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ABBREVIATIONS

COUNTRIES

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

OTHERS

BIS	Bank for International Settlements
b.o.p.	balance of payments
BPM5	IMF Balance of Payments Manual (5th edition)
CD	certificate of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
EER	effective exchange rate
EMI	European Monetary Institute
EMU	Economic and Monetary Union
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
HWWI	Hamburg Institute of International Economics
ILO	International Labour Organization
IMF	International Monetary Fund
MFI	monetary financial institution
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCB	national central bank
OECD	Organisation for Economic Co-operation and Development
PPI	Producer Price Index
SITC Rev. 4	Standard International Trade Classification (revision 4)
ULCM	unit labour costs in manufacturing
ULCT	unit labour costs in the total economy

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

EDITORIAL

On the basis of its regular economic and monetary analyses, the Governing Council decided at its meeting on 8 October 2009 to leave the key ECB interest rates unchanged. The current rates remain appropriate. The incoming information and analyses since the last meeting in early September have confirmed the Governing Council's previous assessment. While annual HICP inflation was still slightly negative in September, according to Eurostat's flash estimate, it is expected to turn positive again in the coming months and to remain at moderately positive rates over the policy-relevant horizon. At the same time, the latest information further supports the Governing Council's view that the euro area economy is stabilising and is expected to recover at a gradual pace. However, uncertainty remains high. As regards medium to longer-term inflation expectations, they remain firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term. The outcome of the monetary analysis confirms the assessment of low inflationary pressure over the medium term, as money and credit expansion continues to moderate. Against this background, the Governing Council expects price stability to be maintained over the medium term, thereby supporting the purchasing power of euro area households.

With regard to the economic analysis, available survey indicators continue to signal an ongoing stabilisation of economic activity. In particular, the euro area should benefit from a recovery in exports, the significant macroeconomic stimulus under way and the measures taken to restore the functioning of the financial system. In addition, following the substantial negative contributions in the first half of 2009, the inventory cycle is expected to contribute positively to real GDP growth in the second half of the year. However, uncertainty remains high and the volatility in incoming data warrants a cautious interpretation of the available information. Overall, the recovery is expected to remain rather uneven. It will be supported in the short term by a number of temporary factors but is likely to be affected over the medium term by the process of ongoing balance sheet correction in the financial and the non-financial sector of the economy, both inside and outside the euro area.

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

With regard to price developments, annual HICP inflation stood at -0.3% in September, according to Eurostat's flash estimate, compared with -0.2% in August. The current negative inflation rates are in line with previous expectations and reflect largely base effects resulting from the movements in global commodity prices a year ago. Also owing to base effects, annual inflation rates are projected to turn positive again in the coming months. Thereafter, over the policy-relevant horizon, inflation is expected to remain in positive territory, with overall price and cost developments staying subdued reflecting ongoing sluggish demand in the euro area and elsewhere. In this context, it is important to re-emphasise that inflation expectations over the medium to longer term remain firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term.

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

Turning to the monetary analysis, the latest data confirm that developments in broad money and credit growth remain subdued. In August, the annual growth of M3 and loans to the private sector declined further to historically low rates of 2.5% and 0.1% respectively. This parallel deceleration in money and credit growth confirms the Governing Council's previous assessment of a moderate underlying pace of monetary expansion and low inflationary pressures over the medium term.

The ongoing deceleration in annual M3 growth has continued to be accompanied by a strengthening in annual M1 growth, which in August rose further to 13.6%. The strength of M1 reflects the fact that narrower spreads between the rates on different short-term deposits have fostered shifts in the allocation of funds from, in particular, short-term time deposits to overnight deposits. At the same time, the steep slope of the yield curve may have supported shifts from M3 to longer-term deposits and securities outside M3.

The overall flow of bank loans to the non-financial private sector remained subdued in August. In the case of households, the latest data suggest that the decline in loan growth has been levelling off at low rates of expansion. In the case of non-financial corporations, following a few months of negative flows, the flow of loans was again slightly positive in August. Looking through the volatility in monthly data, loan growth continues to be very subdued. This is in line with the lag that normally prevails between trends in economic activity and developments in loans to enterprises. In this respect, given the subdued levels of production and trade, as well as the ongoing uncertainty with regard to the business outlook, further weak developments in loans to non-financial corporations in the coming months appear likely. At the same time, the ongoing improvement in financing conditions should support the demand for credit in the period ahead. Against the background of highly demanding challenges, banks should take appropriate measures to strengthen further their capital bases and, where necessary, take full advantage of government measures to support the financial sector, particularly as regards recapitalisation.

To sum up, the current rates remain appropriate. The incoming information and analyses since its last meeting in early September have confirmed the Governing Council's previous assessment. While annual HICP inflation was still slightly negative in September, according to Eurostat's flash estimate, it is expected to turn positive again in the coming months and to remain at moderately positive rates over the policy-relevant horizon. At the same time, the latest information further supports the Governing Council's view that the euro area economy is stabilising and is expected to recover at a gradual pace. However, uncertainty remains high. As regards medium to longer-term inflation expectations, they remain firmly anchored in line with the Governing Council's aim of keeping inflation rates below, but close to, 2% over the medium term. Cross-checking the outcome of the economic analysis with that of the monetary analysis confirms the assessment of low inflationary pressure over the medium term, as money and credit expansion continues to moderate. Against this background, the Governing Council expects price stability to be maintained over the medium term, thereby supporting the purchasing power of euro area households.

As the transmission of monetary policy works with lags, the Governing Council expects that its policy action will progressively feed through to the economy in full. Hence, with all the measures taken, including the latest 12-month longer-term refinancing operation of 30 September, monetary policy is providing strong ongoing support to the economy. Once the macroeconomic environment improves, the Governing Council will make sure that the measures taken are unwound in a timely fashion and that the liquidity provided is absorbed in order to counter effectively any threat to price stability over the medium to longer term.

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

As regards fiscal policies, the need for ambitious and realistic fiscal exit and consolidation strategies is becoming increasingly pressing. It is vital that governments put in place concrete structural measures and convincingly communicate that they are committed to ensuring the sustainability of public finances. Governments should design their consolidation plans in line with the provisions of the Stability and Growth Pact, ensuring that consolidation starts as soon as possible and at the latest when the recovery takes hold. These plans should also be accompanied by a strengthening of national budgetary frameworks. Consolidation efforts should be stepped up in 2011 and will need to exceed significantly the benchmark of 0.5% of GDP per annum set in the Stability and Growth Pact. In countries with high deficit and/or debt ratios, the annual structural adjustment should reach at least 1% of GDP. In view of the rapidly increasing public expenditure ratios, as well as projected further expenditure pressures owing to higher interest burdens and ageing-related costs, countries' structural measures should focus on the expenditure side.

Turning to structural reforms, in all countries more efforts are crucial to support sustainable growth and employment as it is likely that the financial crisis has affected the productive capacity of the euro area economies. In particular, appropriate wage-setting, sufficient labour market flexibility and effective incentives to work are required. At the same time, policies that enhance competition and innovation are urgently needed to speed up restructuring and investment and to create the business opportunities and productivity gains needed to ensure a sustained recovery. An appropriate restructuring and consolidation of the banking sector should also play an important role. Sound balance sheets, sound risk management, and transparent as well as robust business models are key to strengthening the financial soundness of banks and their resilience to shocks, thereby laying the foundations for sustainable economic growth and financial stability.

This issue of the Monthly Bulletin contains three articles. The first article reviews monetary policy and loan supply in the euro area. The second article presents recent developments in the balance sheets of the Eurosystem, the Federal Reserve System and the Bank of Japan. The third article addresses financial development in emerging economies and policy implications.

ECONOMIC AND MONETARY DEVELOPMENTS

1 THE EXTERNAL ENVIRONMENT OF THE EURO AREA

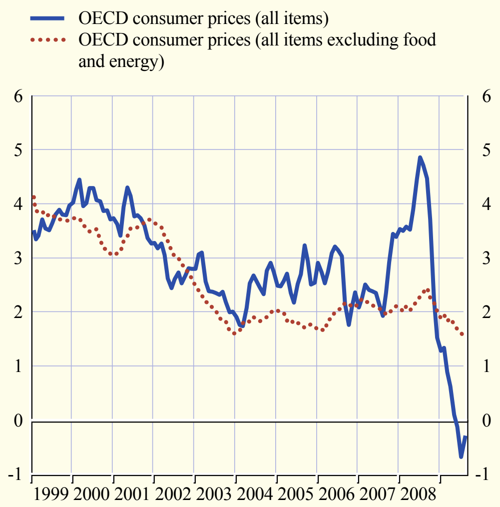
Latest indicators are increasingly suggesting that the significant contraction in economic activity has come to an end, notably in major emerging economies as well as in a number of advanced economies. At the same time, global inflation rates remain low, owing to base effects related to commodity prices and substantial spare capacity. While uncertainty is still high, risks to the global economic outlook are viewed to be broadly balanced.

1.1 DEVELOPMENTS IN THE WORLD ECONOMY

Latest indicators are increasingly suggesting that the significant contraction in economic activity has come to an end, notably in major emerging economies as well as in a number of advanced economies. In September, the global Purchasing Managers' Index (PMI) posted its highest reading since December 2007, pointing to an expansion in global economic activity. Output in the manufacturing sector continued to grow faster than in the services sector, although it rose at a slower pace than in the previous month.

Chart 1 International price developments

(monthly data; annual percentage changes)



Source: OECD.

Global inflation rates remain low, owing to base effects related to commodity prices and substantial spare capacity. The headline CPI in OECD countries fell by 0.3% in the year to August 2009, compared with a fall of 0.6% in July. Excluding food and energy, annual CPI inflation reached 1.5% in August 2009 (see Chart 1). As indicated by the global PMI input prices indices, purchase prices rose in the manufacturing sector in September, while costs declined in the services sector.

UNITED STATES

In the United States, economic activity appears to have stabilised. According to revised estimates by the Bureau of Economic Analysis, real GDP contracted by 0.7% in annualised terms in the second quarter of 2009, less than previously estimated. The contraction in the second quarter, which follows a much more pronounced fall of 6.4% in the first quarter, was mostly due to negative contributions from inventory investment, private fixed investment and private consumption. Government expenditure and decreasing imports contributed positively to growth in the second quarter. Looking ahead, the outlook for GDP growth has been improving recently. While financing conditions remain tight and labour markets weak, recent data point to improvements in the housing market and the manufacturing sector. Moreover, government stimulus measures continue to provide substantial support to the economy.

As regards price developments, the US consumer price index declined by 1.5% in the year to August 2009. This followed a decrease of 2.1% in the year to July. The negative headline inflation continues to be driven, for the most part, by the decline in energy prices compared with the previous year. The annual rate of inflation, excluding food and energy, reached 1.4% in August, down from 1.5% in July. Looking ahead, base effects related to energy prices will be gradually reversed over the months to come and headline inflation rates are likely to return to positive territory. However, economic slack is expected to limit the upward pressure on prices.

On 23 September 2009 the US Federal Open Market Committee (FOMC) decided to keep its target for the federal funds rate unchanged within a range of 0% to 0.25%. The FOMC's post-meeting statement acknowledged improved economic prospects, noting that new information suggests that economic activity has picked up following its severe downturn.

JAPAN

In Japan, economic activity started to recover in the second quarter of 2009, while annual inflation rates remained negative. According to the second preliminary estimate by Japan's Cabinet Office, real GDP grew by 0.6% quarter on quarter in the second quarter of 2009. This is less than previously estimated and compares with a decline of 3.3% in the previous quarter. The recovery stems primarily from higher net exports. According to the Bank of Japan's Tankan survey, confidence among manufacturers improved notably in the third quarter, but remained at low levels. The outlook for spending and profitability remained weak.

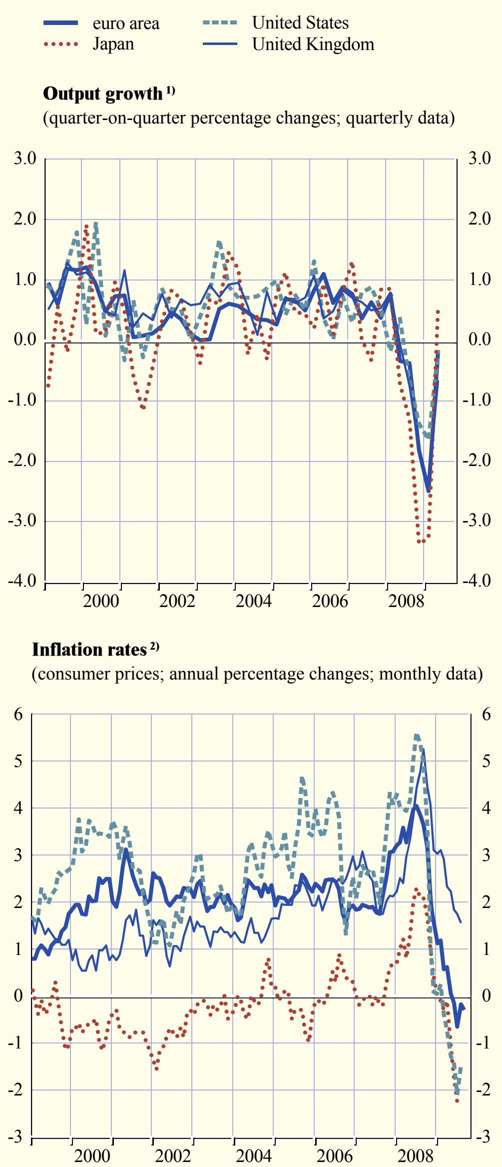
Annual CPI inflation remained negative at -2.2% in August, unchanged from July. This reflects the output gap and base effects stemming from last year's rise in energy prices. Annual CPI inflation, excluding food and energy, also remained unchanged at -0.9% in August.

At its meeting on 17 September 2009, the Bank of Japan decided to leave its target for the uncollateralised overnight call rate unchanged at 0.1%.

UNITED KINGDOM

In the United Kingdom, the decline in real GDP moderated in the second quarter of 2009, reaching -0.6% quarter on quarter compared with -2.5% in the first quarter. Private consumption and gross fixed capital formation continued to contribute negatively to GDP growth, though less so than in the first quarter, whereas government consumption, net exports, and especially inventory accumulation contributed positively. Short-term indicators suggest a

Chart 2 Main developments in major industrialised economies



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

further improvement in economic activity in the third quarter. The conditions in the housing market have improved in recent months. In particular, mortgage approvals have increased and house prices have been rising slightly in month-on-month terms. Annual HICP inflation decreased to 1.6% in August and the Bank of England expects inflation to remain below the 2% target in the near term. On 10 September the Monetary Policy Committee decided to maintain the official Bank Rate paid on commercial bank reserves at 0.5%. Furthermore, the Bank of England continued with the GBP 175 billion asset purchase programme.

OTHER EUROPEAN COUNTRIES

The economic situation also improved in most other non-euro area EU countries in the second quarter, with the pace of decline in real GDP moderating in most countries and some countries registering positive growth. In Sweden, real GDP increased by 0.2% quarter on quarter in the second quarter of 2009, a noticeable improvement compared with a 0.9% decline in the first quarter. In Denmark, however, real GDP contracted by 2.6% quarter on quarter in the second quarter compared with a 1.3% decrease in the first quarter. The stronger decline in GDP in the second quarter was partly due to base effects stemming from a significant one-off boost to gross fixed capital formation related to oil rig installations in the first quarter. Overall, HICP inflation has decreased in both countries in recent months, standing at 1.9% in Sweden and 0.7% in Denmark in August 2009. On 25 September 2009 Danmarks Nationalbank decided to lower its main policy rate by 10 basis points to 1.25%.

In the largest central and eastern European EU Member States, recent indicators point to some improvement in economic activity. In the second quarter of 2009, real GDP contracted at a slower pace than in the previous quarter in Hungary and Romania – by -2.0% and -1.1% respectively, quarter on quarter. Meanwhile, real GDP increased by 0.1% in the Czech Republic and by 0.5% in Poland. The recent signs of stabilisation in economic activity partly reflect temporary factors, such as the increase in external demand related to the impact of car scrapping schemes in some euro area countries. In August 2009 consumer prices were unchanged compared to one year ago in the Czech Republic, whereas annual HICP inflation in Hungary, Poland and Romania remained at levels between 4% and 5%. On 28 September 2009 the Magyar Nemzeti Bank decided to decrease its main policy rate by 50 basis points to 7.5%.

EMERGING ASIA

The recovery has continued in emerging Asia, even though its pace seems to have slowed down slightly in some economies recently. While fiscal stimuli, accommodative monetary policy and higher asset prices have supported domestic demand, the recovery of foreign trade has been considerably slower. Both imports and exports are clearly below the levels prevailing in the summer of 2008. Furthermore, while annual changes in consumer prices were still in negative territory in a number of countries, recent data point to a gradual return to positive inflation rates.

In China, monthly indicators suggest that economic growth remained robust in the third quarter of 2009. Although growth was largely dependent on the fiscal stimulus and the resulting boost in infrastructure investment, growth in private investment also accelerated, mainly owing to the improved outlook in the real estate sector. While investment growth increased commodity imports in China, the recovery of exports has been much slower. Accommodative monetary policy and the fiscal stimulus have been reflected in heightened credit growth. In August 2009 the loan stock was 33% larger than a year earlier. Annual changes in consumer prices have continued to be negative, although the pace of decline slowed from -1.8% in July to -1.2% in August.

LATIN AMERICA

While the overall economic situation in Latin America has been improving, there has been some heterogeneity in the growth performance of major economies. At the same time, inflationary pressures have continued to recede in most economies.

In Brazil, economic activity recovered notably in the second quarter, with real GDP increasing by 1.9% compared with the previous quarter. In August annual consumer price inflation fell to 4.3%, compared with 4.5% in July. In Argentina, real GDP expanded by 1.1% year on year in the second quarter, down from 2.6% in the first quarter. Annual consumer price inflation increased to 5.9% in August. In Mexico, activity appears to have reached an inflection point following the sharp contraction during the first half of the year. Industrial production decreased in July by 7% year on year, after having fallen at double-digit rates in the two previous months. Meanwhile, inflationary pressures declined further, with annual consumer price inflation reaching 5.1% in August, down from 5.4% in July.

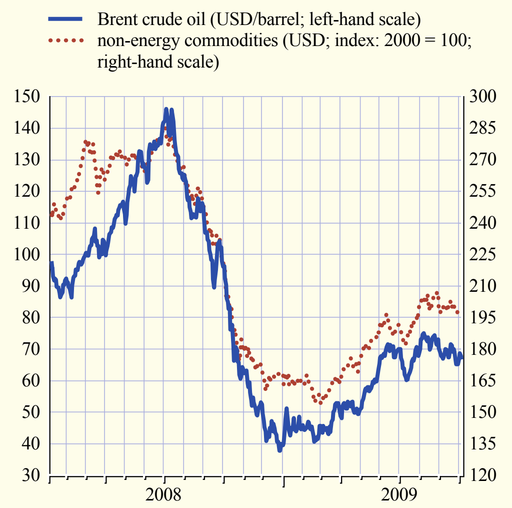
1.2 COMMODITY MARKETS

Oil prices remained broadly stable in September and early October (see Chart 3). On 7 October Brent crude oil prices stood at USD 68.9 per barrel (which is 74% higher than at the beginning of 2009). Looking ahead, market participants expect higher oil prices in the medium term, with futures contracts for December 2011 trading at around USD 78.

The projections for oil demand in 2009 and 2010, especially for North America and non-OECD Asia, were repeatedly revised upwards by the International Energy Agency. However, the expected improvement in global demand conditions has not yet materialised into an inventory drawdown and stocks are still at record high levels, especially in the United States. On the supply side, a moderate decrease in non-OPEC oil production was offset by higher output in OPEC countries.

The prices of non-energy commodities also remained broadly stable in September. After having moderated substantially in the past few months, food prices posted some increases, led by maize, which was affected by adverse weather conditions in the US Midwest. By contrast, metal prices moderated amid market concerns that the restocking process in China that has supported demand in recent months may have come to an end. In aggregate terms, the price index for non-energy commodities (denominated in US dollars) was about 19% higher at the end of September than at the beginning of the year.

Chart 3 Main developments in commodity markets



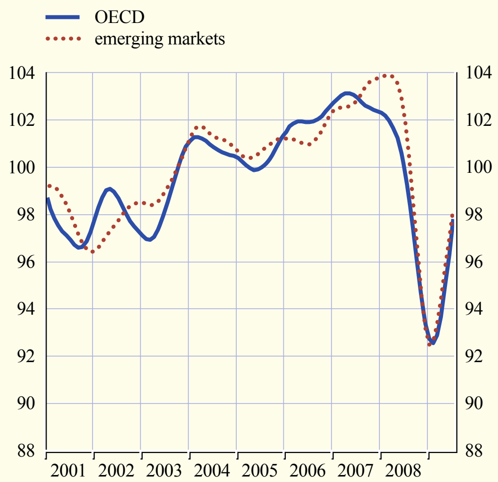
Sources: Bloomberg and HWWI.

1.3 OUTLOOK FOR THE EXTERNAL ENVIRONMENT

The most recent trade data indicate that world trade is likely to have rebounded in the third quarter, supporting the short-term prospects for foreign demand for euro area goods and services. Leading indicators also suggest that global economic activity is showing signs of recovery. In July the OECD's composite leading indicators (CLIs) pointed to broad economic recovery in most OECD countries (see Chart 4). For emerging economies, the CLIs showed stronger signs of recovery than in recent months.

Chart 4 OECD composite leading indicator

(monthly data; amplitude-adjusted)



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

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

2 MONETARY AND FINANCIAL DEVELOPMENTS

2.1 MONEY AND MFI CREDIT

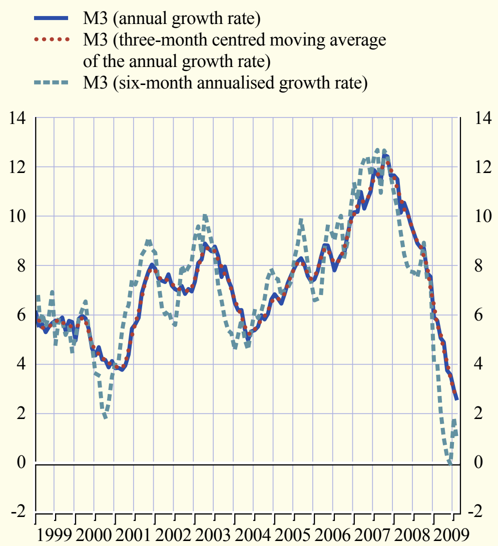
The monetary data for August point to a continued parallel decline of the annual growth rate of both M3 and loans to the private sector, thus confirming the moderation of the underlying rate of monetary growth. The flow of loans to the non-financial private sector was positive but subdued in August. Thus far, the pattern of growth in loans to households and non-financial corporations remained consistent with historical regularities with respect to the business cycle. As regards the funding situation of MFIs, developments in longer-term deposits and debt securities in August suggest that credit institutions have been able to obtain funding at longer maturities. Taking the three months to August together, the deleveraging of euro area MFIs appears to have lost some steam, although MFIs have continued to reduce their positions vis-à-vis one another.

THE BROAD MONETARY AGGREGATE M3

The annual growth rate of M3 continued to decrease in August, to 2.5%, from 3.0% in July (see Chart 5). On a month-on-month basis, M3 remained unchanged in August and the short-term growth rates of M3 appear to have stabilised at a subdued level. The interest rate configuration continued to strongly influence monetary developments. On the one hand, the steepness of the yield curve is fostering outflows from monetary assets and makes the decline in M3 growth overstate the decline in underlying monetary growth. On the other hand, the declining spread between interest rates on different short-term deposits is prompting shifts from short-term time deposits and marketable instruments into overnight deposits.

Chart 5 M3 growth

(percentage changes; adjusted for seasonal and calendar effects)



Source: ECB.

The annual growth rate of MFI loans to the private sector also declined further in August. The monthly flow was negative, but this was due entirely to developments in loans to non-monetary financial intermediaries. By contrast, lending to the non-financial private sector was positive but subdued in August. The pattern of loans to households and non-financial corporations has thus far been consistent with historical regularities regarding the relationship between MFI loans and the current stage of the business cycle. Moreover, the weakness of MFI loans to the non-financial private sector largely reflects the still high degree of uncertainty regarding business, income and housing market prospects. These factors reduce the demand for loans, but also have a bearing on banks' assessments of borrowers' creditworthiness and on their willingness and capacity to lend, as also confirmed by the results of the survey on the access to finance of small and medium-sized enterprises (SMEs) in the euro area that was conducted by the ECB in cooperation with the European Commission (see Box 2).

With regard to credit institutions' funding, the Eurosystem's one-year liquidity-providing operations provided banks with ample short-term liquidity and allowed them to focus on strengthening longer-term funding. As regards such funding through the issuance of longer-term debt securities, the Eurosystem's programme for the purchase of covered bonds is likely to have had a beneficial effect. Mirroring the situation on the funding side, the main asset holdings of the MFI sector did not contract in August. Taking the three months to August together, the deleveraging of euro area MFIs appears to have lost some steam, although MFIs have continued to reduce their positions vis-à-vis one another.

