	2.2	9.7	850.9	53.1	46.9	31.5	1.3	1.7	7.5

2. Debt securities issued by euro area MFIs

	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7
2007	4,933.2	81.5	18.5	9.2	1.7	1.9	3.4
2008	5,111.7	83.3	16.7	8.4	2.0	1.9	2.5
2009 Q1	5,197.9	83.3	16.7	8.7	1.9	1.9	2.5
Q2	5,225.1	83.6	16.4	8.3	1.8	1.8	2.7
Q3	5,203.2	84.0	16.0	8.2	1.8	1.9	2.3
Q4 [(p)]	5,179.5	83.3	16.7	8.7	1.7	1.9	2.5

Source: ECB.

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

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

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

3. Loans

	MFIs [3)]							Non-MFIs						
	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies					All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	To euro area residents													
2007	5,794.2	-	-	-	-	-	-	11,098.9	96.2	3.8	1.8	0.2	0.9	0.6
2008	6,312.6	-	-	-	-	-	-	11,739.4	95.9	4.1	2.1	0.3	1.0	0.4
2009 Q1	6,128.0	-	-	-	-	-	-	11,785.6	95.9	4.1	2.1	0.3	1.0	0.5
Q2	6,216.3	-	-	-	-	-	-	11,834.4	96.1	3.9	2.0	0.2	1.0	0.5
Q3	5,911.4	-	-	-	-	-	-	11,763.1	96.2	3.8	1.9	0.2	1.0	0.4
Q4 [p]	5,955.0	-	-	-	-	-	-	11,746.6	96.2	3.8	1.9	0.2	1.0	0.4
	To non-euro area residents													
2007	2,344.5	48.2	51.8	28.8	2.3	2.4	12.7	955.7	40.9	59.1	41.2	1.2	3.7	8.2
2008	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	1,999.7	45.2	54.8	29.6	2.8	3.2	13.5	949.6	40.2	59.8	42.6	1.1	3.9	7.6
Q3	1,894.0	45.5	54.5	29.9	2.7	3.1	12.6	914.0	40.4	59.6	41.9	1.5	3.8	7.6
Q4 [p]	1,913.2	45.9	54.1	29.5	2.5	3.0	12.6	915.0	39.9	60.1	42.0	1.5	3.7	8.1

4. Holdings of securities other than shares

	Issued by MFIs [3)]							Issued by non-MFIs						
	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies					All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total	USD	JPY	CHF	GBP			Total	USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Issued by euro area residents													
2007	1,740.3	95.2	4.8	2.4	0.3	0.3	1.5	2,210.3	97.7	2.3	1.4	0.2	0.1	0.5
2008	1,979.5	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	2,834.2	97.5	2.5	1.7	0.2	0.1	0.4
Q2	2,123.5	95.0	5.0	2.5	0.5	0.4	1.4	2,962.4	97.7	2.3	1.5	0.2	0.1	0.3
Q3	2,117.9	95.1	4.9	2.9	0.2	0.3	1.3	2,997.4	97.9	2.1	1.4	0.2	0.1	0.4
Q4 [p]	2,080.8	94.8	5.2	3.0	0.2	0.3	1.4	2,980.4	98.1	1.9	1.2	0.2	0.1	0.3
	Issued by non-euro area residents													
2007	582.4	53.9	46.1	27.3	0.7	0.4	14.4	652.3	35.9	64.1	39.3	4.5	0.8	12.6
2008	580.7	54.1	45.9	28.6	0.9	0.5	13.3	646.8	39.0	61.0	37.1	6.4	0.8	11.0
2009 Q1	597.8	52.1	47.9	27.6	0.3	1.6	13.9	617.8	34.1	65.9	40.5	4.3	0.8	15.3
Q2	571.0	55.3	44.7	24.6	1.7	1.4	14.6	633.1	33.5	66.5	41.4	4.0	0.9	15.0
Q3	562.7	56.3	43.7	25.3	0.6	0.5	14.7	618.3	34.8	65.2	39.3	4.2	0.9	15.1
Q4 [p]	547.9	55.6	44.4	26.5	0.4	0.5	14.9	604.6	34.7	65.3	38.6	4.0	0.9	15.5

Source: ECB.

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

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

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

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

2.9 Aggregated balance sheet of euro area investment funds [1)]

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

1. Assets

	Total	Deposits and loan claims	Securities other than shares	Shares and other equity (excl. investment fund/ money market fund shares)	Investment fund/ money market fund shares	Non-financial assets	Other assets (incl. financial derivatives)
	1	2	3	4	5	6	7
	Outstanding amounts						
2009 Aug.	5,105.3	374.7	1,969.4	1,496.8	660.6	209.2	394.6
Sep.	5,161.5	348.9	1,998.6	1,544.8	680.3	205.1	383.8
Oct.	5,170.9	351.1	2,017.6	1,522.0	687.1	207.0	386.0
Nov.	5,235.1	340.2	2,043.3	1,560.5	692.6	207.3	391.1
Dec.	5,363.9	343.0	2,076.2	1,671.0	707.5	211.8	354.4
2010 Jan.	5,422.7	349.0	2,123.1	1,638.3	715.4	214.3	382.6
Feb. (p)	5,484.5	351.0	2,139.6	1,662.7	732.7	215.3	383.2
	Transactions						
2009 Q2	107.1	-0.7	99.9	19.5	2.2	10.0	-23.8
Q3	171.9	-9.0	69.9	112.6	9.1	2.0	-12.6
Q4	98.5	-11.9	63.6	46.2	15.8	9.3	-24.5

2. Liabilities

	Total	Loans and deposits received	Investment fund shares issued				Other liabilities (incl. financial derivatives)
			Total	Held by euro area residents		Held by non-euro area residents	
					Investment funds		
	1	2	3	4	5	6	7
	Outstanding amounts						
2009 Aug.	5,105.3	105.8	4,648.5	3,803.9	491.5	844.6	350.9
Sep.	5,161.5	96.7	4,738.3	3,875.4	513.9	862.9	326.6
Oct.	5,170.9	95.6	4,742.3	3,867.4	522.2	874.9	333.0
Nov.	5,235.1	96.3	4,802.7	3,902.3	528.1	900.4	336.1
Dec.	5,363.9	99.3	4,959.2	4,009.4	538.6	949.8	305.5
2010 Jan.	5,422.7	100.1	4,992.6	4,038.7	541.1	953.9	330.0
Feb. (p)	5,484.5	100.2	5,051.2	4,072.9	547.6	978.3	333.1
	Transactions						
2009 Q2	107.1	0.3	93.5	75.0	20.9	18.5	13.3
Q3	171.9	0.9	185.8	99.3	16.8	86.5	-14.8
Q4	98.5	3.0	118.0	74.1	15.1	44.0	-22.6

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

	Total	Funds by investment policy						Funds by type		Memo item: Money market funds
		Bond funds	Equity funds	Mixed funds	Real estate funds	Hedge funds	Other funds	Open-end funds	Closed-end funds	
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2009 July	4,553.1	1,494.0	1,249.6	1,111.3	227.2	78.2	392.7	4,485.3	67.8	1,285.4
Aug.	4,648.5	1,515.9	1,293.0	1,139.7	230.5	78.2	391.3	4,580.4	68.1	1,285.2
Sep.	4,738.3	1,531.4	1,344.8	1,164.8	226.8	77.4	393.1	4,670.4	67.8	1,253.0
Oct.	4,742.3	1,546.7	1,321.9	1,178.3	231.6	78.8	385.0	4,674.5	67.8	1,246.2
Nov.	4,802.7	1,560.2	1,348.7	1,194.0	234.1	78.8	387.0	4,735.1	67.6	1,223.7
Dec.	4,959.2	1,577.0	1,449.2	1,215.3	239.2	84.4	394.1	4,888.1	71.1	1,201.6
2010 Jan.	4,992.6	1,609.5	1,412.9	1,232.5	244.5	93.2	400.0	4,921.1	71.5	1,215.1
Feb. (p)	5,051.2	1,632.7	1,438.8	1,241.7	245.1	94.4	398.3	4,979.4	71.8	1,202.1
	Transactions									
2009 Aug.	28.5	11.6	9.9	7.5	1.7	-0.8	-1.4	28.6	-0.1	5.3
Sep.	26.3	4.4	9.9	12.9	0.0	-0.1	-0.8	25.7	0.6	-26.3
Oct.	33.1	13.2	3.9	16.4	2.8	1.2	-4.4	33.2	-0.1	-5.2
Nov.	19.7	8.6	5.4	4.0	1.2	-0.5	1.0	19.8	-0.1	-18.6
Dec.	65.2	10.9	24.5	13.4	8.5	5.0	2.9	60.3	4.9	-36.7
2010 Jan.	54.3	15.6	7.2	11.2	8.3	8.0	4.0	54.3	0.0	2.4
Feb. (p)	21.5	13.5	4.2	2.8	1.1	0.3	-0.3	21.4	0.1	-16.3

Source: ECB.

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

2.10 Securities held by investment funds [1] broken down by issuer of securities

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

1. Securities other than shares

	Total	Euro area						Rest of the world			
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations		EU Member States outside the euro area	United States	Japan
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
2009 Q1	1,710.7	1,234.0	340.9	628.6	151.7	4.1	108.7	476.7	142.4	183.5	22.6
Q2	1,873.0	1,293.9	357.9	635.6	173.3	4.0	123.0	579.1	161.9	234.6	21.8
Q3	1,998.6	1,384.6	388.6	668.9	186.0	4.9	136.2	614.0	180.2	234.4	21.8
Q4 (p)	2,076.2	1,413.0	387.6	688.9	187.0	5.5	144.0	663.2	199.0	251.9	15.9
	Transactions										
2009 Q2	99.9	32.1	3.5	10.1	11.3	-0.8	8.0	67.8	6.7	48.8	-2.6
Q3	69.9	47.6	10.6	21.0	6.1	0.3	9.7	22.2	11.2	3.5	-1.0
Q4 (p)	63.6	25.4	-2.8	19.8	0.7	0.5	7.3	38.2	17.2	15.2	-6.1

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

	Total	Euro area						Rest of the world			
		Total	MFIs	General government	Other financial intermediaries	Insurance corporations and pension funds	Non-financial corporations		EU Member States outside the euro area	United States	Japan
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
2009 Q1	1,070.6	503.0	48.1	-	26.2	19.8	408.8	567.5	89.3	190.8	47.9
Q2	1,251.6	566.1	69.8	-	28.6	16.8	450.2	685.5	110.8	210.9	59.7
Q3	1,544.8	701.4	97.2	-	35.8	24.8	543.4	843.4	127.0	265.1	61.8
Q4 (p)	1,671.0	721.5	97.1	-	36.1	23.9	564.3	949.5	138.3	295.3	65.8
	Transactions										
2009 Q2	19.5	-4.2	1.3	-	-1.5	-3.4	-1.3	23.6	4.3	1.0	7.1
Q3	112.6	34.1	7.5	-	4.1	2.3	20.7	78.5	2.4	34.0	1.4
Q4 (p)	46.2	3.2	4.4	-	1.3	-0.6	-1.8	43.0	3.8	8.5	3.6

3. Investment fund/money market fund shares

	Total	Euro area						Rest of the world			
		Total	MFIs [2]	General government	Other financial intermediaries [2]	Insurance corporations and pension funds	Non-financial corporations		EU Member States outside the euro area	United States	Japan
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
2009 Q1	594.6	492.9	85.1	-	407.8	-	-	101.8	9.5	15.9	0.3
Q2	627.6	540.1	82.9	-	457.2	-	-	87.5	12.9	16.2	0.4
Q3	680.3	592.0	78.1	-	513.9	-	-	88.3	14.5	18.9	0.3
Q4 (p)	707.5	612.7	74.1	-	538.6	-	-	94.8	15.6	19.0	0.3
	Transactions										
2009 Q2	2.2	15.8	-5.1	-	20.9	-	-	-13.6	2.0	0.3	0.0
Q3	9.1	10.5	-6.2	-	16.8	-	-	-1.5	0.9	-0.3	0.0
Q4 (p)	15.8	10.6	-4.5	-	15.1	-	-	5.2	0.9	0.4	0.1

Source: ECB.

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

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

3 EURO AREA ACCOUNTS

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

Uses 2009 Q4	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Exports of goods and services						471.4
Trade balance [1]						-29.2
Generation of income account						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,189.9	120.7	743.2	60.5	265.5	
Other taxes less subsidies on production	31.1	7.2	13.4	5.0	5.5	
Consumption of fixed capital	351.2	96.8	196.9	11.4	46.1	
Net operating surplus and mixed income [1]	526.2	277.2	225.5	26.0	-2.5	
Allocation of primary income account						
Net operating surplus and mixed income						
Compensation of employees						4.9
Taxes less subsidies on production						
Property income	635.6	34.6	233.5	307.5	59.9	91.4
Interest	366.0	31.6	59.1	215.4	59.9	52.3
Other property income	269.6	3.0	174.5	92.1	0.0	39.1
Net national income [1]	1,991.6	1,646.1	83.6	22.2	239.7	
Secondary distribution of income account						
Net national income						
Current taxes on income, wealth, etc.	293.6	244.3	42.1	6.8	0.3	1.4
Social contributions	448.9	448.9				1.1
Social benefits other than social transfers in kind	471.1	1.5	16.1	33.5	420.0	0.8
Other current transfers	208.4	75.1	27.3	47.9	58.2	9.1
Net non-life insurance premiums	45.0	32.1	11.2	1.0	0.7	1.3
Non-life insurance claims	45.3			45.3		0.6
Other	118.1	43.0	16.0	1.6	57.4	7.2
Net disposable income [1]	1,959.2	1,443.6	26.8	29.0	459.8	
Use of income account						
Net disposable income						
Final consumption expenditure	1,865.1	1,321.2			544.0	
Individual consumption expenditure	1,647.3	1,321.2			326.1	
Collective consumption expenditure	217.9				217.9	
Adjustment for the change in the net equity of households in pension fund reserves	14.8	0.1	0.2	14.6	0.0	0.0
Net saving/current external account [1]	94.0	137.1	26.6	14.4	-84.1	-7.0
Capital account						
Net saving/current external account						
Gross capital formation	438.3	138.7	207.4	13.1	79.1	
Gross fixed capital formation	461.6	137.9	231.6	12.9	79.1	
Changes in inventories and acquisitions less disposals of valuables	-23.3	0.8	-24.2	0.1	0.0	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	-0.2	-1.8	0.8	0.1	0.7	0.2
Capital transfers	60.9	13.9	1.2	1.3	44.4	5.4
Capital taxes	10.9	10.6	0.3	0.0		0.0
Other capital transfers	49.9	3.4	0.9	1.3	44.4	5.4
Net lending (+)/net borrowing (-) (from capital account) [1]	10.5	97.1	46.3	14.3	-147.2	-10.5
Statistical discrepancy	0.0	2.3	-2.3	0.0	0.0	0.0

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

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

(EUR billions)

Resources 2009 Q4	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Imports of goods and services						442.2
Trade balance						
Generation of income account						
Gross value added (basic prices)	2,098.4	501.9	1,179.0	102.9	314.6	
Taxes less subsidies on products	234.2					
Gross domestic product (market prices)[2]	2,332.6					
Compensation of employees						
Other taxes less subsidies on production						
Consumption of fixed capital						
Net operating surplus and mixed income						
Allocation of primary income account						
Net operating surplus and mixed income	526.2	277.2	225.5	26.0	-2.5	
Compensation of employees	1,191.3	1,191.3				3.6
Taxes less subsidies on production	279.9				279.9	-14.6
Property income	629.8	212.2	91.6	303.8	22.1	97.2
Interest	354.5	53.9	36.4	255.6	8.7	63.7
Other property income	275.2	158.4	55.3	48.2	13.4	33.5
Net national income						
Secondary distribution of income account						
Net national income	1,991.6	1,646.1	83.6	22.2	239.7	
Current taxes on income, wealth, etc.	294.2				294.2	0.8
Social contributions	448.9	1.3	16.9	48.5	382.2	1.1
Social benefits other than social transfers in kind	469.1	469.1				2.8
Other current transfers	177.4	97.0	11.7	46.4	22.2	40.2
Net non-life insurance premiums	45.3			45.3		1.1
Non-life insurance claims	44.4	34.2	9.2	0.7	0.3	1.4
Other	87.7	62.9	2.5	0.4	21.9	37.7
Net disposable income						
Use of income account						
Net disposable income	1,959.2	1,443.6	26.8	29.0	459.8	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in the net equity of households in pension fund reserves	14.8	14.8				0.0
Net saving/current external account						
Capital account						
Net saving/current external account	94.0	137.1	26.6	14.4	-84.1	-7.0
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	351.2	96.8	196.9	11.4	46.1	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	64.2	14.0	32.3	2.9	15.1	2.0
Capital taxes	10.9				10.9	0.0
Other capital transfers	53.3	14.0	32.3	2.9	4.1	2.0
Net lending (+)/net borrowing (-) (from capital account)						
Statistical discrepancy						

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

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

(EUR billions)

Assets 2009 Q4	Euro area	Households	Non-financial corporations	MFIs	Other financial inter-mediaries	Insurance corporations and pension funds	General govern-ment	Rest of the world
Opening balance sheet, financial assets								
Total financial assets		17,858.5	15,622.3	32,292.6	12,592.4	6,270.2	3,434.4	15,134.1
Monetary gold and special drawing rights (SDRs)				285.9				
Currency and deposits		6,305.3	1,732.0	9,325.4	1,988.5	845.7	707.7	3,700.9
Short-term debt securities		34.3	134.5	632.4	318.3	360.4	24.6	874.5
Long-term debt securities		1,445.0	176.8	6,408.4	2,006.3	2,045.7	372.8	3,137.6
Loans		75.4	2,917.0	12,705.3	3,034.2	419.3	469.8	1,740.6
of which: Long-term		58.0	1,614.3	9,776.9	2,526.4	312.1	360.1	.
Shares and other equity		4,144.0	7,146.8	2,050.7	4,996.7	2,147.3	1,265.6	5,137.5
Quoted shares		720.2	1,212.4	522.9	1,716.2	409.7	295.2	.
Unquoted shares and other equity		2,047.0	5,550.1	1,179.4	2,631.3	437.7	824.2	.
Mutual fund shares		1,376.7	384.3	348.4	649.2	1,299.8	146.2	.
Insurance technical reserves		5,383.6	145.0	1.9	0.0	191.3	3.2	140.3
Other accounts receivable and financial derivatives		471.0	3,370.3	882.5	248.4	260.6	590.6	402.5
Net financial worth								
Financial account, transactions in financial assets								
Total transactions in financial assets		161.6	154.0	28.5	196.7	78.9	-46.2	91.1
Monetary gold and SDRs				1.0				-1.0
Currency and deposits		111.9	54.4	62.4	-29.1	-1.5	-51.2	-97.1
Short-term debt securities		-21.9	3.7	-20.4	-10.6	21.5	7.2	-20.7
Long-term debt securities		-17.0	17.3	-55.5	85.6	10.5	-19.4	68.9
Loans		-0.3	24.8	-8.3	1.6	0.0	-15.0	24.0
of which: Long-term		-0.5	9.1	65.8	4.1	3.5	3.1	.
Shares and other equity		0.0	-27.3	-18.3	138.9	48.6	3.2	110.9
Quoted shares		-6.9	-18.3	13.6	69.0	-1.3	3.8	.
Unquoted shares and other equity		6.7	8.3	-3.9	56.2	1.1	-4.0	.
Mutual fund shares		0.3	-17.2	-28.1	13.7	48.9	3.4	.
Insurance technical reserves		73.5	-0.4	0.1	0.0	0.8	0.0	6.6
Other accounts receivable and financial derivatives		15.5	81.4	67.6	10.3	-1.1	28.8	-0.6
Changes in net financial worth due to transactions								
Other changes account, financial assets								
Total other changes in financial assets		53.5	233.9	42.1	39.0	71.6	27.1	115.6
Monetary gold and SDRs				30.0				
Currency and deposits		0.6	-2.0	35.9	12.3	2.6	-0.9	30.0
Short-term debt securities		-0.9	-0.3	3.0	-6.7	6.2	0.0	-12.9
Long-term debt securities		2.1	12.9	-16.6	15.3	29.2	-2.4	-0.5
Loans		0.0	-0.5	-0.7	-12.3	-0.8	-1.5	4.6
of which: Long-term		0.0	-5.3	-13.9	-13.5	-0.8	4.7	.
Shares and other equity		30.3	261.8	-6.7	21.8	34.7	12.7	74.6
Quoted shares		18.1	115.9	-23.1	20.3	8.3	-11.1	.
Unquoted shares and other equity		0.4	142.5	3.8	-13.5	-0.2	26.2	.
Mutual fund shares		11.9	3.4	12.6	14.9	26.6	-2.4	.
Insurance technical reserves		21.5	0.1	0.0	0.0	-0.1	0.0	5.3
Other accounts receivable and financial derivatives		-0.2	-38.1	-2.8	8.6	-0.3	19.3	14.6
Other changes in net financial worth								
Closing balance sheet, financial assets								
Total financial assets		18,073.6	16,010.2	32,363.2	12,828.2	6,420.6	3,415.3	15,341.7
Monetary gold and SDRs				316.9				
Currency and deposits		6,417.9	1,784.4	9,423.6	1,971.8	846.7	655.7	3,633.8
Short-term debt securities		11.5	137.9	615.0	301.0	388.2	31.8	841.0
Long-term debt securities		1,430.1	207.0	6,336.3	2,107.2	2,085.4	351.0	3,206.0
Loans		75.0	2,941.3	12,696.4	3,023.5	418.5	453.4	1,769.2
of which: Long-term		57.4	1,618.2	9,828.7	2,517.0	314.9	367.9	.
Shares and other equity		4,174.3	7,381.3	2,025.7	5,157.3	2,230.6	1,281.5	5,323.0
Quoted shares		731.3	1,310.0	513.5	1,805.5	416.7	287.8	.
Unquoted shares and other equity		2,054.1	5,700.8	1,179.4	2,674.0	438.7	846.5	.
Mutual fund shares		1,388.9	370.5	332.9	677.8	1,375.3	147.1	.
Insurance technical reserves		5,478.6	144.7	2.0	0.0	192.1	3.2	152.2
Other accounts receivable and financial derivatives		486.3	3,413.5	947.4	267.3	259.2	638.8	416.6
Net financial worth								

Source: ECB.

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

(EUR billions)

Liabilities 2009 Q4	Euro area	Households	Non-financial corporations	MFIs	Other financial inter-mediaries	Insurance corporations and pension funds	General govern-ment	Rest of the world
Opening balance sheet, liabilities								
Total liabilities		6,431.3	24,377.8	31,527.4	12,565.9	6,419.4	8,158.4	13,438.4
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			29.5	21,916.5	27.2	0.0	223.4	2,409.0
Short-term debt securities			326.2	680.2	63.5	9.2	1,051.0	248.8
Long-term debt securities			490.7	4,599.3	2,564.9	39.4	5,129.0	2,769.3
Loans		5,762.9	8,308.5		2,780.9	256.6	1,345.8	2,907.0
of which: Long-term		5,403.6	5,892.6		1,796.3	99.5	1,132.5	.
Shares and other equity			11,849.0	3,008.5	6,905.8	489.2	5.4	4,624.0
Quoted shares			3,299.0	595.0	189.7	176.1	0.0	.
Unquoted shares and other equity		6.6	8,549.9	1,160.7	2,157.7	312.3	5.4	.
Mutual fund shares				1,252.7	4,558.4			.
Insurance technical reserves		33.9	332.2	67.3	0.8	5,430.7	0.4	
Other accounts payable and financial derivatives		627.9	3,041.6	1,255.6	222.7	194.4	403.5	480.3
Net financial worth [1]	-1,409.7	11,427.3	-8,755.5	765.2	26.6	-149.3	-4,724.0	
Financial account, transactions in liabilities								
Total transactions in liabilities		62.2	109.9	48.7	180.9	60.2	101.0	101.6
Monetary gold and SDRs								
Currency and deposits			-0.1	35.6	-3.4	0.0	10.7	7.1
Short-term debt securities			-12.6	5.2	9.8	-0.7	-44.0	1.2
Long-term debt securities			22.0	-39.8	30.1	0.7	71.0	6.4
Loans		45.4	19.4		-10.8	-18.5	4.2	-12.9
of which: Long-term		45.6	38.6		-2.3	-2.4	32.8	.
Shares and other equity			30.5	-30.3	143.7	3.0	1.6	107.6
Quoted shares			9.5	14.5	8.7	2.7	0.0	.
Unquoted shares and other equity		0.0	21.0	15.7	38.3	0.2	1.6	.
Mutual fund shares				-60.5	96.7			.
Insurance technical reserves		0.1	0.1	1.8	0.0	78.7	0.0	
Other accounts payable and financial derivatives		16.7	50.7	76.2	11.5	-3.0	57.5	-7.8
Changes in net financial worth due to transactions [1]	10.5	99.3	44.1	-20.2	15.8	18.7	-147.2	-10.5
Other changes account, liabilities								
Total other changes in liabilities		1.4	261.3	19.9	101.4	27.7	-40.4	181.4
Monetary gold and SDRs								
Currency and deposits			0.0	58.1	0.0	0.0	0.0	20.2
Short-term debt securities			-9.5	2.4	-1.4	1.1	1.1	-5.1
Long-term debt securities			4.3	14.8	14.7	0.5	-33.3	39.0
Loans		-3.5	-15.1		14.6	-1.7	-0.2	-5.3
of which: Long-term		-2.2	-3.1		5.0	-1.2	-0.1	.
Shares and other equity			283.6	-42.7	88.7	-3.9	-0.6	104.0
Quoted shares			121.1	-36.2	-6.3	-6.9	0.0	.
Unquoted shares and other equity		0.1	162.5	-15.6	-8.3	3.0	-0.6	.
Mutual fund shares				9.1	103.3			.
Insurance technical reserves		0.2	0.0	0.0	0.0	26.7	0.0	
Other accounts payable and financial derivatives		4.6	-1.9	-12.6	-15.1	5.2	-7.5	28.5
Other changes in net financial worth [1]	95.8	52.1	-27.4	22.2	-62.4	43.8	67.6	-65.8
Closing balance sheet, liabilities								
Total liabilities		6,494.9	24,749.0	31,596.0	12,848.2	6,507.3	8,219.0	13,721.4
Monetary gold and SDRs								
Currency and deposits			29.4	22,010.3	23.8	0.0	234.0	2,436.3
Short-term debt securities			304.1	687.7	71.9	9.6	1,008.1	244.9
Long-term debt securities			517.0	4,574.3	2,609.8	40.6	5,166.7	2,814.7
Loans		5,804.8	8,312.8		2,784.7	236.3	1,349.9	2,888.8
of which: Long-term		5,447.0	5,928.1		1,799.0	95.8	1,165.2	.
Shares and other equity			12,163.0	2,935.4	7,138.2	488.3	6.4	4,835.7
Quoted shares			3,429.7	573.4	192.1	171.9	0.0	.
Unquoted shares and other equity		6.7	8,733.4	1,160.8	2,187.7	315.5	6.4	.
Mutual fund shares				1,201.3	4,758.3			.
Insurance technical reserves		34.1	332.3	69.1	0.8	5,536.0	0.4	
Other accounts payable and financial derivatives		649.3	3,090.4	1,319.2	219.1	196.6	453.5	501.0
Net financial worth [1]	-1,303.4	11,578.7	-8,738.9	767.2	-20.0	-86.7	-4,803.7	

Source: ECB.

3.2 Euro area non-financial accounts

(EUR billions; four-quarter cumulated flows)

Uses	2005	2006	2007	2008 Q1-2008 Q4	2008 Q2-2009 Q1	2008 Q3-2009 Q2	2008 Q4-2009 Q3	2009 Q1-2009 Q4
Generation of income account								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	3,906.8	4,069.0	4,256.9	4,433.7	4,439.5	4,437.3	4,428.8	4,420.4
Other taxes less subsidies on production	129.8	129.3	137.1	131.7	128.7	121.8	116.5	109.2
Consumption of fixed capital	1,190.3	1,250.6	1,318.1	1,381.5	1,391.8	1,398.7	1,403.5	1,407.4
Net operating surplus and mixed income [1]	2,067.3	2,183.2	2,328.7	2,342.6	2,277.8	2,197.2	2,152.2	2,141.6
Allocation of primary income account								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,585.5	3,013.8	3,580.0	3,864.4	3,740.9	3,495.6	3,224.1	2,985.4
Interest	1,344.6	1,643.3	2,058.0	2,306.8	2,211.9	2,051.3	1,836.2	1,640.7
Other property income	1,240.9	1,370.5	1,522.0	1,557.6	1,528.9	1,444.3	1,387.8	1,344.7
Net national income [1]	6,967.8	7,321.7	7,703.1	7,787.9	7,703.1	7,610.2	7,547.1	7,532.9
Secondary distribution of income account								
Net national income								
Current taxes on income, wealth, etc.	935.9	1,028.2	1,111.7	1,122.8	1,111.6	1,074.4	1,044.6	1,017.7
Social contributions	1,477.9	1,539.8	1,595.2	1,660.9	1,668.4	1,668.3	1,670.5	1,672.0
Social benefits other than social transfers in kind	1,505.5	1,553.4	1,598.9	1,665.6	1,690.0	1,721.3	1,752.3	1,781.5
Other current transfers	712.0	723.3	752.8	792.0	786.8	779.0	770.3	767.7
Net non-life insurance premiums	179.6	179.9	184.3	189.8	187.0	183.5	179.0	175.0
Non-life insurance claims	180.5	180.2	184.1	190.9	188.0	184.2	179.6	175.4
Other	351.9	363.2	384.4	411.3	411.8	411.2	411.7	417.3
Net disposable income [1]	6,881.4	7,229.5	7,608.5	7,682.5	7,597.5	7,503.6	7,438.5	7,422.9
Use of income account								
Net disposable income								
Final consumption expenditure	6,355.4	6,631.8	6,893.4	7,161.8	7,169.8	7,164.5	7,158.9	7,174.5
Individual consumption expenditure	5,690.5	5,946.6	6,181.8	6,410.6	6,407.8	6,394.9	6,382.4	6,392.8
Collective consumption expenditure	664.9	685.3	711.6	751.2	762.0	769.6	776.5	781.7
Adjustment for the change in the net equity of households in pension fund reserves	60.8	62.9	60.1	64.9	64.7	63.0	60.9	59.5
Net saving [1]	526.4	597.9	715.2	520.7	427.7	339.1	279.6	248.5
Capital account								
Net saving								
Gross capital formation	1,716.7	1,875.4	2,019.9	2,058.1	1,991.4	1,891.8	1,808.9	1,738.0
Gross fixed capital formation	1,709.9	1,853.4	1,992.6	2,022.5	1,970.7	1,899.7	1,839.0	1,795.7
Changes in inventories and acquisitions less disposals of valuables	6.8	22.1	27.4	35.6	20.7	-7.9	-30.0	-57.6
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	-0.4	-0.4	-1.1	0.7	1.1	0.7	0.4	0.2
Capital transfers	183.7	169.9	151.5	160.8	159.1	170.1	172.2	179.0
Capital taxes	24.4	22.5	24.3	23.8	23.6	28.6	29.0	33.9
Other capital transfers	159.3	147.4	127.2	137.0	135.5	141.6	143.3	145.2
Net lending (+)/net borrowing (-) (from capital account) [1]	13.5	-12.0	29.3	-145.7	-164.5	-145.9	-117.1	-73.1

Sources: ECB and Eurostat.

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

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

(EUR billions; four-quarter cumulated flows)

Resources	2005	2006	2007	2008 Q1-2008 Q4	2008 Q2-2009 Q1	2008 Q3-2009 Q2	2008 Q4-2009 Q3	2009 Q1-2009 Q4
Generation of income account								
Gross value added (basic prices)	7,294.3	7,632.1	8,040.8	8,289.6	8,237.8	8,155.0	8,101.1	8,078.5
Taxes less subsidies on products	845.3	914.0	959.5	946.5	930.2	913.7	902.7	895.1
Gross domestic product (market prices)[2]	8,139.6	8,546.1	9,000.4	9,236.1	9,168.0	9,068.7	9,003.8	8,973.6
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
Net operating surplus and mixed income								
Allocation of primary income account								
Net operating surplus and mixed income	2,067.3	2,183.2	2,328.7	2,342.6	2,277.8	2,197.2	2,152.2	2,141.6
Compensation of employees	3,914.1	4,076.5	4,264.9	4,442.1	4,447.7	4,445.4	4,436.6	4,427.4
Taxes less subsidies on production	988.2	1,054.7	1,103.6	1,084.3	1,064.6	1,042.3	1,027.6	1,019.7
Property income	2,583.8	3,021.0	3,585.9	3,783.4	3,654.0	3,420.9	3,154.7	2,929.7
Interest	1,319.0	1,613.7	2,016.4	2,245.4	2,146.8	1,984.9	1,767.3	1,574.4
Other property income	1,264.8	1,407.3	1,569.5	1,538.0	1,507.2	1,436.0	1,387.5	1,355.2
Net national income								
Secondary distribution of income account								
Net national income	6,967.8	7,321.7	7,703.1	7,787.9	7,703.1	7,610.2	7,547.1	7,532.9
Current taxes on income, wealth, etc.	939.5	1,032.9	1,119.1	1,131.0	1,119.6	1,080.7	1,050.1	1,023.4
Social contributions	1,477.2	1,539.0	1,594.4	1,660.3	1,667.5	1,667.2	1,669.5	1,671.2
Social benefits other than social transfers in kind	1,497.9	1,545.4	1,590.0	1,657.5	1,681.9	1,713.4	1,744.6	1,773.7
Other current transfers	630.5	635.3	660.5	687.2	682.1	675.1	664.8	660.5
Net non-life insurance premiums	180.5	180.2	184.1	190.9	188.0	184.2	179.6	175.4
Non-life insurance claims	178.3	177.1	181.5	187.3	184.3	180.8	176.1	172.1
Other	271.6	277.9	294.9	309.1	309.8	310.1	309.1	313.0
Net disposable income								
Use of income account								
Net disposable income	6,881.4	7,229.5	7,608.5	7,682.5	7,597.5	7,503.6	7,438.5	7,422.9
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in the net equity of households in pension fund reserves	61.0	63.1	60.3	64.9	64.7	63.0	60.9	59.5
Net saving								
Capital account								
Net saving	526.4	597.9	715.2	520.7	427.7	339.1	279.6	248.5
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,190.3	1,250.6	1,318.1	1,381.5	1,391.8	1,398.7	1,403.5	1,407.4
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	196.8	184.4	166.2	171.7	167.5	178.9	181.3	188.4
Capital taxes	24.4	22.5	24.3	23.8	23.6	28.6	29.0	33.9
Other capital transfers	172.3	161.9	142.0	147.9	144.0	150.4	152.3	154.5
Net lending (+)/net borrowing (-) (from capital account)								

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

3.3 Households

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

	2005	2006	2007	2008 Q1-2008 Q4	2008 Q2-2009 Q1	2008 Q3-2009 Q2	2008 Q4-2009 Q3	2009 Q1-2009 Q4
Income, saving and changes in net worth								
Compensation of employees (+)	3,914.1	4,076.5	4,264.9	4,442.1	4,447.7	4,445.4	4,436.6	4,427.4
Gross operating surplus and mixed income (+)	1,338.9	1,415.3	1,499.4	1,550.8	1,543.7	1,531.4	1,520.4	1,515.9
Interest receivable (+)	225.4	261.6	304.9	336.6	321.9	296.2	263.5	235.4
Interest payable (-)	130.5	163.4	209.1	233.7	217.4	192.6	164.0	139.8
Other property income receivable (+)	702.7	747.7	790.2	795.4	787.3	762.1	745.1	736.3
Other property income payable (-)	9.5	9.8	10.0	10.1	10.2	10.3	10.3	10.2
Current taxes on income and wealth (-)	741.7	794.3	851.7	892.3	890.3	877.8	871.8	860.8
Net social contributions (-)	1,474.0	1,535.7	1,591.0	1,656.5	1,664.0	1,663.7	1,665.9	1,667.2
Net social benefits (+)	1,492.6	1,539.9	1,584.3	1,651.7	1,676.0	1,707.5	1,738.7	1,767.8
Net current transfers receivable (+)	66.4	66.7	69.4	72.1	73.6	76.7	79.8	82.1
= Gross disposable income	5,384.4	5,604.3	5,851.5	6,056.1	6,068.3	6,074.9	6,072.1	6,086.9
Final consumption expenditure (-)	4,690.6	4,897.9	5,088.5	5,267.0	5,249.0	5,225.1	5,198.6	5,197.8
Changes in net worth in pension funds (+)	60.6	62.7	59.8	64.6	64.3	62.7	60.6	59.2
= Gross saving	754.4	769.2	822.8	853.7	883.6	912.4	934.0	948.3
Consumption of fixed capital (-)	326.0	345.2	366.0	384.1	386.5	388.2	389.4	389.8
Net capital transfers receivable (+)	24.0	18.7	12.0	13.5	13.1	14.3	15.7	10.9
Other changes in net worth [1] (+)	565.8	523.4	62.3	-1,689.2	-1,330.9	-722.3	56.9	524.0
= Changes in net worth [1]	1,018.1	966.1	531.1	-1,206.1	-820.7	-183.8	617.2	1,093.4
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	552.6	605.3	644.7	642.3	623.0	598.2	575.1	557.2
Consumption of fixed capital (-)	326.0	345.2	366.0	384.1	386.5	388.2	389.4	389.8
Main items of financial investment (+)								
Short-term assets	205.4	308.1	423.2	427.4	381.2	290.4	194.7	33.6
Currency and deposits	246.8	284.1	349.8	439.0	398.4	335.6	256.3	121.8
Money market fund shares	-21.4	1.4	38.3	-13.1	1.8	-17.1	-22.0	-43.1
Debt securities [2]	-20.0	22.6	35.1	1.5	-19.0	-28.0	-39.5	-45.1
Long-term assets	412.8	336.8	153.0	39.4	72.8	171.7	302.9	449.7
Deposits	-7.6	1.9	-31.1	-27.4	-13.7	15.7	55.1	88.1
Debt securities	-2.6	56.1	45.4	56.2	43.2	25.6	27.4	14.8
Shares and other equity	130.2	-19.4	-83.4	-115.9	-90.2	-33.5	28.1	96.1
Quoted and unquoted shares and other equity	63.2	-4.5	-4.5	12.1	25.2	39.0	47.5	42.7
Mutual fund shares	67.0	-14.9	-78.8	-128.0	-115.4	-72.5	-19.4	53.4
Life insurance and pension fund reserves	292.7	298.2	222.2	126.6	133.5	163.8	192.3	250.7
Main items of financing (-)								
Loans	398.9	395.2	356.9	206.1	154.8	126.0	98.5	98.3
of which: From euro area MFIs	358.5	349.0	283.7	82.8	20.1	10.3	-15.8	63.1
Other changes in financial assets (+)								
Shares and other equity	473.3	468.3	55.6	-1,407.7	-1,069.6	-628.3	-61.1	335.5
Life insurance and pension fund reserves	109.5	46.7	25.1	-252.6	-201.2	-99.6	55.5	152.9
Remaining net flows (+)	-10.5	-58.6	-47.7	-64.7	-85.7	-2.0	38.0	52.6
= Changes in net worth [1]	1,018.1	966.1	531.1	-1,206.1	-820.7	-183.8	617.2	1,093.4
Financial balance sheet								
Financial assets (+)								
Short-term assets	4,478.6	4,744.5	5,199.8	5,698.3	5,772.1	5,787.1	5,745.9	5,731.7
Currency and deposits	4,173.7	4,453.9	4,842.8	5,314.4	5,375.7	5,431.0	5,397.6	5,468.3
Money market fund shares	291.2	252.7	289.4	317.2	342.3	310.9	307.6	243.6
Debt securities [2]	13.6	37.9	67.6	66.7	54.0	45.2	40.7	19.8
Long-term assets	11,075.6	11,988.0	12,168.2	10,452.6	10,184.5	10,638.6	11,225.5	11,439.1
Deposits	998.8	1,009.8	943.4	883.7	859.4	878.4	907.7	949.5
Debt securities	1,238.8	1,306.6	1,332.1	1,366.7	1,337.7	1,372.7	1,438.6	1,421.7
Shares and other equity	4,570.6	5,059.3	5,033.1	3,468.6	3,243.7	3,507.9	3,836.4	3,930.7
Quoted and unquoted shares and other equity	3,234.3	3,641.6	3,674.1	2,488.1	2,309.3	2,497.0	2,767.2	2,785.4
Mutual fund shares	1,336.2	1,417.7	1,359.1	980.5	934.4	1,010.9	1,069.2	1,145.3
Life insurance and pension fund reserves	4,267.4	4,612.3	4,859.6	4,733.6	4,743.8	4,879.6	5,042.8	5,137.1
Remaining net assets (+)	270.8	241.9	211.7	228.5	211.1	238.3	218.7	212.6
Liabilities (-)								
Loans	4,766.1	5,165.6	5,510.9	5,708.0	5,701.9	5,739.4	5,762.9	5,804.8
of which: From euro area MFIs	4,201.0	4,553.1	4,825.5	4,901.1	4,878.7	4,899.0	4,916.2	4,956.0
= Net financial wealth	11,058.9	11,808.8	12,068.8	10,671.4	10,465.8	10,924.5	11,427.3	11,578.7

Sources: ECB and Eurostat.