MAIN COMPONENTS OF M3

The decline observed in the annual growth rate of M3 in August was driven by lower growth of both short-term deposits other than overnight deposits (i.e. M2-M1) and marketable instruments (i.e. M3-M2). This was partly offset by a further increase in annual M1 growth (i.e. currency in circulation and overnight deposits).

The annual growth rate of M1 rose further to 13.6% in August, from 12.1% in the previous month (see Table 1). This increase reflected another strong monthly inflow into overnight deposits, as well as a monthly inflow into currency in circulation.

The annual growth rate of short-term deposits other than overnight deposits declined further to stand at -4.1% in August, down from -2.7% in July. Developments in the sub-components of this category of deposit continued to diverge. While the annual growth rate of deposits redeemable at notice of up to three months (i.e. short-term savings deposits) increased further in August, this was more than offset by a decline in the annual growth rate of deposits with an agreed maturity of up to

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					
		2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 July	2009 Aug.
M1	**46.6**	**0.7**	**2.7**	**5.3**	**8.0**	**12.1**	**13.6**
Currency in circulation	7.9	7.5	12.4	13.6	13.2	12.5	13.2
Overnight deposits	38.8	-0.6	0.8	3.6	6.9	12.1	13.6
M2 - M1 (= other short-term deposits)	40.6	19.1	15.8	9.3	3.0	-2.7	-4.1
Deposits with an agreed maturity of up to two years	22.1	37.6	29.0	12.9	-0.8	-12.1	-15.1
Deposits redeemable at notice of up to three months	18.5	-1.7	-0.5	4.5	8.6	12.3	13.7
M2	**87.2**	**9.2**	**8.9**	**7.2**	**5.5**	**4.7**	**4.6**
M3 - M2 (= marketable instruments)	12.8	8.9	4.1	-0.8	-2.5	-6.8	-9.9
M3	**100.0**	**9.1**	**8.2**	**6.0**	**4.3**	**3.0**	**2.5**
Credit to euro area residents		**9.1**	**7.4**	**5.9**	**4.3**	**3.3**	**2.8**
Credit to general government		0.6	1.7	5.6	8.4	10.9	11.5
Loans to general government		2.1	2.9	2.3	1.5	2.4	3.6
Credit to the private sector		10.9	8.6	6.0	3.5	1.8	1.1
Loans to the private sector		9.1	7.4	4.6	2.2	0.7	0.1
Loans to the private sector adjusted for sales and securitisation		10.1	8.5	6.1	3.6	1.9	1.3
Longer-term financial liabilities (excluding capital and reserves)		**3.3**	**1.2**	**1.8**	**2.7**	**3.2**	**3.8**

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

two years (i.e. short-term time deposits), which fell significantly further to stand at -15.1%, down from -12.1% in the previous month.

The developments in the various types of short-term deposit are in line with the declining spread between the interest rates paid on these deposits. In particular, this fostered outflows from short-term time deposits into both overnight deposits and short-term saving deposits. This can be explained by the fact that, on the basis of the available data on MFI interest rates, the interest rate on short-term time deposits has declined more sharply than that on the latter two types of deposit. There may also have been an increase in the allocation of funds to financial assets outside M3, as the steepening of the yield curve since the end of last year has made these long-term instruments more attractive.

The annual growth rate of marketable instruments declined further to stand at -9.9% in August, down from -6.8% in July. As regards the sub-components of marketable instruments, the annual growth rate of the short-term MFI debt securities held by the money-holding sectors (i.e. debt securities with a maturity of up to two years) moved further into negative territory, standing at -43.9% in August, after -38.6% in July. On a monthly basis, euro area and non-euro area residents reduced their holdings of these securities in August, while MFIs themselves increased their holdings. Another significant monthly decrease in the money-holding sectors' holdings was also recorded in the case of repurchase agreements. However, this decrease largely reflected the reduction in the volume of secured interbank transactions conducted through a central counterparty. The fact that the latter is classified as belonging to the other financial intermediaries sector implies that these transactions affect the repurchase agreement holdings of this sector. Finally, market fund shares/units were the only marketable instrument for which a positive flow was recorded in August.

The annual growth rate of M3 deposits – which comprise short-term deposits and repurchase agreements and represent the broadest monetary aggregate for which a sectoral breakdown is reported – continued to decline in August, to 3.1%, from 3.6% in July. The household sector was the main driver of this decline, although it still accounted for almost all of the annual growth of M3 deposits. By contrast, the contribution made by non-financial corporations has increased in recent months. On a monthly basis, a small inflow into M3 deposits of the household sector was recorded in August. At the same time, after a series of contractions around the turn of the year, non-financial corporations continued to increase their holdings of M3 deposits in August. Non-monetary financial intermediaries also expanded their M3 deposit holdings in August, following a large outflow in the previous month.

MAIN COUNTERPARTS OF M3

Turning to the counterparts of M3, the annual growth rate of total MFI credit to euro area residents declined to 2.8% in August, down from 3.3% in July (see Table 1). However, this development masks a further strengthening in the annual growth of credit to general government, to 11.5% in August, up from 10.9% in July, while the growth of credit to the private sector declined to 1.1%, from 1.8% in the previous month. In both cases, August saw strong monthly flows related to MFIs' purchases of public and private sector debt securities.

The annual growth rate of MFI loans to the private sector, the largest component of credit to the private sector, declined further to stand at 0.1% in August, down from 0.7% in the previous month. On a monthly basis, the flow of MFI loans to the private sector was negative in August, reflecting a further contraction of lending to financial intermediaries, while lending to the non-financial private sector expanded slightly.

The month-on-month growth rates of loans to the private sector in recent months have been affected only slightly by the distortionary impact of the derecognition of loans in the context of securitisation. Indeed, true-sale securitisation activity has been subdued, after a period of intense activity at the end of 2008, whereby originating credit institutions sold loans and acquired the securities issued for use as collateral in Eurosystem credit operations. This decline in securitisation activity may be attributable to an easing of credit institutions' demand for central bank liquidity after the one-year longer-term refinancing operation conducted by the Eurosystem at the end of June, an operation that replaced other types of liquid instruments. This notwithstanding, the impact of loan derecognition continued to be prevalent in the annual growth rates, with the difference between the corrected and uncorrected annual series standing at 1.3 percentage points in August, after 1.2 percentage points in the previous month.

The annual growth rate of MFI loans to non-financial corporations declined further to stand at 0.7% in August, down from 1.6% in July (see Table 2). The August data confirm that, on balance, the flows of loans with a longer maturity (above five years) have remained positive and have partly offset the contractions in the level of short and medium-term loans, although these data recorded a first small positive monthly inflow in loans with a maturity of up to one year since November 2008. The still subdued development of short-term loans could reflect a process whereby firms are replacing short-term bank loans with long-term loans – in order to lock-in the low level of long-term interest rates – or (especially in the case of large firms) bank loans with a stronger market-based security issuance.

The annual growth rate of loans to households declined to -0.2% in August, down from nil in July. However, on a monthly basis, a clearly positive flow was recorded. The decrease in the annual growth rate of loans to households continued to be driven by a decrease in the annual growth rate of loans for house purchase, to -0.4% in August, after -0.1% in July, reflecting, to a large extent, the moderate house price dynamics in many euro area countries. This notwithstanding, the recent developments confirm that a levelling-off of the downward momentum of lending to households has been taking place in recent months, which is in line with the current stage of the economic cycle (see Box 1 below).

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					
		2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 July	2009 Aug.
Non-financial corporations	**44.3**	**12.8**	**11.3**	**8.2**	**4.7**	**1.6**	**0.7**
Up to one year	26.4	11.0	9.0	4.1	-2.4	-8.3	-8.9
Over one and up to five years	20.2	18.6	16.0	12.5	9.9	6.1	3.9
Over five years	53.4	11.8	10.8	8.8	6.8	5.5	5.0
Households [2]	**45.6**	**3.9**	**2.8**	**1.0**	**0.0**	**-0.0**	**-0.2**
Consumer credit [3]	12.9	4.4	3.2	1.3	-0.3	-1.0	-0.9
Lending for house purchase [3]	71.4	4.1	2.9	0.7	-0.2	-0.1	-0.4
Other lending	15.7	2.6	2.2	1.7	1.6	1.4	1.4
Insurance corporations and pension funds	**0.9**	**-6.6**	**-6.5**	**-5.8**	**-2.4**	**-3.2**	**-8.2**
Other non-monetary financial intermediaries	**9.3**	**22.3**	**14.5**	**7.6**	**1.0**	**-0.1**	**-1.0**

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.

Box 1

LOANS TO THE NON-FINANCIAL PRIVATE SECTOR OVER THE BUSINESS CYCLE IN THE EURO AREA

The annual growth in bank loans to the non-financial private sector has continued to decelerate in recent months. This development somewhat masks different tendencies across sectors. In the case of non-financial corporations, loan growth has remained on a downward path, while in the case of households, the earlier downward movement in loan growth has been levelling off in the most recent months. Differences in the timing of the turning-points of sectoral loan developments over the business cycle would correspond to historical regularities.[1] Available information suggests that the euro area economy is stabilising and expected to recover at a gradual pace. It may therefore be particularly interesting at the current juncture to review the empirical evidence on the evolution of loans in the past. Against this background, this box presents some stylised facts about the business cycle behaviour of sectoral loan growth and the uncertainties surrounding these facts.

The stylised facts of loan growth over the business cycle

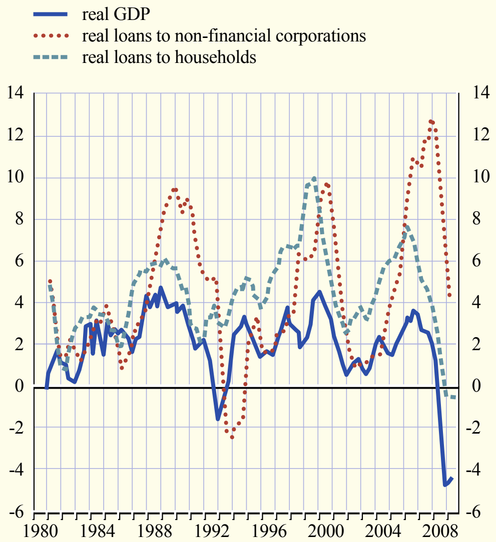
Since the early 1980s, the evolution in the growth of real loans to non-financial corporations and households seems to have been closely aligned with that in growth of real GDP (see Chart A). At the same time, there are clear differences in both the respective phases and the amplitudes of these different series.

As is shown in the table, correlation analysis suggests that in the case of households, the strongest link between real GDP growth and loan growth – a correlation coefficient of 67% – is established with an average lead of one quarter for loan growth. In the case of non-financial corporations, the strongest link – a correlation coefficient of 70% – prevails when loan growth lags the cycle by, on average, three quarters. These phase shifts also broadly hold when looking more narrowly at the turning-points. For household loans, for example, the lead is one quarter for the overall correlation and two for the turning-points. The lead in the case of loans to households mainly comes from the sub-component loans for housing purchase, while consumer credit and other lending to households seem to lag the cycle slightly.

The regularities reflect the different demand and supply factors which drive developments in loans to households and non-financial corporations. For instance, the slightly leading

Chart A Growth in real loans to the non-financial private sector and in real GDP

(annual percentage changes)



Sources: ECB and Eurostat.
Notes: All variables are deflated by the GDP deflator. Quarterly data. The last observation is for the second quarter of 2009.

1 See also the box entitled "The cyclical pattern of loans to households and non-financial corporations in the euro area" in the June 2007 issue of the Monthly Bulletin.

Stylised facts of loans to the non-financial private sector in the euro area

Variable	Average annual growth rate	Correlation with real GDP		Lead/lag (+/-) of turning-point relative to real GDP (quarters)
		Maximum correlation (%)	Lead/lag (+/-) (quarters)	
Real GDP	2.0			
Real loans to households	4.5	67	1	2
Real loans to non-financial corporations	4.5	70	-3	-3

Sources: ECB and Eurostat.
Note: Results are derived for the period from the second quarter of 1980 to the second quarter of 2009 and are based on annual growth rates.

behaviour of household loans may be explained by the fact that the decline in both house prices and interest rates during slowdowns typically encourages some households to resume their demand for housing loans when expectations for a recovery strengthen. By contrast, the lagging pattern of loans to non-financial corporations may reflect the possibility that firms first use their internal funds – as cash flows improve during the recovery – and only later turn to external financing. Finally, some supply-side factors may also be relevant, such as the possible preference of banks to increase their lending first to households during a recovery rather than to firms, as household loans, notably those for house purchase, are better collateralised.

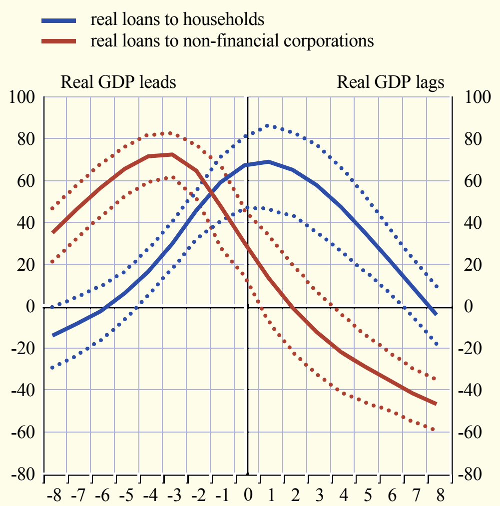
Uncertainty surrounding the stylised facts

When applying the regularities discussed above to the assessment of a specific situation, it is important to know how frequent and marked deviations from the average pattern can be. In other words, it is necessary to assess how much uncertainty characterises these regularities. For this purpose, three measures are presented below: (i) confidence bands around the correlation coefficients; (ii) rolling correlations; and (iii) the pattern of the lead or lag in turning-points over time.

The confidence bands around the dynamic correlations in Chart B confirm that the maximum correlation between real GDP growth and the growth in real loans to households, on the one hand, and non-financial corporations, on the other hand, is significantly positive (i.e. significantly greater than zero from a statistical point of view).[2] However, the maximum correlation between real GDP growth and growth in real loans to households leading

Chart B Correlations at different lead/lag shifts: growth in real loans to households and non-financial corporations relative to real GDP growth

(percentages)



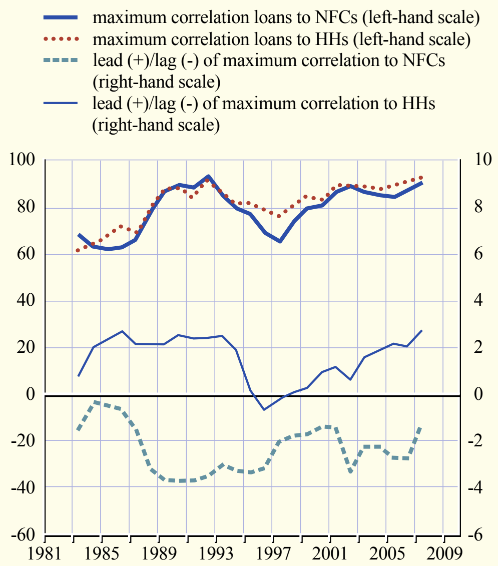
Sources: ECB and Eurostat.
Notes: Based on annual growth rates from the second quarter of 1981 to the second quarter of 2009. The dotted lines refer to confidence bands, computed as the correlation coefficient plus and minus the standard error (calculated using the optimal bandwidth procedure from Newey and West). See also footnote 2 in the text.

2 Confidence bands were computed using the non-parametric method to obtain heteroskedasticity and autocorrelation consistent standard errors as described in W. Newey and K. West, "Automatic lag selection in covariance matrix estimation", *Review of Economic Studies*, Vol. 61, 1994, pp. 631-653.

by one quarter is not statistically different from the coincident correlation, as can be seen by comparing the maximum correlation value with the value of the higher confidence band of the contemporaneous correlation. By contrast, the maximum correlation between real GDP growth and growth in real loans to non-financial corporations lagging by three quarters is statistically different from the coincident correlation.[3] Thus, while the growth in real loans to non-financial corporations can safely be characterised as a lagging indicator of real GDP growth from a statistical perspective, this is not the case for the growth in real loans to households as a leading indicator.

Chart C Rolling correlations: growth in real loans to households and non-financial corporations relative to real GDP growth

(percentages; quarters)



Sources: ECB and Eurostat.
Notes: All variables are deflated by the GDP deflator. Based on annual growth rates from the second quarter of 1981 to the second quarter of 2009. Five-year averages of three-year periods. "NFCs" stands for non-financial corporations; "HHs" stands for households.

The rolling correlation coefficients in Chart C suggest that there is a fair amount of stability in the relationship between real GDP growth and sectoral loan growth, given that the maximum correlation for the individual time periods has mostly been well above 60% since the early 1980s.[4] However, the leads and lags of loan growth at which this maximum correlation has been achieved seem to have changed more substantially over time. During the second half of the 1990s, growth in real loans to households appears to have moved more contemporaneously with real GDP growth, while it appears to have led during the rest of the period. By contrast, growth in real loans to non-financial corporations appears to have been consistently lagging. These statistics suggest that the relationship between loan growth and real GDP growth can at times deviate significantly from average developments.

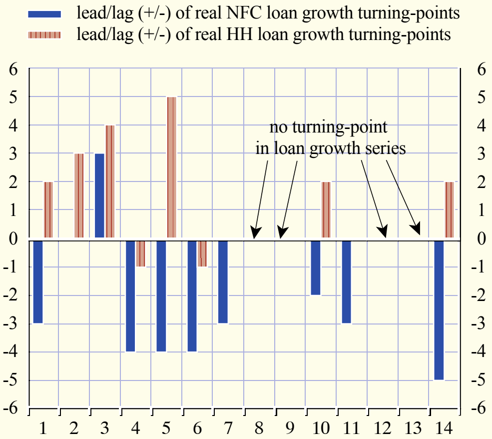
This finding is also supported by the fact that the lead/lag relationship in turning-points varies over time (see Chart D). For example, while on average turning-points in the growth of real loans to households tended to lead peaks and troughs in real GDP growth by almost two quarters, this relationship varied between minus one (i.e. a lag of one quarter) to plus five (a lead of five quarters).[5] Similarly, while turning-points in the growth of real loans to non-financial corporations tended, on average, to lag peaks and troughs in real GDP growth by about three quarters, this relationship varied between minus five and plus three. Moreover, in both cases some turning-points in real GDP growth were not associated with peaks and troughs in loan growth (such as in the late 1990s and mid-2000s). There is no clear evidence

3 Note that these conclusions can be derived with reference to confidence bounds relating to both plus and minus the standard error as well as plus and minus twice the standard error.
4 The period for the rolling correlations is three years, which is the average peak-to-peak duration of cycles in the annual growth series considered. Five-year averages were taken to show average developments over time.
5 Turning-points were determined using the so-called Bry-Boschan algorithm (see G. Bry and C. Boschan, "Cyclical analysis of time series: selected procedures and computer programs", *NBER Technical Paper Series*, No 20, National Bureau of Economic Research, 1971). This algorithm is typically applied to indicators of levels to detect classical business cycle phases, i.e. expansions and recessions. However, this algorithm also often produces reasonable results for growth rates. Very similar results are obtained by identifying turning-points by means of simple rules of thumb (based on assumptions relating to the duration of expansions and moderations) or more formal modelling approaches such as Markov-switching models.

of a relationship between the deviation from the average lead or lag of turning-points and the severity of economic downturns or the strength of upturns. On the one hand, looking at the early 1990s, which saw the most severe recession from the early 1980s until the most recent one in the euro area, the lead of the turning-point in household loans (five quarters) and the lag in non-financial corporation loans (four quarters) mark the largest deviations for troughs. On the other hand, the periods of strongest expansion, such as those in the late 1980s and early 2000s (when annual real GDP growth was close to 5%), do not seem to have been characterised by exceptional deviations in the lead and lag of the corresponding peaks in loan variables.

Chart D Relationships between turning points in growth in real loans to households, growth in real loans to non-financial corporations and in real GDP growth

(quarters)



1	T	early 1980s	8	P	late 1990s
2	P	mid-1980s	9	T	late 1990s
3	T	mid-1980s	10	P	early 2000s
4	P	late 1980s	11	T	early 2000s
5	T	early 1990s	12	P	mid-2000s
6	P	mid-1990s	13	T	mid-2000s
7	T	mid-1990s	14	P	late 2000s

Source: ECB and Eurostat.
Notes: Turning-points based on the Bry-Boschan algorithm. "NFC" stands for non-financial corporations; "HH" stands for households. "P" refers to peak and "T" to trough.

Overall, average historical regularities suggest that the annual growth of real loans to households slightly leads real GDP growth, but that growth in loans to non-financial corporations clearly lags growth in real GDP. Thus, the view that the euro area economy is stabilising and the anticipation of a gradual recovery would be consistent with the current levelling-off of household loan growth, but could also be expected to be accompanied by a further moderation in the growth of loans to non-financial corporations until at least early 2010. However, these average regularities are surrounded by uncertainty, which is particularly marked at the current juncture owing to still strained financial markets.

Turning to the other counterparts of M3, the annual growth rate of MFIs' longer-term financial liabilities excluding capital and reserves increased further in August, reaching 3.8%, up from 3.2% in July. In particular, longer-term deposits (i.e. those with an agreed maturity of over two years and those redeemable at notice of over three months) have benefited from the steepened yield curve, thus attracting at least part of the funds that have been flowing out of short-term time deposits. In addition, the money-holding sectors continued to purchase longer-term debt securities in August, suggesting that MFIs are able to obtain long-term funding from non-banks by using this instrument. While yield considerations are favouring this instrument as well, a stimulating effect from the Eurosystem's covered bond purchase programme is likely to also have played a role in this development, as covered bond issuance, which is typically of long maturity, has picked up markedly.

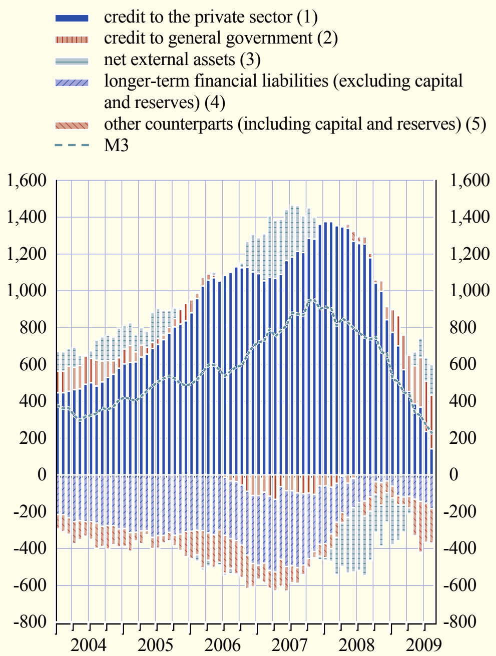
The annual growth rate of capital and reserves declined to 9.5% in August, down from 10.1% in July, despite a relatively large positive monthly flow.

Finally, a further positive flow of €43 billion was recorded in the net external asset position of the MFI sector in August, which brought the annual flow to €165 billion, after €127 billion in the 12 months up to July (see Chart 6). This development is the continuation of a pattern observed since May, whereby MFIs have, on a 12-month basis, reduced their liabilities vis-à-vis non residents more than their assets. To some extent, this reduction in both assets and liabilities reflects the global scaling-down of interbank cross-border positions in the context of deleveraging.

To sum up, the monetary data for August point to a continued parallel deceleration of growth in M3 and loans to the private sector, thus confirming the moderation in the underlying rate of monetary growth. Lending to the non-financial private sector continued to be subdued, to a large extent reflecting the still high degree of uncertainty surrounding business, income and housing market prospects. This uncertainty impacts not only on the demand for MFI loans, but also on credit institutions' willingness and capacity to lend. The data for August, particularly when assessed together with those for the two preceding months, also suggest that the scaling-down of MFI balance sheets has lost some steam. This notwithstanding, MFIs continued to reduce their positions vis-à-vis one another.

Chart 6 Counterparts of M3

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



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

2.2 SECURITIES ISSUANCE

Overall debt securities issuance growth remained sustained in July 2009, albeit decelerating from the robust pace recorded since November 2008. In the non-financial corporate sector, the momentum of securities issuance remained strong in July, driven mainly by long-term debt securities issuance. It is likely that this continued increase in debt securities issuance by the corporate sector to some extent reflects the substitution of market-based financing for bank financing, given the more rapid decline in the cost of market-based debt than in bank lending rates since end-2008.

DEBT SECURITIES

The annual growth rate of debt securities issued by euro area residents edged downwards slightly to 11.7% in July 2009, from 11.9% in the previous month (see Table 3), thereby confirming a stabilisation in the growth of debt securities issuance at a high level. This is also reflected in the seasonally adjusted six-month annualised growth rate of debt securities issuance, which has been signalling a slight moderation in the ongoing robust growth of overall debt securities issued in recent months (see Chart 7). The overall figure, however, conceals some differences in behaviour across different maturities and types of issuer.

Table 3 Securities issued by euro area residents

Issuing sector	Amount outstanding (EUR billions) 2009 July	Annual growth rates [1] 2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 June	2009 July
Debt securities	**14,061**	**7.3**	**7.8**	**10.6**	**12.0**	**11.9**	**11.7**
MFIs	5,447	8.2	5.7	5.9	5.8	4.8	4.2
Non-monetary financial corporations	2,153	22.9	23.7	31.1	32.7	30.0	31.0
Non-financial corporations	763	4.1	5.0	7.7	10.0	11.4	12.6
General government	5,698	2.4	5.6	9.6	12.1	13.3	13.2
of which:							
Central government	5,344	2.4	5.7	9.9	12.2	13.6	13.4
Other general government	353	3.0	2.9	5.9	9.6	9.7	9.5
Quoted shares	**3,815**	**0.6**	**0.8**	**1.2**	**1.9**	**2.7**	**2.7**
MFIs	509	2.8	4.9	7.2	8.7	9.8	9.5
Non-monetary financial corporations	278	2.6	2.6	3.1	3.4	4.3	4.0
Non-financial corporations	3,027	0.0	-0.1	0.0	0.8	1.5	1.6

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

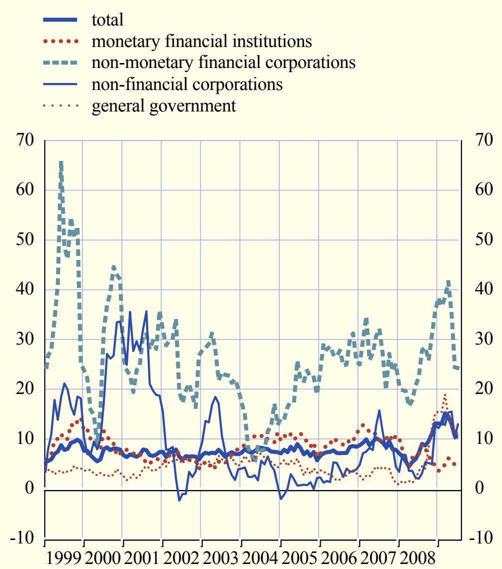
Regarding maturities, the annual growth rate of issuance of short-term debt securities, while still high, continued to decline rapidly, falling to 18.7% in July from 19.9% in the previous month. At the same time, the growth in issuance of long-term debt securities remained strong and broadly unchanged, at 10.8%. Issuance of longer-term debt securities may be broken down further into securities at floating and fixed rates. In recent months, issuers have clearly favoured the issuance of fixed rate long-term debt securities, which represent around 70% of the outstanding amount of long-term debt securities issued. The annual growth rate of fixed rate long-term debt securities issuance surged from 5.4% at the beginning of the year to 10.3% in July 2009. At the same time, the annual growth rate of floating rate long-term debt securities continued to decrease, falling to 12.5%.

Regarding sectoral issuance, the annual growth rate of debt securities issued by non-financial corporations reached 12.6% in July 2009. This is the highest growth rate observed since June 2003. Monthly net issuance activity by non-financial corporations suggests that the ability to raise short-term finance continued to be hampered up until July 2009. Hence, the strong momentum in corporate debt securities issuance was mainly driven by long-term securities.

The surge in long-term net issuance, together with the record volumes recorded at the turn of 2009, points to renewed interest from non-financial corporations in the European corporate bond market. Two factors may have played a significant role in providing an incentive for corporate debt issuance. First, credit spreads have been declining rapidly over recent months.

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

(six-month annualised growth rates; seasonally adjusted)



Source: ECB.

This has substantially lowered financing costs in the issuance of debt financing and has enabled firms to secure relatively inexpensive funding. Since end-2008 there has been a greater decline in the cost of market-based debt than in the costs of bank loan financing. For instance, the real cost of market-based debt financing has dropped much more rapidly than MFIs' lending rates. Second, the momentum in debt issuance could also reflect the deterioration of the availability of external financing through a tightening of terms and conditions for bank loans (see Box 2, which presents the results of the recent survey on the access to finance of small and medium-sized enterprises in the euro area). Since November 2008 the surge in issuance of corporate debt has led to a gradual restructuring of the debt maturity structure, with non-financial corporations increasingly relying on longer-term funding. In November 2008 17% of the outstanding market-based debt held by non-financial corporations was short-term. In July 2009, this proportion had fallen to 11%.

Turning to the financial sector, there was a further slowdown in the annual growth rate of debt securities issuance by monetary financial institutions, to 4.2% in July, from 4.8% in June. This slowdown was driven by a rapid decline in the annual growth rate of short-term debt securities issued, down to 1.8% in July, from 4.5% in June. Some moderation in the growth of long-term debt securities issuance also continued in July, with the annual growth rate standing at 4.6%, i.e. 0.2 percentage point lower than in the previous month.

By contrast, there was a slight pick-up in the annual growth rate of debt securities issued by non-monetary financial institutions, to 31% in July 2009, i.e. 1 percentage point higher than in June. This is confirmed by a stabilisation of the seasonally adjusted six-month annualised growth rate in July 2009, after several months of rapid decline. The issuance activity of non-monetary financial institutions, as for other types of issuer, continued to focus on longer-term maturities.

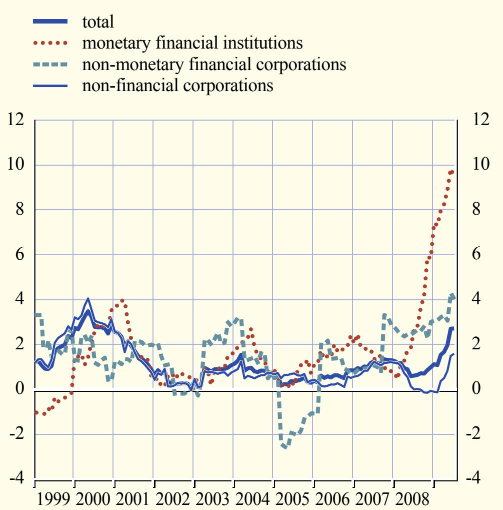
Finally, the annual growth rate of debt securities issued by the general government sector remained strong, broadly unchanged from the previous month, at 13.2% in July 2009. A strong acceleration in the annual growth rate of short-term debt securities issuance was more than offset by a slowdown in the annual growth rate of longer-term debt securities issued. The strong momentum in the issuance of government debt securities reflects the continued substantial funding needs of the euro area public sector.

QUOTED SHARES

The annual growth rate of quoted shares issued by euro area residents remained unchanged at 2.7% in July 2009 (see Chart 8). The annual growth rate of equity issuance by MFIs remained high at 9.5%, reflecting continued efforts on the part of many euro area banks

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

(annual growth rates)



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

to strengthen their balance sheets by bolstering their capital bases. Another notable feature is the annual growth rate of quoted shares issued by non-financial corporations, which rose further to 1.6% in July 2009, possibly fostered by positive stock market developments in recent months.

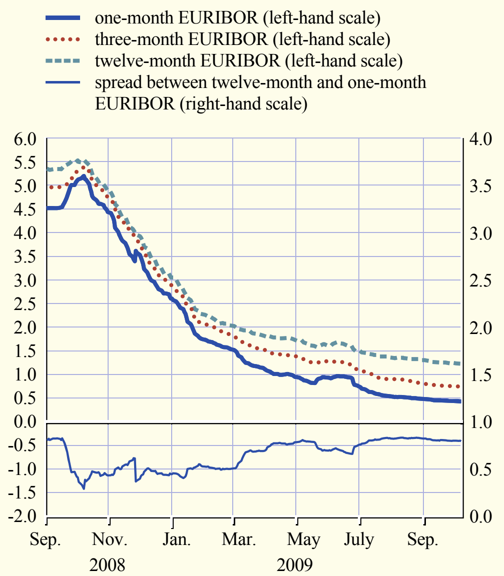
2.3 MONEY MARKET INTEREST RATES

While unsecured money market interest rates declined in September and early October 2009, secured rates increased slightly. As a result, the spread between unsecured and secured interest rates with three-month maturity also declined slightly during that period. In September the Eurosystem continued to provide the financial system with abundant amounts of liquidity by means of fixed rate tender procedures with a full allotment of its main and longer-term refinancing operations with maturities of up to one year. The amount allotted in the second one-year operation on 30 September was significantly lower than that of the first operation conducted in June. Furthermore, the Eurosystem continued to conduct outright purchases of covered bonds in the context of the covered bond purchase programme it had started on 6 July 2009.

Unsecured money market rates continued to decline in September and early October 2009, albeit at a slower pace than in previous months. On 7 October the one-month, three-month, six-month and twelve-month EURIBOR stood at 0.43%, 0.74%, 1.01% and 1.23% respectively. Compared with the levels observed on 2 September, the one-month EURIBOR declined by 5 basis points, while the rates for maturities of between three and twelve months declined by 7 basis points. As a result, the spread between the twelve-month and one-month EURIBOR – an indicator of the slope of the money market yield curve – declined slightly to stand at 79 basis points on 7 October, compared with 82 basis points on 2 September (see Chart 9).

Chart 9 Money market interest rates

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



Sources: ECB and Reuters.

Secured money market rates derived from the EONIA swap index increased slightly in September, contributing to a decline in the spread between unsecured rates and secured rates. For the three-month segment, this spread stood at 27 basis points on 7 October, i.e. 14 basis points lower than the level observed on 2 September.

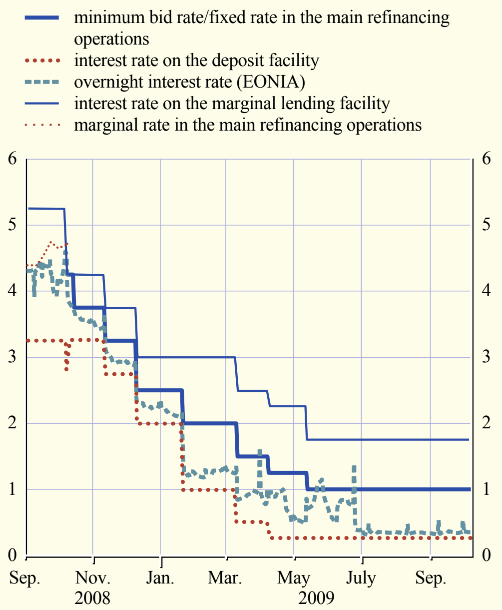
The interest rates implied by the prices of three-month EURIBOR futures maturing in December 2009, March 2010 and June 2010 declined to stand at 0.785%, 0.965% and 1.225% respectively on 7 October – i.e. 8, 9 and 15 basis points respectively below the rates prevailing on 2 September.

The EONIA was broadly stable in September and early October, standing at levels around

10 basis points above the deposit facility rate of 0.25%, except on 8 and 30 September, when it stood at 0.54% and 0.53% respectively (see Chart 10). The first exception coincided with the last day of the maintenance period ending on 8 September, when the Eurosystem conducted a liquidity-absorbing fine-tuning operation and absorbed €195.1 billion in a variable rate tender operation with a maximum rate of 1.00%, a marginal rate of 0.80% and a weighted average rate of 0.73%. On 30 September the EONIA rose to 0.53%, mainly on account of end-of-quarter effects. The increase was reversed on the following day, and the EONIA stood at 0.34% on 7 October.

Chart 10 ECB interest rates and the overnight interest rate

(percentages per annum; daily data)



Sources: ECB and Reuters.

The volume of outstanding open market operations which, owing to the Eurosystem's current liquidity management, is determined solely by the bidding behaviour of counterparties, declined until 30 September, when the second one-year longer-term refinancing operation (LTRO) was settled. On 1 October the volume of outstanding refinancing operations in euro was €742.7 billion, well below the record high of €896.5 reached on 25 June, following the settlement of the first one-year LTRO in the order of €442.5 billion on 24 June. Since then, the liquidity term structure has lengthened significantly, with the main refinancing operations only accounting for around 10% of total outstanding liquidity.

In the main refinancing operations conducted on 1, 8, 15, 22 and 29 September, the ECB allotted €72.1 billion, €93.3 billion, €87.8 billion, €85.0 billion, and €66.8 billion respectively. As regards longer-term operations, the ECB conducted three special LTROs with maturities of one, three and six months in September 2009, as well as the second of the three one-year LTROs announced in May. The ECB allotted €10.6 billion in the special LTRO with a maturity of one month on 8 September, and €3.2 billion and €3.7 billion respectively in the special LTROs with maturities of three and six months on 9 September. In the second one-year LTRO on 30 September, the ECB allotted €75.2 billion, less than what had been expected by market participants.

In line with the decline in the allotment amounts in market operations, the liquidity surplus in the euro area money markets declined gradually in the course of the month, as reflected in the average daily recourse to the deposit facility, which decreased from €136.7 billion in the maintenance period ending on 8 September to €105.8 billion in the following period up to 7 October.

Furthermore, using its reciprocal currency arrangements (swap lines) with the Federal Reserve, the Eurosystem continued to provide US dollar funding against collateral eligible for Eurosystem operations, conducting operations with various maturities on 2, 9, 16, 23 and 30 September. The ECB also continued to provide Eurosystem counterparties with Swiss franc funding against euro cash via foreign exchange swap operations. On 24 September the Governing Council of the ECB decided, in agreement with the Federal Reserve, to continue conducting US dollar liquidity-providing operations with a maturity of seven days until January 2010. All other US dollar liquidity-providing operations have been discontinued. On the same date, the Governing Council of the ECB decided, in agreement with the Swiss National Bank, to continue conducting one-week Swiss franc liquidity-providing swap operations until January 2010.

Finally, the Eurosystem has continued to purchase eligible covered bonds under the programme started on 6 July. The total value of the covered bonds purchased between 6 July and 7 October amounted to around €17 billion, as compared with the announced overall amount of direct purchases of €60 billion.

2.4 BOND MARKETS

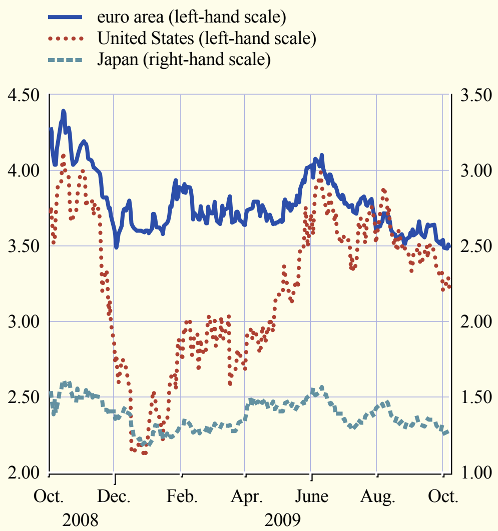
Long-term euro area government bond yields decreased slightly in September and in early October, despite the continued rally in the prices of risky assets. Intra-euro area government bond spreads remained broadly unchanged on account of both low liquidity premia and low perceived credit risk. This, together with the further narrowing of corporate bond spreads, appeared to partly reflect an improvement in the macroeconomic outlook. However, the low level of money market rates is likely to have led many market participants to increase the risk exposure of their bond portfolios. Implied bond market volatility remained broadly unchanged in the euro area, while declining somewhat in the United States.

On 7 October ten-year government bond yields stood at 3.5% in the euro area and 3.2% in the United States, 7 and 22 basis points below the levels observed at the end of August (see Chart 11). Thus, the ten-year nominal interest rate differential between US and euro area government bonds stood at around -28 basis points on that date. Ten-year government bond yields also decreased in Japan, standing at 1.3% on 7 October. Market uncertainty concerning short-term developments in bond yields, as measured by option-implied volatility, remained broadly unchanged in the euro area and decreased somewhat in the United States, returning to the levels observed prior to the bankruptcy of Lehman Brothers.

In early October euro area sovereign issuers saw their spreads vis-à-vis German ten-year government bond yields standing close to the levels observed at the end of August. Although those spreads decreased for all countries throughout September, they then widened again slightly in the final days of the review period. Overall, the level of euro area sovereign bond spreads appears to reflect not only the narrowing of the liquidity premia differentials observed in the last few months, but also low sovereign

Chart 11 Long-term government bond yields

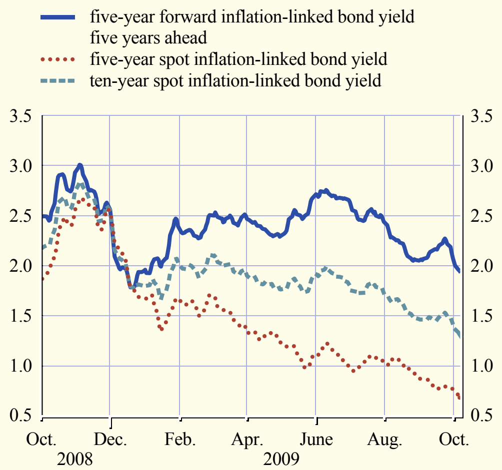
(percentages per annum; daily data)



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

Chart 12 Euro area zero coupon inflation-linked bond yields

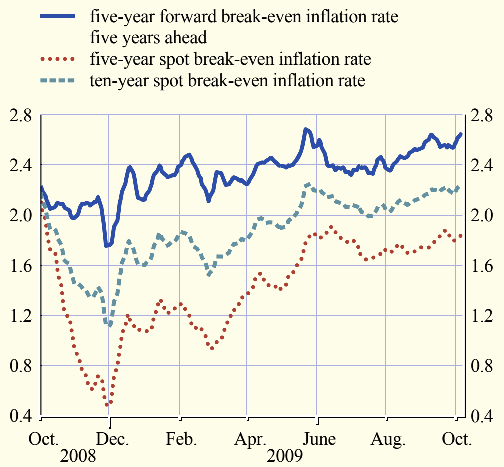
(percentages per annum; five-day moving averages of daily data; seasonally adjusted)



Sources: Reuters and ECB calculations.

Chart 13 Euro area zero coupon break-even inflation rates

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



Sources: Reuters and ECB calculations.

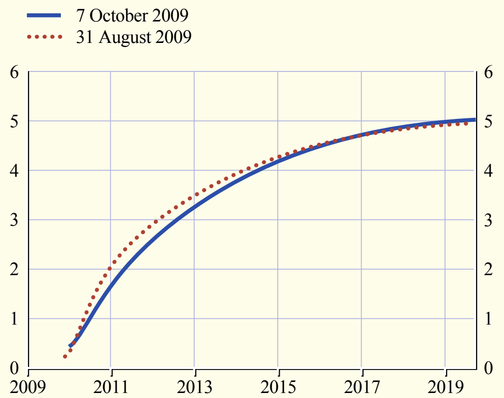
credit risk, as roughly indicated by CDS spreads. Moreover, the relatively subdued overall level of long-term interest rates may in part reflect banks' strong demand for government bonds. The low level of money market rates is likely to have led many market participants to increase the risk exposure of their bond portfolios.

Yields on euro area five-year inflation-linked government bonds declined by 21 basis points to stand at 0.7% on 7 October, while ten-year real yields declined by 16 basis points to stand at 1.3% (see Chart 12). The five-year forward real yield five years ahead decreased by 11 basis points to stand at 1.9%. Recent developments in euro area government bond markets – especially liquidity premia returning to the levels observed prior to the bankruptcy of Lehman Brothers – point to a further normalisation of the pricing of inflation-linked instruments.

Market-based measures suggest that long-term inflation expectations in the euro area remain well anchored. On 7 October the five and ten-year spot break-even inflation rates stood at 1.8% and 2.2% respectively, up slightly from the levels observed at the end of August. The implied five-year forward break-even inflation rate five years ahead increased by 4 basis points to stand at 2.6% (see Chart 13).

Chart 14 Implied forward euro area overnight interest rates

(percentages per annum; daily data)



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

The term structure of forward rates in the euro area shows how the overall behaviour of euro area long-term yields can be decomposed into changes in interest rate expectations (and related risk premia) at different horizons (see Chart 14). The implied forward overnight interest rate curve for euro area government bonds steepened in early October as compared with the end of August. This mainly reflects the downward revision of interest rate expectations for medium maturities of the forward curve.

Corporate bond spreads in the euro area declined further relative to their end-August levels, most significantly for lower investment-grade financials and speculative-grade bonds. The spreads for the highest rating class remained at a level corresponding to that observed in early 2008, while the spreads for high-yield bonds returned to the levels prevailing prior to the bankruptcy of Lehman Brothers. As in the case of stock prices, the continued narrowing of corporate bond spreads points to further increases in investor confidence and risk appetite amid exceptionally low short-term interest rates.

2.5 INTEREST RATES ON LOANS AND DEPOSITS

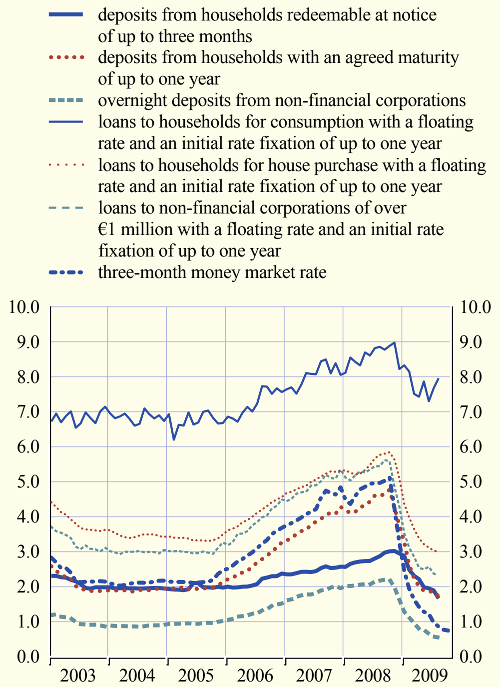
In August 2009 further declines were recorded for most MFI interest rates on new loans to and deposits from households and non-financial corporations, with the notable exception of short-term rates for consumer credit. The downward trend observed in MFI interest rates since November 2008 is consistent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

In August 2009 most short-term MFI interest rates on new loans and deposits were lower than they had been in the previous month, reflecting the continued – albeit still partial – pass-through of the substantial declines observed in money market rates since November 2008 (see Chart 15).

Average MFI interest rates on small short-term loans to non-financial corporations decreased by 15 basis points in August 2009, while average rates on large short-term loans to such corporations decreased by 6 basis points. Average rates on overdrafts granted to non-financial corporations declined by 10 basis points. At the same time, average rates on short-term consumer credit granted to households increased in August for the second consecutive month, rising by a further 28 basis points, while average rates on loans to households for house purchase declined slightly. Looking beyond the volatility of rates on short-term consumer

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

(percentages per annum; rates on new business)



Source: ECB.

credit, this may point to some increases in credit risk premia against the background of deteriorating labour market conditions and uncertainty about future income.

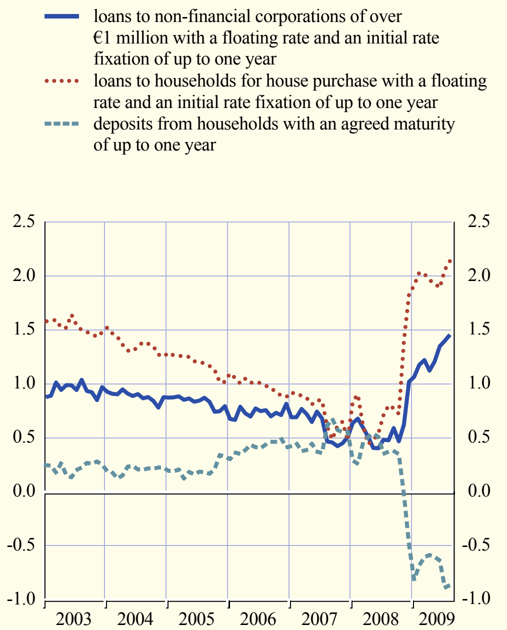
Overall, the decreases observed in short-term lending rates in August 2009 reflected broadly similar developments in corresponding money market rates. In particular, the three-month EURIBOR declined by a further 11 basis points. Consequently, the spreads between short-term MFI interest rates and short-term money market rates remained broadly unchanged, but are expected to decline as changes in market rates are eventually passed on (see Chart 16).

Taking a longer-term perspective, the interest rates charged on loans to households for house purchase with a floating rate and an initial rate fixation period of up to one year declined by 284 basis points between October 2008 and August 2009. Equivalent rates on small and large loans to non-financial corporations declined by 310 and 327 basis points respectively. This compares with a decrease of 425 basis points in the three-month EURIBOR. Amid concerns regarding the outlook for borrowers' balance sheets and uncertainty surrounding borrowers' income and ability to service their debts, which are raising credit risk premia, reductions in policy rates appear to have been feeding through to retail lending and deposit rates with a degree of inertia broadly similar to that observed in the past.

All long-term lending rates decreased in August, both for households and for non-financial corporations. For example, the interest rates on small and large loans to non-financial corporations

Chart 16 Spreads of short-term MFI interest rates vis-à-vis the three-month money market rate

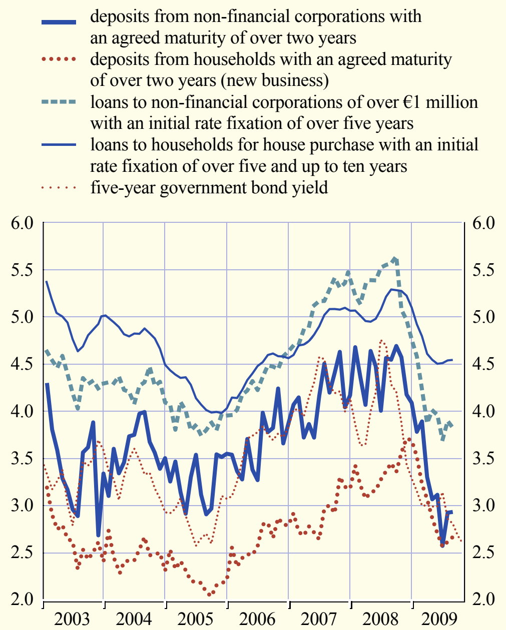
(percentage points; rates on new business)



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

Chart 17 Long-term MFI interest rates and a long-term market rate

(percentages per annum; rates on new business)



Source: ECB.

fell by 9 and 7 basis points respectively. By comparison, the yield on five-year government bonds decreased by 5 percentage points.