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

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

3.4 Non-financial corporations

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

	2005	2006	2007	2008 Q1-2008 Q4	2008 Q2-2009 Q1	2008 Q3-2009 Q2	2008 Q4-2009 Q3	2009 Q1-2009 Q4
Income and saving								
Gross value added (basic prices) (+)	4,163.1	4,369.3	4,620.3	4,750.3	4,693.1	4,612.1	4,556.3	4,528.4
Compensation of employees (-)	2,471.3	2,583.9	2,713.6	2,831.9	2,828.1	2,818.6	2,802.5	2,787.2
Other taxes less subsidies on production (-)	72.8	75.4	80.3	76.1	74.0	68.9	64.2	59.1
= Gross operating surplus (+)	1,619.0	1,710.0	1,826.4	1,842.2	1,791.0	1,724.6	1,689.6	1,682.1
Consumption of fixed capital (-)	670.5	701.9	738.6	774.2	780.2	783.6	786.2	788.6
= Net operating surplus (+)	948.4	1,008.1	1,087.8	1,068.1	1,010.8	941.0	903.4	893.5
Property income receivable (+)	433.8	506.0	574.0	594.1	570.8	536.6	507.7	478.6
Interest receivable	141.3	169.7	198.9	223.8	211.8	194.9	174.3	157.0
Other property income receivable	292.5	336.3	375.1	370.3	358.9	341.6	333.4	321.7
Interest and rents payable (-)	236.1	284.0	345.7	400.1	381.4	350.5	310.7	274.2
= Net entrepreneurial income (+)	1,146.1	1,230.1	1,316.1	1,262.1	1,200.2	1,127.0	1,100.5	1,097.9
Distributed income (-)	857.5	926.2	987.4	1,030.3	1,018.2	976.1	941.3	917.2
Taxes on income and wealth payable (-)	149.1	189.8	211.9	193.5	186.5	165.8	144.8	131.6
Social contributions receivable (+)	72.8	74.9	63.7	66.0	65.6	65.6	65.5	65.6
Social benefits payable (-)	60.7	60.6	62.0	63.5	63.7	64.0	64.3	64.4
Other net transfers (-)	61.4	65.8	56.6	58.9	58.3	58.5	59.5	60.4
= Net saving	90.1	62.5	62.0	-18.2	-60.9	-71.8	-43.9	-10.1
Investment, financing and saving								
Net acquisition of non-financial assets (+)	253.0	311.7	363.9	354.3	298.2	212.9	149.8	95.4
Gross fixed capital formation (+)	915.9	989.9	1,077.1	1,095.1	1,059.7	1,006.9	967.6	942.2
Consumption of fixed capital (-)	670.5	701.9	738.6	774.2	780.2	783.6	786.2	788.6
Net acquisition of other non-financial assets (+)	7.7	23.8	25.4	33.4	18.7	-10.3	-31.6	-58.2
Main items of financial investment (+)								
Short-term assets	128.5	159.8	168.4	61.7	3.7	35.0	81.0	114.5
Currency and deposits	113.8	146.1	154.4	13.7	-6.4	10.2	37.7	90.0
Money market fund shares	7.4	2.3	-19.2	28.7	29.1	36.4	41.9	42.6
Debt securities [1]	7.4	11.5	33.2	19.3	-19.0	-11.5	1.3	-18.1
Long-term assets	390.4	517.6	736.0	663.1	685.5	561.3	413.4	207.2
Deposits	31.8	24.0	-25.6	22.6	36.5	39.7	11.9	-2.1
Debt securities	-34.4	14.0	-32.4	-71.5	-3.0	17.2	-6.4	-6.2
Shares and other equity	234.2	285.4	446.9	365.7	376.1	340.8	283.7	137.5
Other (mainly intercompany loans)	158.8	194.3	347.2	346.2	275.9	163.6	124.2	78.1
Remaining net assets (+)	87.8	117.4	110.1	53.2	-102.6	-75.8	-76.6	-54.4
Main items of financing (-)								
Debt	432.7	732.4	843.0	760.7	575.7	405.7	230.4	82.5
of which: Loans from euro area MFIs	276.7	449.0	544.2	392.6	252.0	98.2	-35.0	-151.4
of which: Debt securities	14.0	40.0	33.5	62.6	67.5	79.2	92.2	76.9
Shares and other equity	275.9	238.8	404.7	311.1	287.6	317.3	297.5	206.2
Quoted shares	101.7	38.1	70.4	2.5	13.2	47.1	57.9	58.6
Unquoted shares and other equity	174.2	200.7	334.2	308.5	274.4	270.2	239.5	147.6
Net capital transfers receivable (-)	60.6	72.3	69.8	76.3	78.8	77.4	78.3	81.0
= Net saving	90.1	62.5	62.0	-18.2	-60.9	-71.8	-43.9	-10.1
Financial balance sheet								
Financial assets								
Short-term assets	1,509.3	1,675.1	1,827.7	1,889.0	1,876.5	1,908.3	1,957.9	1,999.2
Currency and deposits	1,229.6	1,367.3	1,507.7	1,537.6	1,510.0	1,551.2	1,579.5	1,634.1
Money market fund shares	173.4	181.4	157.4	182.2	208.1	213.6	220.4	206.5
Debt securities [1]	106.3	126.4	162.6	169.2	158.4	143.6	158.0	158.6
Long-term assets	8,809.7	10,197.0	11,102.2	9,365.6	9,098.1	9,494.4	10,149.1	10,452.8
Deposits	107.9	151.8	156.0	173.6	173.9	162.4	152.6	150.3
Debt securities	282.4	296.9	262.7	177.5	181.9	157.7	153.2	186.3
Shares and other equity	6,432.5	7,564.1	8,178.4	6,160.1	5,838.3	6,280.5	6,926.4	7,174.9
Other (mainly intercompany loans)	1,986.9	2,184.1	2,505.2	2,854.4	2,904.0	2,893.9	2,917.0	2,941.3
Remaining net assets	335.8	352.9	385.2	461.1	448.8	479.6	503.2	497.2
Liabilities								
Debt	7,195.5	7,892.8	8,633.5	9,381.1	9,414.3	9,450.5	9,457.7	9,466.3
of which: Loans from euro area MFIs	3,524.3	3,981.9	4,507.1	4,895.6	4,859.3	4,825.9	4,759.4	4,708.9
of which: Debt securities	667.1	686.4	684.1	739.6	736.6	771.2	816.9	821.1
Shares and other equity	11,206.7	13,218.6	14,408.5	10,616.8	9,955.0	10,688.9	11,849.0	12,163.0
Quoted shares	3,721.5	4,533.5	5,023.9	2,850.0	2,483.7	2,827.6	3,299.0	3,429.7
Unquoted shares and other equity	7,485.1	8,685.0	9,384.6	7,766.9	7,471.3	7,861.3	8,549.9	8,733.4

Sources: ECB and Eurostat.

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

3.5 Insurance corporations and pension funds

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

	2005	2006	2007	2008 Q1-2008 Q4	2008 Q2-2009 Q1	2008 Q3-2009 Q2	2008 Q4-2009 Q3	2009 Q1-2009 Q4
Financial account, financial transactions								
Main items of financial investment (+)								
Short-term assets	22.9	64.4	69.2	116.5	69.7	54.6	41.8	22.6
Currency and deposits	7.2	11.0	6.5	57.0	18.4	11.8	-0.7	-33.2
Money market fund shares	-0.9	3.4	2.8	20.7	18.6	12.1	7.0	9.0
Debt securities [1]	16.6	49.9	59.9	38.8	32.7	30.6	35.5	46.7
Long-term assets	290.8	293.7	169.9	67.8	49.7	81.6	112.1	178.4
Deposits	16.7	68.4	48.8	-4.7	8.0	9.1	17.2	15.2
Debt securities	132.9	111.5	48.8	33.5	52.8	7.6	12.8	49.1
Loans	-0.5	-1.3	-15.6	21.8	-2.1	10.3	7.9	5.3
Quoted shares	31.3	-2.5	-0.4	-15.2	-20.2	-22.7	-96.9	-84.0
Unquoted shares and other equity	19.0	29.5	22.0	23.3	16.1	11.1	2.4	-5.8
Mutual fund shares	91.5	88.2	66.4	9.2	-4.9	66.3	168.8	198.6
Remaining net assets (+)	-0.7	9.6	-11.5	19.6	8.3	31.2	30.4	32.6
Main items of financing (-)								
Debt securities	-0.4	5.7	3.0	11.7	13.8	9.9	10.0	0.8
Loans	12.8	44.9	-5.3	24.3	-2.3	12.3	5.9	-28.3
Shares and other equity	10.5	9.2	1.7	0.1	1.5	2.3	4.4	4.3
Insurance technical reserves	340.4	307.5	242.3	133.1	117.8	147.8	174.0	258.9
Net equity of households in life insurance and pension fund reserves	296.4	301.0	239.1	129.5	122.5	151.7	178.4	250.1
Prepayments of insurance premiums and reserves for outstanding claims	44.0	6.5	3.2	3.6	-4.6	-3.9	-4.4	8.8
= Changes in net financial worth due to transactions	-50.3	0.5	-14.2	34.6	-3.1	-4.9	-10.0	-2.2
Other changes account								
Other changes in financial assets (+)								
Shares and other equity	197.7	178.8	17.6	-564.7	-433.5	-280.2	-57.6	176.3
Other net assets	60.9	-39.8	-39.7	35.8	30.0	51.5	95.4	91.2
Other changes in liabilities (-)								
Shares and other equity	123.0	41.4	-33.3	-179.1	-187.8	-123.2	-53.4	14.2
Insurance technical reserves	144.7	55.1	27.6	-248.8	-203.9	-97.6	65.9	163.2
Net equity of households in life insurance and pension fund reserves	153.8	51.3	27.7	-249.3	-197.9	-93.9	65.5	166.3
Prepayments of insurance premiums and reserves for outstanding claims	-9.1	3.8	-0.1	0.5	-6.0	-3.7	0.3	-3.1
= Other changes in net financial worth	-9.2	42.5	-16.5	-101.0	-11.9	-7.9	25.4	90.1
Financial balance sheet								
Financial assets (+)								
Short-term assets	430.4	503.0	566.2	688.4	709.9	709.1	695.7	720.2
Currency and deposits	146.6	157.1	163.6	224.5	213.2	196.1	190.3	195.2
Money market fund shares	74.3	80.1	80.7	98.8	112.3	104.2	103.2	99.1
Debt securities [1]	209.5	265.8	321.9	365.2	384.4	408.8	402.2	425.9
Long-term assets	4,715.6	5,125.4	5,273.9	4,796.8	4,749.6	4,909.8	5,122.6	5,249.1
Deposits	519.8	589.8	638.8	636.1	649.4	651.6	655.4	651.5
Debt securities	1,801.1	1,853.9	1,859.5	1,909.3	1,948.1	1,928.2	2,003.9	2,047.6
Loans	411.4	406.9	393.1	413.8	414.6	419.5	419.3	418.5
Quoted shares	634.5	718.1	713.2	417.1	374.9	436.9	409.7	416.7
Unquoted shares and other equity	414.4	487.8	527.2	445.4	417.2	416.1	437.7	438.7
Mutual fund shares	934.4	1,068.9	1,142.2	975.1	945.5	1,057.4	1,196.6	1,276.1
Remaining net assets (+)	182.6	212.6	193.1	235.5	236.6	250.7	257.5	254.8
Liabilities (-)								
Debt securities	21.3	35.9	29.3	46.0	44.9	44.8	48.7	50.2
Loans	201.1	242.8	233.9	265.7	268.4	268.2	256.6	236.3
Shares and other equity	629.8	680.3	648.7	469.8	410.3	436.3	489.2	488.3
Insurance technical reserves	4,597.0	4,959.6	5,229.5	5,113.8	5,116.7	5,260.4	5,430.7	5,536.0
Net equity of households in life insurance and pension fund reserves	3,910.9	4,263.2	4,530.0	4,410.2	4,417.1	4,557.4	4,724.2	4,826.6
Prepayments of insurance premiums and reserves for outstanding claims	686.1	696.3	699.5	703.6	699.6	703.0	706.5	709.4
= Net financial wealth	-120.6	-77.6	-108.3	-174.6	-144.3	-140.1	-149.3	-86.7

Source: ECB.

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

4 FINANCIAL MARKETS

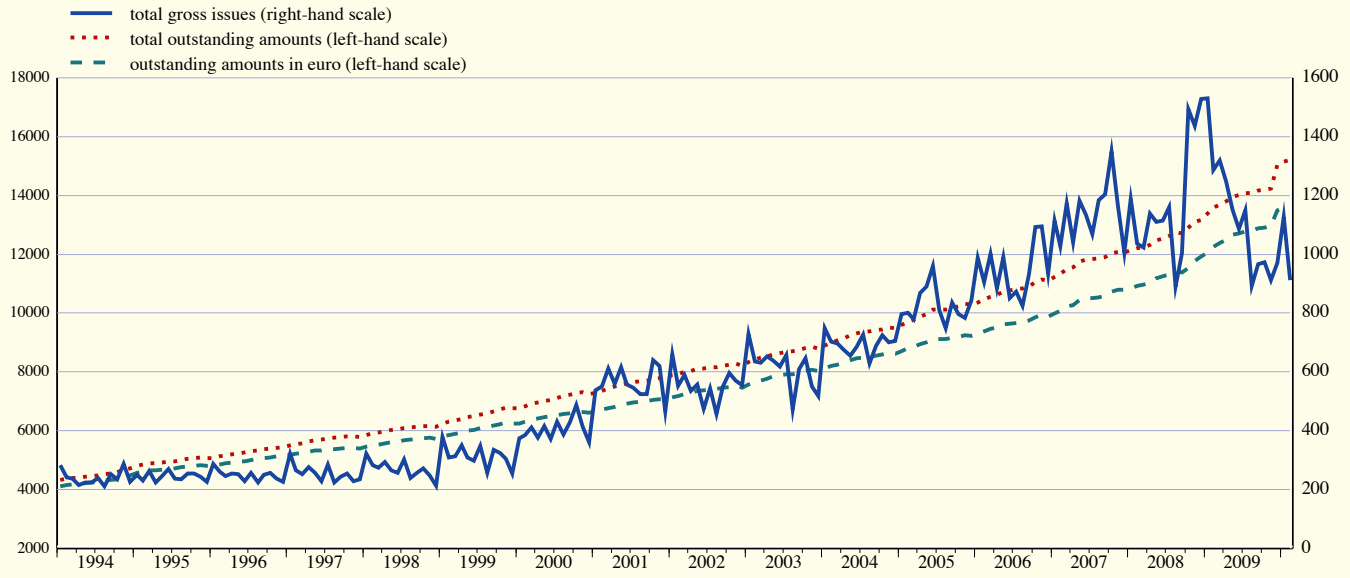
4.1 Securities other than shares by original maturity, residency of the issuer and currency

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

	Total in euro [1]			By euro area residents								
				In euro			In all currencies					
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted [2]	
											Net issues	6-month growth rates
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2009 Feb.	14,437.1	1,260.2	190.8	12,248.7	1,200.9	184.9	13,581.5	1,286.5	204.4	11.0	157.1	13.1
Mar.	14,609.0	1,318.1	170.4	12,384.7	1,229.9	134.5	13,687.0	1,318.7	149.9	11.9	134.4	15.2
Apr.	14,685.8	1,233.7	79.5	12,484.4	1,167.4	102.4	13,798.2	1,247.9	108.9	12.0	91.0	14.6
May	14,894.0	1,160.0	208.1	12,658.6	1,070.7	174.2	13,941.2	1,151.2	173.1	12.1	113.2	13.1
June	14,983.6	1,088.9	89.1	12,718.5	1,006.8	59.1	14,006.1	1,087.0	68.8	11.9	87.4	10.6
July	15,014.6	1,124.4	31.6	12,773.7	1,069.8	55.7	14,072.1	1,148.9	67.3	11.7	101.1	10.5
Aug.	15,063.8	883.2	48.2	12,804.1	827.4	29.4	14,092.8	893.4	22.7	11.0	60.8	8.9
Sep.	15,168.8	965.6	106.1	12,882.2	882.4	79.2	14,162.2	966.1	83.4	12.0	144.8	9.0
Oct.	15,161.0	950.7	-7.1	12,903.1	901.1	21.6	14,183.3	972.4	24.4	10.9	-1.3	7.5
Nov.	15,216.6	888.5	55.9	12,960.9	846.2	58.0	14,244.7	912.0	66.6	9.6	42.7	6.4
Dec.	15,756.7	935.9	-45.1	13,501.9	882.4	-44.2	15,030.6	969.7	-44.5	8.1	34.5	5.3
2010 Jan.	.	.	.	13,585.7	1,021.3	83.3	15,150.1	1,128.0	98.6	7.7	70.8	4.8
Feb.	.	.	.	13,632.8	821.8	47.9	15,206.5	913.0	41.1	6.3	-11.0	3.7
	Long-term											
2009 Feb.	12,824.0	301.5	169.2	10,752.9	270.5	161.4	11,893.3	297.6	173.5	9.2	136.3	10.6
Mar.	13,004.2	319.9	150.5	10,923.1	280.3	140.4	12,027.9	301.9	141.6	10.3	138.9	13.2
Apr.	13,080.2	292.4	79.1	10,991.1	257.6	71.3	12,105.7	276.4	74.7	10.3	71.4	14.0
May	13,283.4	339.2	204.3	11,161.3	281.4	171.4	12,256.6	301.8	175.6	10.6	112.9	13.3
June	13,404.0	313.2	118.9	11,269.9	274.6	106.7	12,384.6	308.5	126.8	10.8	99.7	11.9
July	13,429.7	269.5	25.9	11,302.1	248.1	32.5	12,425.2	273.0	41.4	10.8	82.6	11.2
Aug.	13,486.6	131.6	56.7	11,344.0	109.0	41.6	12,465.6	121.9	45.8	10.5	94.0	10.3
Sep.	13,558.6	223.6	72.0	11,418.3	197.0	74.3	12,528.5	222.6	74.5	11.5	120.0	9.9
Oct.	13,618.0	244.5	57.8	11,473.6	216.1	53.8	12,580.3	235.4	55.6	11.7	52.8	9.5
Nov.	13,705.2	199.5	86.2	11,556.7	178.8	82.1	12,659.9	193.9	84.8	10.8	51.2	8.4
Dec.	14,226.5	168.7	-18.9	12,087.0	153.2	-10.0	13,411.8	165.1	-18.0	9.2	-14.2	6.1
2010 Jan.	.	.	.	12,159.4	272.6	73.1	13,516.3	304.6	89.0	9.1	131.9	6.8
Feb.	.	.	.	12,229.6	192.8	71.0	13,597.0	207.3	66.3	8.0	24.4	5.6

C15 Total outstanding amounts and gross issues of securities other than shares issued by euro area residents

(EUR billions)



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

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

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

4.2 Securities other than shares issued by euro area residents, by sector of the issuer and instrument type

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

1. Outstanding amounts and gross issues

	Outstanding amounts						Gross issues [1]					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2008	13,176	5,273	1,925	701	4,938	340	1,177	816	75	100	162	24
2009	15,031	5,376	2,972	799	5,510	373	1,124	738	58	85	221	22
2009 Q1	13,687	5,396	2,032	723	5,192	343	1,378	922	78	92	250	35
Q2	14,006	5,437	2,111	758	5,349	351	1,162	749	62	90	241	20
Q3	14,162	5,431	2,136	785	5,452	358	1,003	652	43	84	212	12
Q4	15,031	5,376	2,972	799	5,510	373	951	628	49	72	182	20
2009 Nov.	14,245	5,389	2,156	796	5,537	366	912	590	37	69	197	20
Dec.	15,031	5,376	2,972	799	5,510	373	970	695	67	69	121	18
2010 Jan.	15,150	5,425	3,000	809	5,549	368	1,128	714	73	69	258	14
Feb.	15,206	5,416	2,976	827	5,612	375	913	574	32	71	214	22
	Short-term											
2008	1,591	822	62	116	566	25	961	722	27	92	101	19
2009	1,619	733	70	70	725	21	874	639	14	68	137	15
2009 Q1	1,659	839	42	98	663	18	1,078	806	17	74	154	27
Q2	1,622	785	37	85	699	16	866	631	14	69	139	13
Q3	1,634	751	31	82	752	19	797	569	10	71	139	8
Q4	1,619	733	70	70	725	21	753	550	14	60	116	13
2009 Nov.	1,585	706	34	74	751	19	718	515	9	58	121	15
Dec.	1,619	733	70	70	725	21	805	621	20	59	93	12
2010 Jan.	1,634	737	69	73	741	13	823	595	20	61	143	6
Feb.	1,609	735	59	77	723	16	706	499	25	55	115	12
	Long-term [2]											
2008	11,586	4,451	1,863	585	4,371	316	216	95	48	8	61	4
2009	13,412	4,644	2,902	729	4,784	353	250	99	44	16	84	6
2009 Q1	12,028	4,558	1,991	625	4,529	324	300	116	61	18	96	8
Q2	12,385	4,652	2,074	673	4,650	335	296	119	48	21	102	7
Q3	12,529	4,680	2,105	703	4,701	339	206	83	33	14	72	4
Q4	13,412	4,644	2,902	729	4,784	353	198	78	35	13	66	6
2009 Nov.	12,660	4,683	2,122	722	4,786	348	194	75	28	11	76	5
Dec.	13,412	4,644	2,902	729	4,784	353	165	74	47	10	28	7
2010 Jan.	13,516	4,688	2,930	735	4,808	355	305	120	53	8	115	8
Feb.	13,597	4,681	2,917	750	4,890	358	207	75	7	16	100	10
	of which: Long-term fixed rate											
2008	7,615	2,327	635	448	3,955	250	120	49	9	6	53	3
2009	8,711	2,607	897	598	4,338	271	172	60	18	16	74	4
2009 Q1	7,935	2,395	701	491	4,095	253	208	72	27	18	86	5
Q2	8,250	2,493	747	539	4,211	260	210	72	23	20	90	5
Q3	8,376	2,528	767	570	4,251	259	140	49	14	13	61	3
Q4	8,711	2,607	897	598	4,338	271	131	45	10	12	59	5
2009 Nov.	8,508	2,550	774	590	4,329	265	142	47	13	11	68	2
Dec.	8,711	2,607	897	598	4,338	271	83	33	8	8	27	6
2010 Jan.	8,765	2,648	901	600	4,347	268	202	80	11	7	100	4
Feb.	8,866	2,652	897	612	4,435	271	158	41	3	13	93	8
	of which: Long-term variable rate											
2008	3,478	1,725	1,198	127	363	64	81	36	38	1	5	1
2009	4,280	1,751	1,954	121	374	81	61	27	25	1	6	2
2009 Q1	3,586	1,758	1,264	125	369	70	75	32	34	0	5	3
Q2	3,615	1,741	1,301	124	374	74	65	30	24	1	7	2
Q3	3,612	1,726	1,312	123	372	79	49	21	18	1	7	1
Q4	4,280	1,751	1,954	121	374	81	58	26	24	1	5	2
2009 Nov.	3,606	1,708	1,322	122	373	81	42	21	14	0	5	2
Dec.	4,280	1,751	1,954	121	374	81	74	34	38	1	1	0
2010 Jan.	4,320	1,753	1,976	125	382	85	84	31	40	0	8	5
Feb.	4,297	1,743	1,967	128	374	86	40	30	2	3	3	2

Source: ECB.

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

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

4.2 Securities other than shares issued by euro area residents, by sector of the issuer and instrument type

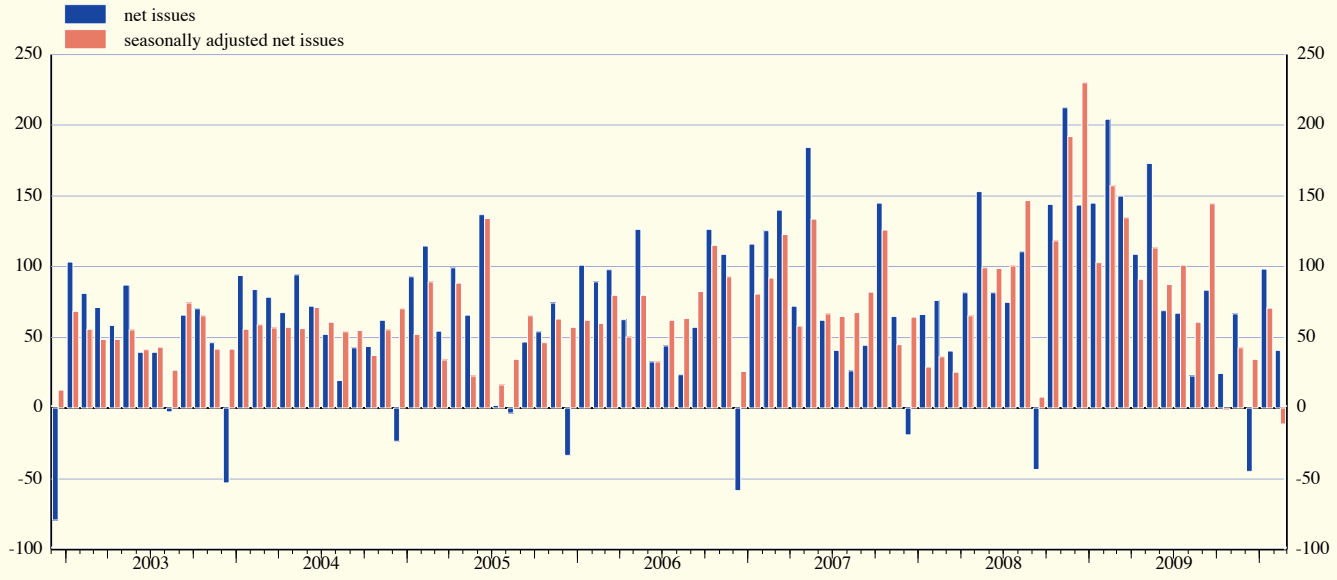
(EUR billions unless otherwise indicated; transactions during the period; nominal values)

2. Net issues

	Non-seasonally adjusted [1]						Seasonally adjusted [1]					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2008	95.2	23.1	34.9	4.3	31.8	1.1	95.8	23.3	34.1	4.4	33.1	1.0
2009	89.2	9.9	22.1	8.0	46.4	2.8	89.1	9.7	21.5	7.8	47.3	2.8
2009 Q1	166.5	39.8	35.0	7.0	83.9	0.9	131.5	20.3	44.9	5.2	58.7	2.4
Q2	117.0	21.8	27.1	11.5	53.8	2.8	97.2	21.2	26.8	7.4	39.0	2.8
Q3	57.8	0.4	9.6	10.1	35.4	2.3	102.2	9.9	28.8	12.9	47.1	3.5
Q4	15.5	-22.4	16.7	3.6	12.5	5.1	25.3	-12.7	-14.4	5.6	44.3	2.5
2009 Nov.	66.6	8.9	12.1	3.0	39.7	2.8	42.7	11.6	2.9	2.6	25.2	0.4
Dec.	-44.5	-28.4	27.4	-1.2	-49.4	7.1	34.5	23.3	-35.7	7.3	36.4	3.2
2010 Jan.	98.6	37.7	23.6	6.5	36.4	-5.6	70.8	13.8	64.1	2.6	-8.2	-1.5
Feb.	41.1	-20.6	-21.5	16.7	60.1	6.5	-11.0	-46.3	-23.9	17.9	34.1	7.2
	Long-term											
2008	65.7	16.2	32.8	2.8	13.4	0.6	65.0	16.3	32.0	2.9	13.3	0.5
2009	88.8	15.1	24.2	11.8	34.5	3.1	88.4	15.2	23.7	11.9	34.6	3.1
2009 Q1	134.7	25.0	41.8	12.9	52.0	3.0	130.2	16.3	51.9	14.4	44.7	2.9
Q2	125.7	36.2	28.6	15.9	41.3	3.7	94.6	25.5	27.7	12.2	25.7	3.5
Q3	53.9	12.3	11.7	11.1	17.4	1.4	98.9	22.5	31.1	13.0	29.8	2.5
Q4	40.8	-13.1	14.8	7.4	27.3	4.4	29.9	-3.5	-16.0	7.9	38.1	3.5
2009 Nov.	84.8	12.9	13.1	8.3	47.8	2.7	51.2	17.5	3.7	7.7	22.1	0.2
Dec.	-18.0	-46.2	25.5	2.7	-5.0	4.9	-14.2	-19.1	-36.5	4.7	30.9	5.7
2010 Jan.	89.0	38.0	24.0	3.3	21.6	2.0	131.9	40.5	61.8	4.5	23.4	1.7
Feb.	66.3	-18.0	-11.7	13.3	79.5	3.2	24.4	-40.4	-11.9	14.6	57.9	4.2

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

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



Source: ECB.

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

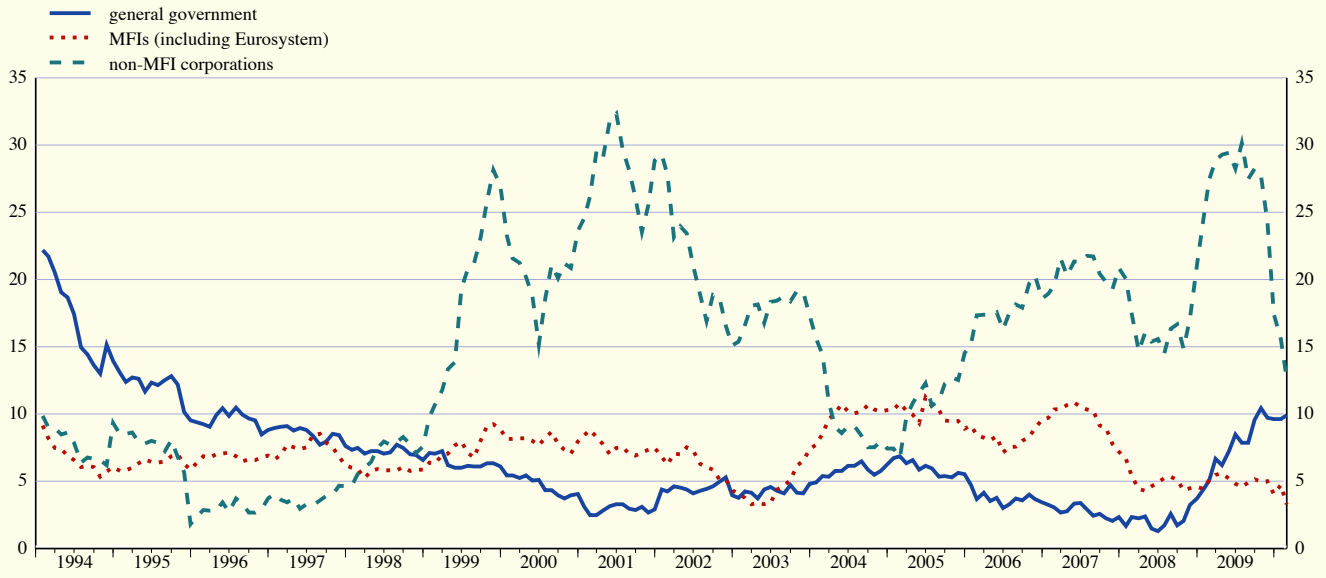
4.3 Growth rates of securities other than shares issued by euro area residents [1)]

(percentage changes)

	Annual growth rates (non-seasonally adjusted)						6-month seasonally adjusted growth rates					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2009 Feb.	11.0	6.3	32.0	8.2	10.1	6.5	13.1	3.8	36.2	13.4	16.1	7.2
Mar.	11.9	6.4	33.1	9.1	11.6	7.9	15.2	4.8	38.0	13.0	19.8	10.0
Apr.	12.0	6.3	33.3	10.2	11.7	10.6	14.6	6.0	41.5	15.4	15.1	11.3
May	12.1	5.5	32.8	10.2	12.8	9.5	13.1	5.8	35.1	15.9	13.0	11.9
June	11.9	4.8	29.6	11.8	13.7	9.6	10.6	4.7	24.1	10.8	12.0	9.6
July	11.7	4.2	30.7	13.3	13.5	9.4	10.5	4.8	24.1	14.3	11.0	10.3
Aug.	11.0	3.5	26.8	12.9	13.4	9.0	8.9	3.2	18.4	12.5	10.7	10.8
Sep.	12.0	4.2	27.0	15.3	14.9	10.6	9.0	3.5	17.2	17.4	10.2	11.3
Oct.	10.9	3.0	25.8	16.2	13.6	10.4	7.5	0.1	11.9	17.3	12.1	9.4
Nov.	9.6	2.5	21.3	15.9	12.1	10.6	6.4	-0.7	9.0	15.9	11.3	9.3
Dec.	8.1	2.2	13.4	13.8	11.3	9.7	5.3	-0.3	3.5	15.4	10.7	10.4
2010 Jan.	7.7	2.2	13.2	13.2	10.2	9.1	4.8	-0.3	3.2	11.9	9.4	7.8
Feb.	6.3	0.5	9.4	14.3	9.8	10.8	3.7	-2.0	0.9	16.0	8.8	10.9
	Long-term											
2009 Feb.	9.2	5.1	33.8	10.6	5.1	3.9	10.6	3.0	40.9	19.5	7.4	3.0
Mar.	10.3	5.4	34.8	13.1	6.7	5.8	13.2	3.9	42.8	21.1	11.8	7.3
Apr.	10.3	5.6	34.7	14.8	6.0	8.7	14.0	5.2	46.7	26.1	10.0	11.8
May	10.6	5.2	34.3	16.4	7.2	8.5	13.3	5.7	39.5	30.5	9.1	14.2
June	10.8	4.8	31.6	19.0	8.5	8.4	11.9	5.6	27.8	29.0	9.8	12.6
July	10.8	4.6	33.3	21.3	7.8	8.0	11.2	6.1	25.3	26.6	8.6	12.0
Aug.	10.5	4.9	29.8	20.8	7.8	8.0	10.3	6.8	19.6	22.1	8.3	13.2
Sep.	11.5	5.1	30.0	23.3	9.6	9.3	9.9	6.4	18.6	25.4	7.5	11.4
Oct.	11.7	4.9	28.6	25.3	10.4	10.4	9.5	4.7	12.7	24.6	11.0	9.0
Nov.	10.8	5.0	23.7	26.2	9.6	10.8	8.4	4.3	9.8	22.2	10.1	7.6
Dec.	9.2	4.0	15.2	24.2	9.5	11.8	6.1	2.5	3.8	19.7	9.0	10.9
2010 Jan.	9.1	4.7	13.7	21.3	9.5	11.4	6.8	3.3	3.1	16.1	10.5	10.7
Feb.	8.0	3.3	10.1	21.0	9.8	12.2	5.6	-0.1	1.3	19.8	11.2	11.4

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

(annual percentage changes)



Source: ECB.

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

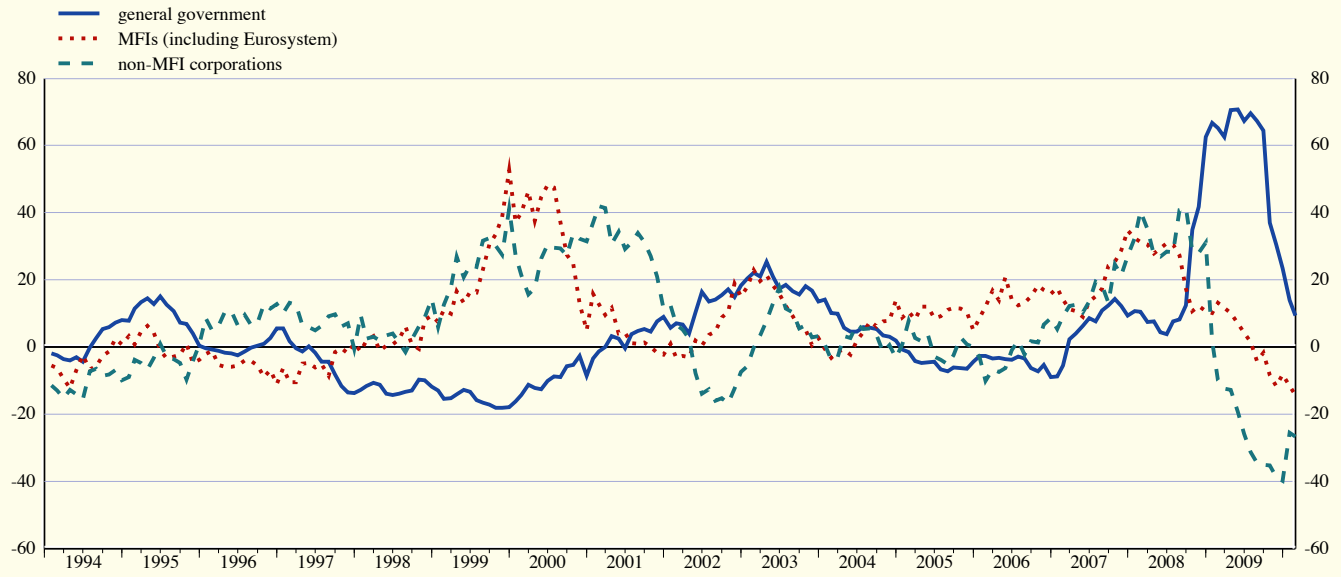
4.3 Growth rates of securities other than shares issued by euro area residents [1] (cont'd)

(percentage changes)

	Long-term fixed rate						Long-term variable rate					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	13	14	15	16	17	18	19	20	21	22	23	24
	In all currencies combined											
2008	3.1	4.9	5.7	4.9	1.5	1.4	12.8	5.6	33.4	7.1	7.6	3.2
2009	9.6	7.0	20.8	24.2	8.1	4.2	12.3	2.0	37.0	-2.0	0.1	20.7
2009 Q1	6.1	4.9	12.9	12.5	5.4	1.6	15.8	5.3	44.7	0.8	0.8	11.1
Q2	9.0	6.8	20.3	21.3	7.5	4.8	14.6	3.3	44.0	-1.1	-0.6	19.9
Q3	10.6	7.2	24.6	28.5	9.0	3.9	11.6	1.0	36.5	-3.3	-1.6	25.1
Q4	12.4	8.9	25.1	34.0	10.3	6.6	7.8	-1.6	25.3	-4.4	2.0	26.2
2009 Sep.	11.7	8.2	24.5	31.8	10.0	4.4	11.2	0.2	34.5	-4.8	2.9	28.2
Oct.	12.7	8.5	25.9	34.3	11.1	6.4	9.5	-1.1	31.2	-4.3	1.3	26.1
Nov.	12.5	9.4	25.5	35.3	10.1	7.1	7.0	-1.8	23.4	-4.2	1.7	25.8
Dec.	12.1	9.6	23.1	32.9	9.7	8.3	2.8	-4.0	11.6	-4.6	3.0	25.2
2010 Jan.	11.7	10.6	19.4	28.5	9.3	7.0	3.4	-3.5	10.7	-3.6	7.3	28.2
Feb.	11.0	8.8	14.3	27.4	10.0	8.3	1.5	-4.6	7.9	-1.9	3.2	27.1
	In euro											
2008	2.9	4.7	6.1	3.0	1.7	1.3	14.3	6.6	35.1	7.2	7.9	2.0
2009	10.1	8.9	23.1	22.6	8.2	3.6	14.6	3.9	39.3	-2.6	-0.4	21.8
2009 Q1	6.5	6.1	16.3	9.8	5.6	0.9	18.7	7.9	47.7	0.7	0.9	10.9
Q2	9.6	8.7	23.3	19.5	7.7	4.2	17.3	5.3	47.0	-1.8	-0.7	21.7
Q3	11.3	9.4	26.5	27.4	9.2	3.3	13.8	2.9	38.8	-3.9	-2.4	27.4
Q4	12.9	11.2	25.8	33.5	10.4	6.1	9.3	-0.2	26.6	-5.2	0.7	26.8
2009 Sep.	12.3	10.7	25.8	30.7	10.1	3.7	13.3	2.0	36.4	-5.7	1.7	30.5
Oct.	13.3	11.0	27.1	33.7	11.2	5.7	11.3	0.6	32.6	-5.3	0.0	26.9
Nov.	13.0	11.8	25.9	34.8	10.2	6.8	8.4	-0.6	24.6	-5.0	0.4	25.9
Dec.	12.3	11.0	22.8	33.4	9.8	8.0	3.8	-3.2	12.5	-5.2	1.7	25.1
2010 Jan.	11.7	11.6	19.3	29.1	9.4	6.6	4.2	-3.1	11.7	-4.1	5.9	28.3
Feb.	11.3	9.8	14.1	28.4	10.1	8.1	2.1	-4.4	8.8	-2.2	1.8	27.0

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

(annual percentage changes)



Source: ECB.