Taking a longer-term perspective, the declines observed between August 2008 and August 2009 for long-term MFI interest rates on loans to households were around half of the 160 basis point decline seen for government bond yields over that period. Long-term interest rates on small loans to non-financial corporations declined by 126 basis points between August 2008 and August 2009. While these developments may primarily reflect the typically sluggish adjustment of retail bank interest rates to changes in market rates, they may also point to an increase in credit risk premia. By contrast, long-term MFI rates on large loans to non-financial corporations declined substantially, falling by 174 basis points between August 2008 and August 2009.

The profitability of euro area banks depends, among other things, on loan-deposit margins on outstanding amounts and new business rates. Both measures remained broadly unchanged between February and August 2009. This tends to confirm that banks have passed on the recent reductions in policy rates to their retail lending and deposit rates to a broadly similar degree.

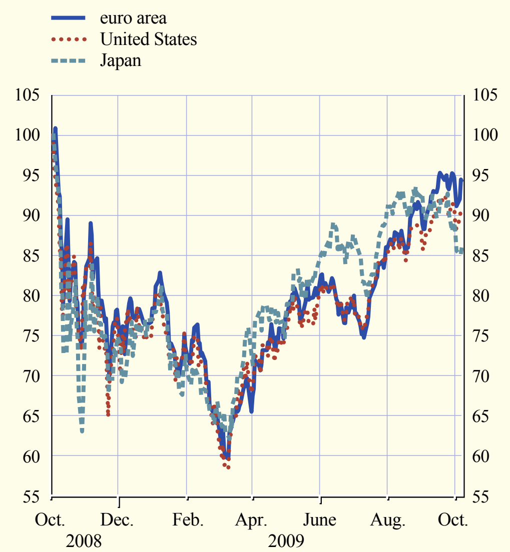
2.6 EQUITY MARKETS

Euro area and US stock prices continued to increase for most of September and in early October, mainly for the non-financial sector. At the same time, implied stock market volatility remained broadly unchanged. Expected growth in earnings per share 12 months ahead improved significantly for the non-financial sector in the euro area and turned positive for the first time since November 2008. Overall, these developments seem to reflect more optimistic market views on the outlook for growth. When considering these generally positive signals, the possibility cannot be ruled out that demand for risky assets has been stimulated by the liquidity situation in financial markets.

Between the end of August and 7 October euro area and US stock markets broadly continued the rally observed since March, despite experiencing a correction in the last week of September. Euro area stock prices, as measured by the broad-based Dow Jones EURO STOXX index, and stock prices in the United States, as measured by the Standard & Poor's 500 index, both increased by 4% between the end of August and 7 October (see Chart 18). Over the same period, stock prices in Japan, as measured by the Nikkei 225 index, decreased by 7%. While the price increases observed in previous months had been most pronounced for financial stocks, the review period saw significant gains also for the non-financial sector. Short-term

Chart 18 Stock price indices

(index: 1 October 2008 = 100; daily data)

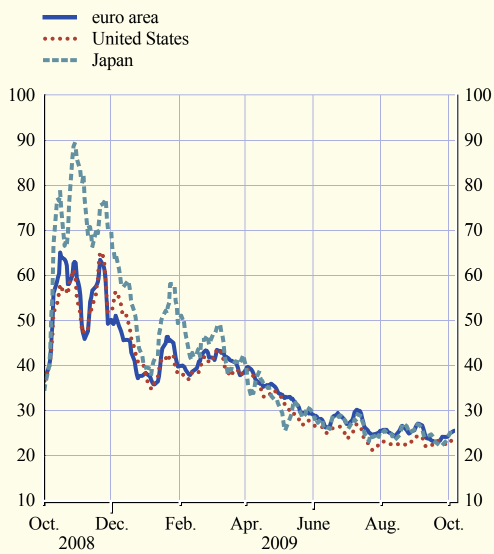


Sources: Reuters and Thomson Financial Datastream.
Note: The indices used are the Dow Jones EURO STOXX broad index for the euro area, the Standard & Poor's 500 index for the United States and the Nikkei 225 index for Japan.

stock market uncertainty, as measured by option-implied volatility, remained broadly unchanged in the euro area, the United States and Japan (see Chart 19). Although short-term stock market uncertainty returned to the levels prevailing prior to the intensification of the financial crisis in September 2008, it remained significantly higher than before the onset of the credit market turmoil in mid-2007.

Chart 19 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.

Developments in euro area stock markets appeared to reflect a more optimistic outlook for economic activity. Indeed, a number of macroeconomic data releases were generally viewed by market participants as better than expected. Moreover, a further increase in investor confidence and a further decline in risk aversion continued to support stock prices in all sectors. In particular, September saw significant gains also for the stocks of non-financial corporations. In the euro area, the strongest gains were recorded in the health care and industrial sectors (both 6%).

While actual earnings growth for euro area listed companies remained depressed in September, expected earnings growth increased, mainly as a result of a significant improvement in expectations for the non-financial sector. Actual monthly earnings-per-share growth for the firms covered by the Dow Jones EURO STOXX index stood at -3.7% in September, up from -3.9% in August. For the stocks of the financial sector, monthly earnings-per-share growth turned positive to stand at 0.6%. By contrast, strong declines were observed for consumer services and basic materials (-17.7% and -11.6% respectively). Analysts expected earnings per share 12 months ahead to increase by 11.5% (compared with 5.6% in August). This substantial increase in earnings growth expectations is primarily due to the improved outlook for non-financial corporations (for which expected earnings growth stood at 6.4%, up from -0.7% in August), especially in the consumer services, industrial and consumer goods sectors. It should be noted that in September, the expected growth of earnings per share for the non-financial sector turned positive for the first time since November 2008. For the financial sector, earnings per share were expected to increase by 24.7% in the next 12 months (up from 22.1% in August). The euro area price/earnings ratio continued to increase in September, especially for the financial sector, standing above its historical average for the first time since July 2007.

Notwithstanding the positive indications stemming from recent data releases and earnings expectations, the possibility cannot be ruled out that the continuation of the rally in the prices of risky assets has, to some extent, been stimulated by the liquidity situation in financial markets. The low level of money market rates may have led some investors to allocate a larger share of their funds to riskier asset classes.

Box 2

THE RESULTS OF THE FIRST ROUND OF THE "SURVEY ON THE ACCESS TO FINANCE OF SMALL AND MEDIUM-SIZED ENTERPRISES IN THE EURO AREA"

This box presents the results of the first round of the "Survey on the access to finance of small and medium-sized enterprises in the euro area".[1] The survey was conducted by the ECB in cooperation with the European Commission between 17 June and 23 July 2009 and covered 6,000 small and medium-sized enterprises (SMEs), as well as large firms, in the euro area.[2] It provides evidence on changes in the financing conditions of euro area SMEs and large firms, with respect to the previous six months, i.e. broadly corresponding to the first half of 2009. Given that this is the first time the survey has been conducted, the results described below should be interpreted with caution.

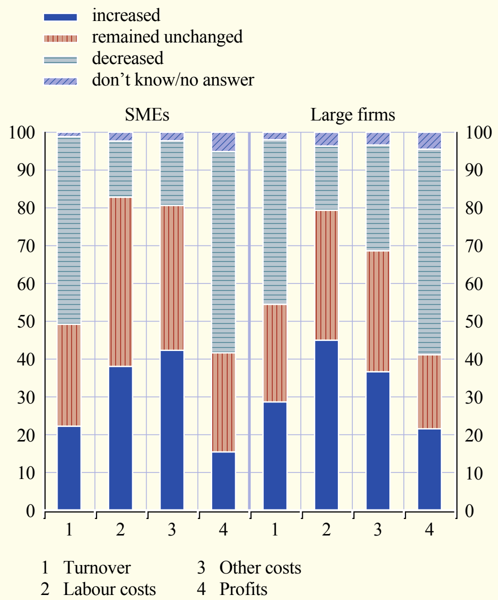
The financial situation of euro area SMEs in the first half of 2009

A net percentage[3] of around one-quarter of the respondent euro area SMEs (27%) reported a decrease in their turnover in the first half of 2009 (see Chart A), whereas large firms provided a somewhat less negative assessment (15%). At the same time, a net percentage of 23% of the SMEs reported an increase in their labour costs and a net 25% reported an increase in other costs (e.g. material and energy costs). These turnover and cost developments had a negative impact on firms' profits (net income after taxes). In fact, a net percentage of 38% of the SMEs and a somewhat lower 33% of the large firms reported a decrease in their profits in the first half of 2009. Hence, it appears that over the reporting period SMEs were somewhat more affected by the economic downturn.

The survey results confirm the weak overall demand in the first half of 2009. In fact, the most pressing problem confronting euro area SMEs during that period was to find customers (27% selected this reply). This was followed by "access to finance", which was reported as the most pressing issue by 17% of the SMEs, especially smaller ones. Competition (reported by 14% of the SMEs as the most pressing problem), production costs (notably labour costs) and a lack of skilled workers were also

Chart A Selected indicators of the financial situation of euro area firms, change over the preceding six months

(percentages of respondents)



Source: ECB/European Commission survey on the access to finance of SMEs.

1 See European Central Bank (2009), "Survey on the access to finance of small and medium-sized enterprises in the euro area", September.
2 SMEs include micro firms (1-9 employees), small firms (10-49 employees) and medium-sized firms (50-249 employees). Large firms are defined as firms with 250 or more employees.
3 The net percentage of firms reporting an increase (decrease) is calculated as the difference between the percentage of firms reporting "increases" ("decreases") and the percentage reporting "decreases" ("increases").

seen as most pressing issues (both of the latter two were reported by 9% of the SMEs).

External financing needs of euro area SMEs in the first half of 2009

Nearly half of the firms (49% of the SMEs and 46% of large firms) reported that their need for bank loans had remained unchanged in the first half of 2009 (see Chart B). At the same time, the share of the SMEs reporting an increase in their bank financing needs was somewhat higher than the share of those reporting a decline. As a result, in net terms, 11% of the SMEs reported an increase in their need for bank loans, compared with 5% in the case of large firms. Regarding trade credit, a net 4% of the SMEs reported an increased need for trade credit, while the net percentage for large firms equalled 0%.

Fixed investment was regarded the most important factor that contributed to increasing financing needs. A net percentage of 8% and 9% of the SMEs and large firms respectively reported that fixed investment had increased their need for external financing during the preceding six months. External financing needs for inventories and working capital appear to have increased somewhat as well.

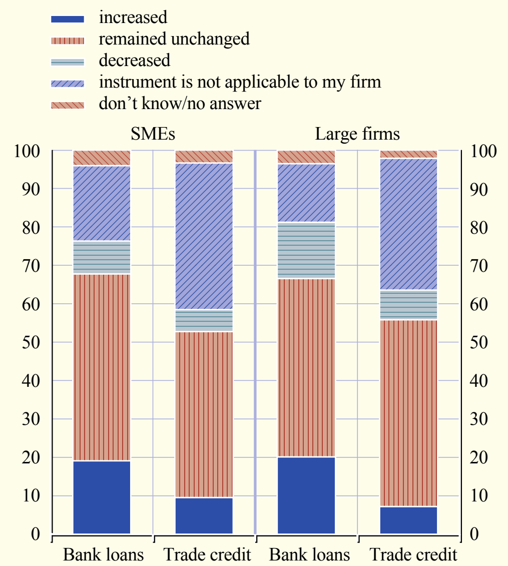
Applications for external financing

In the first half of 2009, a minority of firms (28% of the SMEs and 34% of the large firms) reported that they had applied for bank loans, i.e. either a new loan or a renewal of an existing loan. The main reason for not applying for a loan was sufficient availability of internal funds (reported by 37% of the SMEs and 38% of the large firms). Only 5% of the SMEs reported that they did not apply because they thought their application might be rejected.

Of the SMEs that had applied for bank loans in the first half of 2009, 77% reported that they had received all or part of the amount requested (see Chart C). By contrast, 12% of the SMEs

Chart B External financing needs of euro area firms, change over the preceding six months

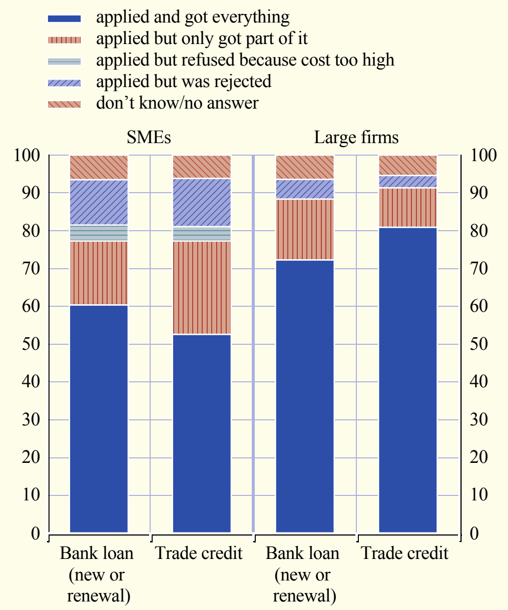
(percentages of respondents)



Source: ECB/European Commission survey on the access to finance of SMEs.

Chart C Outcome of the applications for external financing by euro area firms over the preceding six months

(percentages of firms that have applied for external financing)



Source: ECB/European Commission survey on the access to finance of SMEs.

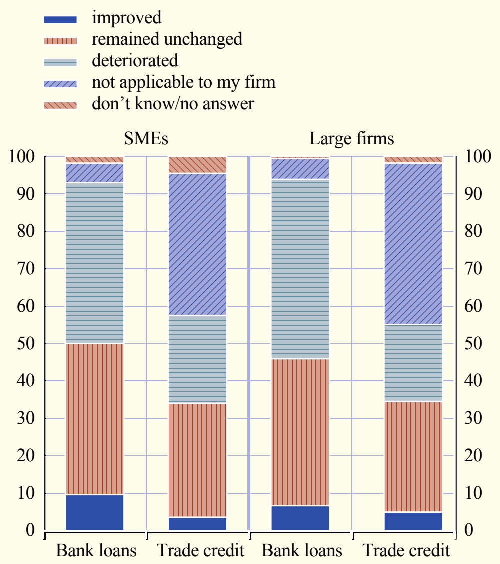
reported that their application had been rejected by the bank. The larger and the older the firms, the more successful they were in obtaining a loan. For instance, only 5% of the large firms had their loan applications rejected. Regarding trade credit and other external financing, the picture is broadly similar. The majority of firms that had applied for trade credit or other external financing in the first half of 2009 had received the full amount requested.

Availability of external financing for euro area SMEs in the first half of 2009

The firms that had applied for any category of external financing in the first half of 2009 were also asked whether the availability of the various external financing alternatives had improved or deteriorated over that period. A net 33% of those SMEs reported a deterioration in the availability of bank loans (for new loans or the renewal of an existing loan) in the first half of 2009 (see Chart D). This net percentage was higher for large firms (41%). By contrast, for trade credit a somewhat higher net percentage of the SMEs (20%) than of large firms (15%) reported a deterioration.

Chart D Availability of external financing for euro area firms, change over the preceding six months

(percentages of firms that had applied for external financing)



Source: ECB/European Commission survey on the access to finance of SMEs.

The availability of external financing depends on various factors, including the general economic outlook, the firm-specific situation and the attitude of lenders. A sizeable net percentage of 54% of the euro area SMEs considered that the general economic outlook had had a negative impact on the availability of financing, while a lower net percentage (27%) of the SMEs assessed their firm-specific situation as having deteriorated in the first half of 2009 (see Chart E). In addition, a net percentage of 10% and 6% respectively of the SMEs reported that their firm's own capital and credit history had deteriorated over the previous six months. Overall, this indicates that the general economic situation in the first half of 2009 was the most important factor behind the deterioration in the availability of financing. Regarding the supply-side effects on the availability of external financing, a net percentage of 25% of the SMEs reported that banks' willingness to provide a loan had decreased over the preceding six months, while 37% of the SMEs reported that banks' willingness had remained unchanged. The smaller the firm, the larger was the net percentage reporting such a deterioration. The willingness of business partners to provide trade credits or of investors to invest in equity or debt securities was also judged to have decreased, although less markedly than that of banks.

Terms and conditions of bank loans

As regards the terms and conditions of bank loans, a net 5% of the SMEs reported that the level of interest rates had increased in the first half of 2009. Non-interest terms and conditions appear to have played a more important role in the deterioration of the availability of external financing.

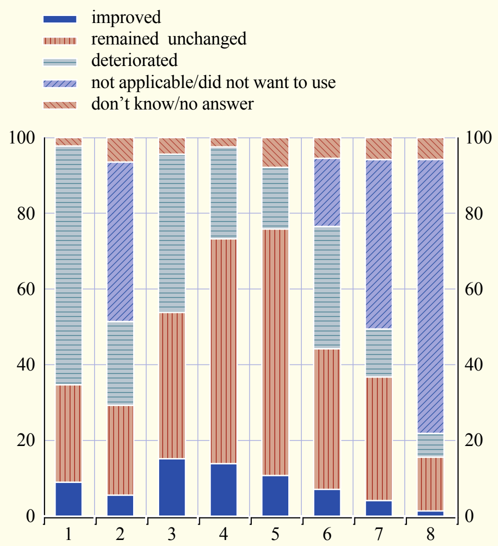
The net percentage of SMEs reporting an increase in the cost of financing other than interest rates (e.g. charges, fees and commissions) was much higher (33%) than that reporting an increase in interest rates. In addition, a considerable net percentage of the SMEs reported an increase in collateral requirements (32%) and in other non-price terms and conditions, such as loan covenants and information requirements (32%). A smaller net percentage of the SMEs reported a decrease in the available size of the loan or credit line (5%) or in the available loan maturity (2%). At the same time, the majority of the firms reported that non-price terms and conditions had not changed in the first half of 2009.

Expectations regarding access to financing

Looking forward, the majority of the SMEs expected their access to financing in the second half of 2009 to remain broadly unchanged across an array of financing alternatives (i.e. bank loans, trade credit, etc.). In addition, the proportion of SMEs that expected the availability of financing to deteriorate was only slightly larger than that expecting an improvement. For example, a net percentage of 2% of the SMEs expected the availability of internal financing to deteriorate in the second half of 2009; for bank loans, the corresponding figure was 4%. Large firms, by contrast, were somewhat more optimistic in their expectations regarding their access to finance in the second half of 2009. Regarding the growth outlook over the next two to three years, the SMEs expected their average turnover growth to be lower, on balance, than the growth they had experienced in the previous three years. At the same time, nearly 40% of the SMEs did not foresee obstacles in obtaining the financing for their medium-term growth aspirations.

Chart E Factors having an impact on the availability of financing to euro area SMEs, changes over the preceding six months

(percentages of respondents)



1 General economic outlook
2 Access to public financial support including guarantees
3 Your firm-specific outlook with respect to your sales and profitability or business plan
4 Your firm's own capital
5 Your firm's credit history
6 Willingness of banks to provide a loan
7 Willingness of business partners to provide trade credit
8 Willingness of investors to invest in equity or debt securities issued by firm

Source: ECB/European Commission survey on the access to finance of SMEs.

3 PRICES AND COSTS

According to Eurostat's flash estimate, annual HICP inflation was -0.3% in September, compared with -0.2% in August. The current negative inflation rates are in line with previous expectations and reflect largely base effects resulting from the movements in global commodity prices a year ago. Also owing to these base effects, annual inflation rates are projected to turn positive again in the coming months. Looking further ahead, inflation is expected to remain in positive territory, with overall price and cost developments staying subdued reflecting sluggish demand in the euro area and elsewhere. Risks to the inflation outlook remain broadly balanced.

3.1 CONSUMER PRICES

According to Eurostat's flash estimate, euro area annual HICP inflation was -0.3% in September, down from -0.2% in August (see Table 4). The outcome was slightly lower than anticipated. Official estimates of the breakdown of the September HICP have not yet been published, but available evidence suggests that the lower rate was driven mostly by a stronger than expected fall in the annual rate of change in energy prices.

For August, the detailed breakdown signals that the increase in overall HICP inflation from -0.7% in July was almost entirely driven by an upward movement in the annual rate of change in energy prices. The annual rate of change in the energy component of the HICP rose in August to -10.2%, from -14.4% in July. More than half of this increase came from a strong base effect stemming from developments in oil prices in 2008. The remainder was due to a month-on-month increase in energy prices, reflecting mainly developments in the prices of liquid fuels for transportation and heating. Conversely, the annual rate of change in electricity and gas prices continued to decrease, as they follow developments in oil prices with a lag.

The rest of the HICP components did not record any sharp movements in August. The annual rate of change in the unprocessed food component of the euro area HICP declined slightly in August to -1.2%, from -1.1% in July. Overall, the rate of change in unprocessed food prices has unwound considerably since the peaks reached in mid-2008, owing partly to the continued decrease in the

Table 4 Price developments

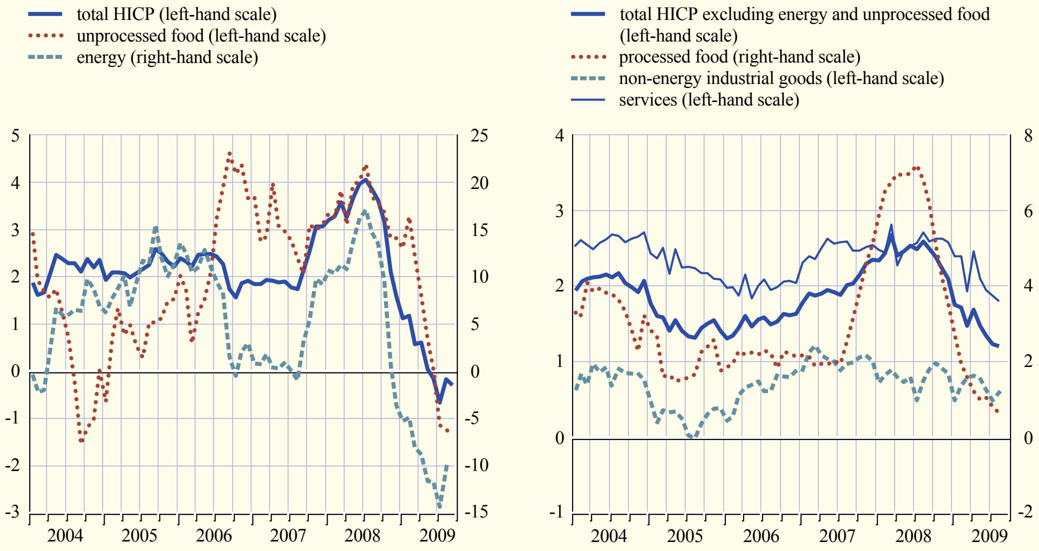
(annual percentage changes, unless otherwise indicated)

	2007	2008	2009 Apr.	2009 May	2009 June	2009 July	2009 Aug.	2009 Sep.
HICP and its components								
Overall index [1]	2.1	3.3	0.6	0.0	-0.1	-0.7	-0.2	*-0.3*
Energy	2.6	10.3	-8.8	-11.6	-11.7	-14.4	-10.2	.
Unprocessed food	3.0	3.5	1.6	0.7	0.0	-1.1	-1.2	.
Processed food	2.8	6.1	1.2	1.0	1.1	0.8	0.6	.
Non-energy industrial goods	1.0	0.8	0.8	0.8	0.6	0.5	0.6	.
Services	2.5	2.6	2.5	2.1	2.0	1.9	1.8	.
Other price indicators								
Industrial producer prices	2.7	6.1	-4.8	-5.9	-6.5	-8.4	-7.5	.
Oil prices (EUR per barrel)	52.8	65.9	39.0	42.8	49.5	46.5	51.1	46.9
Non-energy commodity prices	7.5	2.0	-25.4	-24.5	-23.5	-22.8	-16.2	-16.7

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 September 2009 refers to Eurostat's flash estimate.

Chart 20 Breakdown of HICP inflation: main components

(annual percentage changes; monthly data)



Source: Eurostat.

annual rate of change in meat prices, following the reversal of the food price shock on global markets. The annual rate of growth in processed food prices declined from 0.8% in July to 0.6% in August, its smallest rate of increase since 1999. This low rate was mostly the result of further declines in the growth rates of the prices of cereals, dairy products and oils, as the strong rates of growth observed last year unwound.

The annual rate of growth in non-energy industrial goods prices increased slightly in August to 0.6%, from 0.5% in July. This modest increase was due mostly to the contribution of clothing prices and stemmed from the pattern of seasonal discounting. Overall, the annual inflation rate of non-energy industrial goods prices has been on a slightly downward trend over the past year, driven primarily by durable goods – particularly cars – and to a lesser extent by semi-durable goods, which mirrors mainly movements in the prices of clothing and footwear.

Services price inflation edged down further to 1.8% in August, from 1.9% in July, mostly on account of a decline in the inflation rate of holiday-related services (such as restaurants, accommodation and air transport). Weak consumer demand and the lagged pass-through of past declines in commodity prices contributed to the declines in these items of the HICP services component.

Reflecting offsetting developments in non-energy industrial goods and services price inflation, HICP inflation excluding all food and energy items remained stable at 1.3% in August. Recent developments in non-energy industrial goods prices and services prices are discussed in more detail in Box 3.

Box 3

RECENT TRENDS IN THE HICP EXCLUDING FOOD AND ENERGY

Most of the volatility observed in headline HICP inflation in the recent past has been driven by the contributions of its food (both processed and unprocessed) and energy components, which are strongly influenced by external factors. By contrast, developments in the HICP excluding food and energy, representing around 70% of the total index in terms of weighting, have shown a much lower degree of volatility. This reflects rather smooth developments in the prices of its two components, non-energy industrial goods and services, which are to a greater extent determined by factors related to economic fundamentals. At the current juncture, it is particularly insightful to look at the less volatile components of the HICP in order to analyse the forces driving inflation.

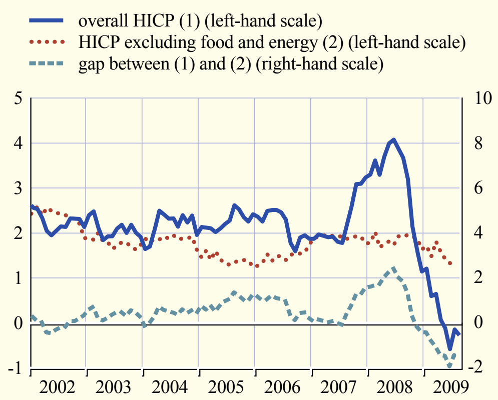
The negative gap between the annual rates of change in the overall HICP and in the HICP excluding food and energy has been gradually increasing since the beginning of 2009, almost amounting to -2 percentage points in July 2009 (see Chart A). This unprecedented large negative gap can be attributed to the unusually strong developments in the food and energy components of the HICP since mid-2007.[1] While overall HICP inflation was negative over the summer of 2009 and is expected to turn positive again in the coming months, the annual rate of change in the HICP excluding food and energy has been on a downward path since mid-2008 and shows no sign of reversing in the short-term.

Developments in the prices of the two less volatile components of the HICP, non-energy industrial goods and services, are largely determined by the same main drivers. While external factors have some influence, domestic factors, such as wages and profit mark-ups, play a dominant role in the determination of non-food, non-energy consumer price developments. Wage developments typically depend on conditions in the labour market, productivity, and past and expected inflation. At the same time, domestic demand and competition factors are crucial determinants of the profit mark-up.

From the external side, price developments in the HICP excluding food and energy are influenced by the transmission of changes in prices of imported inputs along the domestic chain of production. They are also affected by the prices of goods and services directly imported for final consumption. In this respect, the overall moderation in commodity prices, the easing of global inflation and the recent strengthening of the euro have lowered external price pressures and therefore have a dampening impact on non-food, non-energy consumer price developments. Beyond the impact of external factors, the moderation in

Chart A Overall HICP and HICP excluding food and energy

(annual percentage changes)

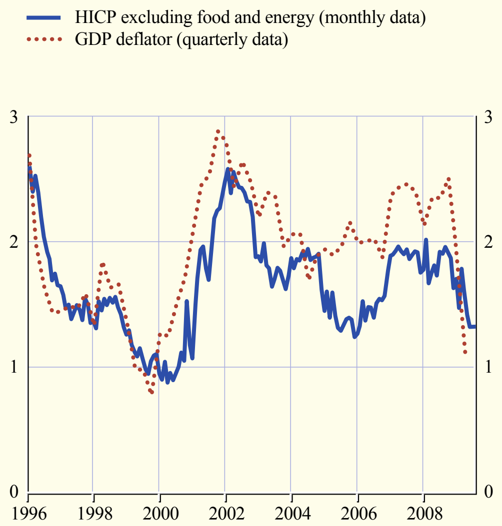


Source: Eurostat.

1 For more information, see the box entitled "Recent developments in selected measures of underlying inflation for the euro area" in the June 2009 issue of the Monthly Bulletin.

Chart B GDP deflator and the HICP excluding food and energy

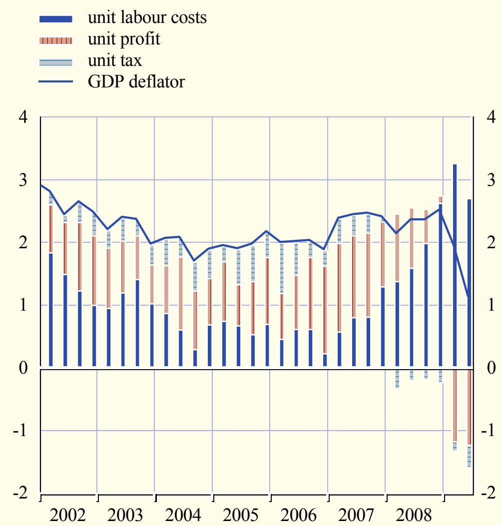
(annual percentage changes)



Source: Eurostat.

Chart C Decomposition of the GDP deflator

(annual percentage changes; percentage points)



Source: Eurostat.

HICP inflation excluding food and energy since mid-2008 has, however, been due mostly to the easing of domestic demand pressures. This can be shown by its close relationship with the developments in the annual growth rate of the GDP deflator, which is a summary indicator of unit labour cost and profit developments (see Chart B).

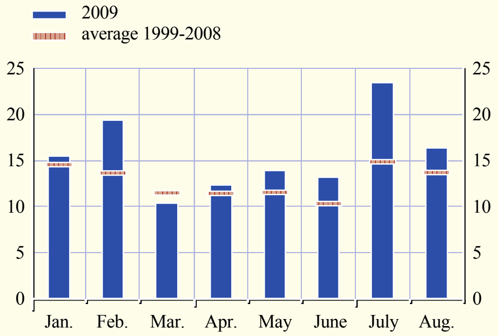
The annual growth rate of the GDP deflator peaked at 2.5% in the last quarter of 2008 and declined significantly to 1.1% in the second quarter of 2009. This was almost entirely due to the strong decrease in the contribution of unit profit growth, which turned negative in the first quarter of 2009 (see Chart C), reflecting the sharp drop in domestic demand. By contrast, over the same period, the contribution of unit labour cost growth remained particularly strong. This was due partly to the fact that several wage agreements were entered into before the worsening of economic conditions in 2008. In addition, it reflected a significant drop in productivity as employment reacted with a lag to the fall in GDP. Unit labour cost growth started to decrease, however, in the second quarter of 2009 on account of a smaller decline in productivity growth and a weakening of growth in compensation per employee.

The recent evolution of profit mark-ups reflects the depressed economic environment, characterised by considerable slack and weak consumer demand. Indeed, downward shocks to demand are an important factor in a decision to lower prices.[2] This is consistent with a relatively large share of price declines, in year-on-year terms, in items of the HICP excluding food and energy through most of 2009 when compared with the average share of price declines over the last ten years (see Chart D). This means that the prices of a number of HICP items – for instance cars and passenger air transport – have been displaying negative annual rates of growth for several consecutive months, which was not often the case in the past.

2 See the article entitled “Price-setting behaviour in the euro area” in the November 2005 issue of the Monthly Bulletin.

Chart D Share of HICP excluding food and energy items with negative annual rates of change

(percentages)



Source: Eurostat.
Note: The shares are calculated using the expenditure weights of the items included in the HICP excluding food and energy.

Currently falling car prices, as recorded by the HICP, are explained mainly by weak domestic demand and strong competition. In the case of air transport prices, domestic and external factors are exerting a combined influence. The annual rate of change in HICP passenger air transport prices has been strongly decreasing since mid-2008, turning negative in March 2009. In the second half of 2008, this development was due mainly to the decrease in oil prices, which seems to have been passed through to consumer prices with a lag. More recently, however, the weakness in demand is likely to have played an important role, affecting, in particular, holiday-related services prices, in a very competitive environment.

Looking ahead, the expected developments in the drivers of inflation in the HICP excluding food and energy would suggest that the slight downward path in this measure will continue, with its extent and duration depending crucially on the timing and strength of the recovery. Indeed, in the current environment, downward pressures on inflation from domestic factors should remain. In particular, in the context of deteriorating labour markets, subdued wage developments should reduce cost pressures. In the light of an expected increase in overall HICP inflation, driven by strong base effects, this suggests that the gap between overall HICP inflation and HICP inflation excluding food and energy is likely to close in the near future.

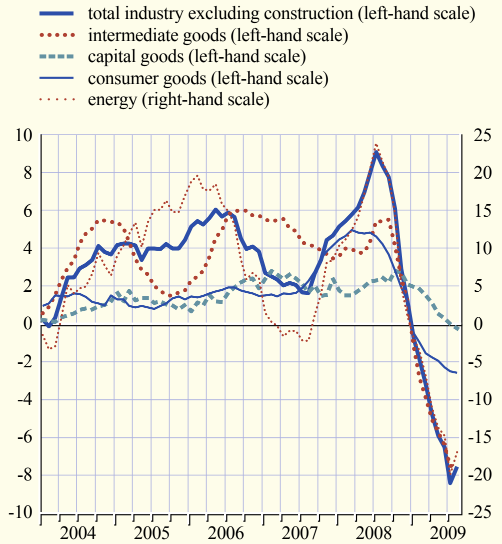
3.2 INDUSTRIAL PRODUCER PRICES

Supply chain price pressures remain very subdued. However, the annual rate of change in industrial producer prices (excluding construction) rose in August to -7.5%, from -8.4% in July. This development was largely driven by the energy component on account of positive base effects and increased energy prices in August. As a result, the annual rate of change in the energy component rose to -16.9% in August, from -19.9% in July. Excluding energy (and construction), annual producer price inflation decreased slightly further to -4.2% in August, compared with -4.1% in the previous month, with sub-components presenting a mixed picture. The annual rate of change in intermediate goods prices increased slightly to -7.4% in August, from -7.5% in July, owing to higher industrial raw materials prices. Conversely, at the latter stages of the production chain, the annual rates of change in capital goods and consumer goods prices declined further in August to -0.2% and -2.6% respectively (see Chart 21).

Survey data on the price-setting behaviour of firms over recent months also indicates that downward price pressures are moderating (see Chart 22). With regard to the Purchasing Managers' Index, the indices for input prices and prices charged in the manufacturing sector increased in September, signalling an easing in downward price pressures. Conversely, for the services sector, the indices declined somewhat compared with the previous month, possibly reflecting increased competition. The indices for both sectors signal downward pressures on prices compared with the previous month, as they remain below 50.

Chart 21 Breakdown of industrial producer prices

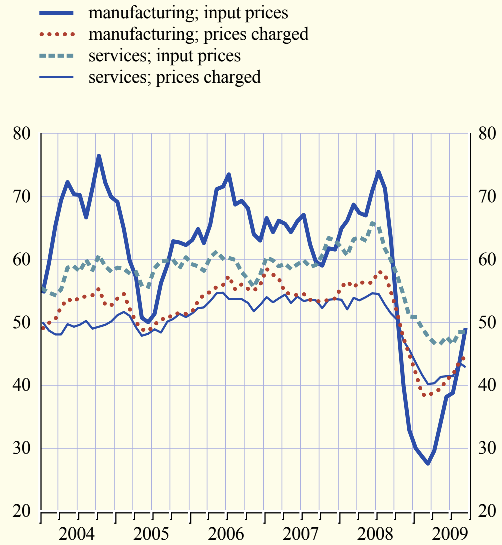
(annual percentage changes; monthly data)



Sources: Eurostat and ECB calculations.

Chart 22 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.

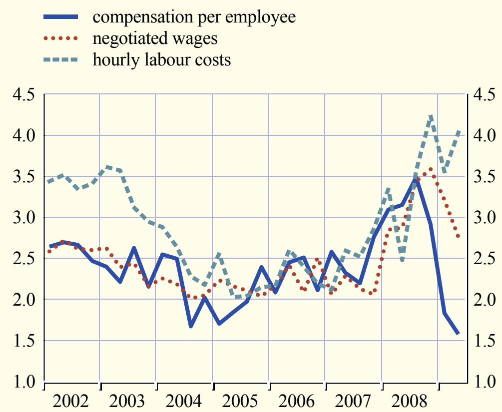
3.3 LABOUR COST INDICATORS

Labour cost growth, which had peaked at the end of 2008, continued on the whole to decline in the second quarter of 2009, reflecting both lower wage growth and fewer hours worked. Developments in these two variables have caused some differences in the behaviour of the annual rates of growth in negotiated wages, compensation per employee and hourly labour costs (see Chart 23 and Table 5).

The annual rate of growth in negotiated wages in the euro area dropped from 3.2% in the first quarter of 2009 to 2.8% in the second quarter. This fall is likely to have reflected workers' reduced bargaining power as a consequence of the sharp downturn in activity, the increase in unemployment and the steep fall in inflation. As negotiated wages capture agreed wage increases through collective agreements, this indicator tends to react to changes in economic conditions with a lag. Indeed, the annual rate of growth in negotiated wages in the second quarter is higher than that registered in any other quarter between 1997 and 2007. Available information signals that the annual rate of growth in negotiated wages may have slowed further at the beginning of the third quarter of 2009.

Chart 23 Selected labour cost indicators

(annual percentage changes; quarterly data)



Sources: Eurostat, national data and ECB calculations.

Table 5 Labour cost indicators

(annual percentage changes, unless otherwise indicated)

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

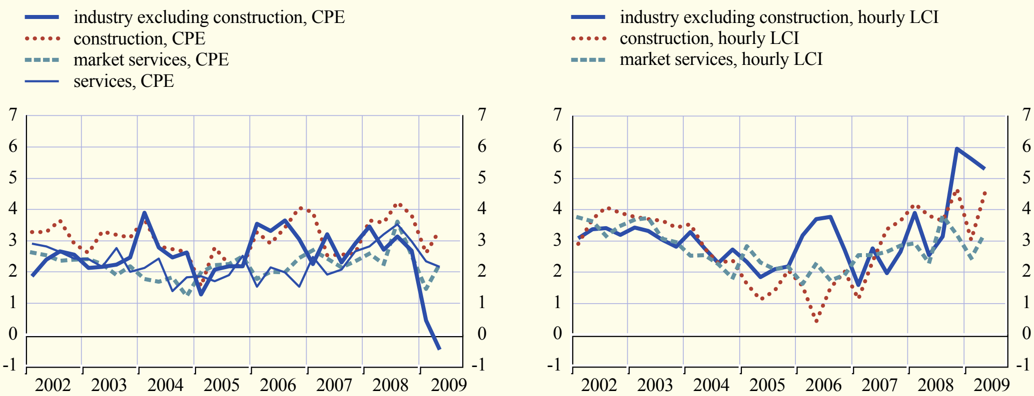
Sources: Eurostat, national data and ECB calculations.

The annual growth rate of compensation per employee declined further to 1.6% in the second quarter of 2009, from 1.8% in the first quarter. This deceleration was broad based in the euro area. The further moderation in the annual growth rate of this indicator reflected lower wage growth, shorter working hours and cuts in flexible pay elements. At 1.6%, euro area compensation per employee grew in the second quarter of the year at its lowest annual rate since the beginning of monetary union and was about 1 percentage point below its average since 1999. The sectoral decomposition indicates that the slowdown in the growth of compensation per employee in the second quarter of 2009 was mostly driven by developments in industry (excluding construction) and non-market services. In industry, the annual rate of change in compensation per employee became negative, while in market services the annual rate of growth in compensation per employee increased after falling to a record low in the first quarter (see Chart 24).

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

Chart 24 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".

decrease in remuneration.[1] Owing to the fact that the industrial sector is most strongly affected by such adjustment measures, in the second quarter of 2009 hourly labour costs increased more in year-on-year terms in this sector – by 5.3%, compared with 4.5% in the construction sector and 3.2% in the services sector. Moreover, the fact that Easter fell in the second quarter in 2009 (as opposed to the first quarter in 2008) also implied a reduction in hours worked in year-on-year terms, which boosted hourly labour costs in the second quarter of 2009.

Annual productivity in terms of output per employee contracted less in the second quarter of 2009 than in the first quarter – by 3.1%, compared with 3.7%. This smaller fall in productivity, combined with the slowdown in the annual rate of growth in compensation per employee, helped to ease somewhat the annual growth in unit labour costs to 4.8% in the second quarter of 2009, from 5.8% in the first quarter. Considering that its average level since the start of monetary union is 1.8%, annual unit labour cost growth remains, nevertheless, very high.

3.4 THE OUTLOOK FOR INFLATION

Over the short term, the outlook for annual HICP inflation will continue to be shaped mainly by base effects relating to energy price movements in 2008. Also owing to base effects, annual inflation rates are projected to turn positive in the coming months. Looking further ahead, inflation is expected to remain in positive territory, with overall price and cost developments remaining subdued on account of ongoing sluggish demand in the euro area and elsewhere.

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

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

4 OUTPUT, DEMAND AND THE LABOUR MARKET

Following the strong negative growth rates observed around the turn of the year, economic activity in the euro area declined only slightly in the second quarter of 2009. Available survey indicators continue to signal an ongoing stabilisation of economic activity. In particular, the euro area should benefit from a recovery in exports, the significant macroeconomic stimulus under way and the measures taken to restore the functioning of the financial system. In addition, following the substantial negative contributions in the first half of 2009, the inventory cycle is expected to contribute positively to real GDP growth in the second half of the year. Overall, the recovery is expected to remain rather uneven. It will be supported in the short term by a number of temporary factors, but is likely to be affected over the medium term by the process of ongoing balance sheet correction in the financial and non-financial sectors of the economy, both inside and outside the euro area. The risks to this outlook remain broadly balanced. However, uncertainty remains high and the persistent volatility in incoming data warrants a cautious interpretation of available information.

4.1 REAL GDP AND DEMAND COMPONENTS

The pace of the decline in euro area activity slowed markedly in the second quarter of 2009. According to Eurostat's second estimate, released on 7 October, euro area real GDP contracted by 0.2% (quarter on quarter) in the second quarter of 2009, after a decline of 2.5% in the first quarter of 2009 (see Chart 25).

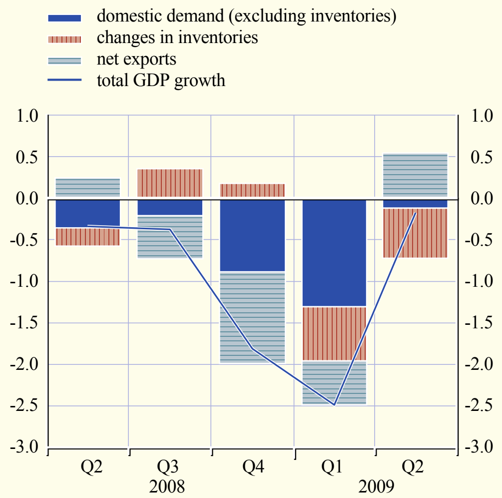
Eurostat's second estimate confirmed that the fall in second quarter real GDP was driven by a large negative contribution from inventories and a slight negative contribution from domestic demand, which were largely offset by a positive contribution from net trade. The second quarter release marks the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

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

Survey-based indicators of private consumption continue to signal an improvement in consumer sentiment. In fact, euro area consumer confidence continued to increase in September, rising for the sixth consecutive month (see Chart 26). Nonetheless, confidence still remained at a level below its long-term average in the third quarter as a whole.

Chart 25 Real GDP growth and contributions

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



Sources: Eurostat and ECB calculations.

As regards quantitative data on household spending, recent dynamics in retail trade point to a bottoming-out of the downward trend observed since mid-2008. Retail sales (including sales of fuels) contracted by 0.2% (month on month) in August, following a decline of the same magnitude in the previous month.

The introduction of government-sponsored subsidies to encourage consumers to scrap old cars and buy new ones provided relatively strong support for household spending in the second quarter of 2009. Monthly data for July and August suggest that the subsidies have continued to buttress demand. Against this background, Box 4 analyses the impact that car purchase subsidies have on overall activity.

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

Box 4

THE EFFECTS OF VEHICLE SCRAPPING SCHEMES ACROSS EURO AREA COUNTRIES

In recent months, fiscal policies have focused on short-term measures to contain the impact that the financial market turmoil has had on the real economy. Specific vehicle scrapping schemes have been implemented in many euro area countries in order to support production in the automotive industry. This box presents an overview of the measures taken in various euro area countries and discusses their potential economic impact.

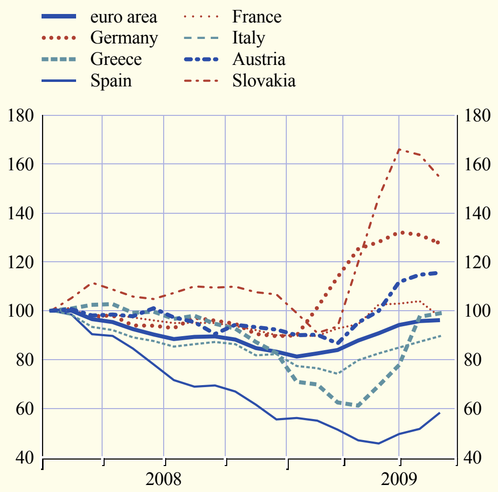
The automotive industry represents a considerable part of the euro area economy, featuring strong interlinkages with other important industries along the value chain. Having been exposed to a weakening in demand, in particular for commercial vehicles, since the beginning of 2008, it has been among those hardest hit by the financial turmoil and the severe economic downturn. Across the euro area, 11 countries have so far implemented or are about to implement vehicle scrapping schemes to soften the impact of the downturn.[1] The first such schemes were implemented in December 2008, and most schemes are planned to last until the end of 2009, or in a few cases until September 2010. Financial support to consumers is typically conditional on the scrapping of old cars and/or the purchase of new or nearly new vehicles, which are generally less harmful to the environment. The budgetary cost of these car scrapping schemes is expected to amount to less than 0.1% of GDP in the euro area as a whole in 2009-10.

The measures appear to have been successful insofar as they have supported short-term demand for new cars. As can be seen from Chart A, new car registrations in the euro area have risen markedly during the course of 2009, rebounding from a decline in 2008. New car registrations rose most strongly in Germany, Austria and Slovakia during the first eight months of 2009, reflecting relatively strong incentives in these countries. The upward impact of these fiscal stimulus measures on demand for new cars has not been strong enough, however, to compensate for the decline in overall demand for cars in the euro area, resulting in particular

1 For detailed information, see: ACEA (European Automobile Manufacturers' Association), "Overview of vehicle scrapping schemes in the EU", 26 August 2009, http://www.acea.be/images/uploads/files/20090826_Fleet_renewal_schemes.pdf.

Chart A New passenger car registrations in selected euro area countries

(indices of three-month moving averages; January 2008=100; seasonally and working day-adjusted)



Sources: ACEA/A.A.A. and ECB calculations.
Note: The latest data are for August 2009.

from declining foreign demand for new cars. The output of manufacturers of motor vehicles, trailers and semi-trailers continued to decline sharply during the first half of 2009, and in the euro area was down by 31.1% year on year in the second quarter of 2009. In this context, it should be noted that part of the fiscal stimulus has not been effective insofar as some households would have needed to replace an old car even in the absence of the premium and have therefore realised windfall profits.

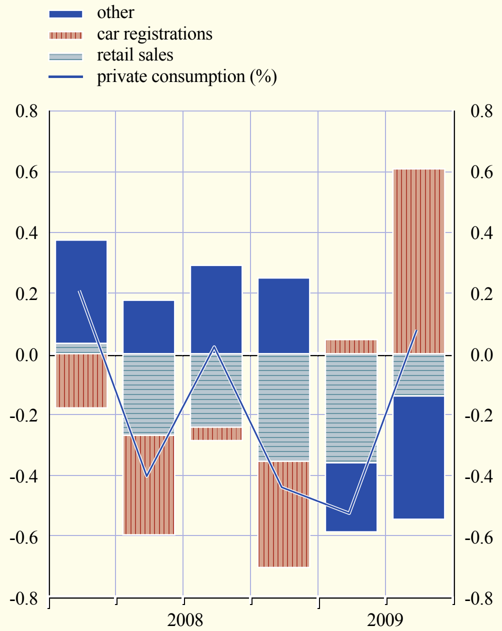
At the macroeconomic level, there is some evidence that rising car registrations had an upward impact on private consumption in the first half of 2009 in the euro area as a whole. The effect has been pronounced in a number of countries which implemented such schemes at a relatively early stage, in particular Germany, France, Italy and Austria. Some upward impact is expected to be seen in the second half of the year in countries which have implemented or upgraded such schemes more recently, such as Greece, Spain and the Netherlands. Given the high import share of car demand and the fact that the car scrapping schemes have been designed in such a way as to avoid discriminating against foreign car producers, it can also be expected that rising car registrations in individual countries will have led to rising car imports from other countries. Evidence of such spillover effects has been reported for Germany, where car imports surged by 11.5% between January and May 2009, reflecting in particular imports of relatively small and less expensive cars from France, Italy, Slovakia and Romania.[2] Altogether, the short-term impact on euro area real GDP growth in the first half of 2009 is likely to have been positive, albeit relatively small.