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

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

(EUR billions, unless otherwise indicated; market values)

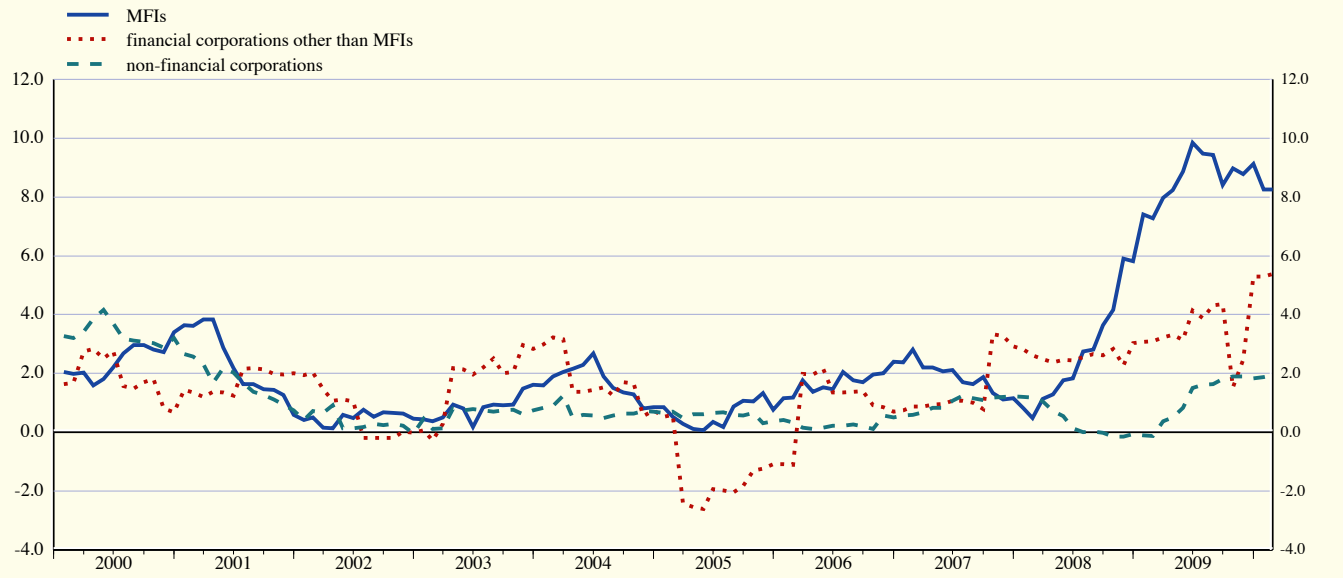
1. Outstanding amounts and annual growth rates

(outstanding amounts as at end of period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index: Dec. 2001 = 100	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2008 Feb.	5,820.8	104.5	1.2	860.1	0.5	492.0	2.6	4,468.7	1.2
Mar.	5,567.1	104.5	1.2	860.5	1.1	501.0	2.5	4,205.6	1.1
Apr.	5,748.0	104.4	1.0	837.2	1.3	519.1	2.4	4,391.7	0.7
May	5,729.4	104.5	0.9	771.0	1.8	496.7	2.5	4,461.7	0.6
June	5,081.0	104.5	0.6	665.3	1.8	435.5	2.4	3,980.3	0.1
July	4,972.7	104.6	0.6	691.6	2.8	427.9	2.5	3,853.2	0.0
Aug.	4,999.3	104.6	0.6	665.5	2.8	438.0	2.7	3,895.7	0.0
Sep.	4,430.0	104.7	0.7	612.2	3.6	381.8	2.6	3,436.1	0.0
Oct.	3,743.8	105.0	0.7	451.9	4.2	280.2	2.8	3,011.8	-0.1
Nov.	3,489.3	105.2	0.9	394.5	5.9	265.1	2.3	2,829.7	-0.2
Dec.	3,482.6	105.4	1.0	377.0	5.8	269.1	3.0	2,836.5	-0.1
2009 Jan.	3,300.8	105.6	1.1	342.8	7.4	258.7	3.1	2,699.3	-0.1
Feb.	2,934.9	105.6	1.1	275.0	7.3	206.0	3.1	2,453.9	-0.1
Mar.	3,018.8	106.1	1.5	314.5	8.0	223.5	3.2	2,480.8	0.4
Apr.	3,452.3	106.2	1.7	412.8	8.2	274.3	3.3	2,765.1	0.5
May	3,600.2	106.5	2.0	453.2	8.9	283.0	3.1	2,864.1	0.8
June	3,551.0	107.3	2.7	448.5	9.8	279.1	4.1	2,823.4	1.5
July	3,836.7	107.5	2.7	509.4	9.5	300.7	3.9	3,026.5	1.6
Aug.	4,034.6	107.5	2.8	572.4	9.4	321.4	4.3	3,140.9	1.6
Sep.	4,204.0	107.6	2.8	593.0	8.4	351.3	4.4	3,259.6	1.8
Oct.	4,059.1	107.8	2.7	568.1	9.0	325.9	1.5	3,165.1	1.9
Nov.	4,072.6	108.1	2.8	567.6	8.8	317.6	2.5	3,187.4	1.9
Dec.	4,420.7	108.5	3.0	572.5	9.1	348.5	5.3	3,499.6	1.8
2010 Jan.	4,253.1	108.7	2.9	522.9	8.3	338.4	5.3	3,391.8	1.9
Feb.	4,171.0	108.7	3.0	504.1	8.3	337.0	5.4	3,329.9	2.0

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

(annual percentage changes)



Source: ECB.

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

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

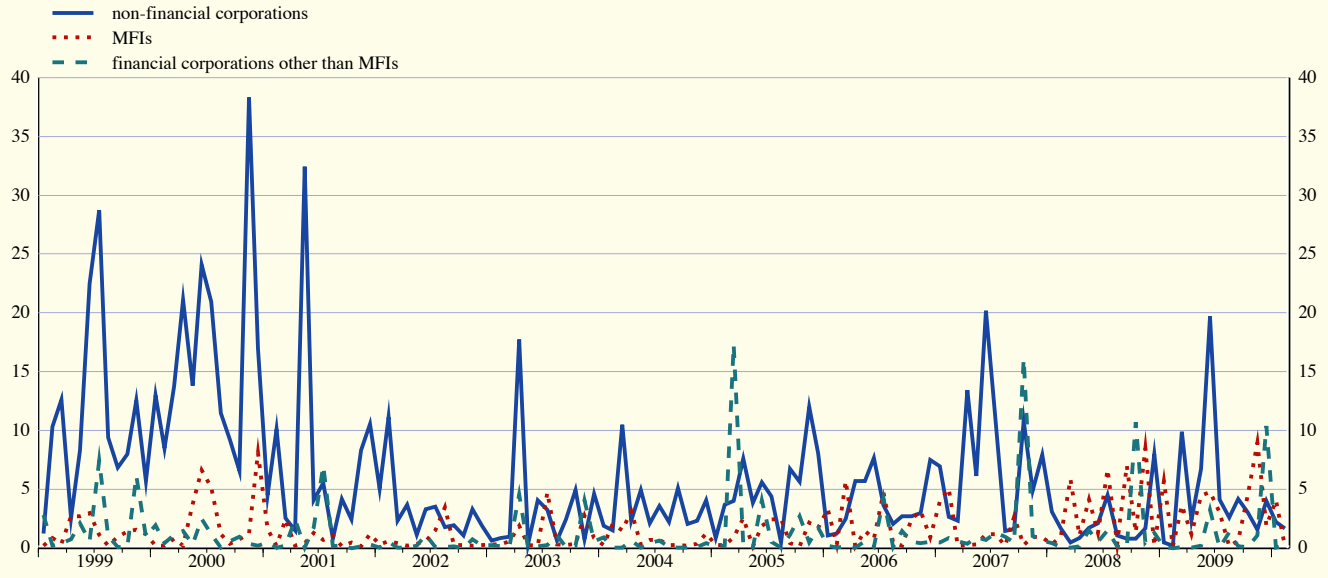
(EUR billions; market values)

2. Transactions during the month

	Total			MFIs			Financial corporations other than MFIs			Non-financial corporations		
	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues	Gross issues	Redemptions	Net issues
	1	2	3	4	5	6	7	8	9	10	11	12
2008 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.	3.6	0.3	3.3	1.2	0.0	1.2	0.1	0.0	0.0	2.4	0.3	2.1
May	11.3	0.3	11.1	4.4	0.0	4.4	0.2	0.0	0.1	6.7	0.3	6.5
June	27.8	2.0	25.7	4.8	0.0	4.8	3.3	0.3	3.0	19.7	1.8	18.0
July	7.2	0.2	7.0	3.0	0.0	3.0	0.0	0.0	0.0	4.1	0.2	3.9
Aug.	3.9	3.3	0.6	0.0	0.0	0.0	1.3	0.0	1.3	2.6	3.3	-0.7
Sep.	5.0	0.3	4.7	0.6	0.0	0.6	0.2	0.0	0.1	4.2	0.2	3.9
Oct.	7.6	0.3	7.4	4.5	0.0	4.5	0.1	0.0	0.1	3.0	0.2	2.8
Nov.	11.6	0.2	11.4	9.0	0.0	9.0	1.0	0.0	1.0	1.6	0.2	1.4
Dec.	16.2	0.2	16.0	1.9	0.0	1.9	10.4	0.1	10.3	4.0	0.1	3.9
2010 Jan.	6.4	0.0	6.3	4.1	0.0	4.1	0.1	0.0	0.1	2.2	0.0	2.2
Feb.	1.8	0.1	1.7	0.0	0.0	0.0	0.2	0.0	0.2	1.6	0.1	1.5

C20 Gross issues of quoted shares by sector of the issuer

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



Source: ECB.

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

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

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

1. Interest rates on deposits (new business)

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight [2]	With an agreed maturity of:			Redeemable at notice of: [2],[3]		Overnight [2]	With an agreed maturity of:			
		Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 1 year	Over 1 and up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9	10	11
2009 Apr.	0.66	2.01	2.69	2.87	2.22	3.75	0.76	1.15	2.64	3.06	1.12
May	0.61	1.89	2.39	2.71	1.99	3.62	0.73	1.08	2.38	3.11	1.02
June	0.56	1.86	2.38	2.57	1.95	3.52	0.63	1.04	2.17	2.58	0.93
July	0.52	1.86	2.41	2.61	1.86	3.38	0.57	0.82	2.41	2.92	0.68
Aug.	0.50	1.72	2.32	2.64	1.64	3.23	0.54	0.71	2.06	2.93	0.57
Sep.	0.49	1.61	2.27	2.52	1.60	3.12	0.52	0.69	2.10	2.74	0.58
Oct.	0.46	1.68	2.11	2.55	1.55	2.97	0.49	0.66	1.99	2.72	0.56
Nov.	0.46	1.67	2.23	2.56	1.52	2.76	0.48	0.70	2.11	2.92	0.58
Dec.	0.45	1.67	2.31	2.40	1.53	2.45	0.47	0.77	2.00	2.53	0.64
2010 Jan.	0.43	1.74	2.33	2.52	1.47	2.23	0.45	0.72	1.95	2.44	0.53
Feb.	0.42	1.75	2.24	2.36	1.45	2.11	0.44	0.73	2.11	2.39	0.53
Mar.	0.42	1.89	2.38	2.24	1.45	2.05	0.44	0.79	2.73	2.26	0.50

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

	Bank overdrafts [2]	Consumer credit				Lending for house purchase					Other lending by initial rate fixation		
		By initial rate fixation			Annual percentage rate of charge [4]	By initial rate fixation				Annual percentage rate of charge [4]			
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
2009 Apr.	9.71	7.39	6.50	8.26	8.05	3.38	4.21	4.55	4.68	4.23	3.54	4.69	4.90
May	9.62	7.82	6.44	8.16	8.08	3.22	4.15	4.50	4.58	4.12	3.60	4.71	4.90
June	9.55	7.26	6.36	8.03	7.83	3.12	4.12	4.51	4.58	4.07	3.55	4.76	4.95
July	9.31	7.63	6.49	8.03	8.02	3.03	4.10	4.54	4.54	4.02	3.35	4.77	4.91
Aug.	9.26	7.93	6.54	7.96	8.17	3.00	4.10	4.54	4.45	4.06	3.24	4.74	4.82
Sep.	9.26	7.69	6.45	7.91	8.00	2.81	4.05	4.48	4.45	3.92	3.13	4.66	4.74
Oct.	9.16	7.32	6.38	7.94	7.87	2.77	4.02	4.45	4.40	3.85	3.21	4.73	4.72
Nov.	9.07	7.03	6.29	7.87	7.76	2.71	3.97	4.46	4.32	3.78	3.16	4.57	4.66
Dec.	8.99	6.42	6.26	7.56	7.43	2.71	3.96	4.42	4.26	3.81	3.08	4.40	4.35
2010 Jan.	8.94	6.83	6.42	8.04	7.86	2.71	3.94	4.38	4.26	3.79	3.13	4.45	4.46
Feb.	9.01	6.72	6.25	7.98	7.78	2.68	3.83	4.32	4.18	3.74	3.17	4.48	4.74
Mar.	8.86	6.34	6.22	7.95	7.60	2.63	3.73	4.21	4.15	3.66	3.05	4.61	4.55

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

	Bank overdrafts [2]	Other loans of up to EUR 1 million by initial rate fixation			Other loans of over EUR 1 million by initial rate fixation		
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7
2009 Apr.	4.72	3.82	5.00	4.60	2.54	3.34	4.01
May	4.64	3.73	5.00	4.52	2.48	3.21	3.98
June	4.55	3.64	4.85	4.49	2.57	3.08	3.71
July	4.34	3.56	4.78	4.32	2.37	2.89	3.90
Aug.	4.23	3.42	4.67	4.24	2.30	2.80	3.83
Sep.	4.25	3.36	4.54	4.16	2.06	2.89	3.64
Oct.	4.18	3.33	4.49	4.18	2.14	2.73	3.64
Nov.	4.11	3.34	4.49	4.10	2.22	2.74	3.80
Dec.	4.05	3.28	4.22	3.96	2.19	3.15	3.58
2010 Jan.	4.05	3.25	4.20	3.99	2.01	2.88	3.65
Feb.	4.02	3.25	4.22	4.05	1.94	2.90	3.61
Mar.	3.99	3.24	4.21	4.00	1.98	2.41	3.43

Source: ECB.

1) Data refer to the changing composition of the euro area. For further information, see the General Notes.
2) For this instrument category, new business and outstanding amounts coincide. End of period.
3) For this instrument category, households and non-financial corporations are merged and allocated to the household sector, since the outstanding amounts of non-financial corporations are negligible compared with those of the household sector when all participating Member States are combined.
4) The annual percentage rate of charge covers the total cost of a loan. The total cost comprises both an interest rate component and a component incorporating other (related) charges, such as the cost of inquiries, administration, preparation of documents and guarantees.

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

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

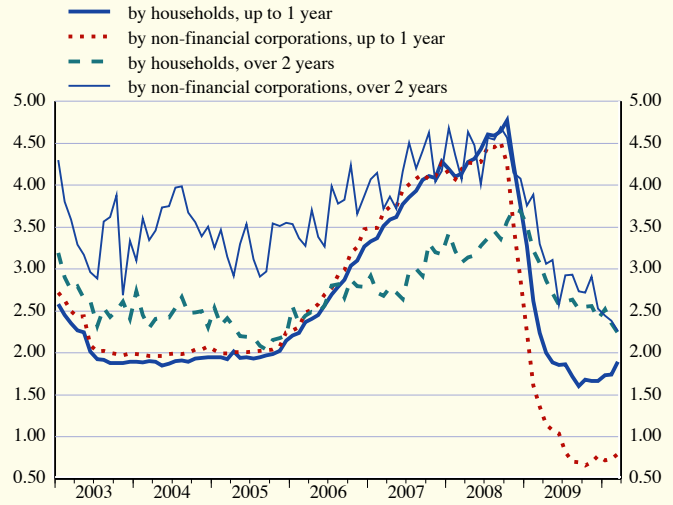
4. Interest rates on deposits (outstanding amounts)

	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight [2)]	With an agreed maturity of:		Redeemable at notice of: [2),3)]		Overnight [2)]	With an agreed maturity of:		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2009 Apr.	0.66	3.54	3.11	2.22	3.75	0.76	2.50	3.84	1.95
May	0.61	3.38	3.04	1.99	3.62	0.73	2.35	3.70	1.79
June	0.56	3.25	3.07	1.95	3.52	0.63	2.19	3.65	1.63
July	0.52	3.07	3.03	1.86	3.38	0.57	1.97	3.52	1.53
Aug.	0.50	2.94	3.01	1.64	3.23	0.54	1.89	3.39	1.53
Sep.	0.49	2.83	3.01	1.60	3.12	0.52	1.80	3.39	1.45
Oct.	0.46	2.64	2.96	1.55	2.97	0.49	1.70	3.34	1.35
Nov.	0.46	2.50	2.95	1.52	2.76	0.48	1.62	3.37	1.28
Dec.	0.45	2.36	2.91	1.53	2.45	0.47	1.56	3.30	1.21
2010 Jan.	0.43	2.20	2.81	1.47	2.23	0.45	1.45	3.23	1.20
Feb.	0.42	2.15	2.84	1.45	2.11	0.44	1.42	3.31	1.19
Mar.	0.42	2.13	2.76	1.45	2.05	0.44	1.39	3.23	1.16

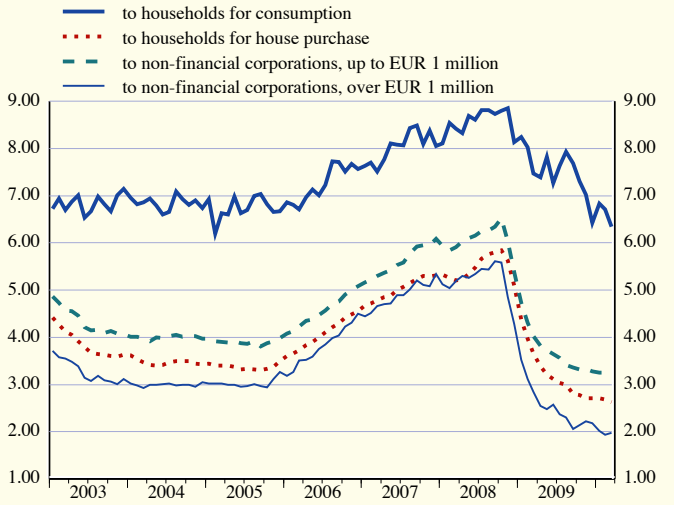
5. Interest rates on loans (outstanding amounts)

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase with a maturity of:			Consumer credit and other loans with a maturity of:			With a maturity of:		
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2009 Apr.	4.70	4.49	4.65	8.19	7.00	5.92	4.10	3.97	4.25
May	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	7.97	6.91	5.79	3.91	3.71	4.00
July	4.31	4.31	4.36	7.82	6.79	5.70	3.72	3.59	3.81
Aug.	4.23	4.25	4.28	7.82	6.74	5.65	3.65	3.50	3.73
Sep.	4.18	4.26	4.25	7.80	6.71	5.63	3.62	3.43	3.68
Oct.	4.05	4.19	4.18	7.69	6.66	5.54	3.56	3.37	3.60
Nov.	4.01	4.15	4.12	7.56	6.66	5.51	3.53	3.36	3.57
Dec.	4.08	4.11	4.07	7.55	6.57	5.43	3.46	3.35	3.50
2010 Jan.	3.99	4.05	4.00	7.51	6.52	5.38	3.47	3.31	3.45
Feb.	4.04	4.11	4.03	7.49	6.61	5.43	3.45	3.33	3.43
Mar.	3.98	4.04	3.98	7.42	6.48	5.34	3.43	3.26	3.36

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



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



Source: ECB.

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

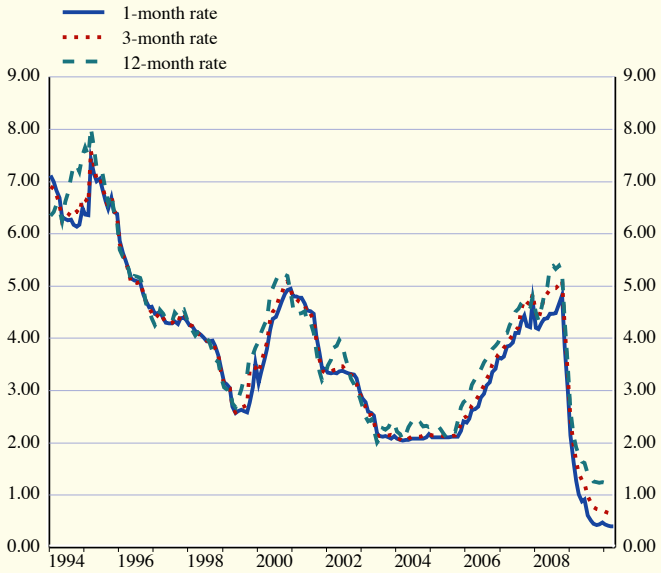
4.6 Money market interest rates

(percentages per annum; period averages)

	Euro area [1), 2)]					United States	Japan
	Overnight deposits (EONIA)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposits (EURIBOR)	3-month deposits (LIBOR)	3-month deposits (LIBOR)
	1	2	3	4	5	6	7
2007	3.87	4.08	4.28	4.35	4.45	5.30	0.79
2008	3.87	4.28	4.64	4.73	4.83	2.93	0.93
2009	0.71	0.89	1.22	1.43	1.61	0.69	0.47
2009 Q1	1.37	1.67	2.01	2.11	2.22	1.24	0.67
Q2	0.77	0.94	1.31	1.51	1.67	0.84	0.53
Q3	0.36	0.53	0.87	1.13	1.34	0.41	0.40
Q4	0.36	0.45	0.72	1.00	1.24	0.27	0.31
2010 Q1	0.34	0.42	0.66	0.96	1.22	0.26	0.25
2009 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
Nov.	0.36	0.44	0.72	0.99	1.23	0.27	0.31
Dec.	0.35	0.48	0.71	1.00	1.24	0.25	0.28
2010 Jan.	0.34	0.44	0.68	0.98	1.23	0.25	0.26
Feb.	0.34	0.42	0.66	0.96	1.23	0.25	0.25
Mar.	0.35	0.41	0.64	0.95	1.22	0.27	0.25
Apr.	0.35	0.40	0.64	0.96	1.23	0.31	0.24

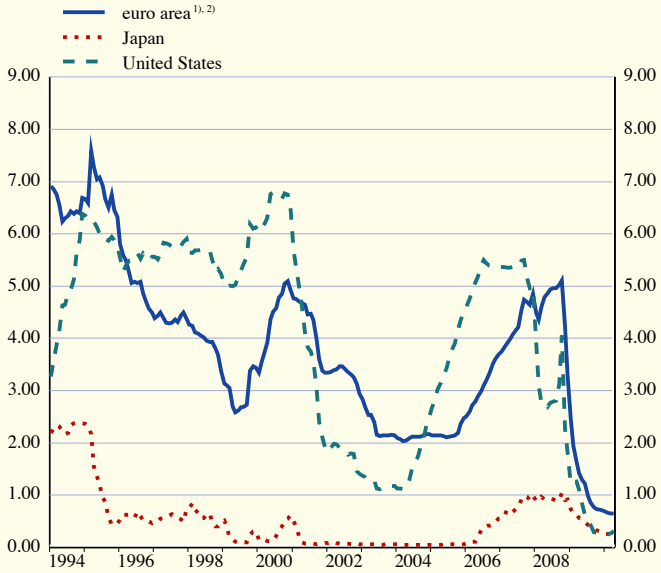
C23 Euro area money market rates [1), 2)]

(monthly averages; percentages per annum)



C24 3-month money market rates

(monthly averages; percentages per annum)



Source: ECB.

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

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

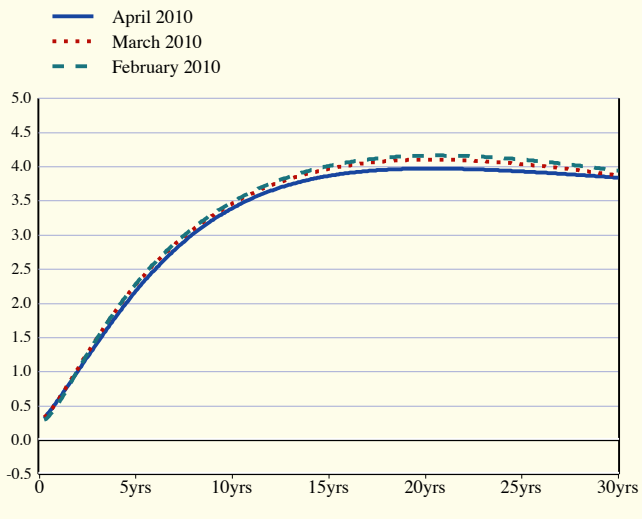
4.7 Euro area yield curves [1)]

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

	Spot rates								Instantaneous forward rates			
	3 months	1 year	2 years	5 years	7 years	10 years	10 years - 3 months (spread)	10 years - 2 years (spread)	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
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
2009	0.38	0.81	1.38	2.64	3.20	3.76	3.38	2.38	1.41	2.44	4.27	5.20
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
Q4	0.38	0.81	1.38	2.64	3.20	3.76	3.38	2.38	1.41	2.44	4.27	5.20
2010 Q1	0.33	0.60	1.05	2.28	2.86	3.46	3.13	2.41	1.02	1.98	3.96	5.02
2009 Apr.	0.74	0.96	1.53	2.72	3.25	3.79	3.05	2.26	1.52	2.58	4.24	5.19
May	0.79	0.93	1.53	3.00	3.60	4.18	3.39	2.65	1.43	2.77	4.81	5.61
June	0.62	0.90	1.50	2.85	3.42	3.99	3.37	2.49	1.47	2.67	4.54	5.42
July	0.49	0.74	1.43	2.68	3.21	3.74	3.26	2.31	1.49	2.62	4.21	5.13
Aug.	0.44	0.74	1.46	2.69	3.19	3.68	3.24	2.22	1.55	2.66	4.16	4.95
Sep.	0.41	0.70	1.33	2.59	3.12	3.64	3.23	2.31	1.34	2.47	4.14	4.96
Oct.	0.50	0.81	1.43	2.61	3.13	3.68	3.18	2.25	1.49	2.50	4.12	5.11
Nov.	0.44	0.80	1.34	2.49	3.01	3.57	3.13	2.23	1.38	2.32	4.00	5.04
Dec.	0.38	0.81	1.38	2.64	3.20	3.76	3.38	2.38	1.41	2.44	4.27	5.20
2010 Jan.	0.28	0.71	1.25	2.48	3.06	3.66	3.38	2.42	1.28	2.25	4.15	5.23
Feb.	0.30	0.54	1.02	2.29	2.88	3.49	3.19	2.46	0.98	2.01	3.99	5.08
Mar.	0.33	0.60	1.05	2.28	2.86	3.46	3.13	2.41	1.02	1.98	3.96	5.02
Apr.	0.32	0.60	1.01	2.18	2.78	3.40	3.07	2.39	1.00	1.85	3.89	4.94

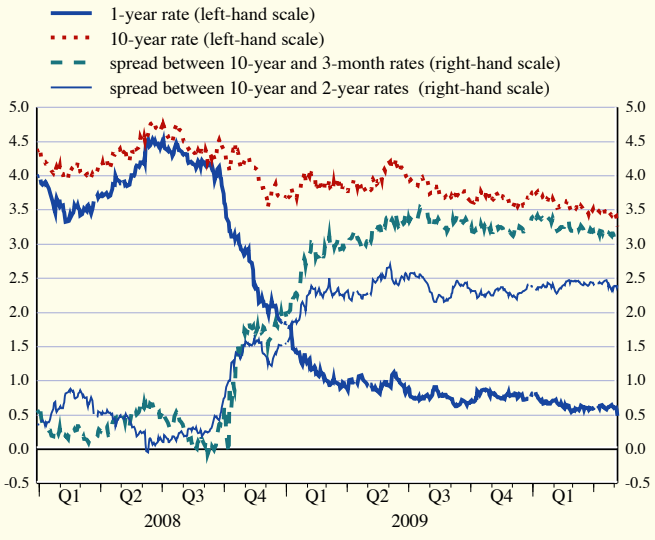
C25 Euro area spot yield curves

(percentages per annum; end of period)



C26 Euro area spot rates and spreads

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



Sources: ECB calculations based on underlying data provided by EuroMTS and ratings provided by Fitch Ratings.
1) Data refer to the changing composition of the euro area. For further information, see the General Notes.

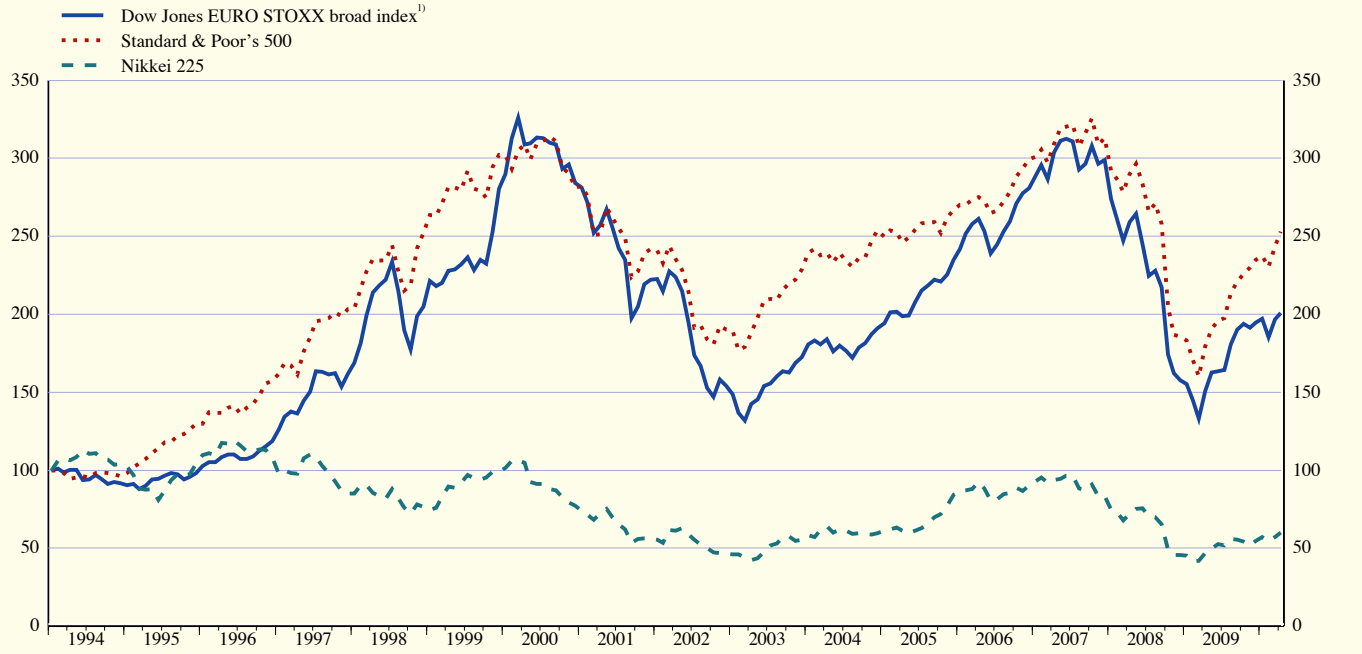
4.8 Stock market indices

(index levels in points; period averages)

	Dow Jones EURO STOXX indices [1]												United States	Japan
	Benchmark		Main industry indices											
	Broad index	50	Basic materials	Consumer services	Consumer goods	Oil and gas	Financials	Industrials	Technology	Utilities	Telecoms	Health care	Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007	416.4	4,315.8	543.8	235.4	366.5	449.6	408.3	488.4	383.4	561.4	492.7	519.2	1,476.5	16,984.4
2008	313.7	3,319.5	480.4	169.3	290.7	380.9	265.0	350.9	282.5	502.0	431.5	411.5	1,220.7	12,151.6
2009	234.2	2,521.0	353.2	140.5	244.5	293.5	172.1	269.7	200.7	353.7	380.4	363.5	946.2	9,321.6
2009 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
Q4	268.1	2,872.7	422.1	151.5	282.8	316.9	209.7	317.7	214.1	375.3	416.5	399.3	1,088.7	9,969.2
2010 Q1	268.0	2,849.0	445.0	159.3	294.9	320.0	195.5	326.7	229.9	372.4	398.8	426.3	1,123.6	10,511.2
2009 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
Nov.	265.4	2,843.8	415.4	149.5	280.0	315.3	208.7	313.6	209.9	369.8	414.5	391.5	1,088.1	9,641.0
Dec.	270.1	2,907.6	447.0	155.0	290.9	321.1	204.3	321.0	211.0	380.5	419.8	412.4	1,110.4	10,169.0
2010 Jan.	273.5	2,922.7	449.4	158.9	295.7	329.8	204.6	331.6	223.1	384.1	407.4	425.5	1,123.6	10,661.6
Feb.	257.0	2,727.5	427.9	154.3	285.3	309.8	183.9	312.3	222.7	360.9	386.8	415.0	1,089.2	10,175.1
Mar.	272.6	2,890.5	456.0	164.0	302.4	320.3	197.7	335.0	242.2	372.2	401.9	436.8	1,152.0	10,671.5
Apr.	278.6	2,937.3	470.9	171.7	313.8	328.6	199.7	349.0	248.8	378.9	396.7	430.0	1,197.3	11,139.8

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

(January 1994 = 100; monthly averages)



Source: ECB.

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

5 PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

1. Harmonised Index of Consumer Prices [1]

	Total					Total (s.a.; percentage change vis-à-vis previous period)						Memo item: Administered prices [2]	
	Index: 2005 = 100	Total		Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
			Total excl. unprocessed food and energy										
% of total [3]	100.0	100.0	83.1	58.0	42.0	100.0	11.9	7.3	29.3	9.6	42.0	88.9	11.1
	1	2	3	4	5	6	7	8	9	10	11	12	13
2006	102.2	2.2	1.5	2.3	2.0	-	-	-	-	-	-	2.1	2.5
2007	104.4	2.1	2.0	1.9	2.5	-	-	-	-	-	-	2.1	2.3
2008	107.8	3.3	2.4	3.8	2.6	-	-	-	-	-	-	3.4	2.7
2009	108.1	0.3	1.3	-0.9	2.0	-	-	-	-	-	-	0.1	1.7
2009 Q1	107.4	1.0	1.6	0.1	2.2	-0.2	0.0	0.3	0.1	-4.9	0.5	0.7	2.9
Q2	108.3	0.2	1.5	-1.2	2.2	0.2	0.1	-0.9	0.1	0.7	0.4	0.0	1.8
Q3	108.0	-0.4	1.2	-1.9	1.8	0.2	0.3	-0.9	0.0	0.8	0.4	-0.6	1.2
Q4	108.6	0.4	1.0	-0.4	1.7	0.2	0.1	0.0	0.0	0.3	0.4	0.4	0.8
2010 Q1	108.6	1.1	0.9	0.9	1.5	0.5	0.0	0.9	0.0	3.0	0.3	1.2	0.4
2009 Nov.	108.5	0.5	1.0	-0.3	1.6	0.2	0.1	0.2	0.0	1.4	0.1	0.4	0.8
Dec.	108.9	0.9	1.0	0.5	1.6	0.0	0.2	-0.1	0.1	-0.5	0.1	0.9	0.8
2010 Jan.	108.1	1.0	0.9	0.7	1.4	0.2	-0.1	0.3	-0.1	2.1	0.0	1.1	0.4
Feb.	108.4	0.9	0.8	0.6	1.3	0.1	0.0	0.5	0.0	-0.1	0.1	1.0	0.4
Mar.	109.4	1.4	0.9	1.3	1.6	0.4	0.0	0.8	0.0	2.6	0.3	1.6	0.4
Apr. [4]	.	1.5	.	.	.	.	.	.	.	.	.	.	.

	Goods						Services					
	Food (incl. alcoholic beverages and tobacco)			Industrial goods			Housing		Transport	Communication	Recreation and personal	Miscellaneous
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy		Rents				
% of total [3]	19.2	11.9	7.3	38.9	29.3	9.6	10.2	6.0	6.6	3.3	14.9	7.1
	14	15	16	17	18	19	20	21	22	23	24	25
2006	2.4	2.1	2.8	2.3	0.6	7.7	2.5	2.1	2.5	-3.3	2.3	2.3
2007	2.8	2.8	3.0	1.4	1.0	2.6	2.7	2.0	2.6	-1.9	2.9	3.2
2008	5.1	6.1	3.5	3.1	0.8	10.3	2.3	1.9	3.9	-2.2	3.2	2.5
2009	0.7	1.1	0.2	-1.7	0.6	-8.1	2.0	1.8	2.9	-1.0	2.1	2.1
2009 Q1	2.4	2.1	2.8	-1.1	0.7	-6.1	2.0	1.7	3.6	-1.7	2.7	2.1
Q2	1.0	1.1	0.8	-2.3	0.7	-10.7	2.1	1.8	3.1	-1.2	2.7	2.0
Q3	-0.1	0.6	-1.2	-2.8	0.5	-11.9	2.0	1.8	2.5	-0.6	1.8	2.1
Q4	-0.2	0.5	-1.5	-0.5	0.3	-3.2	1.9	1.7	2.5	-0.6	1.4	2.2
2010 Q1	0.0	0.6	-0.8	1.3	0.1	4.8	1.9	1.6	2.5	-0.5	1.1	1.6
2009 Oct.	-0.4	0.3	-1.6	-2.0	0.3	-8.5	1.9	1.6	2.6	-0.3	1.6	2.1
Nov.	-0.1	0.5	-1.3	-0.4	0.2	-2.4	1.9	1.7	2.4	-0.7	1.3	2.2
Dec.	-0.2	0.7	-1.6	0.8	0.4	1.8	1.9	1.7	2.5	-0.8	1.2	2.2
2010 Jan.	-0.1	0.6	-1.3	1.1	0.1	4.0	1.9	1.7	2.6	-0.9	1.0	1.6
Feb.	-0.1	0.6	-1.2	0.9	0.1	3.3	1.9	1.6	2.2	-0.4	0.9	1.6
Mar.	0.3	0.5	-0.1	1.8	0.1	7.2	1.9	1.6	2.7	-0.3	1.4	1.5

Sources: Eurostat and ECB calculations.

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

2) These experimental statistics can only provide an approximate measure of price administration, since changes in administered prices cannot be fully isolated from other influences. Please refer to Eurostat's website (http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/introduction) for a note explaining the methodology used in the compilation of this indicator.

3) Weighting used in 2010.

4) Estimate based on provisional national releases, which usually cover around 95% of the euro area, as well as on early information on energy prices.