Indeed, the vehicle scrapping schemes also have some immediate and future adverse effects on activity, which need to be taken into account when assessing the overall impact of these measures. First, demand for other major purchases (such as new furniture, but also car repairs) is being dampened owing to both the direct impact of car purchases on households' budgets and the distortionary impact on relative prices. To the extent that new car purchases have crowded out other major purchases, the impact of the measures on private consumption and overall economic activity is less than the direct impact on new car sales. The importance of such a crowding-out effect can be seen from Chart B, which shows quarterly real private consumption growth and the contributions from retail sales (except sales of motor vehicles and motorcycles), car sales (as measured by new car registrations) and other expenditure. In the first half of 2009 it appears that the positive contribution from car sales was to a large extent compensated for by a corresponding negative contribution from other purchases.[3]

2 See Destatis, "Erste Bilanz nach Einführung der Umweltprämie", Pressemitteilung No 302, 17 August 2009.
3 An important caveat to such calculations is that the car scrapping schemes appear to have changed the structure of car sales towards smaller and cheaper cars.

Chart B Euro area private consumption and its main components

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



Sources: Eurostat and ECB calculations.

Second, a negative impact on demand for new cars can be expected once the measures have been phased out. The car scrapping schemes lower the price of current as opposed to future car purchases and thereby lead to a frontloading of private car purchases. The more car purchases have been brought forward into 2009 as a result of the measures, the stronger this unwinding will be. In surveys for Germany, around half of the respondents report that they have brought forward car purchases into 2009 owing to the premium. In such a case, a substantial weakening of car demand might be expected in early 2010.[4] To the extent that the vehicle scrapping premium has lowered the average age of the car fleet, an adverse effect on new car demand will also prevail in the medium term. In addition, if private households reduced their savings or increased their borrowing to finance their new car purchases, a negative impact on future overall private consumption growth can be expected to the extent that private households need to reduce their borrowing and increase savings again.

Finally, from a more general policy perspective, it should be borne in mind that fiscal measures that benefit a specific industry cause relative price distortions which may prevent necessary structural adjustments, lead to increased pressures from lobbying groups to introduce additional subsidies and distort the level playing field for international competition. Moreover, the early destruction of cars that are still in working order as a result of fiscal incentives to private households reduces the economic wealth of an economy.

All in all, the vehicle scrapping schemes in euro area countries appear to have provided significant support to car production in the first half of 2009 and are expected to continue to do so in the second half of the year (albeit the largest impact on quarterly growth rates may have been seen in the second quarter). However, the upward impact on overall euro area activity in 2009 is likely to remain rather limited and may turn negative in 2010. In general, given their distortionary effects, such measures should be implemented with caution, as they may hamper the efficiency of the functioning of a free market economy and may delay necessary structural change, thereby undermining overall income and employment prospects in the longer term.

4 See Rheinisch-Westfälisches Institut für Wirtschaftsforschung, "Die Konjunktur im Inland", *Konjunkturbericht 2009-2*, September 2009, pp. 51-53.

In line with the pattern observed in previous periods of economic recession, gross fixed capital formation has been one of the main drivers of the current slowdown in economic activity. In the second quarter of 2009 gross fixed capital formation declined by 1.5% (quarter on quarter). The decline was, however, much less pronounced than those seen in the fourth quarter of 2008 and the first quarter of 2009, when investment dropped by 3.5% and 5.4% respectively. Eurostat's second estimate confirmed that non-construction investment (mainly assets intended for use in the production of goods and services) accounted for the bulk of the drop in aggregate investment, while the fall in construction investment was less pronounced.

Investment growth is projected to remain in negative territory in the second half of 2009. With subdued final demand, developments in activity are expected to play a neutral role in investment decisions. At the same time, with profit developments projected to continue to decline, external financing needs will probably exert downward pressure on investment. On the positive side, the decline in the real cost of financing over the past few quarters is expected to be increasingly supportive for investment.

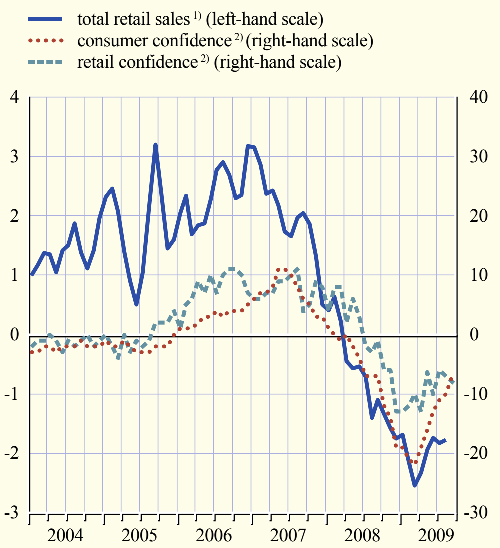
4.2 OUTPUT, SUPPLY AND LABOUR MARKET DEVELOPMENTS

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

Monthly indicators suggest that activity stabilised somewhat in the third quarter of 2009, while euro area industrial production (excluding construction) fell by 0.3% (month on month) in July (see Chart 27). When monthly volatility is averaged out, it appears that production has stabilised in recent months. It is important to note that indicators of short-term developments – for example the monthly rates of change in

Chart 26 Retail sales and confidence in the retail trade and household sectors

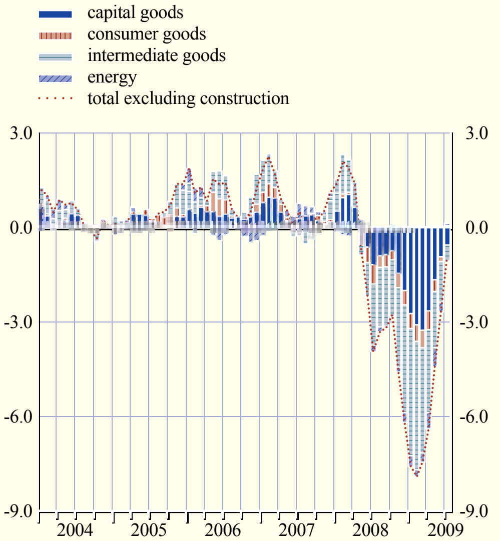
(monthly data)



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.

Chart 27 Industrial production growth and contributions

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



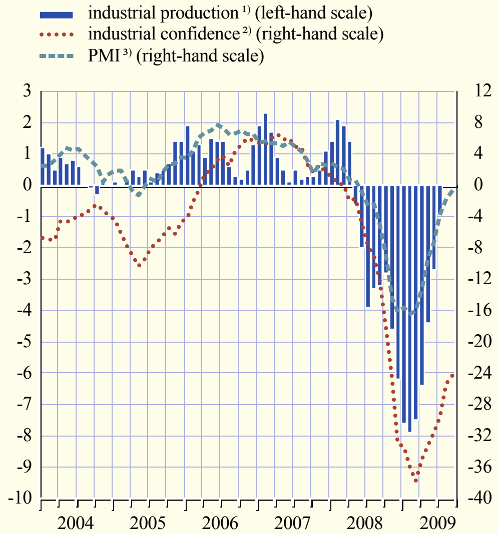
Sources: Eurostat and ECB calculations.
Note: Data shown are calculated as three-month moving averages against the corresponding average three months earlier.

seasonally adjusted series, such as industrial production – should currently be interpreted even more cautiously than in calmer economic conditions.

Business surveys also point towards an ongoing improvement in industrial activity, albeit from a low level (see Chart 28). The Purchasing Managers' Index (PMI) for the manufacturing sector continued to improve in September, reaching a level close to 50 (a value above 50 indicating an increase in production and a value below 50 indicating that production is contracting). The increase in September reflects improvements across all components, with the exception of the employment component, which remained unchanged at a low level. Other business surveys, such as the European Commission Business Surveys, generally confirm the PMI data.

Chart 28 Industrial production, industrial confidence and the PMI

(monthly data; seasonally adjusted)



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

LABOUR MARKET

Conditions in euro area labour markets have continued to deteriorate in recent months. Eurostat's second estimate confirmed that euro area employment decreased by 0.5% (quarter on quarter) in the second quarter of 2009, marking the fourth consecutive quarterly decline (see Table 6). The contraction in employment in the second quarter largely emanated from the industrial sector, whereas employment in the services sector remained broadly unchanged.

Table 6 Employment growth

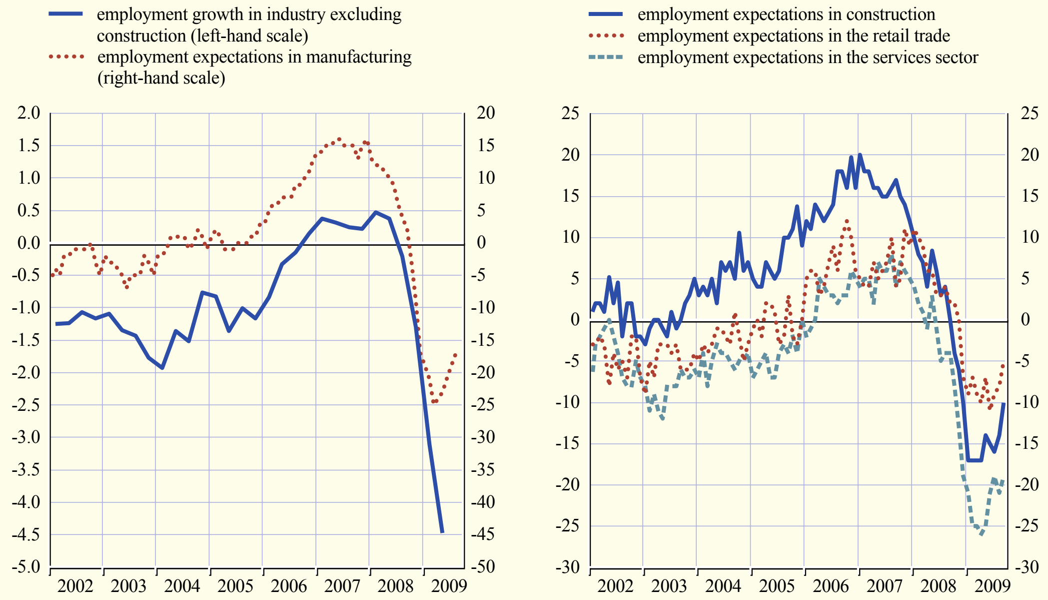
(percentage changes compared with the previous period; seasonally adjusted)

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

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

Chart 29 Employment growth and employment expectations

(annual percentage changes; percentage balances; seasonally adjusted)



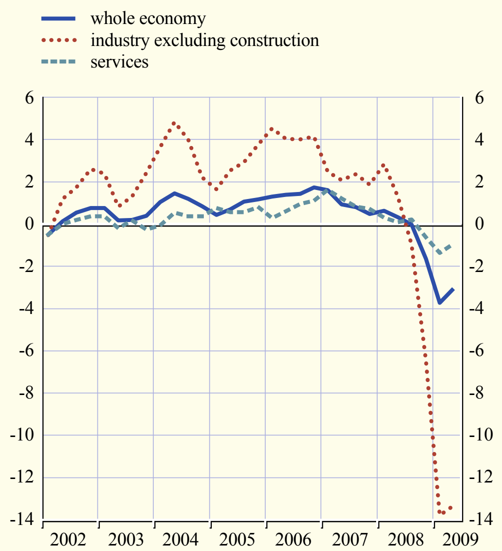
Sources: Eurostat and European Commission Business and Consumer Surveys.
Note: Percentage balances are mean-adjusted.

Business surveys point to a further deterioration in employment in the third quarter of 2009 (see Chart 29). In September employment intentions reported in the PMI survey remained at very low levels for both the industrial and the services sectors. The latest European Commission surveys on employment intentions also suggest a subdued outlook for employment.

As a result of the contraction in economic activity and relatively resilient employment growth over the past 12 months, labour productivity (in terms of output per employee) continued to contract in the second quarter of 2009, falling by 3.1% year on year (see Chart 30). The industrial sector accounted for the bulk of the decline in labour productivity, while the fall in services sector productivity was relatively modest. Short-term dynamics suggest that euro area labour productivity improved in the second quarter, mainly owing

Chart 30 Labour productivity

(annual percentage changes)



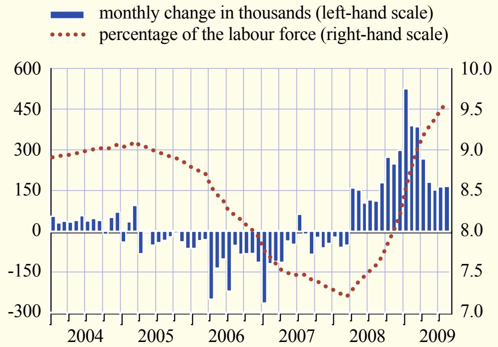
Sources: Eurostat and ECB calculations.

to the fact that the economy has stabilised. Looking ahead, productivity is expected to recover gradually in the latter part of 2009, driven by a combination of a further contraction in employment and a gradual strengthening in economic activity.

The unemployment rate in the euro area rose to 9.6% in August (see Chart 31), an increase of 0.1 percentage point compared with the previous month. Euro area unemployment currently stands at its highest level since early 1999. For a more detailed analysis of the links between changes in output and unemployment in the euro area since the start of Economic and Monetary Union, see Box 5.

Chart 31 Unemployment

(monthly data; seasonally adjusted)



Source: Eurostat.

Box 5

LINKS BETWEEN OUTPUT AND UNEMPLOYMENT IN THE EURO AREA

Euro area unemployment exhibited a downward trend from the introduction of the euro until spring 2008, reaching a 25-year low of 7.2% in March 2008. With the onset of the financial turmoil and the associated sharp economic downturn, unemployment began to increase markedly. In August 2009 the euro area unemployment rate stood at 9.6% – the highest rate recorded in a decade. This box looks at the relationship between changes in output and unemployment in the euro area since the introduction of the euro and examines the different experiences of the euro area countries.

The relationship between contemporaneous changes in economic growth and unemployment is widely recorded in the economic literature and is often referred to as "Okun's Law". More of an empirical "rule of thumb" than a relationship grounded in theory, Okun's Law suggests that a 2-3% decline in output is associated with a 1 percentage point increase in the aggregate unemployment rate.[1]

Developments at the euro area level

Chart A plots year-on-year changes in the euro area unemployment rate against contemporaneous annual percentage changes in GDP, on the basis of quarterly data, from the launch of EMU in 1999 to the second quarter of 2009. Focusing on the period up until the third quarter of 2008, the data suggest that a 1% increase (or, conversely, a 1% fall) in euro area GDP has been associated with a contemporaneous 0.4 percentage point decline (or, respectively,

1 Okun suggests a relationship of -0.3 between changes in GDP and unemployment for the United States over the period 1948-60 on the basis of quarterly data. See A.M. Okun (1962), "Potential GNP: Its Measurement and Significance", American Statistical Association, *Proceedings of the Business and Economic Statistics Section*, pp. 98-104.

a 0.4 percentage point increase) in the euro area unemployment rate.[2] This can be seen in the bold trend line in Chart A estimated over this period. The estimated relationship between unemployment and GDP developments would be considerably influenced by including the last three observations, which cover the period during which the downturn was most severe. This would lower the estimated coefficient to 0.3 (as shown by the dotted line in Chart A).

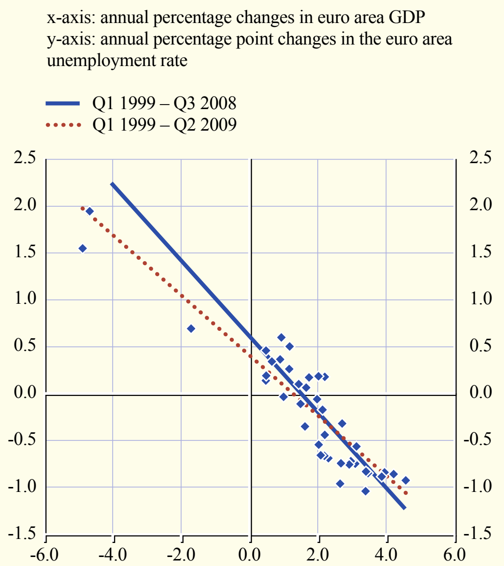
As a consequence of the recent economic downturn, between the second quarter of 2008 and the second quarter of 2009 euro area GDP contracted by around 4.8%, while unemployment rose by 1.9 percentage points. This in part reflects the measures taken in several countries to reduce working hours per employee, although there are considerable differences across the euro area countries.

Developments at the country level

Chart B shows year-on-year percentage point increases in unemployment rates and contemporaneous annual percentage changes in GDP for the euro area as a whole and for the member countries from the second quarter of 2008 to the second quarter of 2009. While Chart B should be interpreted with caution – not least given differences in the speed of adjustment in unemployment across the euro area countries – national labour markets in the euro area appear to have reacted rather differently to the recent downturn. Several euro area economies appear to have experienced relatively modest increases in unemployment despite relatively large contractions in GDP – most notably Germany, Italy and the Netherlands. Others, by contrast, have clearly experienced disproportionately large increases in unemployment rates compared with the euro area average – most notably Spain and Ireland. In relation to the size of

Chart A The relationship between changes in output and unemployment in the euro area since the introduction of the euro

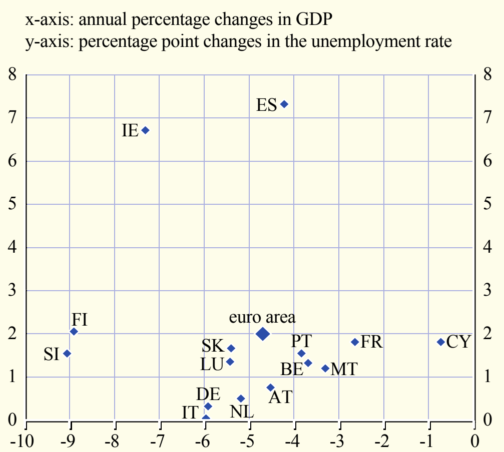
(annual percentage changes; percentage points; quarterly data)



Sources: Eurostat and ECB calculations.

Chart B Output losses and increases in unemployment from the second quarter of 2008 to the second quarter of 2009

(percentage points; percentage changes)



Sources: Eurostat and ECB calculations.
Notes: Data for Greece are not available. Data for Luxembourg relate to the period from the first quarter of 2008 to the first quarter of 2009.

2 A simple ordinary least squares (OLS) regression quantifies the relationship ΔU = -0.40 ΔGDP (-10.4) + 0.60 (6.4) where ΔU represents the absolute annual percentage point change in the harmonised euro area unemployment rate and ΔGDP measures the annual percentage change in euro area GDP; t-statistics are given in parentheses; R^2 = 0.75 from 39 observations over the period from the first quarter of 1999 to the third quarter of 2008.

their respective GDP contractions, Cyprus and France have also experienced relatively large increases in unemployment over the period.

There can be many reasons for the diversity observed across countries. Differences in labour market policies and institutions across euro area countries are likely to affect the speed at which labour markets adjust. Varying degrees of employment protection legislation and differences in coverage across countries (i.e. whether such legislation is extended to all workers, or excludes certain groups, such as young workers), variations in the shares of permanent and temporary contracts, as well as differences in policy initiatives designed to deal with temporary output fluctuations (state-subsidised short-time working schemes, social security exemptions for employers, etc.), undoubtedly influence labour market adjustment across countries.[3] Similarly, differences between wage-setting institutions, which influence the rate at which wages can adjust in the face of output shocks, provide further scope for variation in labour market developments. Moreover, evidence suggests that where such institutions reduce labour market flexibility, there may be more persistent effects on unemployment.[4]

Policy-makers in a number of euro area countries have devoted considerable efforts to supporting employment over the course of the recent downturn, making use of a variety of short-term working arrangements. To the extent that such measures hinder the reallocation of workers from less to more productive sectors, or discourage the necessary restructuring of euro area enterprises in the face of new economic challenges, the prolonged use of such schemes may harm the euro area's productivity growth and international competitiveness in the longer term. Therefore, renewed efforts towards further structural reforms in euro area labour markets would help to boost competitiveness and thus improve the longer-term prospects for euro area employment growth. These efforts include: further reforms of employment protection legislation once the economy returns to a steady recovery path, so as to overcome the segmentation of labour markets and aid the sectoral reallocation of workers; reforms of tax and benefit systems, so as to improve incentives to work; and further efforts to enhance the flexibility of wage-setting arrangements.

3 See also the box entitled "Labour market adjustments during the current contraction of economic activity" in the June 2009 issue of the Monthly Bulletin.
4 See O. Blanchard and J. Wolfers (2000), "The role of shocks and institutions in the rise of European unemployment: the aggregate evidence", Royal Economic Society, *Economic Journal*, Vol. 100, pp. C1-33.

4.3 THE OUTLOOK FOR ECONOMIC ACTIVITY

Following the strong negative growth rates observed around the turn of the year, according to Eurostat's second estimate economic activity in the euro area declined only slightly in the second quarter of 2009, contracting by 0.2% compared with the previous quarter. Available survey indicators continue to signal an ongoing stabilisation of economic activity. In particular, the euro area should benefit from a recovery in exports, the significant macroeconomic stimulus under way and the measures taken to restore the functioning of the financial system. In addition, following the substantial negative contributions in the first half of 2009, the inventory cycle is expected to contribute positively to real GDP growth in the second half of the year. Overall, the recovery is expected to remain rather uneven. It will be supported in the short term by a number of temporary factors, but is likely to be affected over the medium term by the process of ongoing balance sheet correction in the financial and non-financial sectors of the economy, both inside and outside the euro area.

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

5 EXCHANGE RATE AND BALANCE OF PAYMENTS DEVELOPMENTS

5.1 EXCHANGE RATES

Following a period of stabilisation in the summer of 2009, the euro exchange rate strengthened in nominal effective terms in September, mainly as a result of the appreciation of the euro vis-à-vis the pound sterling and the US dollar. This was accompanied by a further decline in exchange rate volatility against a large set of currencies.

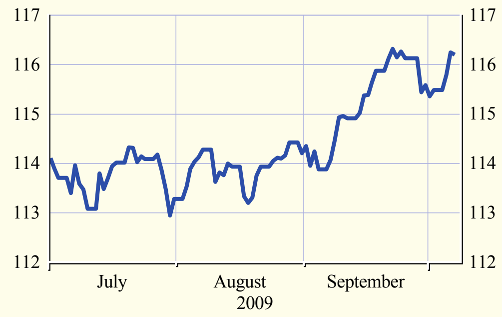
EFFECTIVE EXCHANGE RATE OF THE EURO

Following a period of stabilisation in the summer of 2009, the nominal effective exchange rate of the euro – as measured against the currencies of 21 of the euro area's most important trading partners – appreciated in September. On 7 October it was 1.8% stronger than at the end of June and 2.8% stronger than its average 2008 level. Between the end of June and 7 October the appreciation was primarily driven by the developments in the bilateral euro rates vis-à-vis the pound sterling and the US dollar, which were only partly offset by the depreciation vis-à-vis the Japanese yen and some of the EU Member States' currencies (see Chart 32).

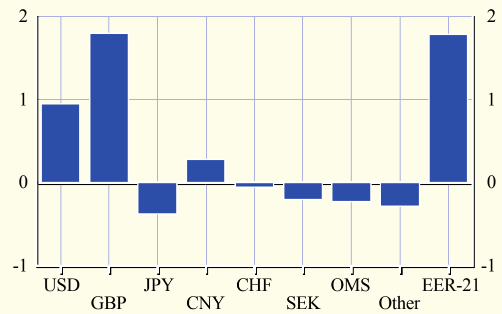
Chart 32 Euro effective exchange rate and its decomposition [1]

(daily data)

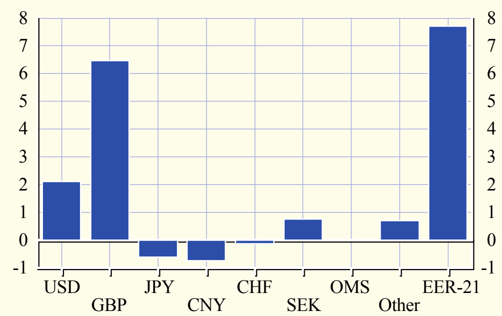
Index: Q1 1999 = 100



Contributions to EER changes [2]
From 30 June 2009 to 7 October 2009
(percentage points)



Contributions to EER changes [2]
From 3 January 2005 to 7 October 2009
(percentage points)



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 and 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.

US DOLLAR/EURO

Over the last three months the euro has moderately appreciated vis-à-vis the US dollar (see Chart 33). The US dollar also weakened against a larger set of currencies, reportedly as a result of the low US interest rates and declining global risk perceptions, which led to some unwinding of the safe-haven flows that had supported the US dollar after the onset of the global financial crisis. At the same time, the implied volatility of the USD/EUR exchange rate continued to decline, drawing close to its average level over the past ten years. On 7 October 2009 the euro was trading at USD 1.47, 4.0% higher than at the end of June 2009 and broadly in line with its 2008 average.

JAPANESE YEN/EURO

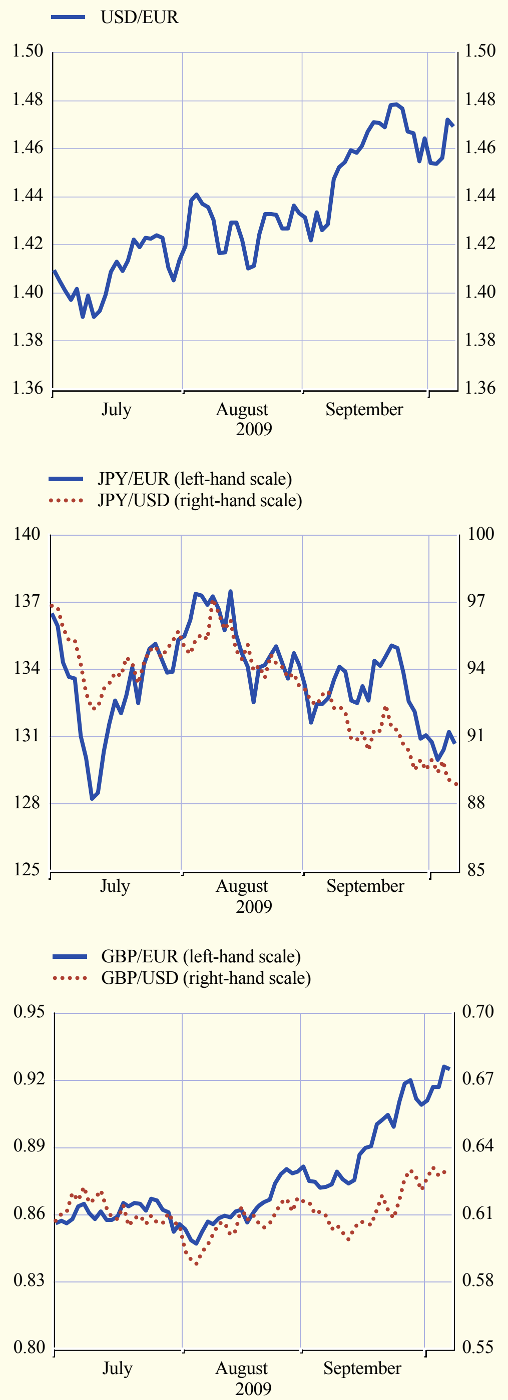
Over the last three months the euro has fluctuated against the Japanese yen in a range between JPY 128 and JPY 138, reportedly affected by changes in the overall risk perception in financial markets. More recently, market considerations regarding the Japanese authorities' stance towards the yen exchange rate might also have played a role. At the same time, the implied volatility for this currency pair continued to decrease, albeit remaining above its historical average. On 7 October the euro stood at JPY 130.7, 3.6% below the level recorded at the end of June and 14.2% weaker than its 2008 average.

EU MEMBER STATES' CURRENCIES

Between the end of June and 7 October most currencies participating in ERM II remained broadly stable against the euro and continued to trade at, or close to, their respective central rates (see Chart 34). However, the Latvian lats depreciated in September and moved towards the weak side of the ±1% unilaterally set fluctuation band, amid market concerns over the fulfilment of the conditions attached to international financial assistance.

Chart 33 Patterns in exchange rates

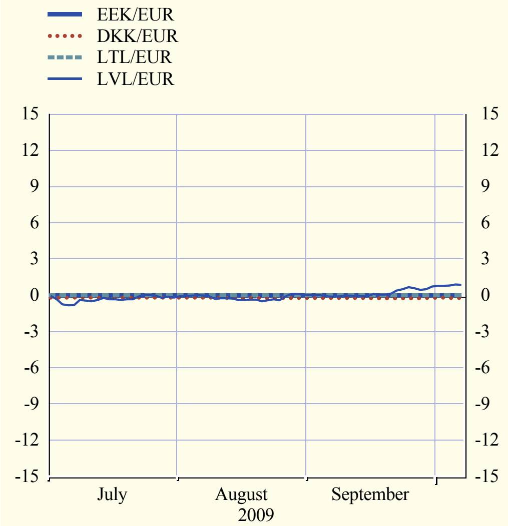
(daily data)



Source: ECB.

Chart 34 Patterns in exchange rates in ERM II

(daily data; deviation from the central rate 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.

As regards the currencies of the EU Member States not participating in ERM II, the euro has strengthened considerably against the pound sterling over the last three months. On 7 October it was 8.5% stronger than at the end of June. The recent developments in the GBP/EUR exchange rate were reportedly driven by market uncertainty over the economic outlook in the United Kingdom. Over the same period, the pace of the euro's depreciation against the Polish zloty, the Hungarian forint and the Czech koruna – which had been almost uninterrupted since early March 2009 – slowed. On 7 October the euro was respectively 5.3%, 1.3% and 0.8% weaker vis-à-vis these three currencies compared with levels at the end of June. The euro also weakened against the Swedish currency, by 4.2% over this period, apparently as a result of waning market concerns over the economic outlook in certain Baltic States.

OTHER CURRENCIES

Between the end of June and 7 October the euro weakened by 0.8% against the Swiss franc, amid some fluctuations, following market reports about alleged intervention in the foreign exchange markets by the Swiss National Bank. Over the same period the euro depreciated vis-à-vis the Australian dollar, the South Korean won and the Canadian dollar by 4.9%, 4.6% and 4.5% respectively.

5.2 BALANCE OF PAYMENTS

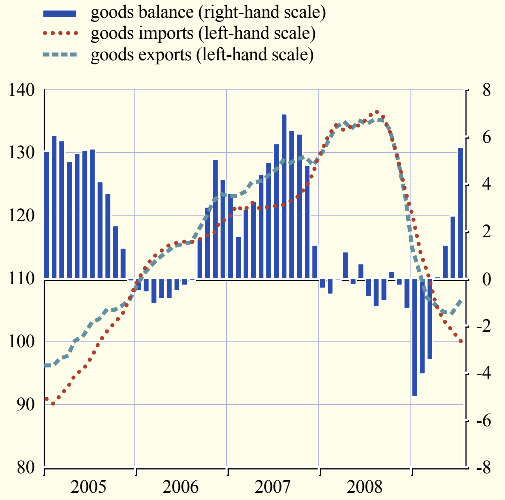
Extra-euro area trade is showing increasing signs of stabilisation, with exports outpacing imports. Consequently, the 12-month cumulated current account deficit of the euro area has narrowed over the last few months, to €108.7 billion in the year to July 2009 (1.2% of GDP). In the financial account, the repercussions of the global financial crisis have been gradually waning. The repatriation of funds has subsided and financial transactions with the rest of the world appear to point to an attenuation of investors' preferences for safe and liquid assets.

TRADE AND THE CURRENT ACCOUNT

Following the sharp contraction around the turn of the year, extra-euro area trade is showing increasing signs of stabilisation, particularly on the export side. In the three-month period to July 2009, exports of goods recorded their first – albeit rather small – increase since September 2008, rising by 0.2% compared with the previous three-month period (see Chart 35). Exports were supported by strengthening foreign demand and a gradual reactivation of international supply chains, as economic activity bottomed out in major export markets and many firms replenished their inventories in the light of the improved economic outlook. The stabilisation of imports is lagging behind that observed for exports. Goods imports continued to decline, albeit at the more moderate pace of 5.0%, in the three-month period to July 2009 compared with the previous three-month period.

Chart 35 Extra-euro area trade in goods

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

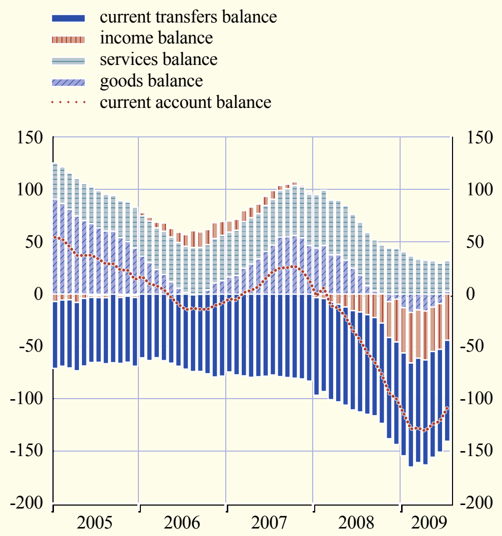


Source: ECB.

Owing to these developments in extra-euro area trade, the goods balance and, consequently, the current account improved gradually (see Chart 36). In July 2009 the 12-month cumulated goods balance shifted back into surplus for the first time since October 2008. At the same time, the cumulated current account deficit narrowed to €108.7 billion (about 1.2% of GDP), although it was still significantly higher than a year earlier.

Chart 36 Main items of the current account

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



Source: ECB.

Trade in services remained weak in the three-month period to July 2009, with imports and exports declining by 4.9% and 3.7% respectively, compared with the previous three months. This lacklustre performance mirrored the fact that, at the global level, the rebound in the services sector has recently been trailing that in the manufacturing sector. Since services – unlike goods – are not storable, trade in services has not been boosted by firms' recent re-stocking. Partly for the same reason, trade in services declined much less than merchandise trade around the turn of the year, giving rise to less favourable base effects. Moreover, certain fiscal policy measures, such as car scrapping schemes in a number of euro area countries, have boosted trade in goods more than services trade.

Turning to the other current account items, the 12-month cumulated deficit in the income account was significantly higher in July 2009 than a year earlier, as investment receipts declined by more than investment payments. Finally, the deficit in current transfers increased slightly in the year to July (see Table 7).

Available indicators suggest that the gradual rebound in euro area exports of goods will continue in the near term. Following six increases in a row, the Purchasing Managers' Index (PMI) of new export orders in the euro area manufacturing sector stabilised in September at a level just above the expansion/contraction threshold of 50 (see Chart 37). This is broadly consistent with the European Commission's survey of export order-book levels in the euro area, which improved in September, albeit by less than in the previous month and from very low levels. Extra-euro area imports of goods are also expected to improve gradually, supported by strengthening final domestic demand and additional demand for imported inputs induced by higher exports.

Chart 37 Euro area PMI of new export orders

(diffusion index; monthly data)

Source: Markit.

Table 7 Main items of the euro area balance of payments

(seasonally adjusted data, unless otherwise indicated)

			Three-month moving average figures ending				12-month cumulated figures ending	
	2009 June	2009 July	2008 Oct.	2009 Jan.	2009 Apr.	2009 July	2008 July	2009 July
			EUR billions					
Current account	**-4.3**	**6.6**	**-9.1**	**-18.2**	**-9.6**	**0.7**	**-44.0**	**-108.7**
Goods balance	2.5	11.2	0.3	-5.0	0.1	5.5	18.2	2.7
Exports	104.5	108.8	133.1	114.3	105.4	105.6	1578.0	1375.2
Imports	102.0	97.6	132.8	119.3	105.3	100.1	1559.8	1372.5
Services balance	1.0	2.7	2.7	3.0	1.8	2.2	50.5	29.2
Exports	37.1	37.3	42.6	41.6	39.1	37.6	505.1	482.7
Imports	36.0	34.6	39.9	38.6	37.3	35.4	454.6	453.4
Income balance	-2.7	-1.6	-3.9	-7.1	-2.9	-0.8	-17.1	-44.0
Current transfers balance	-5.2	-5.7	-8.2	-9.2	-8.5	-6.3	-95.6	-96.6
Financial account [1]	-7.4	-34.1	29.4	32.3	33.3	-5.0	135.1	269.9
Combined net direct and portfolio investment	35.7	-17.6	62.9	-3.7	44.8	27.0	-43.2	392.8
Net direct investment	-9.2	5.3	-15.4	-25.0	-11.2	0.3	-144.2	-154.2
Net portfolio investment	44.9	-23.0	78.3	21.3	56.0	26.7	101.0	547.0
Equities	0.4	18.9	-17.0	-7.6	16.3	9.3	-16.1	2.9
Debt instruments	44.5	-41.9	95.3	29.0	39.7	17.4	117.0	544.0
Bonds and notes	53.8	-66.6	19.5	18.7	29.2	14.4	146.3	245.5
Money market instruments	-9.4	24.8	75.8	10.2	10.5	2.9	-29.3	298.5
			Percentage changes from previous period					
Goods and services								
Exports	-0.3	3.2	0.0	-11.3	-7.3	-0.8	7.1	-10.8
Imports	1.3	-4.2	-0.3	-8.5	-9.7	-5.0	8.6	-9.4
Goods								
Exports	1.1	4.1	-0.7	-14.1	-7.8	0.2	6.7	-12.9
Imports	1.4	-4.3	-1.5	-10.1	-11.7	-5.0	8.9	-12.0
Services								
Exports	-3.8	0.5	2.5	-2.4	-6.0	-3.7	8.4	-4.4
Imports	1.1	-3.9	4.0	-3.2	-3.4	-4.9	7.7	-0.3

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

FINANCIAL ACCOUNT

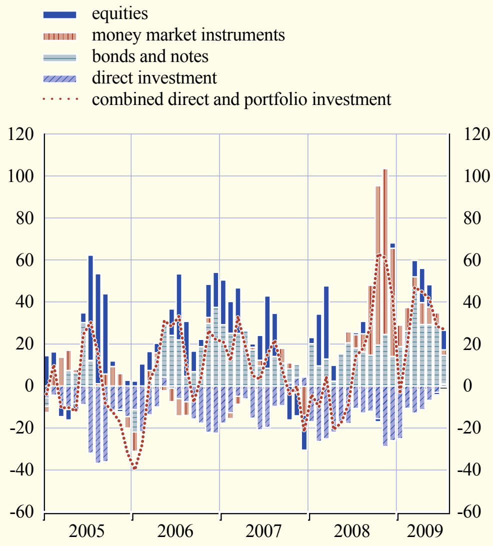
Following the intensification of the financial crisis in the autumn of 2008 the euro area witnessed significant changes in its financial account. As investors' appetite for safe and liquid assets increased, the euro area saw a sharp rise in net inflows of money market instruments (see Chart 38). This development was driven primarily by euro area residents' repatriation of funds, but also by higher purchases of euro area money market instruments by non-residents. In parallel, both residents and non-residents repatriated funds invested in equities.

Over the past few months, however, the repercussions of the global financial crisis on the financial account have gradually subsided. Safe-haven considerations and short-term, low-risk assets seem to have lost some of their appeal in the light of a more favourable global economic outlook and improved financial market conditions.

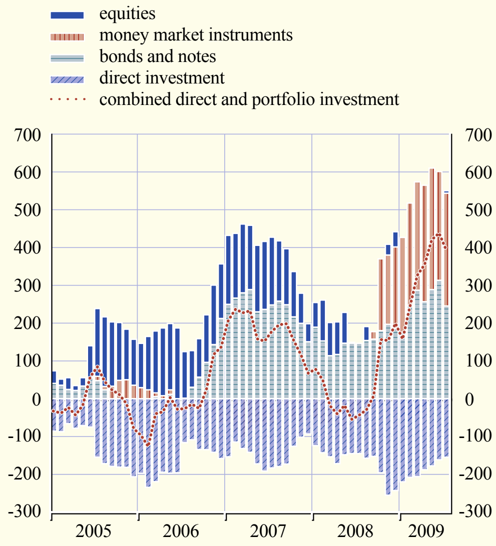
As a result, the repatriation of funds has subsided in all major components of the financial account. Furthermore, both non-residents' purchases and net inflows of euro area money market instruments have fallen markedly compared with the peak levels recorded towards the end of last

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.

year. In terms of three-month moving averages, net inflows of money market instruments amounted to €2.9 billion in July 2009, compared with €78.9 billion in November 2008. In parallel, moderate net inflows of equity securities resumed in the second quarter of 2009, after being at a virtual standstill in the three preceding quarters, possibly reflecting more favourable market expectations of euro area firms' future profits.

Unlike portfolio investment, direct investment has shown some signs of weakness lately, on both the asset side and the liability side, following a notable rebound at the beginning of the year. Since direct investment abroad by euro area residents weakened more than direct investment in the euro area by non-residents, the euro area on average recorded marginal net inflows of direct investment in the three-month period to July 2009, for the first time since December 2007.

Overall, in terms of three-month moving averages, net inflows of combined direct and portfolio investment have declined continuously since March 2009. This reduced the 12-month cumulated net inflow of combined direct and portfolio investment to €392.8 billion in July 2009. In the 12-month period to July 2008, the euro area recorded cumulated net outflows of €43.2 billion.

ARTICLES

MONETARY POLICY AND LOAN SUPPLY IN THE EURO AREA

This article examines the monetary policy effects on loan supply in the euro area. While loan developments typically hinge on a combination of factors that impact simultaneously on the demand for, and the supply of, bank loans, the focus of this article is on identifying the importance of supply-side factors for aggregate loan developments and their interaction with monetary policy. The evidence presented in this article suggests that monetary policy may affect banks' ability and willingness to supply loans, as well as the prices banks offer on their loans. The substantial reductions in key ECB interest rates and the introduction of non-standard monetary policy measures during the recent financial crisis should also be seen against the background of this evidence, taking into account the dominant position of the banking sector in the euro area financial system.

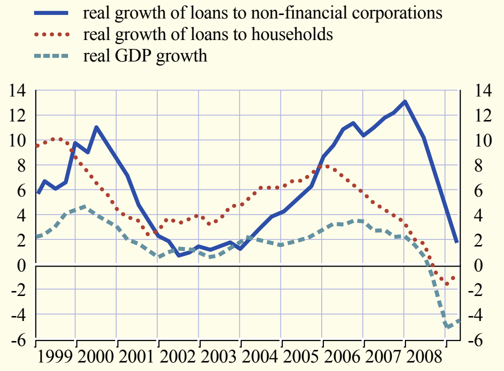
1 INTRODUCTION

In most developed economies, bank lending and, more generally, overall lending by MFIs constitute one of the most important sources of external financing for households and non-financial corporations. Bank lending is a particularly important source of financing in the euro area, where bank loans have accounted for around 85% of the total external financing of the private sector in recent years.[1] Accordingly, the continued smooth functioning of loan supply from the banking system to creditworthy borrowers is a key prerequisite for sustained economic activity, and also for the effective and smooth transmission of the monetary policy stance to the economy. As part of its monetary policy analysis, the ECB thus pays close attention to developments in bank lending and to indications of strains on bank loan supply. For this reason, the sharp decline recorded in recent quarters in the real annual growth rate of loans granted to euro area non-financial corporations and households has been monitored closely (see Chart 1). As in past episodes, the drop in the growth of loans has coincided with the sharp deterioration in economic activity. However, owing to the unprecedented shocks that have hit the financial sector during the financial crisis since mid-2007, it cannot be ruled out that a supply-induced reduction of lending has likewise contributed to amplifying the downturn in the wider economy.

Banks may reduce loan supply by raising loan rates, by lowering loan volumes, or both. Indeed, the Eurosystem's bank lending survey for the euro area provides qualitative information on the extent to which banks tighten their credit standards via price or volume-related terms and conditions (see Chart 2). On average, the tightening of credit standards since the second half of 2007 has been implemented predominantly through increases in margins. However, more stringent requirements with respect to the quantity of loans (and other non-price terms) also seem to have played a non-negligible role.

Chart 1 Real annual growth rate of loans to non-financial corporations and households, and real GDP growth

(annual percentage changes)



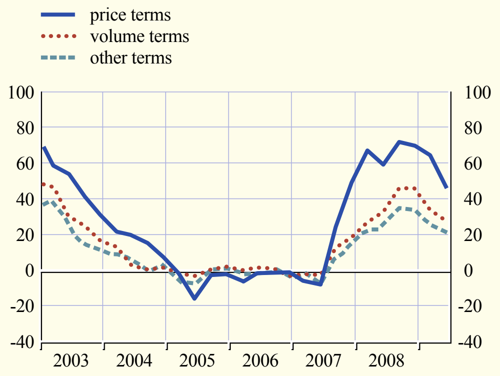
Sources: ECB and Eurostat.
Note: Deflated by the GDP deflator.

Generally, it is rather difficult to identify the supply and demand effects that underlie credit developments, especially as shifts in

1 For further details on the importance of bank financing in the euro area financial system, see the articles entitled "The role of banks in the monetary policy transmission mechanism" and "The external financing of households and non-financial corporations" in the August 2008 and April 2009 issues respectively of the Monthly Bulletin.

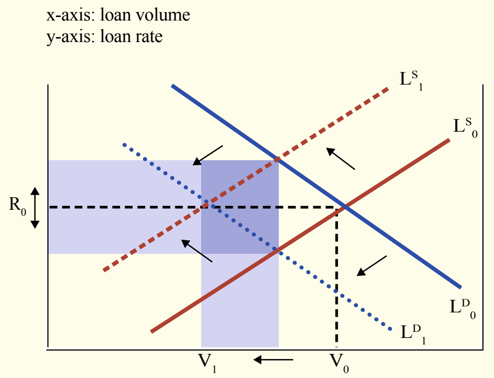
Chart 2 Changes in euro area banks' terms and conditions on loans to enterprises

(net percentages)



Source: Eurosystem bank lending survey.
Notes: "Price terms" refer to "margins on average loans" and "margins on riskier loans". "Volume terms" refer to "size of loan or credit line" and "collateral requirements". "Other terms" refer to "loan covenants", "non-interest rate charges" and "maturity". The net percentages reported for the three groups are simple averages of the net tightening in the underlying terms listed above.

Chart 3 Loan supply and demand



Note: L^S refers to the loan supply curve, whereas L^D refers to the loan demand curve.

demand and supply both have an impact on bank lending rates and credit volumes. This is illustrated in a highly stylised manner in Chart 3, which displays the effects on lending rates and the volume of loans in a situation where both supply and demand are reduced. In such a case, the two countervailing factors trigger a reduction in the credit provided to the economy; at the same time, the net effect on lending rates depends on the relative strength of the two effects. The focus of this article is on identifying and assessing the implications for loan volumes and prices from shifts in the loan supply curve (L^S).

In practice, the monitoring of the functioning of bank lending and the identification of impairments to credit supply require a detailed knowledge and continuous analysis of the financial system and loan supply decisions by financial intermediaries. In general, it can be expected that a bank's decision to fulfil the demand for loans from its customers will depend on a variety of factors. First, it will depend on the bank's ability to finance the amount of money demanded by the bank's borrowers. This will hinge on the loanable funds it has available in terms of its deposit base and access to wholesale funding sources, and on the amount of capital it can allocate to the loan, which in turn hinges on regulatory requirements and the disciplining forces of the market. Second, it will be subject to a risk-return calculation that takes into account the opportunity cost and the possible informational asymmetries between banks and their customers. This, among other things, involves weighing a number of considerations, including the bank's assessment of the probability that the loan will be paid back (which is influenced, inter alia, by the collateral values and by the firm-specific and general economic outlook), alternative investment opportunities for the bank and alternative financing sources for the potential borrower. The latter will, in turn, depend on the degree of competition in the banking sector and in the broader financial system, on the banking model of the lender (for example, on the extent to which the bank engages in long-term relationship lending), on the presence of informational frictions and on the bank's degree of risk aversion. All of these factors potentially have an impact on the bank's lending decisions in terms of the volume of loans it is inclined to extend and the price at which it is willing to do so.

Monetary policy has the potential to affect many of the elements that determine banks' lending decisions. In the economic literature, apart from its impact on bank interest rates via the "interest rate channel", the transmission of monetary policy to bank loan supply is traditionally categorised as the "credit channel" of the transmission mechanism. The latter emphasises the impact that changes in monetary policy rates may have on banks' funding and capital positions (the "narrow" credit channel), on the one hand, and on the collateral values and net worth of the banks' borrowers (the "broad" credit channel), on the other. In addition, monetary policy might influence the risk-taking behaviour of banks, and thus the credit standards that banks apply to their loans, by affecting their risk perceptions and willingness to take more risk.[2]

While monetary policy actions are likely to primarily affect the demand for bank loans through the traditional interest rate channel, it is important for the central bank to also be able to identify and monitor as precisely as possible its impact on the supply side of bank lending. From a monetary policy perspective, it is important to know whether developments in aggregate loans to the non-financial private sector are driven by changes in the demand for loans or by those in loan supply. Indeed, the tools and actions that monetary policy-makers may need to employ can differ substantially, depending on whether the central bank aims to affect loan supply, loan demand, or both. In addition, it is important to identify the underlying source of a shock to loan supply. The response of monetary policy may differ substantially if banks reduce loans (and/or tighten credit standards) because the creditworthiness of borrowers has deteriorated, or because they cannot finance themselves in the market. In the first case, a reduction in policy rates would encourage aggregate demand, so that the net worth of corporations and the willingness of banks to lend would increase over time. In the second case, providing the necessary liquidity to banks would enable them to satisfy the demand for loans of profitable firms.