5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

2. Industry, construction and residential property prices

	Industrial producer prices excluding construction										Construction [1]	Residential property prices [2]
	Total (index: 2005 = 100)	Total		Industry excluding construction and energy						Energy		
			Manufacturing	Total	Intermediate goods	Capital goods	Consumer goods					
							Total	Durable	Non-durable			
% of total [3]	100.0	100.0	83.0	75.8	30.1	21.9	23.7	2.7	21.0	24.2		
	1	2	3	4	5	6	7	8	9	10	11	12
2006	105.1	5.1	3.5	2.7	4.6	1.6	1.5	1.4	1.4	13.5	4.6	6.6
2007	107.9	2.7	3.0	3.2	4.6	2.2	2.2	2.5	2.2	1.2	4.1	4.5
2008	114.4	6.1	4.8	3.4	3.9	2.1	3.9	2.8	4.1	14.1	3.8	1.5
2009	108.6	-5.1	-5.4	-2.8	-5.3	0.4	-2.0	1.2	-2.4	-11.5	0.1	-3.1
2009 Q1	109.8	-2.0	-4.3	-1.1	-2.7	1.8	-1.0	1.8	-1.4	-4.4	2.6	-
Q2	108.3	-5.7	-6.8	-3.0	-5.8	0.7	-2.0	1.5	-2.5	-13.4	-0.2	-3.1 [4]
Q3	108.0	-7.8	-7.4	-4.1	-7.5	-0.1	-2.6	1.0	-3.1	-18.0	-1.7	-
Q4	108.4	-4.6	-3.0	-3.1	-5.0	-0.6	-2.4	0.5	-2.8	-9.5	-0.2	-3.1 [4]
2010 Q1	109.6	-0.2	1.7	-0.5	-0.4	-0.6	-0.5	0.3	-0.7	0.1	.	-
2009 Oct.	108.2	-6.6	-5.2	-3.9	-6.5	-0.6	-2.8	0.4	-3.3	-14.3	-	-
Nov.	108.4	-4.4	-2.8	-3.0	-4.9	-0.6	-2.4	0.5	-2.7	-8.7	-	-
Dec.	108.5	-2.9	-0.8	-2.3	-3.5	-0.5	-2.0	0.5	-2.3	-5.1	-	-
2010 Jan.	109.2	-1.0	0.9	-1.0	-1.6	-0.7	-0.7	0.5	-0.8	-1.6	-	-
Feb.	109.4	-0.4	1.4	-0.5	-0.5	-0.6	-0.5	0.3	-0.6	-0.8	-	-
Mar.	110.1	0.9	2.7	0.1	0.8	-0.5	-0.4	0.3	-0.5	2.8	-	-

3. Commodity prices and gross domestic product deflators [1]

	Oil prices [5] (EUR per barrel)	Non-energy commodity prices						GDP deflators							
		Import-weighted [6]			Use-weighted [7]			Total (s.a.; index: 2000 = 100)	Total	Domestic demand				Exports [8]	Imports [8]
		Total	Food	Non-food	Total	Food	Non-food			Total	Private consumption	Government consumption	Gross fixed capital formation		
% of total		100.0	35.0	65.0	100.0	45.0	55.0								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2006	52.9	27.5	5.8	37.6	24.4	5.9	38.1	113.8	1.9	2.4	2.2	2.0	2.9	2.6	3.8
2007	52.8	7.5	14.3	5.0	5.1	9.4	2.7	116.5	2.4	2.3	2.3	1.7	2.7	1.6	1.4
2008	65.9	2.1	18.5	-4.3	-1.7	9.7	-8.5	119.0	2.2	2.7	2.9	2.7	2.4	2.5	3.7
2009	44.6	-18.5	-8.9	-23.2	-18.1	-11.5	-22.8	120.3	1.0	0.1	-0.1	2.0	-0.7	-3.2	-5.8
2008 Q4	43.5	-9.9	-7.2	-11.2	-14.5	-12.9	-15.8	120.0	2.3	1.5	1.9	2.0	1.8	2.0	0.0
2009 Q1	35.1	-29.2	-15.0	-36.0	-28.7	-17.7	-36.8	120.1	1.8	0.9	0.4	2.7	0.6	-2.0	-4.3
Q2	43.8	-24.5	-11.2	-31.0	-22.5	-10.0	-31.4	120.1	1.1	-0.2	-0.3	1.6	-0.8	-3.6	-6.9
Q3	48.1	-18.8	-12.7	-21.8	-18.9	-15.3	-21.5	120.3	0.9	-0.6	-0.7	2.4	-1.6	-4.4	-8.1
Q4	51.2	2.9	5.8	1.4	2.4	-0.9	4.9	120.4	0.4	0.1	0.2	1.5	-1.1	-2.8	-3.9
2009 Nov.	52.1	-0.8	3.0	-2.7	-0.9	-2.9	0.6	-	-	-	-	-	-	-	-
Dec.	51.6	19.0	16.2	20.5	19.7	11.0	27.1	-	-	-	-	-	-	-	-
2010 Jan.	54.0	26.8	8.1	38.7	25.5	7.5	42.9	-	-	-	-	-	-	-	-
Feb.	54.5	25.0	4.7	38.0	24.8	6.9	42.1	-	-	-	-	-	-	-	-
Mar.	59.1	33.9	8.5	49.8	31.3	7.5	54.2	-	-	-	-	-	-	-	-
Apr.	64.0	35.3	7.6	52.4	33.4	8.4	56.6	-	-	-	-	-	-	-	-

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).

1) Input prices for residential buildings.
2) Experimental data based on non-harmonised national sources (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for further details).
3) In 2005.
4) The quarterly data for the second and fourth quarters refer to biannual averages for the first and second halves of the year respectively. Since some national data are only available annually, the biannual estimate is partially derived from annual results; consequently, the accuracy of biannual data is lower than the accuracy of annual data.
5) Brent Blend (for one-month forward delivery).
6) Refers to prices expressed in euro. Weighted according to the structure of euro area imports in the period 2004-06.
7) Refers to prices expressed in euro. Weighted according to euro area domestic demand (domestic production plus imports minus exports) in the period 2004-06. Experimental data (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for details).
8) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

5.1 HICP, other prices and costs

(annual percentage changes, unless otherwise indicated)

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

(seasonally adjusted)

	Total (index: 2000 = 100)	Total	By economic activity					
			Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
	1	2	3	4	5	6	7	8
	Unit labour costs [1]							
2006	110.0	1.0	1.4	-0.5	3.4	0.6	2.2	2.0
2007	111.7	1.6	2.3	0.8	4.1	0.6	2.3	1.7
2008	115.4	3.3	-0.2	3.7	3.1	3.1	3.1	3.0
2009	119.8	3.8	0.6	9.8	1.6	4.7	1.0	2.2
2008 Q4	118.1	4.7	-0.9	9.7	3.2	5.3	2.4	2.8
2009 Q1	120.1	5.7	0.2	15.7	2.6	7.2	0.8	3.0
Q2	120.2	4.6	0.8	13.8	1.4	5.9	1.5	1.5
Q3	119.7	3.4	0.0	8.3	0.8	3.6	0.7	3.1
Q4	119.7	1.3	0.4	1.6	1.5	2.2	0.9	1.5
	Compensation per employee							
2006	114.9	2.3	3.2	3.4	3.5	1.7	2.3	1.7
2007	117.8	2.5	3.9	2.9	2.7	2.1	2.4	2.5
2008	121.6	3.2	2.8	3.0	4.5	2.7	2.4	3.7
2009	123.4	1.5	3.2	0.4	2.8	1.5	1.3	2.2
2008 Q4	122.6	2.9	1.9	2.8	4.3	2.9	1.8	3.3
2009 Q1	122.6	1.8	3.0	0.5	2.9	2.4	0.6	2.9
Q2	123.1	1.4	3.4	0.1	3.3	2.1	1.8	1.5
Q3	123.7	1.4	3.4	0.4	2.8	0.5	1.3	2.8
Q4	124.1	1.2	2.8	0.5	2.4	1.1	1.9	1.7
	Labour productivity [2]							
2006	104.5	1.3	1.8	3.9	0.1	1.1	0.1	-0.4
2007	105.5	1.0	1.6	2.1	-1.4	1.5	0.1	0.7
2008	105.3	-0.1	3.1	-0.7	1.3	-0.4	-0.7	0.7
2009	103.0	-2.2	2.5	-8.6	1.2	-3.1	0.4	0.0
2008 Q4	103.8	-1.7	2.9	-6.3	1.1	-2.3	-0.6	0.5
2009 Q1	102.0	-3.7	2.8	-13.1	0.3	-4.4	-0.3	-0.1
Q2	102.4	-3.0	2.6	-12.0	1.8	-3.5	0.3	0.0
Q3	103.4	-1.9	3.4	-7.2	2.0	-3.0	0.6	-0.2
Q4	103.7	-0.1	2.4	-1.0	0.9	-1.1	1.0	0.2

5. Hourly labour costs [3]

	Total (s.a.; index: 2008 = 100)	Total	By component		For selected economic activities			Memo item: Indicator of negotiated wages [4]
			Wages and salaries	Employers' social contributions	Mining, manufacturing and energy	Construction	Services	
% of total [5]	100.0	100.0	75.2	24.8	32.4	9.0	58.6	
	1	2	3	4	5	6	7	8
2006	94.3	2.3	2.3	2.2	3.4	1.3	1.8	2.3
2007	96.6	2.5	2.8	1.4	2.2	2.7	2.6	2.1
2008	100.0	3.5	3.5	3.3	3.9	4.2	3.1	3.2
2009	103.3	3.3	3.1	3.9	4.1	3.7	2.8	2.6
2008 Q4	101.8	4.5	4.3	4.9	6.2	5.1	3.4	3.6
2009 Q1	102.2	3.6	3.4	4.6	5.0	3.5	2.8	3.2
Q2	103.2	4.3	4.1	4.7	5.5	4.5	3.6	2.8
Q3	103.5	3.0	2.8	3.5	4.4	3.0	2.2	2.3
Q4	104.1	2.2	2.0	2.7	1.4	3.7	2.4	2.1

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).

1) Compensation (at current prices) per employee divided by value added (volumes) per person employed.
2) Value added (volumes) per person employed.
3) Hourly labour costs for the whole economy, excluding agriculture, public administration, education, health and services not classified elsewhere. Owing to differences in coverage, the estimates for the components may not be consistent with the total.
4) Experimental data (see http://www.ecb.europa.eu/stats/intro/html/experiment.en.html for further details).
5) In 2008.

5.2 Output and demand

1. GDP and expenditure components

	GDP								
	Total	Domestic demand					External balance [1]		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories [2]	Total	Exports [1]	Imports [1]
	1	2	3	4	5	6	7	8	9
	Current prices (EUR billions; seasonally adjusted)								
2006	8,557.6	8,460.3	4,869.7	1,733.4	1,832.1	25.0	97.2	3,451.6	3,354.4
2007	9,006.7	8,865.5	5,062.1	1,803.4	1,970.7	29.4	141.2	3,733.0	3,591.8
2008	9,254.7	9,158.4	5,228.9	1,891.6	2,000.3	37.6	96.3	3,858.6	3,762.3
2009	8,975.1	8,856.6	5,170.6	1,974.5	1,771.2	-59.7	118.6	3,257.7	3,139.1
2008 Q4	2,292.1	2,273.8	1,303.6	480.3	481.1	8.8	18.2	903.6	885.4
2009 Q1	2,238.7	2,223.3	1,288.2	487.2	453.7	-5.8	15.4	808.7	793.3
Q2	2,236.0	2,206.1	1,290.7	492.2	444.7	-21.6	29.9	793.2	763.3
Q3	2,249.0	2,216.0	1,292.8	498.6	439.1	-14.5	32.9	818.0	785.1
Q4	2,251.5	2,211.2	1,298.9	496.4	433.7	-17.8	40.3	837.8	797.4
	percentage of GDP								
2009	100.0	98.7	57.6	22.0	19.7	-0.7	1.3	-	-
	Chain-linked volumes (prices for the previous year; seasonally adjusted [3])								
	quarter-on-quarter percentage changes								
2008 Q4	-1.9	-0.8	-0.6	0.6	-4.1	-	-	-7.3	-4.8
2009 Q1	-2.5	-2.3	-0.5	0.6	-5.2	-	-	-8.0	-7.6
Q2	-0.1	-0.8	0.1	0.6	-1.6	-	-	-1.1	-2.8
Q3	0.4	0.4	-0.1	0.7	-0.9	-	-	2.9	2.9
Q4	0.0	-0.2	0.0	-0.1	-1.3	-	-	1.9	1.3
	annual percentage changes								
2006	3.0	2.9	2.0	2.1	5.4	-	-	8.5	8.5
2007	2.8	2.4	1.6	2.3	4.8	-	-	6.3	5.5
2008	0.6	0.6	0.4	2.1	-0.6	-	-	1.0	1.1
2009	-4.1	-3.4	-1.1	2.3	-10.8	-	-	-12.9	-11.5
2008 Q4	-1.9	-0.5	-0.7	2.4	-6.0	-	-	-7.0	-3.8
2009 Q1	-5.0	-3.5	-1.4	2.4	-11.4	-	-	-16.1	-12.9
Q2	-4.9	-3.7	-1.0	2.3	-11.6	-	-	-16.6	-14.3
Q3	-4.1	-3.4	-1.1	2.6	-11.3	-	-	-13.2	-11.9
Q4	-2.2	-2.9	-0.6	1.8	-8.8	-	-	-4.6	-6.3
	contributions to quarter-on-quarter percentage changes in GDP; percentage points								
2008 Q4	-1.9	-0.8	-0.3	0.1	-0.9	0.3	-1.2	-	-
2009 Q1	-2.5	-2.3	-0.3	0.1	-1.1	-1.0	-0.2	-	-
Q2	-0.1	-0.8	0.0	0.1	-0.3	-0.6	0.6	-	-
Q3	0.4	0.4	-0.1	0.2	-0.2	0.5	0.0	-	-
Q4	0.0	-0.2	0.0	0.0	-0.3	0.1	0.2	-	-
	contributions to annual percentage changes in GDP; percentage points								
2006	3.0	2.8	1.2	0.4	1.1	0.1	0.1	-	-
2007	2.8	2.4	0.9	0.5	1.0	0.0	0.4	-	-
2008	0.6	0.6	0.3	0.4	-0.1	0.1	0.0	-	-
2009	-4.1	-3.4	-0.6	0.5	-2.3	-0.9	-0.7	-	-
2008 Q4	-1.9	-0.5	-0.4	0.5	-1.3	0.8	-1.4	-	-
2009 Q1	-5.0	-3.5	-0.8	0.5	-2.5	-0.6	-1.6	-	-
Q2	-4.9	-3.7	-0.6	0.5	-2.5	-1.1	-1.2	-	-
Q3	-4.1	-3.4	-0.6	0.5	-2.4	-0.8	-0.7	-	-
Q4	-2.2	-2.8	-0.3	0.4	-1.9	-1.0	0.7	-	-

Sources: Eurostat and ECB calculations.

1) Exports and imports cover goods and services and include cross-border intra-euro area trade. They are not fully consistent with: Section 3.1; Table 1 of Section 7.1; Table 3 of Section 7.2; or Tables 1 or 3 of Section 7.5.
2) Including acquisitions less disposals of valuables.
3) Annual data are not working day-adjusted.

5.2 Output and demand

2. Value added by economic activity

	Gross value added (basic prices)							Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services	
	1	2	3	4	5	6	7	8
	Current prices (EUR billions; seasonally adjusted)							
2006	7,643.7	140.8	1,563.7	477.3	1,594.2	2,136.3	1,731.4	913.9
2007	8,047.7	151.0	1,640.4	510.4	1,668.7	2,273.7	1,803.3	959.0
2008	8,309.2	145.9	1,658.7	533.9	1,724.8	2,363.7	1,882.3	945.4
2009	8,080.4	131.3	1,441.3	514.3	1,669.4	2,365.1	1,959.0	894.7
2008 Q4	2,061.7	34.6	395.5	132.0	427.7	593.6	478.3	230.4
2009 Q1	2,015.0	34.2	360.9	130.2	415.7	589.9	484.1	223.6
Q2	2,013.4	33.1	355.2	129.0	416.5	591.1	488.5	222.6
Q3	2,025.0	31.9	362.1	128.1	418.7	592.0	492.3	224.0
Q4	2,027.0	32.2	363.1	127.0	418.5	592.0	494.2	224.5
	percentage of value added							
2009	100.0	1.6	17.8	6.4	20.7	29.3	24.2	-
	Chain-linked volumes (prices for the previous year; seasonally adjusted [1])							
	quarter-on-quarter percentage changes							
2008 Q4	-1.9	0.1	-6.3	-2.0	-1.9	-0.7	0.3	-1.9
2009 Q1	-2.6	0.0	-8.0	-1.3	-3.1	-1.1	0.1	-1.7
Q2	-0.2	-0.2	-1.3	-1.0	-0.1	-0.1	0.7	0.3
Q3	0.4	0.3	2.4	-1.3	0.2	-0.3	0.2	0.8
Q4	0.0	-0.3	-0.1	-1.2	0.0	0.1	0.4	0.2
	annual percentage changes							
2006	2.9	0.0	3.6	2.8	2.7	4.1	1.4	3.3
2007	3.0	0.0	2.4	2.3	3.5	4.2	2.0	0.9
2008	0.8	1.6	-0.7	-0.8	0.9	1.5	1.6	-1.2
2009	-4.2	-0.1	-13.3	-5.8	-4.8	-1.8	1.5	-2.7
2008 Q4	-1.8	1.7	-7.5	-4.1	-2.0	-0.1	1.6	-2.4
2009 Q1	-5.1	0.3	-16.1	-6.8	-5.7	-1.7	1.3	-4.6
Q2	-5.0	0.2	-16.4	-5.9	-5.4	-2.1	1.6	-3.3
Q3	-4.3	0.3	-13.0	-5.5	-4.9	-2.1	1.4	-2.4
Q4	-2.4	-0.1	-7.2	-4.7	-3.0	-1.4	1.4	-0.3
	contributions to quarter-on-quarter percentage changes in value added; percentage points							
2008 Q4	-1.9	0.0	-1.3	-0.1	-0.4	-0.2	0.1	-
2009 Q1	-2.6	0.0	-1.5	-0.1	-0.6	-0.3	0.0	-
Q2	-0.2	0.0	-0.2	-0.1	0.0	0.0	0.2	-
Q3	0.4	0.0	0.4	-0.1	0.0	-0.1	0.1	-
Q4	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	-
	contributions to annual percentage changes in value added; percentage points							
2006	2.9	0.0	0.7	0.2	0.6	1.1	0.3	-
2007	3.0	0.0	0.5	0.1	0.7	1.2	0.5	-
2008	0.8	0.0	-0.1	0.0	0.2	0.4	0.4	-
2009	-4.2	0.0	-2.7	-0.4	-1.0	-0.5	0.3	-
2008 Q4	-1.8	0.0	-1.5	-0.3	-0.4	0.0	0.4	-
2009 Q1	-5.1	0.0	-3.3	-0.4	-1.2	-0.5	0.3	-
Q2	-5.0	0.0	-3.3	-0.4	-1.1	-0.6	0.4	-
Q3	-4.3	0.0	-2.6	-0.4	-1.0	-0.6	0.3	-
Q4	-2.4	0.0	-1.4	-0.3	-0.6	-0.4	0.3	-

Sources: Eurostat and ECB calculations.

1) Annual data are not working day-adjusted.

5.2 Output and demand

(annual percentage changes, unless otherwise indicated)

3. Industrial production

	Total	Industry excluding construction										Construction
		Total (s.a.; index: 2005 = 100)	Total		Industry excluding construction and energy						Energy	
				Manu-facturing	Total	Intermediate goods	Capital goods	Consumer goods				
								Total	Durable	Non-durable		
% of total [1]	100.0	78.0	78.0	69.4	68.8	28.2	22.1	18.5	2.6	15.9	9.1	22.0
	1	2	3	4	5	6	7	8	9	10	11	12
2007	3.2	108.1	3.7	4.1	4.3	3.7	6.6	2.3	1.4	2.5	-0.9	1.2
2008	-2.3	106.1	-1.7	-1.9	-1.9	-3.4	-0.1	-2.0	-5.7	-1.4	0.3	-4.4
2009	-13.9	90.4	-15.0	-16.0	-16.5	-19.2	-21.3	-5.0	-17.5	-3.0	-5.7	-8.3
2009 Q1	-17.0	91.4	-18.6	-20.4	-20.8	-25.4	-24.5	-7.5	-20.0	-5.4	-4.3	-10.0
Q2	-16.9	88.9	-18.8	-19.7	-20.1	-24.3	-24.7	-6.0	-21.2	-3.4	-8.9	-7.5
Q3	-13.8	89.7	-14.5	-15.3	-15.8	-18.2	-21.4	-4.0	-18.4	-1.9	-6.2	-9.4
Q4	-7.6	91.5	-7.6	-8.1	-8.6	-6.8	-14.3	-2.6	-10.2	-1.4	-3.8	-6.4
2009 Sep.	-12.0	90.2	-12.8	-13.1	-13.8	-15.6	-18.6	-2.8	-15.5	-0.6	-7.3	-7.9
Oct.	-10.6	90.5	-11.3	-11.9	-12.5	-12.3	-17.6	-4.7	-14.4	-3.1	-4.9	-6.9
Nov.	-7.4	91.6	-7.0	-7.2	-7.5	-5.8	-13.4	-2.0	-8.0	-1.0	-5.1	-8.0
Dec.	-4.0	92.3	-3.9	-4.4	-4.8	-0.1	-11.5	-0.9	-7.4	0.1	-1.7	-4.0
2010 Jan.	-0.8	93.9	1.5	1.6	1.8	4.4	-0.9	0.5	-2.7	0.9	0.7	-10.4
Feb.	0.3	94.5	4.0	4.3	4.2	6.9	3.0	1.7	0.3	2.0	2.2	-14.9
	month-on-month percentage changes (s.a.)											
2009 Sep.	0.7	-	0.7	1.0	0.2	-5.2	1.6	-0.2	1.2	1.3	-1.6	-1.1
Oct.	0.1	-	0.3	-0.1	-0.3	1.3	-0.6	-1.1	0.0	-1.4	1.6	-0.2
Nov.	0.6	-	1.3	1.4	1.4	0.8	1.4	1.4	2.0	0.9	-2.4	-1.4
Dec.	0.4	-	0.8	0.3	-0.3	-1.1	0.0	0.3	-1.5	0.6	3.1	-1.6
2010 Jan.	1.0	-	1.7	1.6	1.8	1.2	-1.2	0.5	2.1	0.3	2.8	-0.8
Feb.	-0.3	-	0.6	0.6	0.1	0.9	0.9	0.0	0.0	0.0	-0.6	-3.2

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

	Industrial new orders		Industrial turnover		Retail sales (excluding automotive fuel)							New passenger car registrations	
	Manufacturing [2] (current prices)		Manufacturing (current prices)		Current prices	Constant 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			Total (s.a.; thousands) [3]	Total
										Textiles, clothing, footwear	Household equipment		
% of total [1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42.9	57.1	9.9	13.9		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2007	119.9	8.6	115.0	6.5	2.6	104.3	1.8	0.0	3.1	4.0	3.1	968	-0.6
2008	113.3	-5.3	116.9	1.9	1.7	103.4	-0.8	-1.8	-0.1	-1.8	-1.9	896	-7.0
2009	87.7	-22.8	95.5	-18.5	-2.7	101.7	-1.7	-1.5	-1.9	-1.3	-3.7	923	2.9
2009 Q2	84.4	-30.5	93.8	-23.4	-3.0	101.6	-2.0	-1.3	-2.4	-2.2	-5.4	933	-0.3
Q3	91.0	-21.3	96.1	-18.9	-3.4	101.5	-1.8	-1.2	-2.4	-2.8	-3.1	957	9.6
Q4	92.1	-2.8	97.5	-9.2	-1.5	101.7	-0.5	-0.3	-0.6	0.3	-0.7	966	20.5
2010 Q1	.	.	.	.	0.3	101.7	0.1	0.6	-0.1	.	.	903	7.4
2009 Oct.	90.0	-14.7	96.7	-16.6	-1.8	101.7	-0.5	-0.8	-0.4	2.4	-0.9	977	10.8
Nov.	92.8	-0.3	97.9	-6.8	-2.6	101.4	-1.6	-1.3	-1.7	-4.0	-1.7	969	34.0
Dec.	93.4	9.7	97.8	-2.9	-0.3	102.1	0.3	0.9	0.0	1.8	0.3	953	19.5
2010 Jan.	92.0	7.5	99.2	1.2	-0.9	101.8	-0.2	0.8	-0.6	2.4	-1.4	865	8.3
Feb.	93.6	12.5	100.4	6.4	0.0	101.7	0.1	0.2	0.2	1.8	0.6	889	2.9
Mar.	.	.	.	.	1.9	101.6	0.3	0.9	0.0	.	.	953	10.2
	month-on-month percentage changes (s.a.)												
2009 Nov.	-	3.1	-	1.3	-0.4	-	-0.4	0.1	-0.5	-2.6	-0.4	-	-0.8
Dec.	-	0.6	-	-0.2	0.9	-	0.7	0.7	0.7	2.2	1.0	-	-1.7
2010 Jan.	-	-1.6	-	1.5	-0.3	-	-0.3	-0.2	-0.3	1.2	-1.3	-	-9.2
Feb.	-	1.8	-	1.2	0.0	-	-0.2	-0.3	-0.1	-1.1	0.4	-	2.8
Mar.	-	.	-	.	0.7	-	0.0	-0.2	-0.1	.	.	-	7.2

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

1) In 2005.

2) Includes manufacturing industries working mainly on the basis of orders, which represented 61.2% of total manufacturing in 2005.

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

5.2 Output and demand

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

5. Business and Consumer Surveys

	Economic sentiment indicator [2] (long-term average = 100)	Manufacturing industry					Consumer confidence indicator				
		Industrial confidence indicator				Capacity utilisation [3] (%)					
		Total [4]	Order books	Stocks of finished products	Production expectations		Total [4]	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
	1	2	3	4	5	6	7	8	9	10	11
2006	107.2	2	0	6	13	83.2	-9	-3	-9	15	-9
2007	109.2	5	5	5	13	84.2	-5	-2	-4	5	-8
2008	93.5	-9	-15	11	-2	81.8	-18	-10	-25	24	-14
2009	80.8	-28	-56	14	-15	71.1	-25	-7	-26	56	-10
2009 Q1	71.5	-36	-56	20	-31	72.4	-33	-11	-41	64	-14
Q2	75.6	-33	-62	18	-20	69.9	-28	-9	-34	59	-11
Q3	84.1	-26	-58	12	-9	70.3	-21	-5	-20	51	-9
Q4	91.9	-19	-50	7	1	71.7	-17	-3	-11	48	-7
2010 Q1	96.6	-12	-41	2	7	73.9	-17	-4	-11	46	-7
2009 Nov.	91.9	-19	-51	7	2	-	-17	-3	-10	50	-7
Dec.	94.1	-16	-47	5	3	-	-16	-3	-10	46	-5
2010 Jan.	96.0	-14	-44	3	5	72.3	-16	-3	-9	46	-6
Feb.	95.9	-13	-42	4	7	-	-17	-4	-12	47	-7
Mar.	97.9	-10	-39	0	9	-	-17	-5	-12	46	-7
Apr.	100.6	-7	-32	-1	9	75.5	-15	-5	-12	36	-8

	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator			
	Total [4]	Order books	Employment expectations	Total [4]	Present business situation	Volume of stocks	Expected business situation	Total [4]	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2006	1	-4	6	1	3	14	13	18	13	18	24
2007	0	-7	7	1	5	15	13	20	16	19	24
2008	-13	-20	-6	-7	-6	17	2	2	-5	4	7
2009	-31	-40	-22	-15	-21	11	-15	-16	-22	-16	-9
2009 Q1	-31	-36	-26	-19	-21	15	-20	-24	-33	-21	-18
Q2	-33	-42	-24	-17	-23	9	-19	-22	-29	-23	-15
Q3	-31	-41	-22	-14	-19	10	-13	-12	-18	-13	-5
Q4	-28	-40	-16	-12	-19	10	-7	-4	-8	-8	3
2010 Q1	-27	-37	-17	-7	-9	8	-2	0	-4	-2	7
2009 Nov.	-26	-39	-14	-11	-19	10	-4	-4	-7	-8	4
Dec.	-28	-40	-17	-10	-15	9	-6	-3	-7	-6	5
2010 Jan.	-29	-38	-20	-5	-6	8	-2	-1	-6	-2	5
Feb.	-29	-39	-18	-9	-12	9	-5	1	-2	-3	7
Mar.	-25	-35	-14	-6	-9	9	-1	1	-3	-1	8
Apr.	-25	-37	-13	-1	-1	8	4	5	0	5	11

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

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

2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values for the economic sentiment indicator of 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 [1]

1. Employment

(annual percentage changes, unless otherwise indicated)

	Whole economy		By employment status		By economic activity					
	Total (s.a.; millions)	Total	Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total [2]	100.0	100.0	85.2	14.8	3.9	17.1	7.5	25.7	16.0	29.9
	1	2	3	4	5	6	7	8	9	10
2006	144.166	1.6	1.8	0.8	-1.8	-0.3	2.7	1.6	4.0	1.8
2007	146.731	1.8	2.0	0.8	-1.5	0.2	3.7	2.0	4.1	1.3
2008	147.804	0.7	0.9	-0.3	-1.4	0.0	-2.1	1.3	2.2	0.9
2009	145.028	-1.9	-1.8	-2.1	-2.6	-5.2	-6.9	-1.8	-2.2	1.5
2008 Q4	147.227	-0.1	0.0	-0.8	-1.1	-1.2	-4.9	0.4	0.5	1.2
2009 Q1	146.077	-1.3	-1.1	-2.1	-2.3	-3.2	-7.1	-1.3	-1.4	1.5
Q2	145.317	-1.9	-1.9	-2.0	-2.5	-5.0	-7.4	-2.0	-2.3	1.6
Q3	144.543	-2.3	-2.3	-2.2	-3.0	-6.4	-7.5	-1.9	-2.8	1.6
Q4	144.173	-2.1	-2.0	-2.2	-2.5	-6.2	-5.6	-2.0	-2.2	1.2
	quarter-on-quarter percentage changes (s.a.)									
2008 Q4	-0.542	-0.4	-0.4	-0.3	0.0	-1.1	-2.3	-0.4	-0.5	0.6
2009 Q1	-1.150	-0.8	-0.8	-0.8	-0.8	-1.6	-2.3	-0.8	-0.9	0.2
Q2	-0.759	-0.5	-0.5	-0.5	-0.9	-1.8	-1.3	-0.5	-0.8	0.6
Q3	-0.775	-0.5	-0.5	-0.7	-1.2	-1.7	-1.7	-0.2	-0.5	0.2
Q4	-0.370	-0.3	-0.3	-0.2	0.5	-1.1	-0.4	-0.5	-0.1	0.2

2. Unemployment

(seasonally adjusted)

	Total		By age [3]				By gender [4]			
	Millions	% of labour force	Adult		Youth		Male		Female	
			Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total [2]	100.0		78.4		21.6		53.8		46.2	
	1	2	3	4	5	6	7	8	9	10
2006	12.877	8.3	10.053	7.3	2.824	16.4	6.389	7.5	6.487	9.4
2007	11.678	7.5	9.126	6.6	2.552	14.9	5.737	6.7	5.941	8.5
2008	11.892	7.6	9.267	6.6	2.625	15.4	5.999	6.9	5.893	8.3
2009	14.856	9.4	11.643	8.2	3.214	19.4	7.990	9.2	6.867	9.6
2009 Q1	13.906	8.8	10.801	7.7	3.106	18.4	7.363	8.5	6.543	9.2
Q2	14.758	9.3	11.523	8.2	3.236	19.3	7.945	9.2	6.813	9.5
Q3	15.246	9.7	11.972	8.5	3.274	19.9	8.224	9.5	7.022	9.8
Q4	15.515	9.8	12.275	8.7	3.240	19.9	8.426	9.8	7.089	9.9
2010 Q1	15.722	10.0	12.533	8.8	3.189	19.9	8.567	9.9	7.155	10.0
2009 Oct.	15.492	9.8	12.215	8.6	3.278	20.0	8.391	9.7	7.101	9.9
Nov.	15.506	9.8	12.268	8.7	3.238	19.9	8.439	9.8	7.067	9.9
Dec.	15.547	9.9	12.343	8.7	3.203	19.7	8.449	9.8	7.098	9.9
2010 Jan.	15.652	9.9	12.465	8.8	3.187	19.8	8.529	9.9	7.123	9.9
Feb.	15.707	10.0	12.509	8.8	3.198	19.9	8.574	10.0	7.134	10.0
Mar.	15.808	10.0	12.626	8.9	3.181	19.9	8.599	10.0	7.209	10.1

Source: Eurostat.

1) Data for employment refer to persons and are based on the ESA 95. Data for unemployment refer to persons and follow ILO recommendations.
2) In 2009.
3) Adult: 25 years of age and over; youth: below 25 years of age; rates are expressed as a percentage of the labour force for the relevant age group.
4) Rates are expressed as a percentage of the labour force for the relevant gender.

GOVERNMENT FINANCE

6.1 Revenue, expenditure and deficit/surplus [1]

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue										Capital revenue		Memo item: Fiscal burden [2]
			Direct taxes			Indirect taxes		Social contributions			Sales			
				Households	Corporations		Received by EU institutions		Employers	Employees			Capital taxes	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	44.3	11.5	8.8	2.7	13.7	0.3	15.4	8.1	4.5	2.2	0.5	0.3	40.9
2006	45.3	45.0	12.1	8.9	3.0	13.9	0.3	15.3	8.1	4.5	2.1	0.3	0.3	41.5
2007	45.4	45.2	12.4	9.1	3.2	13.8	0.3	15.1	8.0	4.4	2.1	0.3	0.3	41.6
2008	44.9	44.7	12.2	9.3	2.8	13.3	0.3	15.3	8.1	4.5	2.1	0.2	0.3	41.0
2009	44.4	44.1	11.3	9.1	2.2	13.0	0.3	15.7	8.3	4.5	2.2	0.3	0.4	40.4

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure				Memo item: Primary expenditure [3]
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments	Subsidies	Paid by EU institutions		Investment	Capital transfers	Paid by EU institutions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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	2.4	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	42.9	10.2	5.0	2.9	24.8	22.0	1.7	0.5	3.8	2.5	1.4	0.0	43.8
2007	46.1	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	43.1	10.1	5.1	3.0	24.8	22.0	1.6	0.4	3.8	2.5	1.3	0.0	43.9
2009	50.7	46.5	10.8	5.6	2.8	27.3	24.2	1.9	0.4	4.2	2.8	1.4	0.0	47.9

3. Euro area – deficit/surplus, primary deficit/surplus and government consumption

	Deficit (-)/surplus (+)					Primary deficit (-)/ surplus (+)	Government consumption [4]							
	Total	Central gov.	State gov.	Local gov.	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Collective consumption	Individual consumption
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001	-1.9	-1.7	-0.4	-0.1	0.3	1.9	19.9	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	-1.5	-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	-1.1	0.0	-0.1	0.5	2.3	20.0	10.0	5.0	5.2	1.9	2.1	7.9	12.1
2008	-2.0	-2.0	-0.2	-0.2	0.4	1.0	20.5	10.1	5.1	5.3	1.9	2.1	8.1	12.4
2009	-6.3	-5.0	-0.5	-0.4	-0.4	-3.5	22.0	10.8	5.6	5.7	2.0	2.2	8.8	13.3

4. Euro area countries – deficit (-)/surplus (+) [5]

	BE	DE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2006	0.3	-1.6	3.0	-3.6	2.0	-2.3	-3.3	-1.2	1.4	-2.6	0.5	-1.5	-3.9	-1.3	-3.5	4.0
2007	-0.2	0.2	0.1	-5.1	1.9	-2.7	-1.5	3.4	3.6	-2.2	0.2	-0.4	-2.6	0.0	-1.9	5.2
2008	-1.2	0.0	-7.3	-7.7	-4.1	-3.3	-2.7	0.9	2.9	-4.5	0.7	-0.4	-2.8	-1.7	-2.3	4.2
2009	-6.0	-3.3	-14.3	-13.6	-11.2	-7.5	-5.3	-6.1	-0.7	-3.8	-5.3	-3.4	-9.4	-5.5	-6.8	-2.2

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit/surplus.

1) Data refer to the Euro 16. The concepts "revenue", "expenditure" and "deficit/surplus" are based on the ESA 95. Transactions involving the EU budget are included and consolidated. Transactions among Member States' governments are not consolidated.
2) The fiscal burden comprises taxes and social contributions.
3) Comprises total expenditure minus interest expenditure.
4) Corresponds to final consumption expenditure (P.3) of general government in the ESA 95.
5) Includes proceeds from the sale of UMTS licences and settlements under swaps and forward rate agreements.

6.2 Debt [1]

(as a percentage of GDP)

1. Euro area – by financial instrument and sector of the holder

	Total	Financial instruments				Holders				
		Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [2]				Other creditors [3]
						Total	MFIs	Other financial corporations	Other sectors	
	1	2	3	4	5	6	7	8	9	10
2000	69.2	2.7	13.2	3.7	49.6	43.9	22.1	12.3	9.5	25.4
2001	68.2	2.8	12.4	4.0	49.0	42.0	20.6	11.0	10.4	26.2
2002	68.0	2.7	11.8	4.6	48.9	40.5	19.4	10.6	10.5	27.4
2003	69.1	2.1	12.4	5.0	49.6	39.7	19.6	11.0	9.1	29.3
2004	69.5	2.2	12.0	5.0	50.3	38.2	18.5	10.7	9.0	31.3
2005	70.1	2.4	11.8	4.7	51.1	36.3	17.2	11.1	8.0	33.8
2006	68.3	2.4	11.5	4.1	50.2	34.4	17.4	9.3	7.7	33.8
2007	65.9	2.2	10.8	4.2	48.7	32.6	16.7	8.5	7.3	33.4
2008	69.4	2.3	11.0	6.7	49.4	32.4	16.7	8.0	7.6	37.0
2009	78.6	2.4	11.9	8.6	55.8	36.7	19.6	8.8	8.3	41.9

2. Euro area – by issuer, maturity and currency denomination

	Total	Issued by: [4]				Original maturity			Residual maturity			Currencies	
		Central gov.	State gov.	Local gov.	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currencies	Other currencies
	1	2	3	4	5	6	7	8	9	10	11	12	13
2000	69.2	58.2	5.8	4.9	0.4	6.5	62.7	6.2	13.4	27.8	28.1	67.4	1.8
2001	68.2	57.1	6.0	4.7	0.4	7.0	61.2	5.3	13.7	26.6	27.9	66.7	1.5
2002	68.0	56.7	6.2	4.7	0.4	7.6	60.4	5.2	15.5	25.3	27.2	66.7	1.3
2003	69.1	56.9	6.5	5.1	0.6	7.8	61.3	5.0	14.9	26.0	28.2	68.2	0.9
2004	69.5	57.3	6.6	5.1	0.4	7.8	61.6	4.7	14.8	26.2	28.5	68.6	0.9
2005	70.1	57.6	6.7	5.2	0.5	7.9	62.2	4.6	14.8	25.5	29.7	69.1	1.0
2006	68.3	55.9	6.5	5.3	0.5	7.4	60.8	4.3	14.4	24.0	29.8	67.7	0.6
2007	65.9	54.0	6.2	5.2	0.5	7.4	58.5	4.3	14.6	23.5	27.8	65.4	0.5
2008	69.4	57.2	6.6	5.2	0.4	10.2	59.2	4.4	17.8	23.3	28.4	68.6	0.8
2009	78.6	64.8	7.5	5.6	0.6	12.2	66.4	4.5	19.8	26.7	32.1	77.9	0.8

3. Euro area countries

	BE	DE	IE	GR	ES	FR	IT	CY	LU	MT	NL	AT	PT	SI	SK	FI
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2006	88.1	67.6	24.9	97.8	39.6	63.7	106.5	64.6	6.5	63.7	47.4	62.2	64.7	26.7	30.5	39.7
2007	84.2	65.0	25.0	95.7	36.2	63.8	103.5	58.3	6.7	61.9	45.5	59.5	63.6	23.4	29.3	35.2
2008	89.8	66.0	43.9	99.2	39.7	67.5	106.1	48.4	13.7	63.7	58.2	62.6	66.3	22.6	27.7	34.2
2009	96.7	73.2	64.0	115.1	53.2	77.6	115.8	56.2	14.5	69.1	60.9	66.5	76.8	35.9	35.7	44.0

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' debt.

1) Data refer to the Euro 16. Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Data are partially estimated.

2) Holders resident in the country whose government has issued the debt.

3) Includes residents of euro area countries other than the country whose government has issued the debt.

4) Excludes debt held by general government in the country whose government has issued it.

6.3 Change in debt [1]
(as a percentage of GDP)

1. Euro area – by source, financial instrument and sector of the holder

	Total	Source of change			Financial instruments				Holders			
		Borrowing requirement [2]	Valuation effects [3]	Other changes in volume [4]	Currency and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors [5]	MFIs	Other financial corporations	Other creditors [6]
	1	2	3	4	5	6	7	8	9	10	11	12
2001	1.9	1.9	-0.1	0.1	0.2	-0.2	0.5	1.5	0.0	-0.5	-0.8	1.9
2002	2.1	2.7	-0.5	0.0	0.0	-0.2	0.7	1.6	0.0	-0.5	-0.1	2.1
2003	3.1	3.3	-0.2	0.0	-0.6	0.9	0.6	2.1	0.4	0.8	0.8	2.7
2004	3.1	3.2	-0.1	0.0	0.2	0.1	0.1	2.7	0.1	-0.3	0.1	3.1
2005	3.1	3.0	0.0	0.0	0.3	0.3	-0.1	2.6	-0.6	-0.7	0.8	3.6
2006	1.5	1.4	0.1	0.0	0.2	0.2	-0.4	1.5	-0.1	1.0	-1.2	1.6
2007	1.1	1.1	0.0	0.0	-0.1	-0.1	0.3	1.0	-0.2	0.2	-0.3	1.2
2008	5.2	5.1	0.1	0.0	0.1	0.4	2.6	2.0	0.7	0.5	-0.3	4.5
2009	7.1	7.3	-0.2	0.0	0.1	0.6	1.6	4.8	3.4	2.4	0.6	3.7

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) [7]	Deficit-debt adjustment [8]											
			Total	Transactions in main financial assets held by general government							Valuation effects		Other changes in volume	Other [9]
				Total	Currency and deposits	Loans	Securities [10]	Shares and other equity	Privatisations	Equity injections		Exchange rate effects		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2001	1.9	-1.9	0.0	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	-0.1	0.0	0.1	0.6
2002	2.1	-2.6	-0.5	0.1	0.1	0.0	0.0	-0.1	-0.4	0.1	-0.5	-0.1	0.0	0.0
2003	3.1	-3.1	0.0	0.1	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.1	0.0	0.1
2004	3.1	-3.0	0.2	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.1
2005	3.1	-2.6	0.5	0.6	0.3	0.1	0.2	0.1	-0.3	0.2	0.0	0.0	0.0	-0.1
2006	1.5	-1.3	0.2	0.3	0.3	-0.1	0.3	-0.2	-0.4	0.1	0.1	0.0	0.0	-0.2
2007	1.1	-0.6	0.4	0.6	0.2	0.0	0.2	0.1	-0.2	0.2	0.0	0.0	0.0	-0.1
2008	5.2	-2.0	3.2	3.1	0.8	0.7	0.8	0.8	0.0	0.6	0.1	0.0	0.0	0.1
2009	7.1	-6.3	0.8	1.0	0.4	0.0	0.2	0.4	-0.2	0.5	-0.2	0.0	0.0	0.0

Source: ECB.
1) Data refer to the Euro 16 and are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e. [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.
7) Including proceeds from sales of UMTS licences.
8) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
9) Mainly composed of transactions in other assets and liabilities (trade credits, other receivables/payables and financial derivatives).
10) Excluding financial derivatives.

6.4 Quarterly revenue, expenditure and deficit/surplus [1]

(as a percentage of GDP)

1. Euro area – quarterly revenue

	Total	Current revenue						Capital revenue		Memo item: Fiscal burden [2]
			Direct taxes	Indirect taxes	Social contributions	Sales	Property income		Capital taxes	
	1	2	3	4	5	6	7	8	9	10
2003 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	15.3	1.7	0.6	0.5	0.3	38.5
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	42.0	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	49.3	48.7	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	45.7	45.3	12.8	13.5	15.0	1.9	1.5	0.4	0.3	41.5
Q3	43.6	43.2	12.0	12.8	14.9	1.9	0.8	0.5	0.3	40.0
Q4	49.7	49.1	14.4	14.1	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
Q2	45.1	44.7	12.8	12.8	15.0	1.8	1.5	0.4	0.3	40.9
Q3	43.1	42.8	11.7	12.5	15.1	1.9	0.8	0.3	0.3	39.5
Q4	48.8	48.3	13.6	13.6	16.3	3.0	1.0	0.5	0.3	43.7
2009 Q1	42.1	41.9	10.4	12.5	15.4	1.8	1.0	0.2	0.2	38.6
Q2	44.5	43.9	11.6	12.5	15.5	2.0	1.4	0.6	0.5	40.2
Q3	42.4	42.0	10.7	12.3	15.5	2.0	0.8	0.3	0.3	38.8
Q4	48.3	47.6	12.6	13.6	16.4	3.2	0.9	0.7	0.5	43.0

2. Euro area – quarterly expenditure and deficit/surplus

	Total	Current expenditure							Capital expenditure			Deficit (-)/ surplus (+)	Primary deficit (-)/ surplus (+)
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social benefits	Subsidies		Investment	Capital transfers		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2003 Q4	51.1	46.3	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	-0.2
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	10.3	4.6	3.1	25.1	21.4	1.2	3.7	1.9	1.8	-4.8	-1.7
Q2	46.2	42.8	10.2	4.9	3.2	24.5	21.3	1.1	3.4	2.3	1.1	-1.7	1.4
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	4.6	3.0	24.6	21.1	1.2	3.1	1.9	1.2	-2.9	0.1
Q2	45.4	42.2	10.2	4.9	3.1	24.0	21.0	1.1	3.2	2.3	1.0	0.1	3.1
Q3	45.4	42.0	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	41.1	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	0.9	1.1	4.3
Q3	44.6	41.2	9.6	4.8	2.9	23.9	20.7	1.2	3.4	2.5	0.9	-1.0	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	2.1
2008 Q1	44.6	41.4	9.8	4.6	3.0	24.1	20.5	1.2	3.2	2.0	1.2	-2.4	0.5
Q2	45.2	41.9	10.1	5.0	3.2	23.7	20.6	1.1	3.3	2.3	1.0	-0.1	3.1
Q3	45.5	41.9	9.7	4.8	3.1	24.4	21.2	1.2	3.5	2.5	1.0	-2.4	0.7
Q4	51.8	46.7	11.0	6.1	2.8	26.9	23.0	1.4	5.0	3.4	1.7	-2.9	-0.2
2009 Q1	48.4	44.9	10.5	5.3	2.9	26.2	22.4	1.3	3.5	2.2	1.2	-6.3	-3.4
Q2	50.1	46.0	10.8	5.5	3.2	26.5	23.0	1.3	4.0	2.7	1.3	-5.6	-2.4
Q3	49.2	45.3	10.3	5.3	2.8	27.0	23.4	1.4	3.8	2.6	1.1	-6.8	-4.1
Q4	54.7	49.3	11.4	6.4	2.5	29.1	24.7	1.6	5.4	3.4	1.9	-6.5	-3.9

Sources: ECB calculations based on Eurostat and national data.

1) The concepts "revenue", "expenditure" and "deficit/surplus" are based on the ESA 95. Transactions between the EU budget and entities outside the government sector are not included. Otherwise, except for different data transmission deadlines, the quarterly data are consistent with the annual data. The data are not seasonally adjusted.

2) The fiscal burden comprises taxes and social contributions.

6.5 Quarterly debt and change in debt
(as a percentage of GDP)

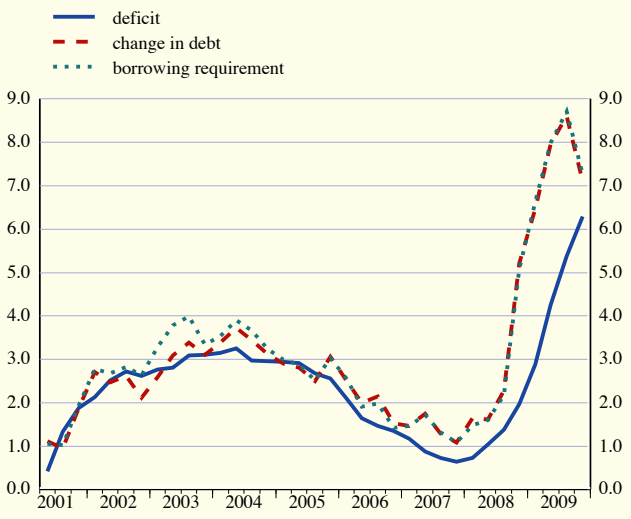
1. Euro area – Maastricht debt by financial instrument [1)]

	Total	Financial instruments			
		Currency and deposits	Loans	Short-term securities	Long-term securities
	1	2	3	4	5
2007 Q1	68.4	2.4	11.5	4.7	49.9
Q2	68.7	2.2	11.2	5.1	50.2
Q3	67.7	2.1	11.1	5.1	49.4
Q4	65.9	2.2	10.8	4.2	48.7
2008 Q1	67.0	2.1	11.2	5.0	48.7
Q2	67.3	2.1	11.2	4.9	49.0
Q3	67.4	2.1	11.1	5.5	48.6
Q4	69.4	2.3	11.0	6.7	49.4
2009 Q1	72.8	2.3	11.3	7.9	51.4
Q2	76.1	2.3	11.6	8.4	53.7
Q3	77.8	2.3	11.7	9.2	54.6
Q4	78.6	2.4	11.9	8.6	55.8

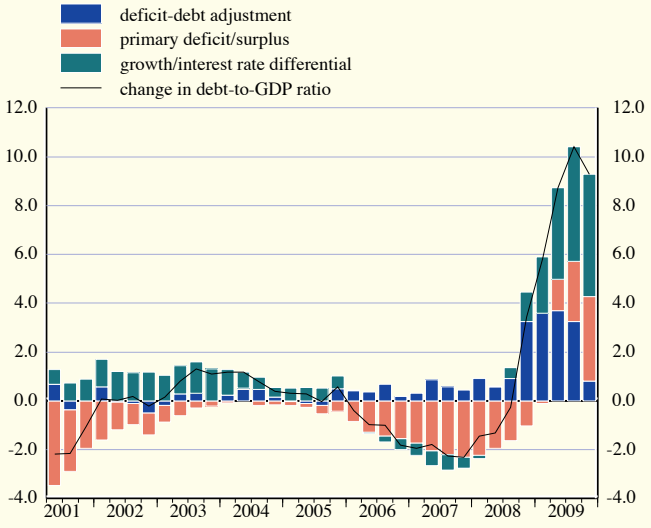
2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)	Deficit-debt adjustment								Memo item: Borrowing requirement
			Total	Transactions in main financial assets held by general government					Valuation effects and other changes in volume	Other	
				Total	Currency and deposits	Loans	Securities	Shares and other equity			
	1	2	3	4	5	6	7	8	9	10	11
2007 Q1	4.5	-2.1	2.3	1.8	1.1	0.0	0.6	0.1	-0.7	1.2	5.2
Q2	4.2	1.1	5.3	4.9	4.1	0.0	0.5	0.3	0.6	-0.2	3.6
Q3	-0.6	-1.0	-1.5	-1.4	-2.1	0.0	0.4	0.2	0.1	-0.2	-0.6
Q4	-3.5	-0.6	-4.1	-2.9	-2.1	0.0	-0.6	-0.2	0.0	-1.2	-3.4
2008 Q1	6.6	-2.4	4.2	3.3	2.0	0.0	1.1	0.3	0.0	0.8	6.6
Q2	4.0	-0.1	3.8	3.9	1.8	0.3	1.3	0.4	0.0	-0.1	4.0
Q3	2.2	-2.4	-0.1	-0.9	-1.6	0.0	0.2	0.5	0.5	0.2	1.8
Q4	8.0	-2.9	5.1	5.8	0.8	2.6	0.5	1.9	0.0	-0.8	8.0
2009 Q1	11.9	-6.3	5.7	6.5	5.1	-0.1	0.9	0.7	-1.2	0.4	13.2
Q2	9.9	-5.6	4.3	3.3	2.4	-0.6	0.2	1.2	0.6	0.4	9.3
Q3	4.7	-6.8	-2.1	-2.9	-3.2	0.7	0.0	-0.4	0.2	0.6	4.5
Q4	2.2	-6.5	-4.3	-2.6	-2.6	0.0	-0.1	0.1	-0.3	-1.4	2.4

C28 Deficit, borrowing requirement and change in debt
(four-quarter moving sum as a percentage of GDP)



C29 Maastricht debt
(annual change in the debt-to-GDP ratio and underlying factors)



Sources: ECB calculations based on Eurostat and national data.
1) The stock data in quarter t are expressed as a percentage of the sum of GDP in t and the previous three quarters.

7 EXTERNAL TRANSACTIONS AND POSITIONS

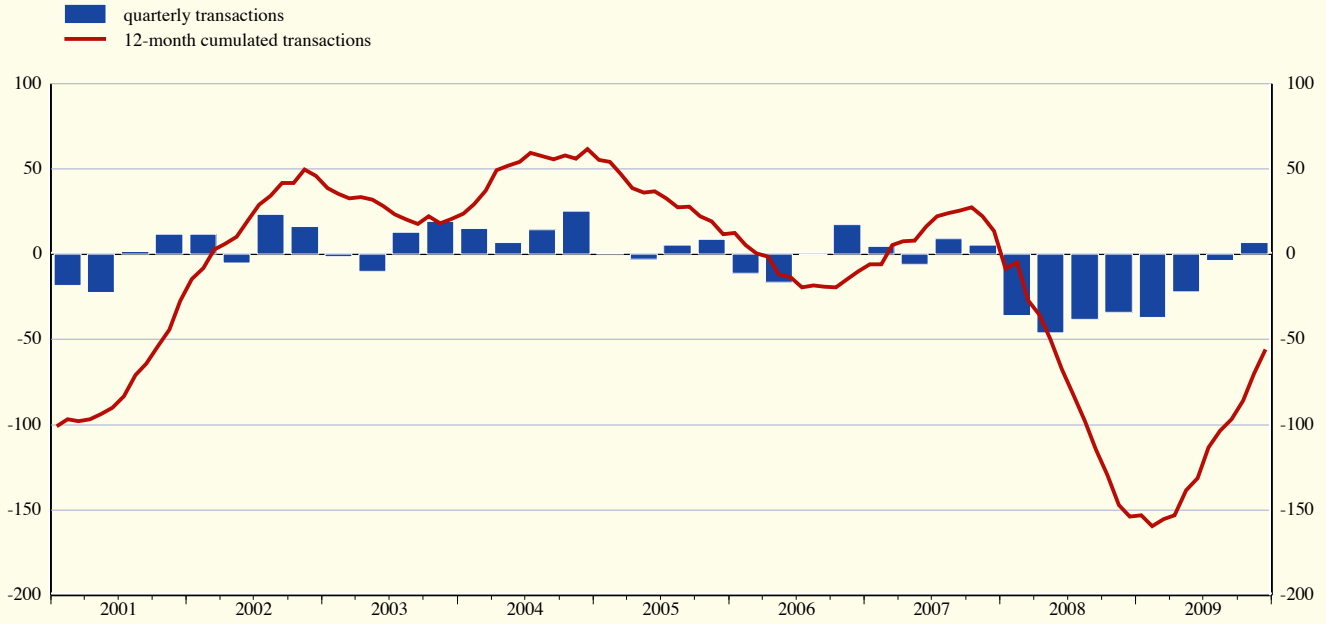
7.1 Summary balance of payments [1]

(EUR billions; net transactions)

	Current account					Capital account	Net lending/ borrowing to/from rest of the world (columns 1+6)	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers			Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2007	13.5	48.0	49.6	2.9	-87.0	5.0	18.5	-10.7	-73.7	151.5	-63.7	-19.6	-5.1	-7.8
2008	-153.8	-19.1	41.4	-76.6	-99.5	9.8	-144.0	163.2	-198.7	344.1	-62.5	83.7	-3.4	-19.2
2009	-55.8	39.5	31.4	-38.0	-88.7	8.0	-47.8	45.4	-95.7	317.9	39.9	-221.2	4.5	2.4
2008 Q4	-34.0	-3.4	8.0	-12.3	-26.3	1.7	-32.3	39.6	-51.9	142.2	-12.2	-38.0	-0.5	-7.3
2009 Q1	-37.2	-7.6	1.8	-3.0	-28.4	1.5	-35.8	50.9	-64.6	105.8	15.8	-11.8	5.6	-15.1
Q2	-22.0	14.0	6.9	-25.5	-17.3	2.2	-19.8	10.9	0.3	70.8	22.9	-81.7	-1.4	8.9
Q3	-3.6	13.8	12.2	-6.7	-22.8	1.4	-2.2	-12.6	-23.7	78.2	-4.5	-62.9	0.3	14.8
Q4	7.0	19.4	10.6	-2.8	-20.2	3.0	9.9	-3.8	-7.8	63.1	5.8	-64.8	-0.1	-6.2
2009 Feb.	-5.7	0.1	0.8	-0.9	-5.8	0.5	-5.2	8.5	-15.6	64.7	1.5	-43.5	1.3	-3.2
Mar.	-7.9	2.9	0.6	0.9	-12.3	0.7	-7.2	10.9	-27.6	53.3	5.6	-19.6	-0.9	-3.6
Apr.	-9.8	4.1	2.0	-6.6	-9.3	1.6	-8.2	18.1	7.7	-5.3	13.0	1.5	1.2	-9.9
May	-13.7	2.6	3.0	-12.7	-6.7	0.2	-13.5	9.4	17.5	33.8	9.4	-49.1	-2.2	4.1
June	1.5	7.3	1.8	-6.2	-1.3	0.3	1.8	-16.6	-24.8	42.3	0.5	-34.2	-0.4	14.8
July	8.1	14.1	3.9	-3.0	-6.9	0.9	9.0	-19.4	7.2	-26.5	6.4	-2.9	-3.7	10.4
Aug.	-6.1	-1.9	4.1	0.0	-8.3	0.5	-5.5	-10.8	1.7	25.7	-9.8	-29.2	0.8	16.3
Sep.	-5.6	1.5	4.1	-3.7	-7.5	0.0	-5.6	17.6	-32.6	78.9	-1.1	-30.8	3.3	-11.9
Oct.	-0.2	8.5	4.1	0.5	-13.3	0.2	0.0	1.5	-3.0	8.2	1.8	-4.8	-0.6	-1.5
Nov.	-2.4	5.0	1.6	-2.8	-6.1	1.4	-1.0	2.8	-7.4	-6.2	-0.1	15.1	1.4	-1.8
Dec.	9.5	5.9	4.9	-0.5	-0.7	1.4	10.9	-8.1	2.7	61.1	4.1	-75.0	-0.8	-2.8
2010 Jan.	-14.7	-7.4	0.8	-1.1	-7.1	1.7	-13.0	14.5	-3.1	-0.7	5.1	11.7	1.5	-1.5
Feb.	-5.2	5.3	1.7	1.2	-13.3	0.9	-4.3	7.2	0.2	10.7	-1.0	0.9	-3.6	-2.9
	12-month cumulated transactions													
2010 Feb.	-46.4	48.0	32.7	-34.1	-93.0	9.9	-36.5	27.0	-61.6	275.3	33.8	-216.3	-4.2	9.5

C30 B.o.p. current account balance

(EUR billions)



Source: ECB.

1) The sign convention is explained in the General Notes.

7.2 Current and capital accounts

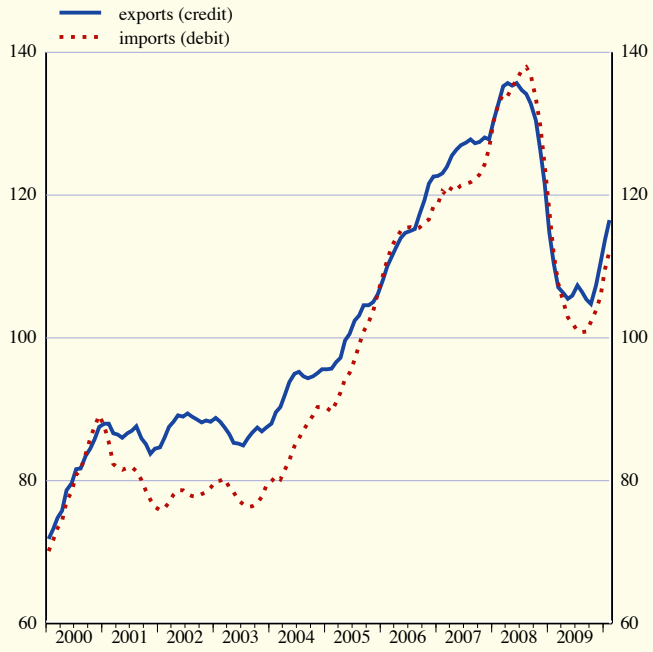
(EUR billions; transactions)

1. Summary current and capital accounts

	Current account													Capital account	
	Total			Goods		Services		Income		Current transfers					
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit		Debit		Credit	Debit
											Workers' remittances		Workers' remittances		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2007	2,702.7	2,689.2	13.5	1,518.0	1,470.1	494.9	445.3	598.7	595.8	91.0	6.4	178.1	20.7	25.7	20.7
2008	2,732.5	2,886.3	-153.8	1,580.4	1,599.5	517.6	476.2	546.1	622.6	88.5	6.7	188.0	21.4	24.2	14.5
2009	2,274.9	2,330.7	-55.8	1,290.1	1,250.5	471.1	439.7	421.0	459.0	92.8	6.1	181.5	21.6	18.9	10.9
2008 Q4	668.9	702.9	-34.0	378.7	382.1	130.7	122.7	132.7	145.0	26.8	1.8	53.1	5.6	5.3	3.6
2009 Q1	557.1	594.4	-37.2	307.5	315.1	110.4	108.6	113.5	116.4	25.8	1.4	54.2	5.0	4.1	2.6
Q2	559.5	581.4	-22.0	312.5	298.5	114.8	107.9	111.2	136.7	21.0	1.6	38.3	5.4	4.9	2.8
Q3	556.0	559.6	-3.6	322.5	308.7	124.0	111.9	95.1	101.8	14.3	1.6	37.2	5.5	3.9	2.4
Q4	602.3	595.3	7.0	347.6	328.2	121.8	111.3	101.2	104.0	31.7	1.5	51.8	5.7	6.0	3.0
2009 Dec.	211.9	202.4	9.5	114.0	108.1	44.2	39.3	37.4	37.9	16.3	.	17.0	.	2.7	1.3
2010 Jan.	174.3	189.0	-14.7	100.2	107.5	35.1	34.3	28.7	29.9	10.4	.	17.4	.	2.5	0.8
Feb.	185.9	191.0	-5.2	111.7	106.4	34.3	32.6	30.4	29.2	9.5	.	22.8	.	1.6	0.7
	Seasonally adjusted														
2008 Q4	641.3	690.4	-49.1	364.4	372.2	128.0	120.0	128.1	149.5	20.8	.	48.7	.	.	.
2009 Q1	580.2	610.0	-29.8	321.3	323.0	121.1	113.7	117.1	127.6	20.7	.	45.7	.	.	.
Q2	566.2	578.8	-12.6	317.6	306.2	116.4	111.0	108.6	116.6	23.6	.	45.0	.	.	.
Q3	551.7	560.1	-8.4	316.2	302.6	115.2	107.1	98.6	108.1	21.8	.	42.3	.	.	.
Q4	573.6	580.7	-7.1	331.6	317.6	118.5	108.2	97.0	106.8	26.5	.	48.1	.	.	.
2009 Sep.	181.8	188.5	-6.7	104.1	102.6	38.3	35.9	31.9	35.9	7.5	.	14.1	.	.	.
Oct.	188.0	191.8	-3.8	107.6	103.4	38.7	35.1	33.1	35.3	8.6	.	17.9	.	.	.
Nov.	191.9	195.1	-3.2	110.4	105.6	39.0	37.1	31.9	36.0	10.6	.	16.4	.	.	.
Dec.	193.7	193.8	-0.1	113.6	108.6	40.8	36.0	32.0	35.4	7.3	.	13.8	.	.	.
2010 Jan.	199.5	201.1	-1.7	117.1	114.6	39.3	36.2	31.9	34.1	11.1	.	16.1	.	.	.
Feb.	195.6	199.5	-3.9	118.9	113.4	38.9	35.6	32.8	34.2	5.0	.	16.3	.	.	.

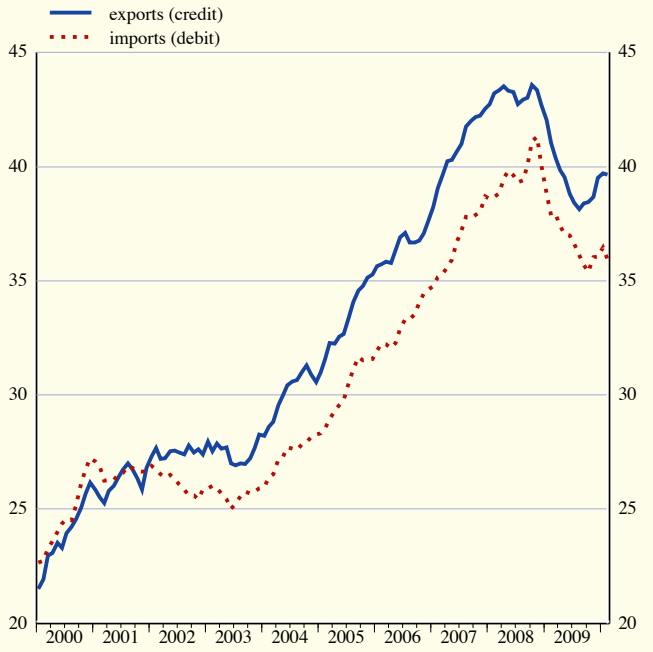
C31 B.o.p. goods

(EUR billions; seasonally adjusted; three-month moving average)



C32 B.o.p. services

(EUR billions; seasonally adjusted; three-month moving average)



Source: ECB.

7.2 Current and capital accounts
(EUR billions)

2. Income account
(transactions)

	Compensation of employees		Investment income													
	Credit	Debit	Total		Direct investment						Portfolio investment				Other investment	
			Credit	Debit	Equity				Debt		Equity		Debt		Credit	Debit
					Credit		Debit		Credit	Debit	Credit	Debit	Credit	Debit		
						Reinv. earnings		Reinv. earnings								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2007	18.8	10.3	579.9	585.5	208.7	70.9	137.7	44.2	26.6	25.2	45.3	113.7	118.8	111.1	180.5	197.8
2008	18.9	10.4	527.1	612.2	154.4	17.9	147.0	50.0	29.9	24.8	43.0	119.0	125.2	125.3	174.5	196.1
2009	18.9	11.6	402.0	447.4	131.7	23.2	106.5	37.1	20.3	20.8	31.4	80.0	110.2	141.9	108.5	98.3
2008 Q4	4.9	2.7	127.8	142.3	35.9	-1.5	36.5	10.1	8.4	6.0	8.4	19.9	31.6	32.7	43.5	47.1
2009 Q1	4.7	2.1	108.8	114.4	34.1	7.8	26.7	15.2	5.2	5.1	6.9	13.3	29.4	37.5	33.3	31.9
Q2	4.6	2.6	106.6	134.2	33.1	1.5	25.6	4.3	5.6	5.9	10.6	38.8	27.5	36.6	29.8	27.2
Q3	4.6	3.5	90.5	98.4	29.0	7.5	25.1	8.5	4.1	4.7	7.1	13.9	27.4	34.8	22.9	19.9
Q4	5.0	3.5	96.2	100.5	35.5	6.3	29.1	9.1	5.4	5.0	6.8	14.1	25.9	33.0	22.5	19.3

3. Geographical breakdown
(cumulated transactions)

2009 Q1 to 2009 Q4	Total	EU Member States outside the euro area						Brazil	Canada	China	India	Japan	Russia	Switzerland	United States	Other
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Credits															
Current account	2,274.9	803.1	45.9	65.9	393.5	234.0	63.7	34.4	30.6	87.0	29.3	46.7	70.3	167.3	306.4	699.8
Goods	1,290.1	429.7	27.7	41.2	183.8	176.8	0.2	18.5	15.7	69.1	21.8	28.8	50.2	83.8	153.2	419.3
Services	471.1	157.2	11.1	12.1	101.9	26.6	5.5	7.4	6.5	13.0	5.9	10.6	12.8	48.4	70.4	138.9
Income	421.0	148.5	6.5	11.3	96.1	27.1	7.5	8.1	7.6	4.8	1.5	7.1	7.0	28.1	77.6	130.7
Investment income	402.0	141.8	6.4	11.1	94.5	26.5	3.3	8.1	7.5	4.7	1.5	7.1	6.9	20.9	75.7	127.8
Current transfers	92.8	67.8	0.7	1.3	11.8	3.4	50.6	0.4	0.8	0.2	0.1	0.2	0.3	6.9	5.1	10.9
Capital account	18.9	14.6	0.0	0.0	0.8	0.2	13.5	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	3.3
	Debits															
Current account	2,330.7	749.6	40.6	67.3	336.3	207.7	97.6	-	24.6	-	-	85.9	-	157.0	324.9	-
Goods	1,250.5	359.7	26.2	37.0	136.4	160.0	0.0	20.1	10.3	153.4	18.0	41.8	78.3	72.1	121.4	375.5
Services	439.7	133.8	7.1	10.4	84.4	31.6	0.2	5.7	5.6	9.7	4.4	7.6	7.5	40.3	94.3	130.7
Income	459.0	145.9	6.4	18.8	103.0	11.7	6.0	-	7.0	-	-	36.1	-	38.6	102.2	-
Investment income	447.4	138.5	6.3	18.7	101.4	6.0	6.0	-	6.9	-	-	36.0	-	38.1	101.4	-
Current transfers	181.5	110.1	0.8	1.1	12.5	4.4	91.4	1.4	1.7	2.9	0.7	0.4	0.5	5.9	6.9	50.9
Capital account	10.9	2.4	0.1	0.1	0.9	0.2	1.0	0.1	0.1	0.1	0.2	0.1	0.0	0.5	0.8	6.6
	Net															
Current account	-55.8	53.6	5.3	-1.4	57.2	26.2	-33.9	-	6.0	-	-	-39.2	-	10.2	-18.5	-
Goods	39.5	70.0	1.5	4.2	47.4	16.8	0.2	-1.5	5.4	-84.3	3.8	-13.0	-28.2	11.7	31.8	43.8
Services	31.4	23.3	3.9	1.7	17.5	-5.0	5.2	1.7	0.9	3.2	1.6	3.0	5.3	8.1	-23.9	8.2
Income	-38.0	2.5	0.1	-7.5	-6.9	15.5	1.5	-	0.6	-	-	-29.0	-	-10.5	-24.6	-
Investment income	-45.4	3.3	0.1	-7.6	-7.0	20.5	-2.7	-	0.6	-	-	-29.0	-	-17.2	-25.7	-
Current transfers	-88.7	-42.4	-0.2	0.2	-0.7	-1.0	-40.8	-1.1	-0.9	-2.6	-0.6	-0.1	-0.2	0.9	-1.8	-40.0
Capital account	8.0	12.3	0.0	-0.1	-0.1	0.0	12.5	-0.1	-0.1	-0.1	-0.2	-0.1	0.0	-0.1	-0.3	-3.3

Source: ECB.

7.3 Financial account

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

1. Summary financial account

	Total [1]			Total as a % of GDP			Direct investment		Portfolio investment		Net financial derivatives	Other investment		Reserve assets
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Outstanding amounts (international investment position)													
2006	12,384.3	13,399.8	-1,015.5	144.8	156.7	-11.9	3,153.4	2,729.4	4,372.1	5,950.0	-20.8	4,553.8	4,720.4	325.8
2007	13,908.5	15,155.8	-1,247.3	154.5	168.3	-13.9	3,572.8	3,130.7	4,631.6	6,556.5	-26.0	5,382.9	5,468.6	347.2
2008	13,315.2	14,949.2	-1,634.0	143.8	161.4	-17.7	3,744.4	3,217.0	3,763.9	6,078.6	-36.2	5,468.8	5,653.6	374.2
2009 Q2	13,309.9	14,845.3	-1,535.4	146.6	163.5	-16.9	4,012.1	3,302.8	3,898.5	6,304.5	-57.8	5,075.6	5,238.0	381.5
Q3	13,381.5	14,979.0	-1,597.5	148.5	166.3	-17.7	4,042.1	3,345.1	4,059.8	6,626.7	-60.1	4,908.9	5,007.2	430.8
Q4	13,687.5	15,154.8	-1,467.3	152.4	168.8	-16.3	4,138.5	3,386.5	4,209.0	6,816.7	-48.3	4,926.0	4,951.6	462.4
	Changes to outstanding amounts													
2005	2,209.7	2,070.3	139.3	27.1	25.4	1.7	522.1	209.0	842.5	1,012.3	16.0	790.0	849.1	39.1
2006	1,545.8	1,845.7	-299.9	18.1	21.6	-3.5	362.6	285.1	484.6	892.2	0.6	692.3	668.4	5.7
2007	1,524.2	1,756.0	-231.9	16.9	19.5	-2.6	419.4	401.3	259.5	606.5	-5.2	829.1	748.1	21.4
2008	-593.3	-206.6	-386.6	-6.4	-2.2	-4.2	171.7	86.3	-867.7	-478.0	-10.2	85.9	185.1	27.0
2009 Q3	71.6	133.7	-62.1	3.2	6.0	-2.8	30.0	42.3	161.2	322.2	-2.3	-166.7	-230.8	49.3
Q4	306.0	175.8	130.2	13.1	7.5	5.6	96.4	41.4	149.2	190.0	11.8	17.1	-55.6	31.5
	Transactions													
2006	1,728.6	1,719.1	9.4	20.2	20.1	0.1	417.6	257.4	519.8	708.5	0.6	789.3	753.2	1.3
2007	1,946.6	1,935.9	10.7	21.6	21.5	0.1	476.5	402.9	438.5	589.9	63.7	962.8	943.1	5.1
2008	464.8	628.0	-163.2	5.0	6.8	-1.8	323.8	125.1	-10.2	333.9	62.5	85.3	169.0	3.4
2009	-164.6	-119.3	-45.4	-1.8	-1.3	-0.5	314.4	218.6	74.2	392.1	-39.9	-508.8	-729.9	-4.5
2009 Q2	-20.4	-9.5	-10.9	-0.9	-0.4	-0.5	87.2	87.5	61.2	132.0	-22.9	-147.3	-229.0	1.4
Q3	20.8	8.1	12.6	0.9	0.4	0.6	62.0	38.2	45.6	123.7	4.5	-91.0	-153.8	-0.3
Q4	55.9	52.2	3.8	2.4	2.2	0.2	62.8	55.0	38.0	101.1	-5.8	-39.1	-103.9	0.1
2009 Oct.	89.4	90.9	-1.5	.	.	.	30.8	27.8	24.8	33.1	-1.8	34.9	30.0	0.6
Nov.	44.0	46.8	-2.8	.	.	.	16.7	9.3	19.5	13.3	0.1	9.1	24.2	-1.4
Dec.	-77.5	-85.6	8.1	.	.	.	15.3	17.9	-6.4	54.7	-4.1	-83.1	-158.2	0.8
2010 Jan.	79.6	94.0	-14.5	.	.	.	5.8	2.6	30.9	30.2	-5.1	49.5	61.2	-1.5
Feb.	41.4	48.6	-7.2	.	.	.	14.2	14.3	8.4	19.1	1.0	14.2	15.1	3.6
	Other changes													
2005	851.4	749.6	101.7	10.5	9.2	1.2	163.7	56.5	426.3	487.7	-1.4	205.7	205.4	57.1
2006	-182.7	126.6	-309.3	-2.1	1.5	-3.6	-55.0	27.7	-35.2	183.7	0.0	-97.0	-84.8	4.4
2007	-422.5	-179.9	-242.5	-4.7	-2.0	-2.7	-57.1	-1.5	-179.0	16.6	-69.0	-133.6	-195.0	16.3
2008	-1,058.0	-834.6	-223.4	-11.4	-9.0	-2.4	-152.1	-38.8	-857.5	-811.8	-72.7	0.6	16.1	23.6
	Other changes due to exchange rate changes													
2005	394.2	245.0	149.2	4.8	3.0	1.8	89.8	5.7	158.3	101.4	.	129.2	137.9	17.0
2006	-343.3	-228.5	-114.8	-4.0	-2.7	-1.4	-72.1	-4.2	-151.6	-101.1	.	-105.7	-123.2	-13.9
2007	-531.1	-291.5	-239.6	-5.9	-3.3	-2.7	-113.3	-5.9	-219.2	-106.0	.	-185.0	-179.6	-13.7
2008	-40.3	59.3	-99.6	-0.5	0.7	-1.2	-17.3	-0.2	1.8	42.0	.	-34.0	17.5	9.2
	Other changes due to price changes													
2005	284.5	430.3	-145.8	3.5	5.3	-1.8	45.0	40.8	199.0	389.5	-1.4	.	.	41.9
2006	288.6	298.4	-9.8	3.4	3.5	-0.1	45.4	33.5	226.0	264.9	0.0	.	.	17.1
2007	82.4	124.7	-42.4	0.9	1.4	-0.5	46.5	12.5	75.0	112.2	-69.8	.	.	30.7
2008	-1,013.8	-1,102.1	88.3	-10.9	-11.9	1.0	-155.6	-138.4	-803.6	-963.7	-75.9	.	.	21.2
	Other changes due to other adjustments													
2005	172.7	74.3	98.3	2.1	0.9	1.2	29.0	10.0	69.0	-3.1	.	76.5	67.4	-1.8
2006	-128.1	56.7	-184.7	-1.5	0.6	-2.1	-28.3	-1.6	-109.6	19.8	.	8.7	38.4	1.2
2007	30.7	-16.9	47.6	0.4	-0.2	0.5	5.0	-13.6	-33.0	12.4	.	59.5	-15.7	-0.8
2008	-20.9	191.6	-212.5	-0.2	2.0	-2.2	18.0	87.4	-56.9	102.2	.	25.4	2.0	-7.3
	Growth rates of outstanding amounts													
2005	15.2	13.4	-	.	.	.	15.2	6.8	13.1	12.1	.	18.5	19.5	-5.9
2006	16.1	14.8	-	.	.	.	15.0	10.5	13.6	13.7	.	20.5	18.7	0.3
2007	15.7	14.3	-	.	.	.	15.1	14.7	10.0	9.8	.	21.2	20.0	1.6
2008	3.3	4.2	-	.	.	.	9.2	4.0	-0.5	5.3	.	1.6	3.2	1.0
2009 Q2	-3.2	-1.8	-	.	.	.	9.3	5.7	-5.6	3.3	.	-9.0	-11.2	-1.6
Q3	-4.0	-3.0	-	.	.	.	7.9	4.9	-3.0	4.4	.	-12.2	-14.9	-1.1
Q4	-1.2	-0.8	-	.	.	.	8.3	6.8	1.9	6.4	.	-9.3	-12.8	-1.2

Source: ECB.

1) Net financial derivatives are included in assets.

7.3 Financial account

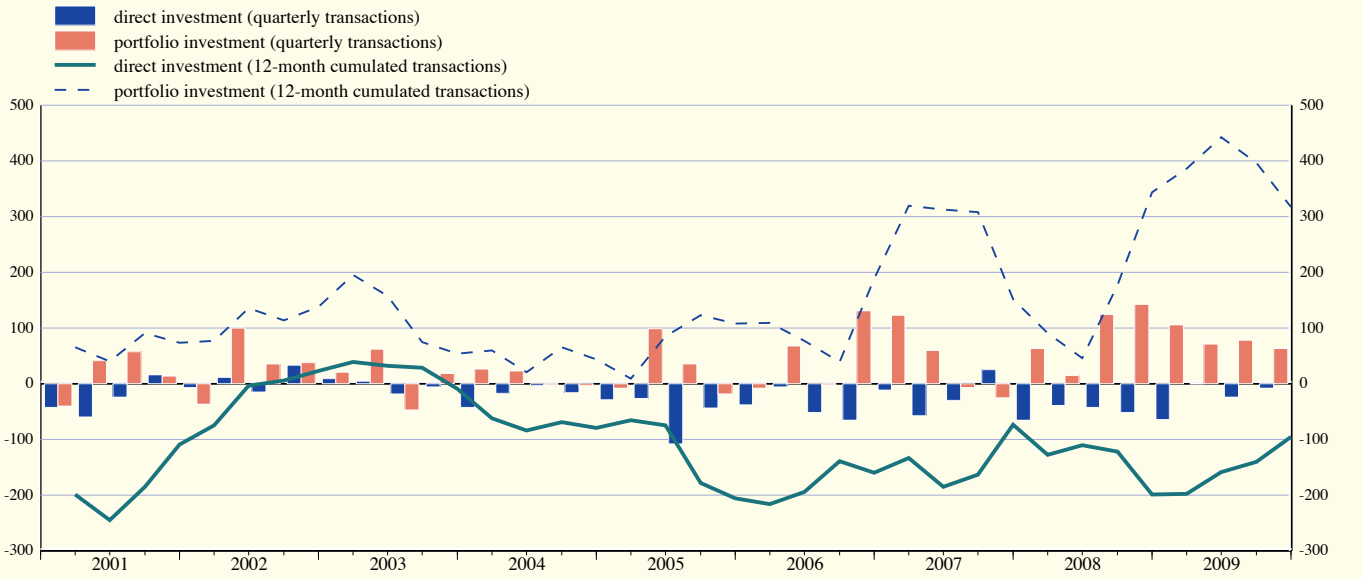
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period; transactions during period)

2. Direct investment

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	In MFIs	In non-MFIs	Total	To MFIs	To non-MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Outstanding amounts (international 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 Q3	4,042.1	3,158.3	259.6	2,898.7	883.8	10.4	873.4	3,345.1	2,517.5	74.7	2,442.8	827.6	15.2	812.4
Q4	4,138.5	3,246.9	259.8	2,987.1	891.6	11.0	880.6	3,386.5	2,566.9	76.7	2,490.2	819.6	15.2	804.4
	Transactions													
2007	476.5	368.4	18.9	349.5	108.2	-0.1	108.3	402.9	305.4	5.4	300.1	97.4	1.4	96.0
2008	323.8	195.1	-4.8	199.9	128.7	-0.2	128.9	125.1	93.0	-1.3	94.3	32.1	1.6	30.4
2009	314.4	227.0	22.0	205.0	87.4	3.4	84.0	218.6	212.3	8.1	204.2	6.3	-0.6	6.9
2009 Q2	87.2	71.4	7.0	64.4	15.8	0.5	15.3	87.5	74.5	1.6	72.9	13.1	0.2	12.8
Q3	62.0	37.0	-1.6	38.7	24.9	0.3	24.6	38.2	35.4	2.4	33.0	2.8	-1.1	3.9
Q4	62.8	64.4	-1.2	65.6	-1.6	1.7	-3.3	55.0	60.9	3.0	57.9	-5.9	0.1	-5.9
2009 Oct.	30.8	29.1	-0.5	29.7	1.7	0.3	1.4	27.8	27.4	-1.0	28.5	0.4	0.0	0.4
Nov.	16.7	19.7	0.8	18.9	-3.0	0.2	-3.2	9.3	8.1	-0.9	9.0	1.2	-0.2	1.4
Dec.	15.3	15.6	-1.5	17.1	-0.3	1.2	-1.5	17.9	25.4	4.9	20.5	-7.4	0.3	-7.8
2010 Jan.	5.8	7.0	0.2	6.8	-1.3	0.0	-1.3	2.6	4.6	0.4	4.2	-2.0	-2.2	0.3
Feb.	14.2	7.2	3.9	3.3	6.9	0.2	6.7	14.3	5.7	0.1	5.6	8.6	4.7	3.9
	Growth rates													
2007	15.1	14.4	8.3	15.0	18.5	-55.0	18.7	14.7	14.6	8.8	14.7	15.3	6.3	15.4
2008	9.2	6.8	-2.0	7.6	18.9	-2.0	19.1	4.0	3.9	-1.8	4.1	4.5	9.9	4.4
2009 Q2	9.3	7.8	4.4	8.1	15.1	4.5	15.2	5.7	7.4	4.9	7.5	0.8	4.1	0.7
Q3	7.9	6.3	8.5	6.1	14.2	13.8	14.2	4.9	7.2	7.1	7.2	-1.9	-5.0	-1.8
Q4	8.3	7.6	9.4	7.5	10.9	37.0	10.6	6.8	8.9	11.3	8.8	0.8	-3.7	0.9

C33 B.o.p. net direct and portfolio investment

(EUR billions)



Source: ECB.

7.3 Financial account

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

3. Portfolio investment assets

	Total	Equity					Debt instruments									
							Bonds and notes					Money market instruments				
		Total	MFIs		Non-MFIs		Total	MFIs		Non-MFIs		Total	MFIs		Non-MFIs	
				Euro-system		General government			Euro-system		General government			Euro-system		General government
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Outstanding amounts (international investment position)															
2007	4,631.6	1,961.8	136.7	2.8	1,825.1	44.6	2,279.7	990.2	16.4	1,289.5	17.2	390.1	297.3	34.6	92.8	0.5
2008	3,763.9	1,162.7	68.4	3.0	1,094.3	27.3	2,179.1	970.9	19.9	1,208.2	18.4	422.1	353.3	61.6	68.8	1.3
2009 Q3	4,059.8	1,368.1	75.3	3.1	1,292.8	32.0	2,277.7	926.8	16.8	1,351.0	37.9	413.9	341.9	45.0	72.1	1.5
Q4	4,209.0	1,482.0	78.2	3.1	1,403.9	34.4	2,344.9	924.3	17.2	1,420.6	37.0	382.0	324.4	44.9	57.7	2.0
	Transactions															
2007	438.5	64.7	26.7	0.0	38.0	8.2	290.5	148.0	4.9	142.4	3.3	83.3	63.3	26.3	20.0	0.8
2008	-10.2	-103.9	-38.4	0.6	-65.6	-0.2	96.7	44.1	3.2	52.6	2.6	-3.0	26.8	15.1	-29.8	0.4
2009	74.2	46.6	-2.9	-0.2	49.5	1.6	29.3	-103.3	-3.5	132.6	17.2	-1.8	5.4	-12.7	-7.2	1.0
2009 Q2	61.2	9.5	-0.2	0.0	9.7	0.6	32.1	-33.6	0.1	65.7	21.1	19.6	12.2	-1.8	7.4	-0.2
Q3	45.6	39.6	3.7	0.0	35.9	0.2	27.4	-7.0	-0.8	34.4	-1.4	-21.4	-10.1	-11.8	-11.2	-0.1
Q4	38.0	35.8	-0.6	-0.2	36.3	0.4	25.1	-14.0	-0.5	39.1	-1.5	-22.9	-17.9	1.3	-5.0	0.8
2009 Oct.	24.8	14.2	0.7	0.0	13.5	.	5.2	-8.0	-0.5	13.1	.	5.4	5.9	4.0	-0.5	.
Nov.	19.5	12.7	-2.2	-0.2	14.9	.	19.3	-0.4	-0.2	19.8	.	-12.5	-12.4	3.0	-0.1	.
Dec.	-6.4	8.9	1.0	0.1	7.9	.	0.6	-5.6	0.3	6.2	.	-15.9	-11.4	-5.7	-4.4	.
2010 Jan.	30.9	-2.9	-0.5	0.0	-2.4	.	14.5	0.4	0.3	14.1	.	19.3	9.8	4.8	9.5	.
Feb.	8.4	3.6	1.3	0.0	2.3	.	5.3	-0.4	0.0	5.7	.	-0.4	-1.6	-0.3	1.2	.
	Growth rates															
2007	10.0	3.3	22.3	-0.5	2.0	21.3	13.9	16.6	38.9	11.9	23.2	23.9	23.7	272.7	29.4	277.4
2008	-0.5	-6.2	-30.0	24.6	-4.5	-0.5	4.3	4.6	20.4	4.1	15.6	-0.6	9.1	41.9	-32.3	71.6
2009 Q2	-5.6	-8.6	-15.6	14.9	-8.1	1.1	-3.0	-10.2	-12.9	2.9	114.2	-10.5	-7.2	-18.6	-24.0	49.7
Q3	-3.0	-3.0	-8.6	12.4	-2.6	0.5	-2.5	-10.6	-20.1	4.0	96.8	-6.7	-0.2	-30.8	-31.4	69.4
Q4	1.9	3.4	-4.5	-7.2	3.9	5.8	1.2	-10.4	-17.7	10.8	93.2	-1.1	0.9	-22.0	-9.8	73.2

4. Portfolio investment liabilities

	Total	Equity			Debt instruments							
					Bonds and notes				Money market instruments			
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	MFIs	Non-MFIs	
								General government				General government
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts (international investment position)											
2007	6,556.5	3,272.5	594.6	2,677.9	3,041.1	1,143.5	1,897.6	1,118.5	243.0	141.5	101.5	76.1
2008	6,078.6	2,168.7	640.7	1,528.0	3,466.5	1,263.8	2,202.8	1,357.1	443.3	108.9	334.4	272.9
2009 Q3	6,626.7	2,577.5	717.6	1,859.9	3,502.3	1,170.8	2,331.5	1,454.7	546.8	70.4	476.4	420.2
Q4	6,816.7	2,719.4	710.9	2,008.5	3,527.3	1,186.7	2,340.6	1,444.7	570.1	99.4	470.7	414.2
	Transactions											
2008	333.9	-107.1	94.8	-201.9	236.3	26.3	210.0	196.7	204.7	-20.1	224.8	194.6
2009	392.1	139.8	6.4	133.4	134.2	-12.4	146.5	137.0	118.1	-2.5	120.6	148.0
2009 Q2	132.0	48.3	1.9	46.3	37.4	-1.0	38.4	57.3	46.3	-5.5	51.8	46.6
Q3	123.7	89.5	11.7	77.7	-19.2	-9.1	-10.1	-8.7	53.5	10.0	43.5	59.2
Q4	101.1	50.4	-7.1	57.5	42.4	9.3	33.2	20.4	8.3	14.5	-6.2	-4.0
2009 Oct.	33.1	-15.6	-2.9	-12.7	30.9	10.9	19.9	.	17.8	-5.8	23.6	.
Nov.	13.3	8.8	-3.6	12.4	4.8	-4.3	9.1	.	-0.2	-1.6	1.4	.
Dec.	54.7	57.2	-0.7	57.8	6.8	2.7	4.1	.	-9.3	21.9	-31.2	.
2010 Jan.	30.2	18.3	-0.3	18.6	2.1	25.6	-23.6	.	9.8	-4.3	14.1	.
Feb.	19.1	4.9	0.0	4.9	10.6	-12.2	22.8	.	3.7	7.7	-4.0	.
	Growth rates											
2007	9.8	5.5	4.4	5.8	13.3	15.5	12.1	13.9	29.6	55.3	10.1	32.0
2008	5.3	-4.7	16.2	-9.8	7.8	2.3	11.1	17.6	81.5	-13.3	215.6	271.7
2009 Q2	3.3	-6.4	0.1	-8.4	3.7	-5.0	8.9	17.5	91.1	-34.6	237.1	299.6
Q3	4.4	-0.1	4.6	-1.3	1.7	-5.6	6.0	11.6	59.5	-23.2	111.6	168.4
Q4	6.4	6.0	1.0	8.2	3.9	-1.0	6.6	10.1	26.6	3.2	35.7	54.9

Source: ECB.

7.3 Financial account

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

5. Other investment assets

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
		Total	Loans/currency and deposits	Other assets	Total	Loans/currency and deposits	Other assets		Trade credits	Loans/currency and deposits	Currency and deposits		Trade credits	Loans/currency and deposits	Currency and deposits
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Outstanding amounts (international investment position)														
2007	5,382.9	36.9	35.6	1.4	3,354.4	3,283.2	71.2	107.8	12.7	48.8	13.7	1,883.7	196.2	1,520.0	473.1
2008	5,468.8	28.8	27.7	1.0	3,280.7	3,221.6	59.1	101.0	12.1	40.9	7.2	2,058.3	186.1	1,647.7	461.7
2009 Q3	4,908.9	22.8	22.5	0.3	2,823.8	2,790.5	33.3	114.8	11.8	54.0	8.9	1,947.5	191.7	1,524.6	407.1
Q4	4,926.0	29.7	29.4	0.3	2,842.1	2,811.5	30.6	122.0	11.8	60.5	10.0	1,932.2	190.1	1,492.2	381.2
	Transactions														
2007	962.8	22.0	22.0	0.0	546.7	539.5	7.2	-7.8	-1.4	-7.4	-5.5	401.9	14.1	344.9	54.9
2008	85.3	-9.4	-9.4	0.0	-48.4	-64.8	16.5	-7.0	-1.1	-7.2	-6.0	150.0	2.8	88.3	-41.1
2009	-508.8	-2.4	-2.4	0.0	-414.5	-394.0	-20.5	9.5	-0.3	7.9	1.1	-101.5	1.9	-105.7	-42.8
2009 Q2	-147.3	7.0	7.0	0.0	-89.8	-75.9	-13.9	-3.5	0.0	-4.3	-4.9	-60.9	5.4	-70.4	-17.8
Q3	-91.0	-6.7	-6.7	0.0	-83.6	-81.3	-2.3	0.0	-0.3	0.1	-4.0	-0.6	0.4	2.1	14.7
Q4	-39.1	5.5	5.5	0.0	-4.4	-2.3	-2.1	6.6	0.0	6.2	1.1	-46.8	-0.6	-47.5	-41.7
2009 Oct.	34.9	1.5	.	.	14.2	.	.	-0.4	.	.	-0.5	19.6	.	.	-6.6
Nov.	9.1	-0.1	.	.	17.1	.	.	3.6	.	.	1.5	-11.4	.	.	-13.6
Dec.	-83.1	4.1	.	.	-35.6	.	.	3.4	.	.	0.1	-54.9	.	.	-21.6
2010 Jan.	49.5	-5.1	.	.	67.7	.	.	-4.1	.	.	-2.9	-9.0	.	.	-5.5
Feb.	14.2	-1.7	.	.	9.0	.	.	-1.1	.	.	0.8	8.0	.	.	3.7
	Growth rates														
2007	21.2	157.3	173.7	-1.7	18.6	18.8	11.3	-6.5	-9.8	-12.6	-28.6	27.2	7.5	29.6	13.9
2008	1.6	-26.2	-26.9	5.0	-1.4	-2.0	23.4	-6.5	-8.9	-14.7	-43.8	8.0	1.4	5.9	-8.9
2009 Q2	-9.0	-28.7	-30.3	5.6	-14.0	-14.1	-17.1	-4.3	-3.3	-12.1	-31.2	-0.1	-4.6	-1.1	-3.3
Q3	-12.2	-42.5	-43.9	4.1	-18.3	-18.4	-23.1	3.5	-4.7	7.8	-13.4	-1.6	-3.8	-1.6	0.6
Q4	-9.3	-10.6	-11.7	0.2	-12.6	-12.2	-36.8	8.9	-2.4	16.2	16.1	-5.0	1.0	-6.6	-10.3

6. Other investment liabilities

	Total	Eurosystem			MFIs (excluding Eurosystem)			General government				Other sectors			
		Total	Loans/currency and deposits	Other liabilities	Total	Loans/currency and deposits	Other liabilities	Total	Trade credits	Loans	Other liabilities	Total	Trade credits	Loans	Other liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Outstanding amounts (international investment position)														
2007	5,468.6	201.7	201.4	0.2	3,935.1	3,872.6	62.5	52.3	0.0	46.9	5.4	1,279.5	156.9	1,009.7	112.8
2008	5,653.6	482.3	481.9	0.4	3,751.8	3,698.1	53.6	61.9	0.0	58.0	3.9	1,357.6	170.2	1,069.6	117.8
2009 Q3	5,007.2	264.3	263.8	0.6	3,450.3	3,413.6	36.8	59.5	0.0	56.2	3.3	1,233.1	179.4	943.5	110.2
Q4	4,951.6	249.6	249.3	0.3	3,394.6	3,356.3	38.3	57.2	0.0	53.6	3.6	1,250.3	181.1	952.3	116.8
	Transactions														
2007	943.1	89.6	89.6	0.0	625.1	620.4	4.6	-1.0	0.0	-2.0	1.0	229.5	10.0	220.5	-1.1
2008	169.0	280.7	280.6	0.1	-178.9	-190.0	11.1	9.4	0.0	10.8	-1.4	57.8	10.9	47.3	-0.4
2009	-729.9	-231.7	-236.5	4.7	-354.3	-343.0	-11.3	-6.9	0.0	-6.7	-0.2	-137.1	0.9	-113.4	-24.5
2009 Q2	-229.0	-89.3	-91.1	1.8	-81.4	-70.0	-11.4	-2.4	0.0	-3.1	0.7	-56.0	3.9	-59.1	-0.8
Q3	-153.8	-43.5	-43.7	0.3	-79.5	-80.1	0.6	0.7	0.0	1.2	-0.5	-31.5	1.0	-20.8	-11.7
Q4	-103.9	-16.8	-16.5	-0.2	-81.1	-81.9	0.8	-3.9	0.0	-4.4	0.6	-2.1	1.0	4.3	-7.4
2009 Oct.	30.0	-8.3	.	.	6.8	.	.	5.9	.	.	.	25.6	.	.	.
Nov.	24.2	-1.3	.	.	16.6	.	.	0.9	.	.	.	8.0	.	.	.
Dec.	-158.2	-7.2	.	.	-104.5	.	.	-10.8	.	.	.	-35.7	.	.	.
2010 Jan.	61.2	-7.5	.	.	70.5	.	.	-0.1	.	.	.	-1.7	.	.	.
Feb.	15.1	2.8	.	.	32.6	.	.	4.2	.	.	.	-24.6	.	.	.
	Growth rates														
2007	20.0	68.1	68.2	-6.9	18.0	18.2	9.2	-1.8	27.4	-4.0	20.7	20.9	6.8	26.4	0.5
2008	3.2	141.3	141.4	20.8	-4.5	-4.9	17.8	18.1	-20.1	23.0	-25.1	4.5	6.8	4.6	-0.9
2009 Q2	-11.2	19.1	17.3	1,145.2	-14.9	-15.1	-9.4	15.2	41.1	16.2	1.2	-6.4	-3.5	-7.5	-1.8
Q3	-14.9	-27.7	-29.0	935.0	-16.3	-16.4	-13.9	11.8	234.7	13.2	-9.0	-8.0	-3.1	-8.8	-8.7
Q4	-12.8	-47.9	-48.8	644.2	-9.4	-9.2	-20.3	-11.0	-148.2	-11.4	-6.3	-9.9	0.2	-10.5	-19.7

Source: ECB.

7.3 Financial account

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

7. Reserve assets

	Reserve assets														Memo items		
	Total	Monetary gold		SDR holdings	Reserve position in the IMF	Foreign exchange								Other claims	Other foreign currency assets	Pre-determined short-term net drains on foreign currency	SDR allocations
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities				Financial derivatives				
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Outstanding amounts (international investment position)																
2006	325.8	176.3	365.213	4.6	5.2	139.7	6.3	22.5	110.7	0.5	79.3	30.8	0.3	0.0	24.6	-21.5	5.6
2007	347.2	201.0	353.688	4.6	3.6	138.0	7.2	22.0	108.5	0.4	87.8	20.3	0.3	0.0	44.3	-38.5	5.3
2008	374.2	217.0	349.190	4.7	7.3	145.1	7.6	8.0	129.5	0.6	111.3	17.6	0.0	0.1	262.8	-245.7	5.5
2009 Q2	381.5	229.8	347.546	4.2	11.3	136.2	9.5	6.6	119.9	0.5	99.3	20.0	0.2	0.0	77.6	-65.6	5.4
Q3	430.8	236.1	347.200	49.8	11.7	133.2	12.7	7.1	113.2	0.5	89.8	22.9	0.2	0.0	56.7	-42.4	50.9
Q4	462.4	266.0	347.163	50.8	10.0	135.5	12.3	8.1	115.2	0.5	92.0	22.7	-0.1	0.0	32.1	-24.5	51.2
2010 Feb.	492.6	283.5	347.161	52.7	11.8	144.5	7.3	15.9	121.6	-	-	-	-0.4	0.0	28.9	-21.8	53.3
Mar.	498.6	287.3	347.159	52.6	11.7	147.0	10.6	10.6	126.1	-	-	-	-0.3	0.0	28.7	-23.5	53.0
	Transactions																
2007	5.1	-3.2	-	0.3	-0.9	8.8	1.0	1.6	6.2	0.0	14.5	-8.3	0.0	0.0	-	-	-
2008	3.4	-2.7	-	-0.1	3.8	2.4	5.0	-15.7	11.8	0.1	15.8	-4.1	1.3	0.0	-	-	-
2009	-4.5	-2.0	-	0.8	2.7	-5.9	3.7	-1.2	-9.5	0.0	-14.1	4.6	1.2	0.0	-	-	-
2009 Q2	1.4	-1.0	-	-0.5	3.3	-0.4	-0.4	2.9	-3.2	0.0	-2.0	-1.2	0.2	0.0	-	-	-
Q3	-0.3	-0.2	-	0.3	0.6	-1.0	2.3	0.3	-3.8	0.0	-7.0	3.2	0.2	0.0	-	-	-
Q4	0.1	0.0	-	1.0	-2.0	1.2	-0.5	0.5	1.1	0.0	1.5	-0.4	0.1	0.0	-	-	-
	Growth rates																
2006	0.3	-2.4	-	11.6	-49.0	7.7	-48.4	12.7	13.4	0.0	29.2	-15.3	-	-	-	-	-
2007	1.6	-1.7	-	7.3	-18.3	6.3	14.9	6.4	5.7	1.1	18.6	-27.6	-	-	-	-	-
2008	1.0	-1.3	-	-2.6	105.3	1.7	67.7	-68.9	10.8	28.0	17.9	-20.6	-	-	-	-	-
2009 Q2	-1.6	-1.6	-	-6.6	174.2	-6.4	106.0	-80.6	2.1	2.6	-0.1	15.5	-	-	-	-	-
Q3	-1.1	-1.3	-	-2.9	200.8	-6.2	60.3	-70.1	-2.7	1.3	-8.9	34.6	-	-	-	-	-
Q4	-1.2	-0.9	-	-2.0	35.2	-4.0	47.5	-22.6	-7.3	1.0	-12.8	25.6	-	-	-	-	-

8. Gross external debt

	Total	By instrument						By sector (excluding direct investment)			
		Loans, currency and deposits	Money market instruments	Bonds and notes	Trade credits	Other debt liabilities	Direct investment: inter-company lending	General government	Eurosystem	MFIs (excluding Eurosystem)	Other sectors
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts (international investment position)										
2006	8,683.9	4,425.5	217.5	2,697.9	144.1	150.8	1,048.0	1,115.2	116.3	4,586.8	1,817.5
2007	9,972.8	5,130.6	243.0	3,041.1	157.0	181.0	1,220.2	1,246.8	201.7	5,220.1	2,084.0
2008	10,941.3	5,307.6	443.3	3,466.5	170.2	175.8	1,377.8	1,692.0	482.3	5,124.4	2,264.7
2009 Q2	10,625.9	4,890.6	493.7	3,503.7	183.1	164.4	1,390.4	1,856.1	313.4	4,853.8	2,212.2
Q3	10,461.0	4,677.0	546.8	3,502.3	179.4	150.8	1,404.6	1,934.4	264.3	4,691.5	2,166.1
Q4	10,457.9	4,611.5	570.1	3,527.3	181.1	159.0	1,408.9	1,916.1	249.6	4,680.6	2,202.6
	Outstanding amounts as a percentage of GDP										
2006	101.5	51.7	2.5	31.5	1.7	1.8	12.2	13.0	1.4	53.6	21.2
2007	110.7	57.0	2.7	33.8	1.7	2.0	13.5	13.8	2.2	58.0	23.1
2008	118.2	57.4	4.8	37.5	1.8	1.9	14.9	18.3	5.2	55.4	24.5
2009 Q2	116.9	53.8	5.4	38.5	2.0	1.8	15.3	20.4	3.4	53.4	24.3
Q3	116.0	51.9	6.1	38.8	2.0	1.7	15.6	21.5	2.9	52.0	24.0
Q4	116.5	51.4	6.4	39.3	2.0	1.8	15.7	21.3	2.8	52.2	24.5

Source: ECB.

7.3 Financial account

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

9. Geographical breakdown

	Total	EU Member States outside the euro area						Canada	China	Japan	Switzer-land	United States	Offshore financial centres	Interna-tional organisa-tions	Other countries
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2008	Outstanding amounts (international investment position)														
Direct investment	527.4	-93.0	-2.1	-30.2	-293.9	233.6	-0.3	41.1	35.2	-9.5	126.2	-68.7	-7.1	-0.2	503.3
Abroad	3,744.4	1,255.3	34.9	93.9	865.7	260.8	0.0	104.1	38.8	71.7	384.5	734.6	418.5	0.1	736.8
Equity/reinvested earnings	2,946.9	967.5	30.1	60.3	660.1	216.9	0.0	83.3	32.0	53.6	335.3	551.3	386.7	0.0	537.4
Other capital	797.5	287.9	4.8	33.6	205.7	43.8	0.0	20.7	6.9	18.1	49.2	183.4	31.9	0.0	199.4
In the euro area	3,217.0	1,348.3	37.0	124.1	1,159.7	27.1	0.3	63.0	3.6	81.2	258.3	803.3	425.6	0.3	233.4
Equity/reinvested earnings	2,405.5	1,096.8	28.3	97.4	956.9	13.9	0.2	50.6	0.8	68.7	191.1	590.8	284.1	0.1	122.5
Other capital	811.6	251.5	8.7	26.7	202.8	13.2	0.1	12.4	2.9	12.5	67.2	212.5	141.6	0.2	110.9
Portfolio investment assets	3,763.9	1,242.2	63.7	122.4	895.5	80.7	80.0	82.8	25.6	213.4	95.4	1,225.8	458.4	30.5	389.8
Equity	1,162.7	228.7	6.4	19.9	191.7	9.8	0.9	18.2	22.8	84.5	81.3	378.8	197.8	2.0	148.6
Debt instruments	2,601.3	1,013.6	57.3	102.5	703.7	71.0	79.1	64.6	2.9	128.8	14.1	847.0	260.6	28.5	241.3
Bonds and notes	2,179.1	849.1	50.3	81.5	569.1	70.3	77.8	61.6	2.3	61.7	12.6	705.4	238.2	28.4	219.9
Money market instruments	422.1	164.5	6.9	21.0	134.6	0.6	1.3	3.0	0.6	67.1	1.5	141.5	22.4	0.1	21.4
Other investment	-184.8	-91.1	51.1	28.0	-110.4	108.8	-168.6	-6.2	-16.0	-10.2	-131.2	-286.3	-0.4	1.8	354.8
Assets	5,468.8	2,419.7	100.9	83.3	2,020.2	201.8	13.4	25.7	34.0	109.4	276.5	852.5	638.2	58.7	1,054.0
General government	101.0	15.0	0.7	0.4	3.6	0.7	9.7	0.0	1.8	0.2	0.1	3.4	1.4	40.1	39.1
MFIs	3,309.5	1,731.1	83.9	58.3	1,419.1	167.9	1.9	16.8	14.5	79.0	164.5	418.9	367.7	18.2	498.8
Other sectors	2,058.3	673.5	16.4	24.6	597.5	33.3	1.8	8.9	17.7	30.3	111.9	430.2	269.2	0.5	516.2
Liabilities	5,653.6	2,510.8	49.8	55.3	2,130.6	93.0	182.0	32.0	50.0	119.5	407.7	1,138.8	638.6	57.0	699.2
General government	61.9	32.5	0.0	0.1	2.5	0.0	29.7	0.0	0.0	0.6	0.5	7.0	0.3	17.7	3.3
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	78.6	380.8	103.2	2.5	168.7
2009 Q1 to 2009 Q4	Cumulated transactions														
Direct investment	95.7	46.9	0.6	-2.2	37.0	11.5	0.0	-6.0	4.7	-1.9	3.9	-0.8	37.6	-0.2	11.6
Abroad	314.4	90.7	2.2	10.8	70.4	7.2	0.0	5.5	4.9	-0.4	33.0	66.9	66.9	0.0	46.9
Equity/reinvested earnings	227.0	62.7	1.1	8.9	45.4	7.2	0.0	4.8	3.1	0.6	17.4	56.4	51.6	0.0	30.4
Other capital	87.4	28.0	1.1	1.9	25.0	0.0	0.0	0.6	1.8	-1.0	15.5	10.6	15.3	0.0	16.6
In the euro area	218.6	43.8	1.7	13.0	33.4	-4.3	0.0	11.4	0.2	1.6	29.1	67.7	29.3	0.2	35.4
Equity/reinvested earnings	212.3	59.0	0.7	16.7	45.7	-4.1	0.0	12.3	0.3	2.3	15.7	81.4	21.5	0.2	19.6
Other capital	6.3	-15.3	0.9	-3.8	-12.3	-0.1	0.0	-0.8	-0.1	-0.7	13.4	-13.7	7.9	0.0	15.7
Portfolio investment assets	74.2	56.4	14.4	19.9	-5.3	3.8	23.6	1.1	7.8	-28.2	4.9	14.0	-58.5	0.3	76.5
Equity	46.6	16.4	0.9	3.2	10.8	1.3	0.1	3.0	8.8	1.9	4.0	11.2	-30.9	0.0	32.2
Debt instruments	27.6	40.0	13.5	16.7	-16.1	2.4	23.4	-1.9	-1.0	-30.2	0.8	2.8	-27.6	0.2	44.3
Bonds and notes	29.3	40.8	12.4	18.4	-11.4	1.5	19.9	-1.6	-0.7	-25.5	-1.3	-9.3	-20.8	-0.2	47.9
Money market instruments	-1.8	-0.8	1.1	-1.7	-4.7	0.9	3.5	-0.3	-0.3	-4.7	2.1	12.1	-6.8	0.4	-3.6
Other investment	221.2	-11.0	-6.3	-4.1	4.5	-10.8	5.8	4.0	1.0	29.8	25.5	200.5	21.1	11.3	-61.0
Assets	-508.8	-160.6	3.6	0.3	-159.7	-7.4	2.6	-0.5	-1.7	-14.2	-72.7	-144.5	-29.0	-0.3	-85.2
General government	9.5	7.4	-0.5	4.7	2.3	0.0	0.8	0.0	-0.1	0.0	0.0	0.1	-0.2	1.2	1.2
MFIs	-416.8	-193.6	5.6	-4.4	-186.1	-8.3	-0.3	-1.6	-4.0	-10.8	-49.9	-66.9	-15.2	-1.5	-73.1
Other sectors	-101.5	25.6	-1.5	0.0	24.1	1.0	2.1	1.1	2.4	-3.3	-22.8	-77.7	-13.5	0.0	-13.3
Liabilities	-729.9	-149.6	9.9	4.4	-164.2	3.5	-3.2	-4.5	-2.7	-44.0	-98.2	-345.0	-50.0	-11.6	-24.3
General government	-6.9	-4.3	0.0	0.0	0.6	0.0	-5.0	0.1	0.0	-0.2	-0.3	-0.4	0.0	-2.0	0.3
MFIs	-586.0	-127.7	11.4	4.8	-142.3	2.7	-4.2	-3.8	-3.1	-45.0	-98.6	-234.1	-55.0	-9.5	-9.3
Other sectors	-137.1	-17.6	-1.5	-0.4	-22.5	0.8	6.0	-0.8	0.3	1.2	0.7	-110.5	5.0	-0.1	-15.3

Source: ECB.

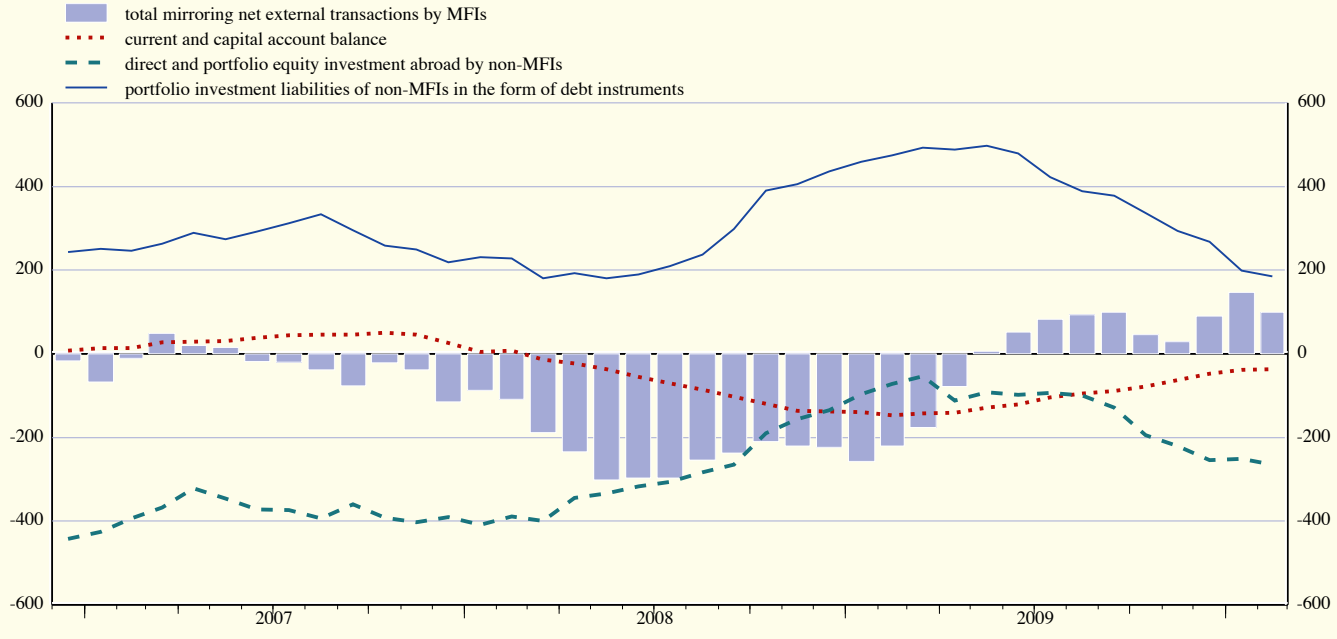
7.4 Monetary presentation of the balance of payments [1]

(EUR billions; transactions)

	B.o.p. items mirroring net transactions by MFIs											
	Total	Current and capital account balance	Transactions by non-MFIs								Financial derivatives	Errors and omissions
			Direct investment		Portfolio investment				Other investment			
			By resident units abroad	By non-resident units in euro area	Assets		Liabilities		Assets	Liabilities		
					Equity	Debt instruments	Equity	Debt instruments				
	1	2	3	4	5	6	7	8	9	10	11	12
2007	-114.3	25.6	-459.4	395.0	-38.8	-162.6	144.5	218.4	-394.3	228.5	-64.0	-7.4
2008	-224.1	-137.0	-329.3	124.5	65.5	-22.4	-202.2	435.4	-143.8	67.7	-62.4	-20.2
2009	90.4	-47.8	-289.0	211.1	-49.5	-125.4	133.4	267.1	92.0	-143.9	39.9	2.4
2008 Q4	56.8	-30.6	-48.4	-7.4	50.7	72.4	-112.6	137.0	-21.7	36.3	-12.1	-6.8
2009 Q1	-38.4	-35.8	-83.6	36.5	32.5	4.9	-48.1	116.5	-13.3	-48.8	15.8	-15.1
Q2	77.9	-19.8	-79.7	85.7	-9.7	-73.1	46.3	90.2	64.5	-58.3	22.9	8.9
Q3	3.5	-2.2	-63.3	36.9	-35.9	-23.2	77.7	33.4	0.7	-30.9	-4.5	14.8
Q4	47.4	9.9	-62.3	52.0	-36.3	-34.1	57.5	27.0	40.2	-6.0	5.8	-6.2
2009 Feb.	25.8	-5.2	-24.2	11.6	18.4	0.9	3.6	32.3	6.1	-15.9	1.5	-3.2
Mar.	3.6	-7.2	-37.5	15.3	11.8	10.0	-12.0	25.6	-13.9	9.5	5.6	-3.6
Apr.	18.1	-8.2	-58.8	72.8	5.3	-45.9	-26.0	42.3	-7.5	41.0	13.0	-9.9
May	6.3	-13.5	-5.3	20.6	-1.9	-33.9	26.5	29.9	83.7	-113.4	9.4	4.1
June	53.6	1.8	-15.7	-7.6	-13.1	6.7	45.8	18.0	-11.8	14.1	0.5	14.8
July	0.6	9.0	-10.8	18.9	-16.5	-21.2	35.3	-33.5	2.2	0.3	6.4	10.4
Aug.	20.4	-5.5	-13.9	17.1	-12.1	-22.1	48.3	5.1	9.4	-12.2	-9.8	16.3
Sep.	-17.5	-5.6	-38.6	0.9	-7.3	20.1	-5.9	61.8	-10.9	-18.9	-1.1	-11.9
Oct.	15.0	0.0	-31.0	28.9	-13.5	-12.7	-12.7	43.5	-19.2	31.5	1.8	-1.5
Nov.	-3.1	-1.0	-15.7	10.4	-14.9	-19.7	12.4	10.5	7.8	8.9	-0.1	-1.8
Dec.	35.5	10.9	-15.6	12.7	-7.9	-1.8	57.8	-27.1	51.6	-46.4	4.1	-2.8
2010 Jan.	-11.1	-13.0	-5.5	4.5	2.4	-23.5	18.6	-9.4	13.1	-1.8	5.1	-1.5
Feb.	-21.4	-4.3	-10.0	9.5	-2.3	-6.9	4.9	18.8	-6.9	-20.4	-1.0	-2.9
	12-month cumulated transactions											
2010 Feb.	99.9	-36.5	-258.4	203.9	-70.0	-150.8	193.0	185.5	97.6	-107.8	33.8	9.5

C34 Main b.o.p. items mirroring developments in MFI net external transactions [1]

(EUR billions; 12-month cumulated transactions)



Source: ECB.

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

7.5 Trade in goods

1. Values and volumes by product group [1]

(seasonally adjusted, unless otherwise indicated)

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
			Total				Memo item:	Total				Memo items:	
	Exports	Imports		Intermediate	Capital	Consumption	Manufacturing		Intermediate	Capital	Consumption	Manufacturing	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Values (EUR billions; annual percentage changes for columns 1 and 2)												
2008	3.9	8.1	1,561.5	771.1	337.8	414.1	1,303.8	1,610.3	1,019.2	233.0	333.9	1,021.5	293.6
2009	-18.1	-22.1	1,275.6	624.9	261.5	352.8	1,061.1	1,257.4	725.2	191.5	312.9	837.6	174.5
2009 Q1	-21.1	-20.9	316.2	152.0	66.0	86.7	261.5	320.4	183.4	49.6	79.3	214.9	36.0
Q2	-22.9	-26.9	311.0	153.6	63.8	85.5	258.6	305.6	173.8	47.3	77.5	205.4	41.7
Q3	-19.5	-25.7	319.1	157.0	64.7	88.5	266.1	312.6	179.8	47.4	78.5	207.3	47.6
Q4	-8.5	-14.5	329.3	162.3	67.1	92.1	275.0	318.8	188.2	47.2	77.5	209.9	49.2
2009 Sep.	-19.4	-22.6	107.2	53.2	21.8	29.3	89.6	106.4	61.4	16.2	26.6	70.5	16.0
Oct.	-17.1	-22.3	108.0	53.7	22.4	29.6	91.2	104.5	61.4	15.1	25.6	69.3	15.9
Nov.	-6.0	-13.8	109.4	53.6	21.3	31.8	90.2	105.8	63.0	15.8	25.6	69.5	16.7
Dec.	-0.7	-5.4	111.9	55.0	23.4	30.7	93.5	108.6	63.8	16.3	26.3	71.2	16.6
2010 Jan.	4.3	0.9	111.7	55.8	20.2	31.1	91.6	109.8	65.7	16.1	26.4	73.0	17.0
Feb.	9.6	5.7	114.7	.	.	.	93.3	111.4	.	.	.	72.3	.
	Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)												
2008	1.5	0.4	144.0	136.9	154.2	148.7	142.8	127.5	119.9	140.9	144.9	133.4	108.1
2009	-16.7	-13.9	119.6	114.6	117.6	128.2	116.0	110.0	101.2	114.7	134.9	110.6	97.1
2009 Q1	-21.0	-14.9	117.8	110.3	118.2	126.0	113.1	111.6	103.5	115.9	133.2	110.4	100.1
Q2	-21.7	-18.9	117.2	113.6	115.2	124.4	113.5	107.4	97.9	111.3	134.1	108.1	97.7
Q3	-17.5	-14.6	119.5	115.3	116.1	128.0	116.4	109.3	99.7	115.2	135.3	110.3	95.2
Q4	-6.1	-7.1	123.8	119.3	121.2	134.3	120.9	111.9	103.5	116.4	137.1	113.7	95.4
2009 Sep.	-17.3	-11.9	120.4	116.5	117.1	128.1	117.7	111.4	101.4	118.1	138.2	113.0	93.7
Oct.	-14.5	-12.3	122.2	119.3	121.7	129.2	120.8	111.7	103.6	112.4	136.6	113.1	96.4
Nov.	-3.1	-6.3	123.7	117.6	116.1	140.7	119.3	111.1	103.2	117.4	136.0	113.1	95.3
Dec.	1.1	-1.9	125.5	120.9	125.7	133.0	122.8	113.0	103.8	119.5	138.7	114.9	94.6
2010 Jan.	3.5	-2.2	124.3	120.6	109.6	134.2	119.8	111.3	104.0	115.9	135.3	115.3	94.1
Feb.	.	.	.	.	.	.	.	.	.	.	.	.	.

2. Prices [2]

(annual percentage changes, unless otherwise indicated)

	Industrial producer export prices (f.o.b.) [3]							Industrial import prices (c.i.f.)						
	Total (index: 2005 = 100)	Total					Memo item: Manufac-turing	Total (index: 2005 = 100)	Total					Memo item: Manufac-turing
			Intermediate goods	Capital goods	Consumer goods	Energy				Intermediate goods	Capital goods	Consumer goods	Energy	
% of total	100.0	100.0	32.2	46.3	17.7	3.8	99.4	100.0	100.0	28.4	27.9	22.1	21.6	81.1
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2008	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	100.9	-2.5	-4.1	0.6	0.5	-26.5	-2.5	102.2	-9.4	-5.8	-0.8	0.2	-26.5	-3.8
2009 Q3	100.9	-4.0	-6.2	0.7	0.4	-34.0	-3.8	102.3	-13.0	-7.8	-1.0	-0.3	-33.8	-5.2
Q4	100.6	-2.0	-5.2	-1.1	-0.5	6.8	-1.9	103.4	-3.3	-4.9	-2.1	-2.9	-2.9	-3.2
2010 Q1	102.6	1.3	-0.3	-0.1	0.6	37.3	1.4	107.5	6.0	2.5	-1.0	-1.0	26.4	1.5
2009 Oct.	100.4	-3.6	-6.5	-1.0	-1.1	-13.7	-3.5	102.8	-7.7	-7.2	-2.2	-3.1	-16.7	-4.9
Nov.	100.7	-2.2	-5.4	-1.6	-0.7	10.6	-2.0	103.4	-3.5	-5.5	-2.4	-3.6	-2.3	-3.6
Dec.	100.6	-0.2	-3.7	-0.6	0.3	33.1	-0.1	103.9	1.9	-2.0	-1.7	-2.0	15.1	-1.0
2010 Jan.	101.7	0.4	-1.7	-0.7	0.4	32.2	0.5	106.1	4.6	0.5	-1.3	-1.4	22.9	0.4
Feb.	102.5	1.2	-0.5	-0.1	0.4	36.5	1.3	107.3	5.5	1.9	-1.1	-1.2	25.3	1.1
Mar.	103.4	2.5	1.5	0.4	1.1	43.2	2.5	109.0	7.7	5.0	-0.7	-0.4	30.9	2.9

Source: Eurostat.

1) Product groups as classified in the Broad Economic Categories. Unlike the product groups shown in Table 2, intermediate and consumption product groups include agricultural and energy products.

2) Product groups as classified in the Main Industrial Groupings. Unlike the product groups shown in Table 1, intermediate and consumer goods do not include energy products, and agricultural goods are not covered. Manufacturing has a different composition compared with the data shown in columns 7 and 12 of Table 1. Data shown are price indices which follow the pure price change for a basket of products and are not simple ratios of the value and volume data shown in Table 1, which are affected by changes in the composition and quality of traded goods. These indices differ from the GDP deflators for imports and exports (shown in Table 3 in Section 5.1), mainly because those deflators include all goods and services and cover cross-border trade within the euro area.

3) Industrial producer export prices refer to direct transactions between domestic producers and non-domestic customers. Contrary to the data shown for values and volumes in Table 1, exports from wholesalers and re-exports are not covered.

7.5 Trade in goods

(EUR billions, unless otherwise indicated; seasonally adjusted)

3. Geographical breakdown

	Total	EU Member States outside the euro area				Russia	Switzerland	Turkey	United States	Asia			Africa	Latin America	Other countries
		Denmark	Sweden	United Kingdom	Other EU countries						China	Japan			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Exports (f.o.b.)														
2008	1,561.5	35.1	53.9	220.4	233.7	78.5	86.7	42.8	186.5	309.4	65.7	33.7	100.1	68.2	146.2
2009	1,275.6	27.5	41.1	174.6	177.1	49.5	78.7	34.4	151.8	282.3	68.0	28.7	91.6	53.9	113.2
2008 Q3	397.6	9.0	14.0	56.1	60.2	20.9	21.8	10.8	46.8	77.3	16.1	8.2	26.6	17.6	36.3
Q4	361.6	8.0	11.5	48.6	52.3	17.8	21.1	8.4	44.1	73.9	15.8	8.1	24.9	17.4	33.6
2009 Q1	316.2	7.3	9.9	42.6	43.6	12.7	20.2	7.7	39.3	66.5	15.3	7.1	23.4	12.9	30.1
Q2	311.0	6.7	9.8	42.7	43.0	12.2	19.2	8.3	38.2	69.9	16.8	7.1	22.6	12.4	26.1
Q3	319.1	6.8	10.5	44.5	44.8	12.1	19.3	9.1	36.3	71.0	17.4	7.2	22.5	14.0	28.0
Q4	329.3	6.7	10.8	44.7	45.6	12.5	20.0	9.3	38.0	74.9	18.6	7.4	23.2	14.6	29.1
2009 Sep.	107.2	2.3	3.6	15.2	15.2	4.0	6.4	3.0	12.1	23.6	5.9	2.4	7.5	4.7	9.5
Oct.	108.0	2.2	3.6	15.1	15.3	4.1	6.4	3.0	12.4	24.5	6.1	2.4	7.6	4.7	9.0
Nov.	109.4	2.2	3.5	14.4	15.0	4.2	6.9	3.1	12.7	24.5	6.3	2.4	7.7	4.9	10.3
Dec.	111.9	2.2	3.6	15.3	15.3	4.2	6.7	3.2	12.8	25.9	6.2	2.6	7.9	5.0	9.8
2010 Jan.	111.7	2.2	3.7	15.2	15.2	4.1	7.0	3.4	12.7	25.4	6.9	2.6	7.8	4.8	10.1
Feb.	114.7	.	.	.	.	4.2	6.8	3.5	12.8	26.4	7.3	2.6	8.1	5.5	.
	Percentage share of total exports														
2009	100.0	2.2	3.2	13.7	13.9	3.9	6.2	2.7	11.9	22.1	5.3	2.3	7.2	4.2	8.9
	Imports (c.i.f.)														
2008	1,610.3	30.7	52.1	164.7	184.9	122.0	70.0	32.4	135.9	480.0	184.5	57.4	141.2	81.7	114.8
2009	1,257.4	26.5	37.7	125.5	162.1	81.4	64.9	26.2	115.9	376.2	158.6	42.9	93.6	59.2	88.2
2008 Q3	419.0	7.9	13.2	41.9	47.8	34.3	17.9	8.2	34.1	124.6	48.4	14.3	38.2	21.2	29.7
Q4	372.5	7.3	11.4	36.5	42.9	24.8	17.4	7.1	33.2	113.7	47.3	13.2	30.8	20.1	27.2
2009 Q1	320.4	6.9	9.5	31.4	38.9	17.8	16.7	6.6	31.9	97.0	41.4	11.5	23.8	14.7	25.3
Q2	305.6	6.5	8.9	30.6	39.4	18.1	16.1	6.3	30.3	92.2	39.4	10.2	23.0	14.2	20.0
Q3	312.6	6.8	9.7	31.6	41.1	21.8	16.1	6.6	26.1	93.2	38.8	10.7	22.6	14.8	22.3
Q4	318.8	6.4	9.6	31.9	42.8	23.7	16.1	6.7	27.5	93.8	39.1	10.5	24.2	15.4	20.6
2009 Sep.	106.4	2.2	3.3	10.8	14.0	8.3	5.3	2.3	8.9	31.5	13.2	3.8	7.6	4.9	7.3
Oct.	104.5	2.2	3.1	10.8	14.3	7.8	5.2	2.3	9.0	30.9	12.7	3.5	7.3	4.9	6.5
Nov.	105.8	2.1	3.1	10.2	14.0	7.9	5.3	2.3	9.2	31.1	12.9	3.5	8.5	5.2	6.8
Dec.	108.6	2.1	3.4	10.9	14.5	7.9	5.6	2.1	9.3	31.8	13.5	3.5	8.5	5.3	7.2
2010 Jan.	109.8	2.0	3.2	11.1	14.4	8.1	5.5	2.4	9.3	33.8	13.2	3.7	8.2	5.1	6.4
Feb.	111.4	.	.	.	.	7.2	5.5	2.3	9.0	33.9	14.0	3.6	8.7	5.2	.
	Percentage share of total imports														
2009	100.0	2.1	3.0	10.0	12.9	6.5	5.2	2.1	9.2	29.9	12.6	3.4	7.4	4.7	7.0
	Balance														
2008	-48.7	4.4	1.8	55.7	48.8	-43.5	16.8	10.4	50.7	-170.6	-118.9	-23.6	-41.0	-13.5	31.4
2009	18.3	1.0	3.4	49.0	14.9	-31.9	13.8	8.1	35.9	-93.9	-90.5	-14.2	-2.0	-5.2	25.0
2008 Q3	-21.4	1.2	0.8	14.2	12.4	-13.4	3.9	2.6	12.7	-47.3	-32.3	-6.0	-11.5	-3.6	6.6
Q4	-10.9	0.7	0.0	12.1	9.4	-7.1	3.6	1.3	11.0	-39.8	-31.5	-5.1	-5.9	-2.7	6.5
2009 Q1	-4.2	0.4	0.5	11.2	4.8	-5.1	3.5	1.1	7.3	-30.4	-26.1	-4.3	-0.4	-1.8	4.7
Q2	5.5	0.2	0.9	12.0	3.6	-5.9	3.1	2.0	7.8	-22.3	-22.5	-3.2	-0.3	-1.8	6.1
Q3	6.5	0.1	0.8	12.9	3.8	-9.7	3.2	2.5	10.2	-22.2	-21.4	-3.5	-0.1	-0.8	5.7
Q4	10.6	0.3	1.2	12.8	2.8	-11.2	4.0	2.5	10.5	-18.9	-20.5	-3.1	-1.1	-0.9	8.5
2009 Sep.	0.8	0.1	0.3	4.5	1.2	-4.3	1.1	0.8	3.2	-7.9	-7.4	-1.4	-0.1	-0.2	2.2
Oct.	3.5	0.0	0.5	4.3	1.0	-3.7	1.2	0.7	3.4	-6.4	-6.6	-1.1	0.3	-0.2	2.4
Nov.	3.7	0.1	0.4	4.2	1.0	-3.7	1.6	0.8	3.6	-6.6	-6.6	-1.2	-0.7	-0.3	3.4
Dec.	3.4	0.2	0.3	4.4	0.8	-3.7	1.2	1.1	3.5	-5.9	-7.4	-0.9	-0.6	-0.4	2.6
2010 Jan.	1.9	0.1	0.4	4.1	0.9	-4.0	1.5	0.9	3.4	-8.4	-6.3	-1.2	-0.4	-0.3	3.6
Feb.	3.3	.	.	.	.	-3.0	1.3	1.2	3.7	-7.5	-6.7	-0.9	-0.7	0.3	.

Source: Eurostat.

8 EXCHANGE RATES

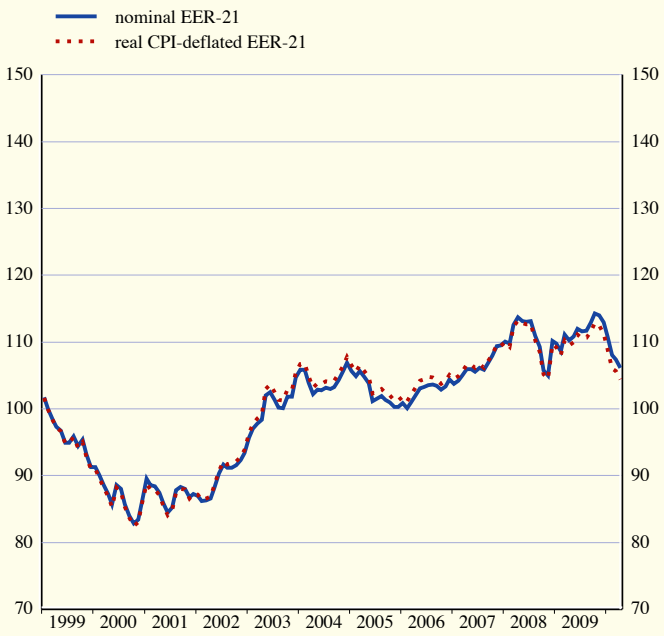
8.1 Effective exchange rates [1]

(period averages; index: 1999 Q1=100)

	EER-21						EER-41	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2007	106.3	106.8	105.2	102.7	106.9	101.0	113.0	104.2
2008	110.5	110.1	107.4	105.7	112.8	104.7	118.0	107.0
2009	111.7	110.6	105.9	106.9	119.0	106.6	120.6	107.8
2009 Q1	109.9	109.2	104.7	105.2	116.9	105.1	119.0	106.9
Q2	111.1	110.2	105.3	106.5	119.9	106.4	119.8	107.4
Q3	112.1	110.9	106.2	107.4	119.0	106.6	121.0	108.1
Q4	113.8	112.2	107.3	108.6	120.2	108.1	122.5	108.8
2010 Q1	108.7	106.9	102.3	.	.	.	116.9	103.2
2009 Apr.	110.3	109.5	104.6	-	-	-	119.1	106.8
May	110.8	109.9	105.2	-	-	-	119.5	107.1
June	112.0	111.1	106.2	-	-	-	120.7	108.3
July	111.6	110.5	105.8	-	-	-	120.5	107.7
Aug.	111.7	110.6	106.0	-	-	-	120.6	107.8
Sep.	112.9	111.6	106.9	-	-	-	122.0	108.7
Oct.	114.3	112.8	108.2	-	-	-	123.0	109.5
Nov.	114.0	112.5	107.6	-	-	-	122.9	109.2
Dec.	113.0	111.3	106.2	-	-	-	121.7	107.9
2010 Jan.	110.8	108.9	104.0	-	-	-	119.1	105.3
Feb.	108.0	106.0	101.6	-	-	-	116.2	102.5
Mar.	107.4	105.7	101.1	-	-	-	115.2	101.8
Apr.	106.1	104.4	100.0	-	-	-	113.5	100.2
	Percentage change versus previous month							
2010 Apr.	-1.2	-1.2	-1.1	-	-	-	-1.5	-1.5
	Percentage change versus previous year							
2010 Apr.	-3.8	-4.6	-4.4	-	-	-	-4.7	-6.2

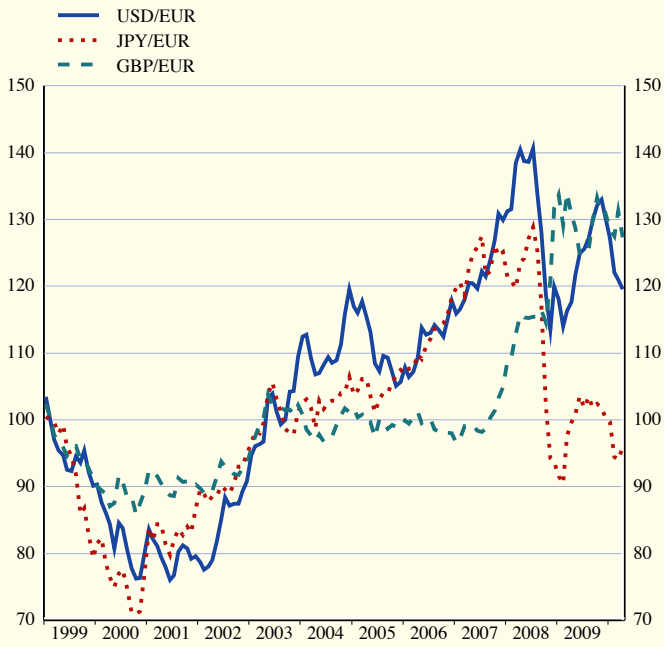
C35 Effective exchange rates

(monthly averages; index: 1999 Q1=100)



C36 Bilateral exchange rates

(monthly averages; index: 1999 Q1=100)



Source: ECB.

1) For a definition of the trading partner groups and other information, please refer to the General Notes.

8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Danish krone	Swedish krona	Pound sterling	US dollar	Japanese yen	Swiss 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
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	7.4462	10.6191	0.89094	1.3948	130.34	1.5100	1,772.90	10.8114	2.0241	1.5850	8.7278	1.7727
2009 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
Q4	7.4424	10.3509	0.90483	1.4779	132.69	1.5088	1,725.91	11.4555	2.0604	1.5604	8.3932	1.6250
2010 Q1	7.4426	9.9464	0.88760	1.3829	125.48	1.4632	1,581.41	10.7364	1.9395	1.4383	8.1020	1.5293
2009 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
Nov.	7.4415	10.3331	0.89892	1.4914	132.97	1.5105	1,735.17	11.5588	2.0711	1.5805	8.4143	1.6223
Dec.	7.4419	10.4085	0.89972	1.4614	131.21	1.5021	1,703.03	11.3296	2.0392	1.5397	8.4066	1.6185
2010 Jan.	7.4424	10.1939	0.88305	1.4272	130.34	1.4765	1,624.76	11.0783	1.9930	1.4879	8.1817	1.5624
Feb.	7.4440	9.9505	0.87604	1.3686	123.46	1.4671	1,582.70	10.6305	1.9326	1.4454	8.0971	1.5434
Mar.	7.4416	9.7277	0.90160	1.3569	123.03	1.4482	1,542.59	10.5313	1.8990	1.3889	8.0369	1.4882
Apr.	7.4428	9.6617	0.87456	1.3406	125.33	1.4337	1,494.53	10.4065	1.8505	1.3467	7.9323	1.4463
	Percentage change versus previous month											
2010 Apr.	0.0	-0.7	-3.0	-1.2	1.9	-1.0	-3.1	-1.2	-2.6	-3.0	-1.3	-2.8
	Percentage change versus previous year											
2010 Apr.	-0.1	-11.2	-2.6	1.6	-3.8	-5.3	-15.1	1.8	-6.6	-16.8	-9.7	-21.8

	Czech koruna	Estonian kroon	Latvian lats	Lithuanian litas	Hungarian forint	Polish zloty	Bulgarian lev	New Romanian leu	Croatian kuna	New Turkish lira
	13	14	15	16	17	18	19	20	21	22
2007	27.766	15.6466	0.7001	3.4528	251.35	3.7837	1.9558	3.3353	7.3376	1.7865
2008	24.946	15.6466	0.7027	3.4528	251.51	3.5121	1.9558	3.6826	7.2239	1.9064
2009	26.435	15.6466	0.7057	3.4528	280.33	4.3276	1.9558	4.2399	7.3400	2.1631
2009 Q3	25.597	15.6466	0.7019	3.4528	271.35	4.1978	1.9558	4.2263	7.3232	2.1444
Q4	25.923	15.6466	0.7084	3.4528	270.88	4.1745	1.9558	4.2680	7.2756	2.2029
2010 Q1	25.868	15.6466	0.7087	3.4528	268.52	3.9869	1.9558	4.1135	7.2849	2.0866
2009 Oct.	25.861	15.6466	0.7088	3.4528	268.49	4.2146	1.9558	4.2871	7.2419	2.1823
Nov.	25.812	15.6466	0.7088	3.4528	270.92	4.1646	1.9558	4.2896	7.2952	2.2262
Dec.	26.089	15.6466	0.7077	3.4528	273.22	4.1439	1.9558	4.2284	7.2907	2.2013
2010 Jan.	26.133	15.6466	0.7088	3.4528	269.43	4.0703	1.9558	4.1383	7.2938	2.1028
Feb.	25.979	15.6466	0.7090	3.4528	271.21	4.0144	1.9558	4.1196	7.3029	2.0756
Mar.	25.541	15.6466	0.7083	3.4528	265.40	3.8906	1.9558	4.0866	7.2616	2.0821
Apr.	25.308	15.6466	0.7076	3.4528	265.53	3.8782	1.9558	4.1306	7.2594	1.9983
	Percentage change versus previous month									
2010 Apr.	-0.9	0.0	-0.1	0.0	0.1	-0.3	0.0	1.1	0.0	-4.0
	Percentage change versus previous year									
2010 Apr.	-5.5	0.0	-0.2	0.0	-10.1	-12.5	0.0	-1.7	-2.1	-6.1

	Brazilian real [1]	Chinese yuan renminbi	Icelandic krona [2]	Indian rupee [3]	Indonesian rupiah	Malaysian ringgit	Mexican peso [1]	New Zealand dollar	Philippine peso	Russian rouble	South African rand	Thai baht
	23	24	25	26	27	28	29	30	31	32	33	34
2007	2.6633	10.4178	87.63	56.4186	12,528.33	4.7076	14.9743	1.8627	63.026	35.0183	9.6596	44.214
2008	2.6737	10.2236	143.83	63.6143	14,165.16	4.8893	16.2911	2.0770	65.172	36.4207	12.0590	48.475
2009	2.7674	9.5277	-	67.3611	14,443.74	4.9079	18.7989	2.2121	66.338	44.1376	11.6737	47.804
2009 Q3	2.6699	9.7702	-	69.1909	14,285.93	5.0333	18.9695	2.1232	68.815	44.7703	11.1618	48.575
Q4	2.5703	10.0905	-	68.9088	13,999.42	5.0275	19.3003	2.0297	69.080	43.5740	11.0757	49.221
2010 Q1	2.4917	9.4417	-	63.4796	12,809.32	4.6590	17.6555	1.9510	63.593	41.2697	10.3852	45.472
2009 Oct.	2.5771	10.1152	-	69.2160	14,057.25	5.0425	19.5856	2.0065	69.419	43.6188	11.0938	49.504
Nov.	2.5777	10.1827	-	69.4421	14,115.45	5.0553	19.5478	2.0450	70.165	43.1835	11.2134	49.634
Dec.	2.5566	9.9777	-	68.0924	13,830.84	4.9859	18.7787	2.0383	67.706	43.9019	10.9261	48.544
2010 Jan.	2.5383	9.7436	-	65.5361	13,263.60	4.8170	18.2820	1.9646	65.702	42.5749	10.6492	47.150
Feb.	2.5237	9.3462	-	63.4291	12,786.05	4.6743	17.7154	1.9615	63.317	41.2845	10.4964	45.360
Mar.	2.4233	9.2623	-	61.7352	12,434.53	4.5083	17.0587	1.9301	61.999	40.1219	10.0589	44.111
Apr.	2.3550	9.1505	-	59.6203	12,101.70	4.2935	16.3957	1.8814	59.788	39.1335	9.8658	43.279
	Percentage change versus previous month											
2010 Apr.	-2.8	-1.2	-	-3.4	-2.7	-4.8	-3.9	-2.5	-3.6	-2.5	-1.9	-1.9
	Percentage change versus previous year											
2010 Apr.	-19.3	1.5	-	-9.7	-16.8	-9.7	-7.7	-18.6	-5.8	-11.5	-16.9	-7.4

Source: ECB.

1) For these currencies the ECB computes and publishes euro reference exchange rates as from 1 January 2008. Previous data are indicative.
2) The most recent rate for the Icelandic krona refers to 3 December 2008.
3) For this currency the ECB computes and publishes euro reference exchange rates as from 1 January 2009. Previous data are indicative.

9 DEVELOPMENTS OUTSIDE THE EURO AREA

9.1 In other EU Member States

(annual percentage changes, unless otherwise indicated)

1. Economic and financial developments

	Bulgaria	Czech Republic	Denmark	Estonia	Latvia	Lithuania	Hungary	Poland	Romania	Sweden	United Kingdom
	1	2	3	4	5	6	7	8	9	10	11
	HICP										
2008	12.0	6.3	3.6	10.6	15.3	11.1	6.0	4.2	7.9	3.3	3.6
2009	2.5	0.6	1.1	0.2	3.3	4.2	4.0	4.0	5.6	1.9	2.2
2009 Q4	0.9	0.0	0.9	-2.0	-1.3	1.2	4.9	3.8	4.5	2.3	2.1
2010 Q1	1.9	0.4	1.9	0.0	-3.9	-0.4	5.8	3.4	4.6	2.7	3.3
2010 Jan.	1.8	0.4	1.9	-1.0	-3.3	-0.3	6.2	3.9	5.2	2.7	3.5
Feb.	1.7	0.4	1.8	-0.3	-4.3	-0.6	5.6	3.4	4.5	2.8	3.0
Mar.	2.4	0.4	2.1	1.4	-4.0	-0.4	5.7	2.9	4.2	2.5	3.4
	General government deficit (-)/surplus (+) as a percentage of GDP										
2007	0.1	-0.7	4.8	2.6	-0.3	-1.0	-5.0	-1.9	-2.5	3.8	-2.8
2008	1.8	-2.7	3.4	-2.7	-4.1	-3.3	-3.8	-3.7	-5.4	2.5	-4.9
2009	-3.9	-5.9	-2.7	-1.7	-9.0	-8.9	-4.0	-7.1	-8.3	-0.5	-11.5
	General government gross debt as a percentage of GDP										
2007	18.2	29.0	27.4	3.8	9.0	16.9	65.9	45.0	12.6	40.8	44.7
2008	14.1	30.0	34.2	4.6	19.5	15.6	72.9	47.2	13.3	38.3	52.0
2009	14.8	35.4	41.6	7.2	36.1	29.3	78.3	51.0	23.7	42.3	68.1
	Long-term government bond yield as a percentage per annum; period average										
2009 Oct.	7.08	4.50	3.60	-	13.51	14.50	7.45	6.15	9.13	3.25	3.34
Nov.	6.53	4.19	3.62	-	13.75	14.50	7.37	6.14	8.24	3.27	3.46
Dec.	6.61	3.98	3.53	-	13.75	9.10	7.69	6.22	8.66	3.24	3.60
2010 Jan.	6.65	4.28	3.57	-	13.76	8.15	7.62	6.13	9.05	3.37	4.01
Feb.	6.05	4.33	3.50	-	13.62	7.15	7.69	6.09	7.92	3.28	4.02
Mar.	5.82	4.02	3.40	-	10.54	5.15	7.16	5.72	7.11	3.20	3.98
	3-month interest rate as a percentage per annum; period average										
2009 Oct.	4.84	1.87	1.58	5.44	13.49	6.59	7.34	4.18	10.03	0.50	0.57
Nov.	4.80	1.80	1.56	4.54	11.87	5.39	7.56	4.19	10.19	0.48	0.61
Dec.	4.71	1.64	1.55	3.28	8.39	4.54	7.47	4.23	10.18	0.48	0.61
2010 Jan.	4.44	1.55	1.46	2.74	4.77	3.07	6.78	4.24	8.56	0.48	0.61
Feb.	4.27	1.52	1.39	2.12	3.16	2.24	6.59	4.17	6.93	0.48	0.63
Mar.	4.21	1.43	1.37	1.86	2.33	1.87	6.65	4.13	6.01	0.49	0.65
	Real GDP										
2008	6.0	2.5	-0.9	-3.6	-4.6	2.8	0.6	5.0	7.3	-0.2	0.5
2009	-5.0	-4.2	-4.9	-14.1	-18.0	-14.8	-6.3	1.8	-7.1	-4.9	-4.9
2009 Q3	-5.4	-4.5	-5.4	-15.6	-19.2	-14.7	-7.1	1.4	-7.1	-5.4	-5.3
Q4	-5.9	-3.1	-3.0	-9.5	-17.1	-12.5	-5.3	3.1	-6.5	-1.5	-3.1
2010 Q1	.	.	.	.	.	-2.8	.	.	.	.	-0.3
	Current and capital account balance as a percentage of GDP										
2008	-23.2	0.2	2.2	-8.4	-11.5	-10.1	-5.9	-3.9	-11.1	9.3	-1.3
2009	-8.0	0.1	3.9	7.4	11.8	7.2	1.5	0.1	-4.0	7.3	-1.1
2009 Q2	-13.1	-2.9	4.3	7.9	16.7	3.5	2.5	-0.1	-5.5	8.7	-1.3
Q3	3.0	-2.0	5.7	10.9	11.8	8.0	2.8	-0.9	-2.8	7.1	-1.6
Q4	-7.1	0.9	5.3	9.8	14.4	13.2	2.2	-1.1	-3.9	5.0	-0.2
	Gross external debt as a percentage of GDP										
2007	100.4	44.5	170.6	111.0	127.6	71.9	115.1	48.4	50.9	179.8	401.3
2008	108.8	50.0	179.0	118.5	128.5	71.6	155.0	56.7	56.0	207.6	431.4
2009 Q2	107.2	47.6	189.8	121.2	131.7	77.6	167.8	60.0	61.5	215.5	390.7
Q3	107.8	46.8	192.0	124.0	145.8	82.9	168.8	60.3	66.7	206.7	411.1
Q4	111.3	50.8	190.8	126.8	154.7	86.5	163.2	59.3	68.9	206.7	405.0
	Unit labour costs										
2008	16.2	5.1	6.5	14.1	21.0	9.3	4.5	6.9	14.5	2.8	2.8
2009	10.6	2.4	5.1	1.7	-7.1	0.9	1.4	2.2	.	4.8	4.9
2009 Q2	14.2	2.9	9.4	3.4	-2.2	10.8	-	3.9	-	6.6	6.8
Q3	10.2	1.6	4.8	1.5	-13.1	-6.5	-	4.3	-	5.0	4.5
Q4	3.7	0.8	-0.7	-7.5	-19.4	-11.4	-	-3.5	-	0.1	4.0
	Standardised unemployment rate as a percentage of labour force (s.a.)										
2008	5.6	4.4	3.3	5.5	7.5	5.8	7.8	7.2	5.8	6.2	5.6
2009	6.8	6.7	6.0	13.8	17.2	13.7	10.0	8.2	6.9	8.3	7.6
2009 Q4	8.0	7.4	7.1	15.5	20.2	15.8	10.6	8.7	7.6	8.8	7.8
2010 Q1	8.6	7.8	7.5	.	21.6	.	11.1	9.0	.	8.9	.
2010 Jan.	8.4	7.7	7.5	-	20.9	.	11.1	8.9	.	9.0	7.8
Feb.	8.6	7.9	7.6	-	21.6	.	11.1	9.0	.	8.9	.
Mar.	8.7	7.9	7.6	-	22.3	.	11.0	9.1	.	8.7	.

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

9.2 In the United States and Japan

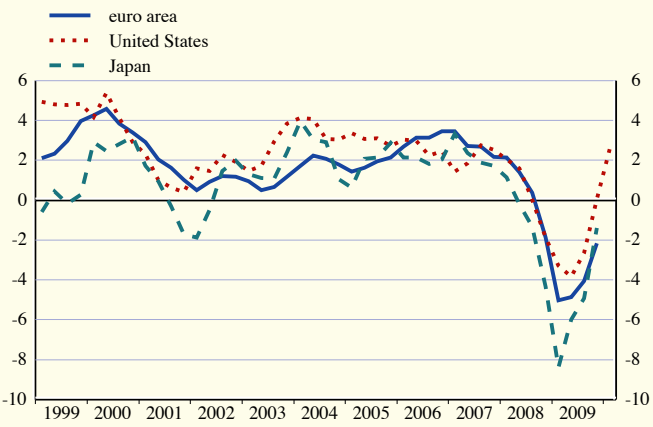
(annual percentage changes, unless otherwise indicated)

1. Economic and financial developments

	Consumer price index	Unit labour costs [1]	Real GDP	Industrial production index (manufacturing)	Unemployment rate as a % of labour force (s.a.)	Broad money [2]	3-month interbank deposit rate [3]	10-year zero coupon government bond yield; [3] end of period	Exchange rate [4] as national currency per euro	Fiscal deficit (-)/ surplus (+) as a % of GDP	Gross public debt [5] as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
	United States										
2006	3.2	2.8	2.7	2.7	4.6	5.3	5.20	5.26	1.2556	-2.2	47.8
2007	2.9	2.3	2.1	1.6	4.6	6.3	5.30	4.81	1.3705	-2.8	48.4
2008	3.8	1.0	0.4	-3.1	5.8	7.1	2.93	2.70	1.4708	-6.5	56.4
2009	-0.4	-1.8	-2.4	-11.1	9.3	7.8	0.69	4.17	1.3948	-11.0	67.7
2009 Q1	0.0	0.0	-3.3	-13.9	8.2	9.6	1.24	2.96	1.3029	-9.9	59.9
Q2	-1.2	0.4	-3.8	-14.6	9.3	8.7	0.84	3.95	1.3632	-11.6	62.8
Q3	-1.6	-2.7	-2.6	-10.6	9.6	7.8	0.41	3.61	1.4303	-11.6	65.9
Q4	1.4	-4.7	0.1	-4.7	10.0	5.1	0.27	4.17	1.4779	-11.1	67.7
2010 Q1	2.4	.	2.5	3.3	9.7	2.0	0.26	4.01	1.3829	.	.
2009 Dec.	2.7	-	-	-1.7	10.0	3.7	0.25	4.17	1.4614	-	-
2010 Jan.	2.6	-	-	2.2	9.7	2.2	0.25	3.92	1.4272	-	-
Feb.	2.1	-	-	2.5	9.7	2.4	0.25	3.89	1.3686	-	-
Mar.	2.3	-	-	5.0	9.7	1.5	0.27	4.01	1.3569	-	-
Apr.	.	-	-	.	.	.	0.31	3.84	1.3406	-	-
	Japan										
2006	0.2	-0.5	2.0	4.5	4.1	1.0	0.30	1.85	146.02	-1.6	159.9
2007	0.1	-1.0	2.3	2.8	3.8	1.6	0.79	1.70	161.25	-2.4	156.3
2008	1.4	2.6	-1.2	-3.4	4.0	2.1	0.93	1.21	152.45	-2.1	162.2
2009	-1.4	.	-5.2	-21.9	5.1	2.7	0.47	1.42	130.34	.	.
2009 Q1	-0.1	3.7	-8.4	-34.6	4.5	2.1	0.67	1.33	122.04	.	.
Q2	-1.0	1.2	-6.0	-27.4	5.1	2.6	0.53	1.41	132.59	.	.
Q3	-2.2	1.4	-4.9	-19.4	5.4	2.8	0.40	1.45	133.82	.	.
Q4	-2.0	.	-1.4	-4.2	5.2	3.3	0.31	1.42	132.69	.	.
2010 Q1	-1.2	.	.	.	.	2.8	0.25	1.48	125.48	.	.
2009 Dec.	-1.7	-	-	6.6	5.2	3.1	0.28	1.42	131.21	-	-
2010 Jan.	-1.3	-	-	19.1	4.9	3.0	0.26	1.42	130.34	-	-
Feb.	-1.1	-	-	31.5	4.8	2.7	0.25	1.43	123.46	-	-
Mar.	-1.1	-	-	.	.	2.6	0.25	1.48	123.03	-	-
Apr.	.	-	-	.	.	.	0.24	1.37	125.33	-	-

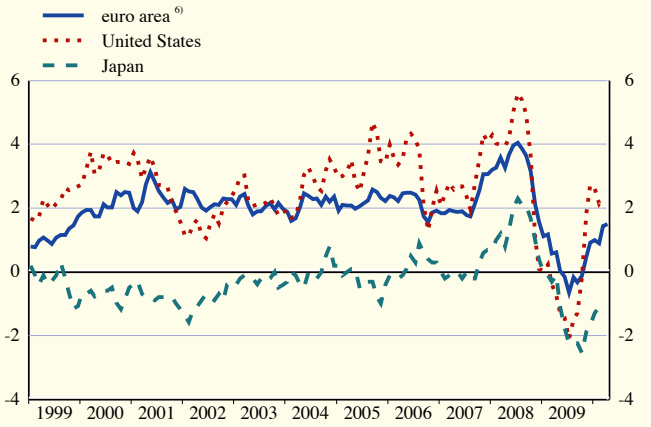
C37 Real gross domestic product

(annual percentage changes; quarterly data)



C38 Consumer price indices

(annual percentage changes; monthly data)



Sources: National data (columns 1, 2 (United States), 3, 4, 5 (United States), 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (column 5 (Japan), euro area chart data); Reuters (columns 7 and 8); ECB calculations (column 11).

1) Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector.
2) Period averages; M2 for the United States, M2+CDs for Japan.
3) Percentages per annum. For further information on the three-month interbank deposit rate, see Section 4.6.
4) For more information, see Section 8.2.
5) Gross consolidated general government debt (end of period).
6) Data refer to the changing composition of the euro area. For further information, see the General Notes.

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TECHNICAL NOTES

EURO AREA OVERVIEW

CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

The average growth rate for the quarter ending in month t is calculated as:

a) $$\left(\frac{0.5I_t + \sum_{i=1}^{2} I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^{2} I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where I_t is the index of adjusted outstanding amounts as at month t (see also below). Likewise, for the year ending in month t, the average growth rate is calculated as:

b) $$\left(\frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

SECTIONS 2.1 TO 2.6

CALCULATION OF TRANSACTIONS

Monthly transactions are calculated from monthly differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If L_t represents the outstanding amount at the end of month t, C_t^M the reclassification adjustment in month t, E_t^M the exchange rate adjustment and V_t^M the other revaluation adjustments, the transactions F_t^M in month t are defined as:

c) $$F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly transactions F_t^Q for the quarter ending in month t are defined as:

d) $$F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where L_{t-3} is the amount outstanding at the end of month t-3 (the end of the previous quarter) and, for example, C_t^Q is the reclassification adjustment in the quarter ending in month t.

For those quarterly series for which monthly observations are now available (see below), the quarterly transactions can be derived as the sum of the three monthly transactions in the quarter.

CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

Growth rates can be calculated from transactions or from the index of adjusted outstanding amounts. If F_t^M and L_t are defined as above, the index I_t of adjusted outstanding amounts in month t is defined as:

e) $$I_t = I_{t-1} \times \left(1 + \frac{F_t^M}{L_{t-1}} \right)$$

The base of the index (for the non-seasonally adjusted series) is currently set as December 2006 = 100. Time series for the index of adjusted outstanding amounts are available on the ECB's website (www.ecb.europa.eu) 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) $$a_t = \left[\prod_{i=0}^{11} \left(1 + F_{t-i}^M \Big/ L_{t-1-i} \right) - 1 \right] \times 100$$

g) $$a_t = \left(I_t \Big/ I_{t-12} - 1 \right) \times 100$$

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index for December 2002 by the index for December 2001.

Growth rates for intra-annual periods can be derived by adapting formula g). For example, the month-on-month growth rate a_t^M can be calculated as:

$$h) \quad a_t^M = \left(I_t / I_{t-1} - 1 \right) \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as $(a_{t+1} + a_t + a_{t-1})/3$, where a_t is defined as in f) or g) above.

CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If F_t^Q and L_{t-3} are defined as above, the index I_t of adjusted outstanding amounts for the quarter ending in month t is defined as:

$$i) \quad I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}} \right)$$

The annual growth rate in the four quarters ending in month t (i.e. a_t) can be calculated using formula g).

SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS [1]

The approach used is based on multiplicative decomposition using X-12-ARIMA.[2] 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.[3] The resulting estimates of seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and revaluations, in turn yielding seasonally adjusted transactions. Seasonal (and trading day) factors are revised at annual intervals or as required.

SECTIONS 3.1 TO 3.5

EQUALITY OF USES AND RESOURCES

In Section 3.1 the data conform to a basic accounting identity. For non-financial transactions, total uses equal total resources for each transaction category. This accounting identity is also reflected in the financial account – i.e. for each financial instrument category, total transactions in financial assets equal total transactions in liabilities. In the other changes in assets account and the financial balance sheets, total financial assets equal total liabilities for each financial instrument category, with the exception of monetary gold and special drawing rights, which are by definition not a liability of any sector.

CALCULATION OF BALANCING ITEMS

The balancing items at the end of each account in Sections 3.1 and 3.2 are computed as follows.

The trade balance equals euro area imports minus exports vis-à-vis the rest of the world for goods and services.

1 For details, see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000) and the "Monetary and financial statistics" sub-section of the "Statistics" section of the ECB's website (www.ecb.europa.eu).

2 For details, see Findley, D., Monsell, B., Bell, W., Otto, M. and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", Journal of Business and Economic Statistics, 16, 2, pp.127-152, or "X-12-ARIMA Reference Manual", Time Series Staff, Bureau of the Census, Washington, D.C.
For internal purposes, the model-based approach of TRAMO-SEATS is also used. For details of TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Banco de España, Working Paper No 9628, Madrid.

3 It follows that for the seasonally adjusted series, the level of the index for the base period (i.e. December 2001) generally differs from 100, reflecting the seasonality of that month.

Net operating surplus and mixed income is defined for resident sectors only and is calculated as gross value added (gross domestic product at market prices for the euro area) minus compensation of employees (uses) minus other taxes less subsidies on production (uses) minus consumption of fixed capital (uses).

Net national income is defined for resident sectors only and is computed as net operating surplus and mixed income plus compensation of employees (resources) plus taxes less subsidies on production (resources) plus net property income (resources minus uses).

Net disposable income is also defined only for resident sectors and equals net national income plus net current taxes on income and wealth (resources minus uses) plus net social contributions (resources minus uses) plus net social benefits other than social transfers in kind (resources minus uses) plus net other current transfers (resources minus uses).

Net saving is defined for resident sectors and is calculated as net disposable income plus the net adjustment for the change in the net equity of households in pension fund reserves (resources minus uses) minus final consumption expenditure (uses). For the rest of the world, the current external account is compiled as the trade balance plus all net income (resources minus uses).

Net lending/net borrowing is computed from the capital account as net saving plus net capital transfers (resources minus uses) minus gross capital formation (uses) minus acquisitions less disposals of non-produced non-financial assets (uses) plus consumption of fixed capital (resources). It can also be calculated in the financial account as total transactions in financial assets minus total transactions in liabilities (also known as changes in net financial worth (wealth) due to transactions). For the household and non-financial corporation sectors, there is a statistical discrepancy between the balancing items computed from the capital account and the financial account.

Changes in net worth (wealth) are calculated as changes in net worth (wealth) due to savings and capital transfers plus other changes in net financial worth (wealth). They currently exclude other changes in non-financial assets owing to the unavailability of data.

Net financial worth (wealth) is calculated as total financial assets minus total liabilities, whereas changes in net financial worth (wealth) are equal to the sum of changes in net financial worth (wealth) due to transactions (lending/net borrowing from the financial account) and other changes in net financial worth (wealth).

Finally, changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities, and other changes in net financial worth (wealth) are calculated as total other changes in financial assets minus total other changes in liabilities.

SECTIONS 4.3 AND 4.4

CALCULATION OF GROWTH RATES FOR DEBT SECURITIES AND QUOTED SHARES

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They can be calculated from transactions or from the index of notional stocks. If N_t^M represents the transactions (net issues) in month t and L_t the level outstanding at the end of month t, the index I_t of notional stocks in month t is defined as:

$$\text{j)} \quad I_t = I_{t-1} \times \left(1 + \frac{N_t}{L_{t-1}}\right)$$

As a base, the index is set equal to 100 in December 2001. The growth rate a_t for month t, corresponding to the change in the 12 months ending in month t, can be calculated using either of the following two formulae:

k) $$a_t = \left[\prod_{i=0}^{11}\left(1 + N^{M}_{t-i} / L_{t-1-i}\right) - 1\right] \times 100$$

l) $$a_t = \left(I_t / I_{t-12} - 1\right) \times 100$$

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an "N" is used 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 [4]

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) $$a_t = \left[\prod_{i=0}^{5}\left(1 + N^{M}_{t-i} / L_{t-1-i}\right) - 1\right] \times 100$$

p) $$a_t = \left(I_t / I_{t-6} - 1\right) \times 100$$

TABLE 1 IN SECTION 5.1

SEASONAL ADJUSTMENT OF THE HICP [4]

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.

4 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).

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 user-friendly access to data via the ECB's Statistical Data Warehouse (http://sdw.ecb.europa.eu), which includes search and download facilities. Further services available in the "Data services" sub-section include subscriptions to different datasets and a repository of compressed Comma Separated Value (CSV) files. For further information, please contact us at: statistics@ecb.europa.eu.

In general, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the Governing Council of the ECB's first meeting of the month. For this issue, the cut-off date was 5 May 2010.

Unless otherwise indicated, all data series including observations for 2009 and beyond relate to the Euro 16 (the euro area including Slovakia) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), statistical series refer to the changing composition of the euro area (see below for details). Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for the respective year of entry into the euro area of Greece (2001), Slovenia (2007), Cyprus (2008), Malta (2008) and Slovakia (2009), calculated from bases covering the year prior to the year of entry, use a series in which the impact of these countries' joining the euro area is taken into account.

The statistical series referring to the changing composition of the euro area are based on the euro area composition at the time to which the statistics relate. Thus, data prior to 2001 refer to the Euro 11, i.e. the following 11 EU Member States: Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Data from 2001 to 2006 refer to the Euro 12, i.e. the Euro 11 plus Greece. Data for 2007 refer to the Euro 13, i.e. the Euro 12 plus Slovenia. Data for 2008 refer to the Euro 15, i.e. the Euro 13 plus Cyprus and Malta, and data as of 2009 refer to the Euro 16, i.e. the Euro 15 plus Slovakia.

Given that the composition of the European currency unit (ECU) does not coincide with the former currencies of the countries that have adopted the single currency, pre-1999 amounts originally expressed in the participating currencies and converted into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States that have not adopted the euro. To avoid this effect on the monetary statistics, pre-1999 data[1] 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

1 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 liquidity-providing factors (columns 1 to 5) and the sum of liquidity-absorbing factors (columns 6 to 10). Base money (column 12) is calculated as the sum of the deposit facility (column 6), banknotes in circulation (column 8) and credit institutions' current account holdings (column 11).

MONEY, BANKING AND INVESTMENT FUNDS

Section 2.1 shows the aggregated balance sheet of the monetary financial institution sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. MFIs comprise central banks, credit institutions as defined under Community law, money market funds and other institutions whose business it is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or make investments in securities. A complete list of MFIs is published on the ECB's website.

Section 2.2 shows the consolidated balance sheet of the MFI sector, which is obtained by netting the aggregated balance sheet positions of MFIs in the euro area. Owing to a small amount of heterogeneity in recording practices, the sum of the inter-MFI positions is not necessarily zero; the balance is shown in column 10 of the liabilities side of Section 2.2. Section 2.3 sets out the euro area monetary aggregates and counterparts. These are derived from the consolidated MFI balance sheet and include positions of non-MFIs resident in the euro area held with MFIs resident in the euro area; they also take account of some monetary assets/liabilities of central government. Statistics on monetary aggregates and counterparts are adjusted for seasonal and trading day effects. The external liabilities item in Sections 2.1 and 2.2 shows the holdings by non-euro area residents of: (i) shares/units issued by money market funds located in the euro area; and (ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area. In Section 2.3, however, these holdings are excluded from the monetary aggregates and contribute to the item "net external assets".

Section 2.4 provides analysis, broken down by sector, type and original maturity, of loans granted by MFIs other than the Eurosystem (i.e. the banking system) resident in the euro area. Section 2.5 provides analysis, broken down by sector and instrument, of deposits held with the euro area banking system. Section 2.6 shows the securities held by the euro area banking system, broken down by type of issuer.

Sections 2.2 to 2.6 include data on transactions, which are derived as differences in outstanding amounts adjusted for reclassifications, revaluations, exchange rate variations and any other changes that do not arise from transactions. Section 2.7 shows selected revaluations that are used in the derivation of transactions. Sections 2.2 to 2.6 also provide growth rates based on those transactions in the form of annual percentage changes. Section 2.8 shows a quarterly currency breakdown of selected MFI balance sheet items.

Details of sector definitions are set out in the third edition of the "Monetary financial institutions and markets statistics sector manual – Guidance for the statistical classification of customers" (ECB, March 2007). The publication "Guidance Notes to the Regulation ECB/2001/13 on the MFI Balance Sheet Statistics" (ECB, November 2002) explains practices that NCBs are recommended to follow. Since 1 January 1999, statistical information has been collected and compiled on the basis of Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the monetary financial institutions sector,[2] as last amended by Regulation ECB/2003/10[3].

In line with this Regulation, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities sides of the MFI balance sheet.

Section 2.9 shows outstanding amounts and transactions on the balance sheet of euro area investment funds (other than money market funds, which are included in the MFI balance sheet statistics). An investment fund is a collective investment undertaking that invests capital raised from the public in financial and/or non-financial assets. A complete list of euro

2 OJ L 356, 30.12.1998, p. 7.
3 OJ L 250, 2.10.2003, p. 19.

area investment funds is published on the ECB's website. The balance sheet is aggregated, so investment funds' assets include their holdings of shares/units issued by other investment funds. Shares/units issued by investment funds are also broken down by investment policy (i.e. into bond funds, equity funds, mixed funds, real estate funds, hedge funds and other funds) and by type (i.e. into open-end funds and closed-end funds). Section 2.10 provides further details on the main types of asset held by euro area investment funds. This Section contains a geographical breakdown of the issuers of securities held by investment funds, as well as breaking issuers down by economic sector where they are resident in the euro area.

Further information on these investment fund statistics can be found in the "Manual on investment fund statistics". Since December 2008 harmonised statistical information has been collected and compiled on the basis of Regulation ECB/2007/8 concerning statistics on the assets and liabilities of investment funds.

EURO AREA ACCOUNTS

Section 3.1 shows quarterly integrated euro area accounts data, which provide comprehensive information on the economic activities of households (including non-profit institutions serving households), non-financial corporations, financial corporations and general government, as well as on the interaction between these sectors and both the euro area and the rest of the world. Non-seasonally adjusted data on current prices are displayed for the last available quarter, following a simplified sequence of accounts in accordance with the methodological framework of the European System of Accounts 1995.

In short, the sequence of accounts (transactions) comprises: (1) the generation of income account, which shows how production activity translates into various categories of income; (2) the allocation of primary income account, which records receipts and expenses relating to various forms of property income (for the economy as a whole; the balancing item of the primary income account is national income); (3) the secondary distribution of income account, which shows how the national income of an institutional sector changes because of current transfers; (4) the use of income account, which shows how disposable income is spent on consumption or saved; (5) the capital account, which shows how savings and net capital transfers are spent in the acquisition of non-financial assets (the balancing item of the capital account is net lending/net borrowing); and (6) the financial account, which records the net acquisitions of financial assets and the net incurrence of liabilities. As each non-financial transaction is mirrored by a financial transaction, the balancing item of the financial account conceptually also equals net lending/net borrowing as calculated from the capital account.

In addition, opening and closing financial balance sheets are presented, which provide a picture of the financial wealth of each individual sector at a given point in time. Finally, other changes in financial assets and liabilities (e.g. those resulting from the impact of changes in asset prices) are also shown.

The sectoral coverage of the financial account and the financial balance sheets is more detailed for the financial corporation sector, which is broken down into MFIs, other financial intermediaries (including financial auxiliaries), and insurance corporations and pension funds.

Section 3.2 shows four-quarter cumulated flows (transactions) for the "non-financial accounts" of the euro area (i.e. accounts (1) to (5) above), also following the simplified sequence of accounts.

Section 3.3 shows four-quarter cumulated flows (transactions and other changes) for households' income, expenditure and accumulation accounts, as well as outstanding amounts for the financial balance sheet accounts, presenting data in a more analytical manner. Sector-specific transactions and balancing items are arranged in a way that more clearly depicts the financing

and investment decisions of households, while respecting the accounting identities presented in Sections 3.1 and 3.2.

Section 3.4 displays four-quarter cumulated flows (transactions) for non-financial corporations' income and accumulation accounts, as well as outstanding amounts for the financial balance sheet accounts, presenting data in a more analytical manner.

Section 3.5 shows four-quarter cumulated financial flows (transactions and other changes) and outstanding amounts for the financial balance sheets of insurance corporations and pension funds.

FINANCIAL MARKETS

The series on financial market statistics for the euro area cover those EU Member States that had adopted the euro at the time to which the statistics relate (i.e. a changing composition), with the exception of statistics on securities issues (Sections 4.1 to 4.4), which relate to the Euro 16 for the whole time series (i.e. a fixed composition).

Statistics on securities other than shares and statistics on quoted shares (Sections 4.1 to 4.4) are produced by the ECB using data from the ESCB and the BIS. Section 4.5 presents MFI interest rates on euro-denominated deposits from and loans to euro area residents. Statistics on money market interest rates, long-term government bond yields and stock market indices (Sections 4.6 to 4.8) are produced by the ECB using data from wire services.

Statistics on securities issues cover: (i) securities other than shares, excluding financial derivatives; and (ii) quoted shares. The former are presented in Sections 4.1, 4.2 and 4.3, while the latter are presented in Section 4.4. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases, two years or less). Securities with (i) a longer maturity, (ii) optional maturity dates, the latest of which is more than one year away, or (iii) indefinite maturity dates are classified as "long-term". Long-term debt securities issued by euro area residents are broken down further into fixed and variable rate issues. Fixed rate issues consist of issues where the coupon rate does not change during the life of the issue. Variable rate issues comprise all issues where the coupon is periodically refixed with reference to an independent interest rate or index. The 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, broken down by original maturity, residency of the issuer and currency. It presents outstanding amounts, gross issues and net issues of securities other than shares, broken down into: (i) issues denominated in euro and issues in all currencies; (ii) issues by euro area residents and total issues; and (iii) total and long-term maturities. Net issues differ from the changes in outstanding amounts owing to valuation changes, reclassifications and other adjustments. This section also presents seasonally adjusted statistics, including six-month annualised seasonally adjusted growth rates for total and long-term debt securities. Seasonally adjusted data are derived from the index of notional stocks, from which the seasonal effects have been removed. See the Technical Notes for details.

Section 4.2 contains a sectoral breakdown of outstanding amounts, gross issues and net issues for issuers resident in the euro area in line with the ESA 95. The ECB is included in the Eurosystem.

The total outstanding amounts for total and long-term debt securities in column 1 of Table 1 in Section 4.2 correspond to the data on outstanding

amounts for total and long-term debt securities issued by euro area residents in column 7 of Section 4.1. The outstanding amounts for total and long-term debt securities issued by MFIs in column 2 of Table 1 in Section 4.2 are broadly comparable with the data on debt securities issued on the liabilities side of the aggregated MFI balance sheet in column 8 of Table 2 in Section 2.1. The total net issues for total debt securities in column 1 of Table 2 in Section 4.2 correspond to the data on total net issues by euro area residents in column 9 of Section 4.1. The residual difference between long-term debt securities and total fixed and variable rate long-term debt securities in Table 1 of Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows seasonally adjusted and non-seasonally adjusted growth rates for debt securities issued by euro area residents (broken down by maturity, type of instrument, sector of the issuer and currency), which are based on financial transactions that occur when an institutional unit incurs or redeems liabilities. The growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes that do not arise from transactions. The seasonally adjusted growth rates have been annualised for presentational purposes. See the Technical Notes for details.

Columns 1, 4, 6 and 8 in Table 1 of Section 4.4 show the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Section 3.4 (financial balance sheet; quoted shares).

Columns 3, 5, 7 and 9 in Table 1 of Section 4.4 show annual growth rates for quoted shares issued by euro area residents (broken down by the sector of the issuer), which are based on financial transactions that occur when an issuer issues or redeems shares for cash, excluding investments in the issuer's own shares. The calculation of annual growth rates excludes reclassifications, revaluations and any other changes that do not arise from transactions.

Section 4.5 presents statistics on all the interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area. Euro area MFI interest rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. These MFI interest rate statistics replaced the ten transitional statistical series on euro area retail interest rates that had been published in the Monthly Bulletin as of January 1999.

Section 4.6 presents money market interest rates for the euro area, the United States and Japan. For the euro area, a broad spectrum of money market interest rates is covered, ranging from interest rates on overnight deposits to those on twelve-month deposits. Before January 1999, synthetic euro area interest rates were calculated on the basis of national rates weighted by GDP. With the exception of the overnight rate prior to January 1999, monthly, quarterly and yearly values are period averages. Overnight deposits are represented by end-of-period interbank deposit bid rates up to and including December 1998 and period averages for the euro overnight index average (EONIA) thereafter. As of January 1999, euro area interest rates on one, three, six and twelve-month deposits are euro interbank offered rates (EURIBOR); prior to that date, they are London interbank offered rates (LIBOR) where available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Section 4.7 shows end-of-period rates estimated from nominal spot yield curves based on AAA-rated euro-denominated bonds issued by euro area central governments. The yield curves

are estimated using the Svensson model[4]. Spreads between the ten-year rates and the three-month and two-year rates are also released. Additional yield curves (daily releases, including charts and tables) and the corresponding methodological information are available at: http://www.ecb.europa.eu/stats/money/yc/html/index.en.html. Daily data can also be downloaded.

Section 4.8 shows stock market indices for the euro area, the United States and Japan.

PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

Most of the data described in this section are produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. Statistics on 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[5]. 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,[6] 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.

4 Svensson, L. E., "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051, 1994.
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.

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[8] 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.

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[10] amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include summary data for the individual euro area countries owing to their importance within the framework of the Stability and Growth Pact. The deficits/surpluses presented for the individual euro area countries correspond to excessive deficit procedure B.9, as defined by Council Regulation (EC) No 479/2009 as regards references to the ESA 95. Section 6.3 presents changes in general

8 OJ L 69, 13.3.2003, p. 1.
9 OJ L 169, 8.7.2003, p. 37.
10 OJ L 172, 12.7.2000, p. 3.

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[11]. Section 6.5 presents quarterly figures on gross consolidated government debt, the deficit-debt adjustment and the government borrowing requirement. These figures are compiled using data provided by the Member States under Regulation (EC) No 501/2004 and Regulation (EC) No 222/2004 and data provided by the NCBs.

EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments and international investment position (i.i.p.) statistics (Sections 7.1 to 7.4) are generally in line with the IMF Balance of Payments Manual (fifth edition, October 1993), the ECB Guideline of 16 July 2004 on the statistical reporting requirements of the ECB (ECB/2004/15)[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 9 in Section 7.3 present a breakdown of the euro area b.o.p. and i.i.p. vis-à-vis major partner countries, both individually and as a group, distinguishing between EU Member States outside the euro area and countries or areas outside the European Union. The breakdown also shows transactions and positions vis-à-vis EU institutions (which,

11 OJ L 179, 9.7.2002, p. 1.
12 OJ L 354, 30.11.2004, p. 34.
13 OJ L 159, 20.6.2007, p. 48.

with the exception of the ECB, are considered to be outside the euro area for statistical purposes, regardless of their physical location) and, for some purposes, offshore centres and international organisations. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives or international reserves. In addition, separate data are not provided for investment income payable to Brazil, mainland China, India or Russia. The geographical breakdown is described in the article entitled "Euro area balance of payments and international investment position vis-à-vis main counterparts" in the February 2005 issue of the Monthly Bulletin.

The data on the euro area b.o.p. financial account and i.i.p. in Section 7.3 are based on transactions and positions vis-à-vis non-residents of the euro area, regarding the euro area as a single economic entity (see also Box 9 in the December 2002 issue of the Monthly Bulletin, Box 5 in the January 2007 issue of the Monthly Bulletin and Box 6 in the January 2008 issue of the Monthly Bulletin). The i.i.p. is valued at current market prices, with the exception of direct investment, where book values are used for unquoted shares, and other investments (e.g. loans and deposits). The quarterly i.i.p. is compiled on the basis of the same methodological framework as the annual i.i.p. As some data sources are not available on a quarterly basis (or are available with a delay), the quarterly i.i.p. is partly estimated on the basis of financial transactions, asset prices and foreign exchange developments.

Table 1 in Section 7.3 summarises the i.i.p. and financial transactions in the euro area b.o.p. The breakdown of the change in the annual i.i.p. is obtained by applying a statistical model to i.i.p. changes other than transactions, using information from the geographical breakdown and currency composition of assets and liabilities, as well as price indices for different financial assets. In this table, columns 5 and 6 refer to direct investment by resident units abroad and direct investment by non-resident units in the euro area.

In Table 5 in Section 7.3, the breakdown into "loans" and "currency and deposits" is based on the sector of the non-resident counterpart – i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms to the IMF Balance of Payments Manual.

The outstanding amounts for the Eurosystem's international reserves and related assets and liabilities are shown in Table 7 of Section 7.3. These figures are not fully comparable with those in the Eurosystem's weekly financial statement owing to differences in coverage and valuation. The data in Table 7 are in line with the recommendations for the template on international reserves and foreign currency liquidity. Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, which was updated on 27 September 2009. More information on the statistical treatment of the Eurosystem's international reserves can be found in a publication entitled "Statistical treatment of the Eurosystem's international reserves" (October 2000), which can be downloaded from the ECB's website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

The euro area's gross external debt statistics in Table 8 of Section 7.3 represent outstanding actual (rather than contingent) liabilities vis-à-vis non-euro area residents that require the payment of principal and/or interest by the debtor at one or more points in the future. Table 8 shows a breakdown of gross external debt by instrument and institutional sector.

Section 7.4 contains a monetary presentation of the euro area balance of payments, showing the transactions by non-MFIs that mirror the net external transactions by MFIs. Included in the

transactions by non-MFIs are b.o.p. transactions for which a sectoral breakdown is not available. These concern the current and capital accounts (column 2) and financial derivatives (column 11). An up-to-date methodological note on the monetary presentation of the euro area balance of payments is available in the "Statistics" section of the ECB's website. See also Box 1 in the June 2003 issue of the Monthly Bulletin.

Section 7.5 shows data on euro area external trade in goods. The source is Eurostat. Value data and volume indices are seasonally and working day-adjusted. The breakdown by product group in columns 4 to 6 and 9 to 11 of Table 1 in Section 7.5 is in line with the classification contained in the Broad Economic Categories and corresponds to the basic classes of goods in the System of National Accounts. Manufactured goods (columns 7 and 12) and oil (column 13) are in line with the SITC Rev. 4 definition. The geographical breakdown (Table 3 in Section 7.5) shows major trading partners both individually and in regional groups. China excludes Hong Kong. On account of differences in definitions, classification, coverage and time of recording, external trade data, in particular for imports, are not fully comparable with the goods item in the b.o.p. statistics (Sections 7.1 and 7.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of imported goods in external trade data.

Industrial import prices and industrial producer export prices (or industrial output prices for the non-domestic market) shown in Table 2 in Section 7.5 were introduced by Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98, which is the principal legal basis for short-term statistics. The industrial import price index covers industrial products imported from outside the euro area under sections B to E of the Statistical Classification of Products by Activity in the European Economic Community (CPA) and all institutional import sectors except households, governments and non-profit institutions. It reflects the cost, insurance and freight price excluding import duties and taxes, and refers to actual transactions in euro recorded at the point when ownership of the goods is transferred. The industrial producer export prices cover all industrial products exported directly by euro area producers to the extra-euro area market under sections B to E of NACE Revision 2. Exports from wholesalers and re-exports are not covered. The indices reflect the free on board price expressed in euro and calculated at the euro area frontier, including any indirect taxes except VAT and other deductible taxes. Industrial import prices and industrial producer export prices are available by Main Industrial Grouping as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007. For more details, see Box 11 in the December 2008 issue of the Monthly Bulletin.

EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate indices for the euro, which are calculated by the ECB on the basis of weighted averages of the euro's bilateral exchange rates against the currencies of the selected trading partners of the euro area. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with those trading partners in the periods 1995-1997, 1998-2000, 2001-2003 and 2004-2006, and are calculated to account for third-market effects. The EER indices are obtained by chain-linking the indicators based on each of these four sets of trade weights at the end of each three-year period. The base period of the resulting EER index is the first quarter of 1999. The EER-21 group of trading partners is composed of the 11 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-41 group comprises the EER-21 plus the following countries: Algeria, Argentina, Brazil, Chile, Croatia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand,

the Philippines, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela. Real EERs are calculated using consumer price indices, producer price indices, gross domestic product deflators and unit labour costs, both for the manufacturing sector and for the total economy.

For more detailed information on the calculation of the EERs, see Box 5, entitled "International trade developments and revision of the effective exchange rates of the euro", in the January 2010 issue of the Monthly Bulletin, the relevant methodological note and ECB Occasional Paper No 2 ("The effective exchange rates of the euro" by Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

The bilateral rates shown in Section 8.2 are monthly averages of those published daily as reference rates for these currencies.

DEVELOPMENTS OUTSIDE THE EURO AREA

Statistics on other EU Member States (Section 9.1) follow the same principles as data relating to the euro area. As a result, data on current and capital accounts and gross external debt include special-purpose vehicles. The data for the United States and Japan contained in Section 9.2 are obtained from national sources.

ANNEXES

CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM[1]

11 JANUARY AND 8 FEBRUARY 2007

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.50%, 4.50% and 2.50% respectively.

8 MARCH 2007

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 3.75%, starting from the operation to be settled on 14 March 2007. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 4.75% and 2.75%, both with effect from 14 March 2007.

12 APRIL AND 10 MAY 2007

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

6 JUNE 2007

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4%, starting from the operation to be settled on 13 June 2007. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5% and 3% respectively, with effect from 13 June 2007.

5 JULY, 2 AUGUST, 6 SEPTEMBER, 4 OCTOBER, 8 NOVEMBER AND 6 DECEMBER 2007, AND 10 JANUARY, 7 FEBRUARY, 6 MARCH, 10 APRIL, 8 MAY AND 5 JUNE 2008

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.00%, 5.00% and 3.00% respectively.

3 JULY 2008

The Governing Council of the ECB decides to increase the minimum bid rate on the main refinancing operations by 25 basis points to 4.25%, starting from the operation to be settled on 9 July 2008. In addition, it decides to increase by 25 basis points the interest rates on both the marginal lending facility and the deposit facility, to 5.25% and 3.25% respectively, with effect from 9 July 2008.

7 AUGUST, 4 SEPTEMBER AND 2 OCTOBER 2008

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.25%, 5.25% and 3.25% respectively.

8 OCTOBER 2008

The Governing Council of the ECB decides to decrease the minimum bid rate on the main refinancing operations by 50 basis points to 3.75%, starting from the operations to be settled on 15 October 2008. In addition, it decides to decrease by 50 basis points the interest rates on

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 fixed-rate tender procedure with full allotment at the interest rate on the main refinancing operation. Furthermore, as of 9 October, the ECB will reduce the corridor of standing facilities from 200 basis points to 100 basis points around the interest rate on the main refinancing operation. The two measures will remain in place for as long as needed, and at least until the end of the first maintenance period of 2009, on 20 January.

15 OCTOBER 2008

The Governing Council of the ECB decides to further expand the collateral framework and enhance the provision of liquidity. To do so, the Governing Council decides: (i) to expand the list of assets eligible as collateral in Eurosystem credit operations, with this expansion remaining in force until the end of 2009, (ii) to enhance the provision of longer-term refinancing, with effect from 30 October 2008 and until the end of the first quarter of 2009, and (iii) to provide US dollar liquidity through foreign exchange swaps.

6 NOVEMBER 2008

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 50 basis points to 3.25%, starting from the operations to be settled on 12 November 2008. In addition, it decides to decrease by 50 basis points the interest rates on both the marginal lending facility and the deposit facility, to 3.75% and 2.75% respectively, with effect from 12 November 2008.

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 longer-term refinancing operations and special-term refinancing operations for as long as needed, and in any case beyond the end of 2009.

2 APRIL 2009

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.25%, starting from the operations to be settled on 8 April 2009. In addition, it decides that the interest rates on the marginal lending and the deposit facility will be 2.25% and 0.25% respectively, with effect from 8 April 2009.

7 MAY 2009

The Governing Council of the ECB decides to decrease the interest rate on the main refinancing operations by 25 basis points to 1.00%, starting from the operation to be settled on 13 May 2009. In addition, it decides to decrease the interest rate on the marginal lending facility by 50 basis points to 1.75% with effect from 13 May 2009, and to leave the interest rate on the deposit facility unchanged at 0.25%.

In addition, the Governing Council of the ECB decides to proceed with its enhanced credit support approach. In particular, it decides that the Eurosystem will conduct liquidity-providing longer-term refinancing operations with a maturity of one year as fixed rate tender procedure with full allotment. In addition, it decides in principle that the Eurosystem will purchase euro-denominated covered bonds issued in the euro area.

4 JUNE 2009

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively. In addition, the Governing Council of the ECB decides upon the technical modalities related to the purchase of euro-denominated covered bonds issued in the euro area decided on 7 May 2009.

2 JULY, 6 AUGUST, 3 SEPTEMBER, 8 OCTOBER, 5 NOVEMBER AND 3 DECEMBER 2009, AND 14 JANUARY, 4 FEBRUARY, 4 MARCH, 8 APRIL AND 6 MAY 2010

The Governing Council of the ECB decides that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

DOCUMENTS PUBLISHED BY THE EUROPEAN CENTRAL BANK SINCE 2009

This list is designed to inform readers about selected documents published by the European Central Bank since January 2009. For Working Papers, which as of January 2009 (from Working Paper No 989 onwards) are available online only, the list only refers to publications released between February and April 2010. As of November 2009 (from Legal Working Paper No 9 onwards) Legal Working Papers are also available online only. Unless otherwise indicated, hard copies can be obtained or subscribed to free of charge, stock permitting, by contacting info@ecb.europa.eu.

For a complete list of documents published by the European Central Bank and by the European Monetary Institute, please visit the ECB's website (http://www.ecb.europa.eu).

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"Assessing global trends in protectionism", February 2009.
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Available monthly since August 2003.

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9 "The legal duty to consult the European Central Bank – national and EU consultations" by S. E. Lambrinoc, November 2009.
10 "Withdrawal and expulsion from the EU and EMU: some reflections" by P. Athanassiou, December 2009.
11 "The role of national central banks in banking supervision in selected central and eastern European countries" by M. Apinis, M. Bodzioch, E. Csongrádi, T. Filipova, Z. Foit, J. Kotkas, M. Porzycki and M. Vetrák, March 2010.

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100 "Survey data on household finance and consumption: research summary and policy use" by the Eurosystem Household Finance and Consumption Network, January 2009.
101 "Housing finance in the euro area" by the Task Force of the Monetary Policy Committee of the European System of Central Banks, March 2009.
102 "Domestic financial development in emerging economies: evidence and implications" by E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara, April 2009.
103 "Transnational governance in global finance: the principles for stable capital flows and fair debt restructuring in emerging markets" by R. Ritter, April 2009.
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109 "Euro area fiscal policies and the crisis" edited by A. van Riet.

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GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website (www.ecb.europa.eu/home/glossary/html/index.en.html).

Autonomous liquidity factors: liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

Balance of payments (b.o.p.): a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

Bank lending survey (BLS): a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

Borrowing requirement (general government): net incurrence of debt by the general government.

Break-even inflation rate: the spread between the yield on a nominal bond and that on an inflation-linked bond of the same (or as similar as possible) maturity.

Capital account: a b.o.p. account that covers all capital transfers and acquisitions/disposals of non-produced, non-financial assets between residents and non-residents.

Capital accounts: part of the system of national (or euro area) accounts consisting of the change in net worth that is due to net saving, net capital transfers and net acquisitions of non-financial assets.

Central parity (or central rate): the exchange rate of each ERM II member currency vis-à-vis the euro, around which the ERM II fluctuation margins are defined.

Compensation per employee or per hour worked: the total remuneration, in cash or in kind, that is payable by employers to employees, i.e. gross wages and salaries, as well as bonuses, overtime payments and employers' social security contributions, divided by the total number of employees or by the total number of employees' hours worked.

Consolidated balance sheet of the MFI sector: a balance sheet obtained by netting out inter-MFI positions (e.g. inter-MFI loans and deposits) in the aggregated MFI balance sheet. It provides statistical information on the MFI sector's assets and liabilities vis-à-vis residents of the euro area not belonging to this sector (i.e. the general government and other euro area residents) and vis-à-vis non-euro area residents. It is the main statistical source for the calculation of monetary aggregates, and it provides the basis for the regular analysis of the counterparts of M3.

Current account: a b.o.p. account that covers all transactions in goods and services, income and current transfers between residents and non-residents.

Debt (financial accounts): loans taken out by households, as well as the loans, debt securities and pension fund reserves (resulting from employers' direct pension commitments on behalf of their employees) of non-financial corporations, valued at market prices at the end of the period.

Debt (general government): the gross debt (currency and deposits, loans and debt securities) at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

Debt security: a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

Debt-to-GDP ratio (general government): the ratio of general government debt to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 126(2) of the Treaty on the Functioning of the European Union to define the existence of an excessive deficit.

Deficit (general government): the general government's net borrowing, i.e. the difference between total government revenue and total government expenditure.

Deficit-debt adjustment (general government): the difference between the general government deficit and the change in general government debt.

Deficit ratio (general government): the ratio of the general government deficit to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 126(2) of the Treaty on the Functioning of the European Union to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

Deflation: a generalised, persistent and self-reinforcing decline in a broad set of prices that results from a drop in aggregate demand and becomes entrenched in expectations.

Deposit facility: a standing facility of the Eurosystem which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at an NCB.

Disinflation: a process of decelerating inflation that may lead to negative inflation rates of a temporary nature.

Direct investment: cross-border investment for the purpose of obtaining a lasting interest in an enterprise resident in another economy (assumed, in practice, for ownership of at least 10% of the ordinary shares or voting power). Included are equity capital, reinvested earnings and other capital associated with inter-company operations. The direct investment account records net transactions/positions in assets abroad by euro area residents (as "direct investment abroad") and net transactions/positions in euro area assets by non-residents (as "direct investment in the euro area").

Effective exchange rates (EERs) of the euro (nominal/real): weighted averages of bilateral euro exchange rates against the currencies of the euro area's main trading partners. The EER indices of the euro are calculated against two groups of trading partners: the EER-21 (comprising the 11 non-euro area EU Member States and 10 trading partners outside the EU) and the EER-41 (composed of the EER-21 and 20 additional countries). The weights used reflect the share of each partner country in the euro area's trade in manufactured goods and account for competition in third markets. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

Enhanced credit support: the non-standard measures taken by the ECB/Eurosystem during the financial crisis with a view to supporting financing conditions and credit flows above and beyond what could be achieved through reductions in key ECB interest rates alone.

EONIA (euro overnight index average): a measure of the effective interest rate prevailing in the euro interbank overnight market. It is calculated as a weighted average of the interest rates on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.

Equities: securities representing ownership of a stake in a corporation. They comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

ERM II (exchange rate mechanism II): the exchange rate arrangement that provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

EURIBOR (euro interbank offered rate): the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

Euro area: the area formed by those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty on the Functioning of the European Union.

European Commission surveys: harmonised surveys of business and/or consumer sentiment conducted on behalf of the European Commission in each of the EU Member States. Such questionnaire-based surveys are addressed to managers in the manufacturing, construction, retail and services industries, as well as to consumers. From each monthly survey, composite indicators are calculated that summarise the replies to a number of different questions in a single indicator (confidence indicators).

Eurosystem: the central banking system made up of the ECB and the NCBs of those EU Member States that have already adopted the euro.

Eurozone Purchasing Managers' Surveys: surveys of business conditions in manufacturing and in services industries conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers' Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers' delivery times and stocks of purchases. The services sector survey asks questions on business activity, expectations of future business activity, the amount of business outstanding, incoming new business, employment, input prices and prices charged. The Eurozone Composite Index is calculated by combining the results from the manufacturing and services sector surveys.

External trade in goods: exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

Financial account: a b.o.p. account that covers transactions between residents and non-residents in direct investment, portfolio investment, other investment, financial derivatives and reserve assets.

Financial accounts: part of the system of national (or euro area) accounts showing the financial positions (stocks or balance sheets), financial transactions and other changes of the different institutional sectors of an economy by type of financial asset.

Fixed rate tender: a tender procedure in which the interest rate is specified in advance by the central bank and in which participating counterparties bid the amount of money they wish to transact at the fixed interest rate.

Fixed rate full-allotment tender procedure: a tender procedure in which the interest rate is specified by the central bank and in which counterparties bid the amount of money they want to transact at that rate, knowing in advance that all their bids will be satisfied.

General government: a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

Gross domestic product (GDP): the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

Harmonised Index of Consumer Prices (HICP): a measure of the development of consumer prices that is compiled by Eurostat and harmonised for all EU Member States.

Hourly labour cost index: a measure of labour costs, including gross wages and salaries (in cash and in kind, including bonuses) and other labour costs (employers' social contributions plus employment-related taxes paid by the employer minus subsidies received by the employer), per hour actually worked (including overtime).

Implied volatility: the expected volatility (i.e. standard deviation) in the rates of change of the price of an asset (e.g. a share or a bond). It can be derived from the asset's price, maturity date and exercise price of its options, as well as from a riskless rate of return, using an option pricing model such as the Black-Scholes model.

Index of negotiated wages: a measure of the direct outcome of collective bargaining in terms of basic pay (i.e. excluding bonuses) at the euro area level. It refers to the implied average change in monthly wages and salaries.

Industrial producer prices: factory-gate prices (transportation costs are not included) of all products sold by industry excluding construction on the domestic markets of the euro area countries, excluding imports.

Industrial production: the gross value added created by industry at constant prices.

Inflation: an increase in the general price level, e.g. in the consumer price index.

Inflation-indexed government bonds: debt securities issued by the general government, the coupon payments and principal of which are linked to a specific consumer price index.

International investment position (i.i.p.): the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world.

International reserves: external assets readily available to and controlled by monetary authorities for directly financing or regulating the magnitude of payments imbalances through intervention in exchange markets. The international reserves of the euro area comprise non-euro denominated claims on non-euro area residents, gold, special drawing rights and the reserve positions in the IMF which are held by the Eurosystem.

Investment funds (except money market funds): financial institutions that pool capital raised from the public and invest it in financial and non-financial assets. See also MFIs.

Job vacancies: a collective term covering newly created jobs, unoccupied jobs or jobs about to become vacant in the near future, for which the employer has recently taken active steps to find a suitable candidate.

Key ECB interest rates: the interest rates, set by the Governing Council, which reflect the monetary policy stance of the ECB. They are the rates at the main refinancing operations, on the marginal lending facility and on the deposit facility.

Labour force: the sum total of persons in employment and the number of unemployed.

Labour productivity: the output that can be produced with a given input of labour. It can be measured in several ways, but is commonly measured as GDP (volume) divided by either total employment or total hours worked.

Longer-term refinancing operations: credit operations with a maturity of more than one week that are executed by the Eurosystem in the form of reverse transactions. The regular monthly operations are conducted with a maturity of three months. During the financial market turmoil that started in August 2007, supplementary operations with maturities ranging from one maintenance period to one year were conducted, the frequency of which varied.

M1: a narrow monetary aggregate that comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

M2: an intermediate monetary aggregate that comprises M1 plus deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

M3: a broad monetary aggregate that comprises M2 plus marketable instruments, in particular repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

Main refinancing operation: a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

Marginal lending facility: a standing facility of the Eurosystem which counterparties may use to receive overnight credit from an NCB at a pre-specified interest rate against eligible assets.

MFI credit to euro area residents: MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

MFI interest rates: the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

MFI longer-term financial liabilities: deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

MFI net external assets: the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

MFIs (monetary financial institutions): financial institutions which together form the money-issuing sector of the euro area. These include the Eurosystem, resident credit institutions (as defined in Community law) and all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credit and/or invest in securities. The latter group consists predominantly of money market funds, i.e. funds that invest in short-term and low-risk instruments usually with a maturity of one year or less.

Minimum bid rate: the lower limit to the interest rates at which counterparties may submit bids in the variable tenders.

Other investment: an item in the b.o.p. and the i.i.p. that covers the financial transactions/positions with non-residents in trade credits, deposits and loans, and other accounts receivable and payable.

Portfolio investment: euro area residents' net transactions and/or positions in securities issued by non-residents of the euro area ("assets") and non-residents' net transactions and/or positions in securities issued by euro area residents ("liabilities"). Included are equity securities and debt securities (bonds and notes, and money market instruments). Transactions are recorded at the effective price paid or received, less commissions and expenses. To be regarded as a portfolio asset, ownership in an enterprise must be equivalent to less than 10% of the ordinary shares or voting power.

Price stability: the maintenance of price stability is the primary objective of the Eurosystem. The Governing Council defines price stability as a year-on-year increase in the HICP for the euro area

of below 2%. The Governing Council has also made it clear that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2% over the medium term.

Purchasing power parity (PPP): the rate at which one currency is converted into another so as to equalise the purchasing power of the two currencies by eliminating the differences in the price levels prevailing in the countries concerned. In their simplest form, PPPs show the ratio of the prices in national currency of the same good or service in different countries.

Reference value for M3 growth: the annual growth rate of M3 over the medium term that is consistent with the maintenance of price stability. At present, the reference value for annual M3 growth is 4½%.

Reserve requirement: the minimum amount of reserves a credit institution is required to hold with the Eurosystem over a predefined maintenance period. Compliance with the requirement is determined on the basis of the average of the daily balances in the reserve accounts over the maintenance period.

Survey of Professional Forecasters (SPF): a quarterly survey that has been conducted by the ECB since 1999 to collect macroeconomic forecasts on euro area inflation, real GDP growth and unemployment from a panel of experts affiliated to financial and non-financial organisations based in the EU.

Unit labour costs: a measure of total labour costs per unit of output calculated for the euro area as the ratio of total compensation per employee to labour productivity (defined as GDP (volume) per person employed).

Variable rate tender: a tender procedure where the counterparties bid both the amount of money they wish to transact with the central bank and the interest rate at which they wish to enter into the transaction.

Volatility: the degree of fluctuation in a given variable.

Write-down: a downward adjustment to the value of loans recorded in the balance sheets of MFIs when it is recognised that the loans have become partly unrecoverable.

Write-off: the removal of the value of loans from the balance sheets of MFIs when the loans are considered to be totally unrecoverable.

Yield curve: a graphical representation of the relationship between the interest rate or yield and the residual maturity at a given point in time for sufficiently homogenous debt securities with different maturity dates. The slope of the yield curve can be measured as the difference between the interest rates or yield at two selected maturities.

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