Furthermore, gauging the interaction between monetary policy and loan supply becomes particularly important during crisis periods when the banking sector is under pressure and loan supply is hit by adverse shocks. In such cases, it is crucial for the central bank to have a sound knowledge of the magnitude of implications of monetary policy actions for loan supply in order to alleviate the shocks to loan supply and put banks in a position to fulfil their role as financial intermediaries for the economy. Such policy actions can range from adjustments to key policy rates to a number of so-called "non-standard" measures. The latter comprise, first, the provision of funding liquidity to banks via full-allotment liquidity operations, the widening of the related collateral framework or an extension of the maturity of liquidity operations, as well as the acquisition of bank assets or (securitised) bank debt. Second, they might extend to the direct supply of funds to the real economy via the purchase of debt issued by the private non-financial sector or by providing funds to intermediary state-sponsored banks that act as a catalyst for the extension of credit to small and medium-sized enterprises.

Against this background, this article focuses on the supply side of bank lending and initially reviews the theoretical arguments for links between monetary policy and banks' lending decisions. Second, it presents recent empirical evidence on the credit and risk-taking channels of monetary policy transmission in the euro area, building up on micro-based data and on information from the Eurosystem bank lending survey. Analogously, the impact of both the financial crisis and recent financial innovation on the transmission of monetary policy to loan supply is assessed. Finally, it offers some concluding remarks from a monetary policy perspective.

2 In the literature, this channel of the monetary policy transmission mechanism is often referred to as the "risk-taking channel"; see, for example, C. Borio and H. Zhu, "Capital regulation, risk-taking and monetary policy: A missing link in the transmission mechanism", *BIS Working Paper Series*, No 268, Bank for International Settlements, 2008.

2 THE CREDIT CHANNEL FROM A THEORETICAL PERSPECTIVE

This section reviews the theoretical mechanisms that underpin the impact of monetary policy on bank lending, thereby affecting the real economy in turn.[3]

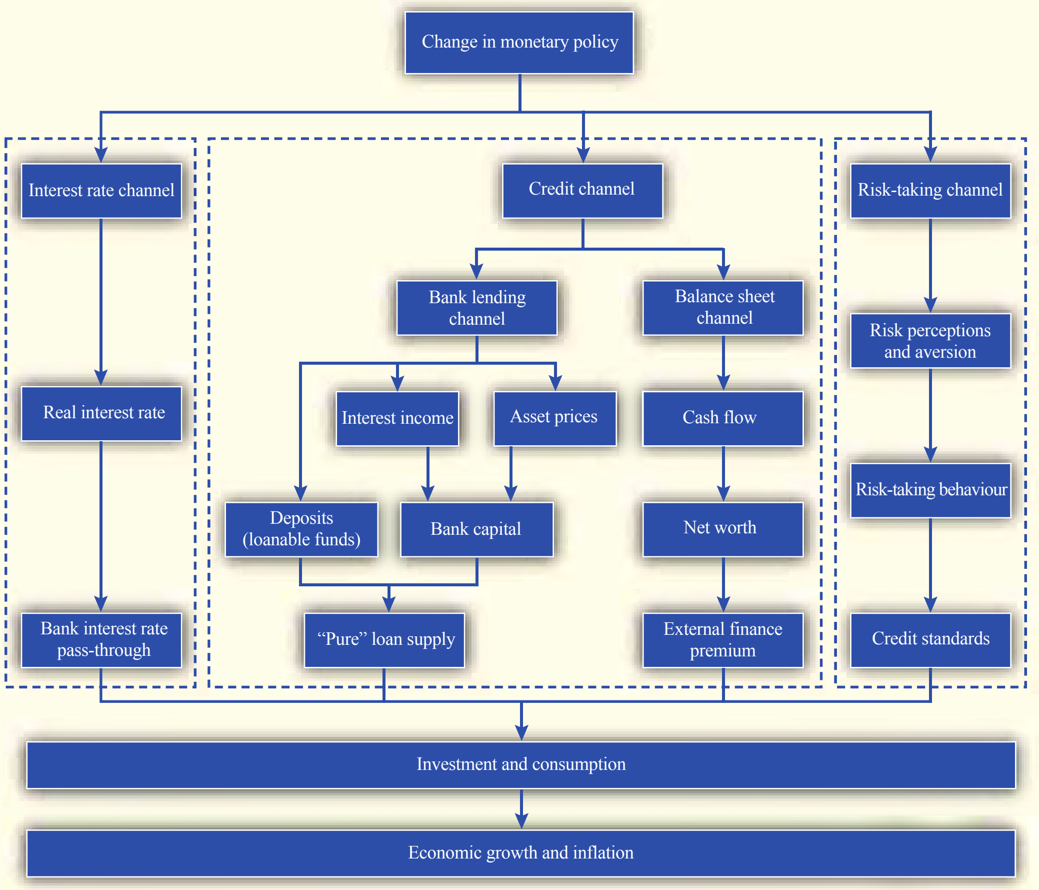
As illustrated in Chart 4, monetary policy – via banks – can affect the economy through several channels. It can have an impact on aggregate demand via the banking system as part of the traditional interest rate channel.[4] Banks determine the pass-through of policy rates to bank lending rates for firms and households.[5] A tightening of monetary policy, which could result in higher lending rates, reduces the demand for loans from firms and households, thereby

3 For a comprehensive overview, see also the article entitled "The role of banks in the monetary policy transmission mechanism" in the August 2008 issue of the Monthly Bulletin.

4 The interest rate channel works on the assumption that some prices and nominal wages are inflexible (sticky) in the short run. For recent evidence on the broad monetary policy transmission mechanism in the euro area, see, for example, J. Boivin, M.P. Giannoni and B. Mojon, "Macroeconomic dynamics in the euro area", in D. Acemoglu, K. Rogoff and M. Woodford (eds.), *NBER Macroeconomics Annual 2008*, National Bureau of Economic Research, 2008. For evidence in the early 2000s, see the studies conducted by the Eurosystem Monetary Transmission Network, which have been collected in I. Angeloni, A.N. Kashyap and B. Mojon (eds.), *Monetary policy transmission in the euro area*, Cambridge University Press, 2003.

5 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.

Chart 4 The main monetary policy transmission channels involving banks



Source: ECB.

ultimately leading to lower aggregate demand by reducing investment and consumption. This mechanism, however, is not the focus of this article, even though it is probably the most important channel of monetary policy.

Monetary policy may also influence the ability of, and incentives for, banks to supply loans through the functioning of the so-called credit channel. In a frictionless financial system, all the projects with a positive net present value would be financed, irrespective of the net worth of the borrower(s) and/or lender(s). However, frictions in financial markets, such as asymmetries of information and incompleteness of contracts, imply that – on account of, for example, moral hazard problems – lenders will not always finance projects with a positive net present value. In such cases, the net worth of the borrower(s) and/or lender(s) is of importance for loan supply, and monetary policy can affect it.[6] This, in turn, has an influence on real economic activity and inflation, especially in the euro area where banks are the key suppliers of external finance for the non-financial private sector.

The credit channel of monetary policy transmission is composed of two sub-channels (see Chart 4). In the first, the bank lending channel, a change in monetary policy rates affects the liability side of banks' balance sheets. This, in turn, triggers adjustments on the asset side through changes in the banks' loan portfolios.[7] Since banks finance themselves largely through short-term debt and deposits, a tightening of monetary policy would tend to reduce loan supply, via its negative impact on the availability of funds for banks. This effect rests on the assumption that banks are not able to perfectly replace short-term debt and deposits with funding from other sources, or that they do not have sufficient liquidity buffers.[8]

Moreover, an increase in short-term rates can increase the external finance premium for banks (i.e. the premium over the risk-free rate paid to outside investors) by potentially reducing the net worth of banks' assets and by increasing their risk burden. This would also affect loan supply.[9] In this sense, the bank lending channel includes the impact of monetary policy, as channelled through banks' capital position, also referred to as the bank capital channel.[10] By way of their impact on bank balance sheet valuations and overall bank profitability, monetary policy rates affect banks' capital position, thus inducing banks to adjust loan supply to meet targeted leverage and capital ratios, as well as regulatory capital requirements. Therefore, the effect of monetary policy on bank loan supply will depend on the liquidity and capital positions of banks, as well as on the size and the maturity structure of their liabilities.[11]

The second mechanism belonging to the credit channel of monetary policy transmission, the balance sheet channel, works through changes to the quality of borrowers (see Chart 4).

6 See B.S. Bernanke and M. Gertler, "Inside the black box: the credit channel of monetary policy transmission", *Journal of Economic Perspectives*, Vol. 9, No 4, autumn 1995, pp. 27-48; and B.S. Bernanke, "The Financial Accelerator and the Credit Channel", speech presented at the conference entitled "The Credit Channel of Monetary Policy in the Twenty-first Century", Federal Reserve Bank of Atlanta, 2007. See also J.E. Stiglitz and B. Greenwald, *Towards a New Paradigm in Monetary Economics*, Cambridge University Press, 2003.

7 See for example B.S. Bernanke and A. Blinder, "Credit, money, and aggregate demand", *American Economic Review*, 78, No 2, May 1988, pp. 901-921; D.W. Diamond and R.G. Rajan, "Money in a Theory of Banking", *American Economic Review*, 96, 2006, pp. 30-53; and J.C. Stein, "An Adverse-Selection Model of Bank Asset and Liability Management with Implications for the Transmission of Monetary Policy", *RAND Journal of Economics*, No 29, 1998, pp. 466-486.

8 See T. Adrian and H. Shin, "Money, Liquidity and Monetary Policy", *American Economic Review*, Papers and Proceedings, Vol. 99(2), 2009.

9 See Bernanke (2007), op. cit.

10 The assumption for the "bank capital" channel to work is that the market for bank equity is imperfect (in the sense that imperfect information, especially when financing conditions are more restrictive, makes it difficult for banks to raise new equity); see, for example, S. Van den Heuvel, "Does bank capital matter for monetary transmission?", *Economic Policy Review*, Federal Reserve Bank of New York, May 2002, pp. 259-265; R.P. Kishan and T.P. Opiela, "Bank capital and loan asymmetry in the transmission of monetary policy", *Journal of Banking & Finance*, No 30, 2006, pp. 259-285; and Y. Altunbas, G. de Bondt and D. Marqués, "Bank capital, bank lending, and monetary policy in the euro area", *Kredit und Kapital*, Vol. 37(4), 2004, pp. 443-464.

11 See, for example, A.N. Kashyap and J. Stein, "What do a million observations on banks say about the transmission of monetary policy?", *American Economic Review*, Vol. 90, No 3, June 2000, pp. 407-428. See also W.J. Den Haan, S. Sumner and G. Yamashiro, "Bank Loan Portfolios and the Monetary Transmission Mechanism", *Journal of Monetary Economics*, Vol. 54, 2007, pp. 904-924.

Changes in policy rates may affect borrowers' net worth via the impact on cash flows and collateral values. The external finance premium paid by borrowers depends inversely on their net worth. When borrowers have little capital to contribute to the financing of a project, the conflict of interests between the borrower and the suppliers of external funds is potentially larger, which translates into higher compensation to be paid to external investors. Moreover, borrowers' net worth is typically pro-cyclical (because profits and asset prices tend to be pro-cyclical) and, therefore, the external finance premium is counter-cyclical. This amplifies the impact of changes in short-term rates on credit availability, and thus on investment, consumption, and production – a mechanism referred to as the financial accelerator.[12] Hence, the effect of monetary policy on bank loan supply depends on the borrowers' net worth (capital ratio, liquidity ratio, size and tangible assets).[13]

The (firm) balance sheet and the bank lending channels are interrelated. A tightening of monetary policy reduces the net worth of borrowers, which, in turn, decreases the net worth of banks via an increase in the credit risk of their loan books. In addition, restrictions on bank loan supply may reduce the net worth of borrowers as a result of the higher cost of capital and/or the reduction of the credit effectively granted.

More recently, the notion of a "risk-taking" channel of monetary policy transmission has been put forward.[14] Low short-term interest rates may increase risk-taking by banks through several mechanisms. First, low levels of interest rates – policy rates and government bond yields – may increase the attractiveness of risky assets for all investors, including banks. This effect can be seen in models of portfolio optimisation in a mean-variance analysis framework, or in models including habit formation. Investors may become less risk-averse during economic expansions because their consumption increases relative to the status quo (normal levels). Less tight monetary policy conditions may decrease investors' risk aversion by supporting real economic activity.[15] Second, when interest rates are low and liquidity is abundant, financial intermediaries may "over-lend" and finance projects with sub-optimal net present values because of conflicts of interests that arise from asymmetric information, which is often pervasive in the banking industry.[16] In fact, the level of overnight rates is a key driver of liquidity for banks, since banks increase their balance sheets (leverage) when financing conditions (through short-term debt) are more favourable, and vice versa.[17] Therefore, low short-term interest

12 See B.S. Bernanke, M. Gertler and S. Gilchrist, "The financial accelerator in a quantitative business cycle framework", in J. Taylor and M. Woodford (eds.), *Handbook of Macroeconomics*, Amsterdam, 1999; J.E. Stiglitz and A. Weiss, "Credit rationing in markets with imperfect information", *American Economic Review*, Vol. 71, No 3, June 1981, pp. 393-410; and B. Holmström and J. Tirole, "Financial intermediation, loanable funds, and the real sector", *The Quarterly Journal of Economics*, Vol. 112, No 3, 1997, pp. 663-691.

13 See B.S. Bernanke, M. Gertler, and S. Gilchrist, "The Financial Accelerator and the Flight to Quality", *Review of Economics and Statistics*, 78, 1996, pp. 1-15; and A. Ashcraft and M. Campello, "Firm balance sheets and monetary policy transmission", *Journal of Monetary Economics*, Vol. 54, 2007, pp. 1515-1528.

14 See, for example, C. Borio and H. Zhu (2008), op. cit.

15 See J. Campbell and J. Cochrane, "By force of habit: a consumption-based explanation of aggregate stock market behaviour", *Journal of Political Economy*, Vol. 107, 1999, pp. 205-251; S. Manganelli and G. Wolswijk, "Market discipline, financial integration and fiscal rules – what drives spreads in the euro area government bond market?", *Working Paper Series*, No 745, ECB, 2007; and B.S. Bernanke and K.N. Kuttner, "What explains the stock market's reaction to Federal Reserve policy?", *The Journal of Finance*, Vol. 60, No 3, June 2005, pp. 1221-1257. For a discussion of the search for yield associated with low levels of interest rates, see R.G. Rajan, "Has Finance Made the World Riskier?", NBER Working Paper 11728 and paper presented at the symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, 2005.

16 See F. Allen and D. Gale, *Understanding Financial Crises*, Oxford University Press, 2007; and F. Allen and D. Gale, "Asset price bubbles and monetary policy" in M. Desai and Y. Said (eds.), *Global Governance and Financial Crises*, 2004. Without bank agency problems, banks would, in the event of having excess liquidity, give funds back to their shareholders or the central bank. See also G. Dell'Ariccia and R. Marquez, "Lending Booms and Lending Standards", *Journal of Finance*, No 61(5), 2006, pp. 2511-2546, and Diamond and Rajan (2006), op. cit.

17 See H. Shin, *Risk and liquidity*, 2008 Clarendon Lectures in Finance, Oxford University Press, forthcoming; and M. Brunnermeier, A. Crockett, C. Goodhart, A. Persaud and H. Shin, "The Fundamental Principles of Financial Regulation", *Geneva Reports on the World Economy, 11*, 2009.

rates may increase bank risk-taking through these channels.[18]

Overall, there are several theoretical mechanisms by which monetary policy may affect the supply of loans that banks are willing and able to provide to firms and households. Given that, in the euro area, banks are the key suppliers of external finance for firms and households, changes in bank loan supply may, in turn, affect economic activity. Hence, the transmission of monetary policy through the credit and risk-taking channels may potentially amplify the monetary policy implications for output and inflation that emanate from the impact on demand via the interest rate channel.

3 EMPIRICAL EVIDENCE ON THE CREDIT AND RISK-TAKING CHANNELS IN THE EURO AREA

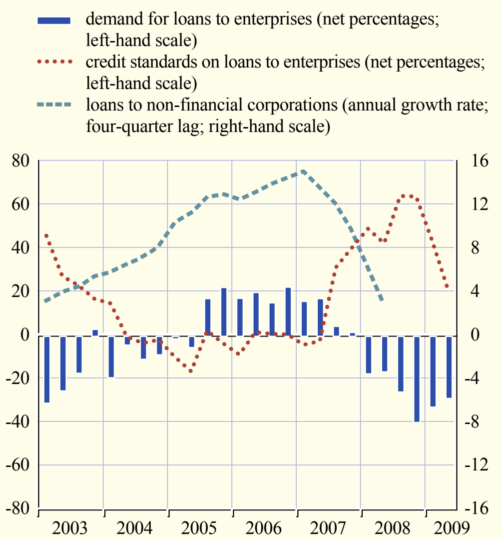
This section presents an overview of empirical evidence for the euro area on the impact of monetary policy on bank loan supply and, ultimately, on economic activity. More specifically, it provides indications for the different channels of monetary policy transmission discussed above, with a focus on the euro area.

The empirical findings are divided into three parts: first, the monetary policy impact on banks' own balance sheets and loan supply is examined. Second, the monetary policy impact on borrower balance sheets and loan supply is analysed. Third, the impact of changes in loan supply on economic activity and inflation is assessed. These findings help address one of the key challenges faced by central banks in gauging the impact of monetary policy on loan supply, namely disentangling loan supply and demand effects as precisely as possible. Empirically, it is difficult to identify supply effects using aggregate time series. Therefore, individual bank-specific characteristics are often used in the empirical literature to identify factors that directly influence loan supply, while demand for loans is typically assumed to be independent of the situation of individual banks and to rather depend on macroeconomic factors. In addition to using such micro-based evidence, use is also made in this article of responses to the Eurosystem bank lending survey for the euro area, which include information on euro area banks' assessments of loan supply and demand conditions and which thus allow a potential identification of supply-side effects at the more aggregate euro area level also. As illustrated in Charts 5 and 6, which include information from the aforementioned survey, bank lending tends to be highly positively correlated with changes in loan demand and negatively correlated with changes in bank credit standards (that broadly reflect bank supply conditions). Using these survey data for identification, however, implies some general qualifications as they are restricted to qualitative information and, thereby, subjective by nature, with the potential

18 Securitisation of loans also increases bank liquidity, and results in assets yielding attractive returns for investors. At the same time, it may induce reduced screening and monitoring of securitised loans. Hence, the impact of low rates on bank risk-taking may be stronger with high securitisation activity (see Rajan (2005), op. cit.).

Chart 5 Lending to non-financial corporations in the euro area

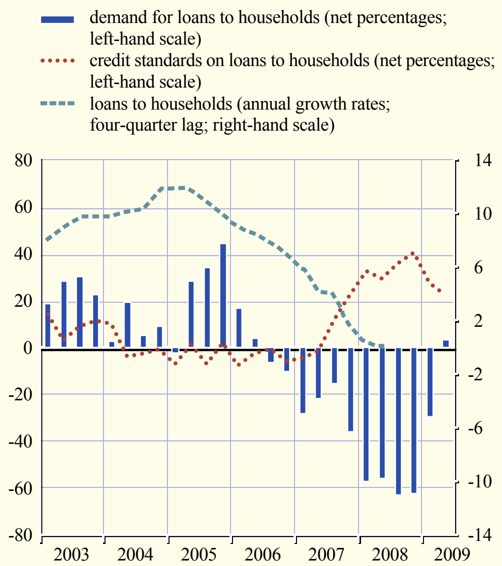
(annual percentage changes; net percentages)



Source: ECB.

Chart 6 Lending to households for house purchase in the euro area

(annual percentage changes; net percentages)



Source: ECB.

for an endogenous link between responses that relate to credit demand and those that refer to credit supply.[19] Furthermore, in the case of the bank lending survey, the time horizon of the data available is still limited, as the first survey round only took place in the fourth quarter of 2002.

MONETARY POLICY IMPACT ON BANK BALANCE SHEETS AND LOAN SUPPLY

The issue of the extent to which monetary policy impacts on bank loan supply is typically analysed in terms of the credit and risk-taking channels of monetary policy transmission (see Section 2). In this respect, it is useful to distinguish between the "traditional" bank lending channel (working through the availability of funds), a bank capital channel (via the impact on banks' profitability and capital position), the balance sheet channel (relating to the net worth of the bank borrowers) and the risk-taking channel (working through banks' risk perceptions). The empirical evidence for the euro area with respect to these four channels is presented hereafter.

As regards the "traditional" bank lending channel, where a change in monetary policy rates that affects the banks' liabilities can be expected to have an impact on the banks' ability to lend, the empirical evidence for the euro area is rather mixed.[20] Early evidence on the importance of the bank lending channel in the euro area countries was provided by the results of studies by the Eurosystem Monetary Transmission Network (MTN).[21] Somewhat in contrast to evidence for the United States, the MTN found that the features of the banking sector in many euro area countries to some extent sheltered banks from the effects of monetary policy on their funding, and thus on their ability to lend. For example, the partial public involvement in national banking sectors, extensive deposit insurance schemes, the existence of bank network arrangements and the prominence of relationship lending were assessed to be weakening the importance of the bank lending channel in many euro area countries. According to the MTN results, only the degree of bank liquidity was found to significantly interact with monetary policy in the sense that less liquid banks were more prone to change their lending in response to changes in monetary

19 When looking at the survey responses on the factors contributing to the tightening of credit standards, this qualification holds true particularly for risk-related factors that reflect the assessment of the creditworthiness of borrowers.

20 By contrast, earlier evidence in favour of the bank lending channel was found for the United States, using micro-econometric modelling approaches. In particular, it was found that monetary policy had distributional effects across banks with different degrees of informational opaqueness (as measured by, for example, size, liquidity and capital); see, for example, J. Peek and E.S. Rosengren, "Bank lending and the transmission of monetary policy", in J. Peek and E.S. Rosengren, (eds.), *Is Bank Lending Important for the Transmission of Monetary Policy?*, Federal Reserve Bank of Boston Conference Series 39, 1995, pp. 47-68; Kashyap and Stein (2000), op. cit. A related study using a different modelling approach was undertaken by J.C. Driscoll, "Does bank lending affect output? Evidence from the U.S. states", *Journal of Monetary Economics*, Vol. 51, 2004, pp. 451-471. For similar findings, see also A. Ashcraft, "New evidence on the lending channel", *Journal of Money, Credit, and Banking*, Vol. 38(3), 2003, pp. 751-776.

21 See, in particular, M. Ehrmann, L. Gambacorta, J. Martínez Pagés, P. Sevestre and A. Worms, "Financial systems and the role of banks in monetary policy", in I. Angeloni, A.K. Kashyap and B. Mojon (eds.), *Monetary Policy Transmission in the Euro Area*, Cambridge University Press, Cambridge, 2003, and the companion papers cited therein.

policy. More recently, the growing importance of non-deposit funding sources, such as capital market financing (e.g. covered bond issuance) and the rapid expansion of the euro area securitisation market, has also tended to further weaken the bank lending channel. In this regard, Box 1 examines the role of financial innovation in the monetary policy transmission mechanism, also taking into account the effects of the financial turmoil. Nonetheless, whereas the MTN studies were conducted mainly on the basis of data samples covering the period prior to the introduction of the euro, more recent studies using data covering the period since the start of Stage Three of EMU have found some evidence of a functioning bank lending channel among euro area countries.[22]

22 Using the approach of Driscoll (op. cit.) for a panel of euro area countries, the studies find that money demand shocks have a significant effect on bank lending (and, in contrast to Driscoll's findings, also on economic activity); see L. Cappiello, A. Kadareja, C. Kok Sørensen and M. Protopapa, "Do bank loans and credit standards have an effect on output? A panel approach for the euro area", *Working Paper Series,* ECB, forthcoming; and M. Čihák, and P.K. Brooks, "From subprime loans to subprime growth? Evidence for the euro area", *IMF Working Paper Series*, No 09/69, International Monetary Fund, 2008.

Box

TAKING STOCK OF THE IMPACT OF FINANCIAL INNOVATION ON BANK LOAN SUPPLY IN THE LIGHT OF THE FINANCIAL TURMOIL

The years prior to the credit market turmoil coincided with spectacular increases in the amount and complexity of securitisation activity, and in the number of countries using structured finance products. While securitisation has been in use as a funding technique for more than 50 years in the United States, a significant use of securitisation in the euro area has only taken place in recent years.[1] The large increases in the use of securitisation across the globe were part of a wider trend of financial innovation towards the structuring and trading of credit risk.[2] Together, these developments helped to make credit risk more tradable. This trend also encompassed the development of credit derivatives and the frequent use of securitisation techniques, in combination with more traditional forms of transferring credit risk, such as the syndication of loans. This revolution in credit risk transfer techniques can be traced back to a number of concurrent factors, such as globalisation in financial markets, improvements in information technology and pricing models, as well as the movement towards a more market-based financial system. In Europe, the disappearance of exchange rate risk among euro area countries, the increase in financial integration and a more market-based financial system all contributed to enhancing the liquidity and size of the securitisation market.

The recent financial market crisis has had a huge impact on the securitisation markets. In this respect, even though securitisation activity in the primary markets has remained robust, the bulk of the thus securitised instruments is retained within the originators' balance sheets. The primary market for public securitisation was very weak and almost ground to a halt in most of 2008 and in the first half of 2009, while some activity remains in the secondary market. Indeed, evidence from the bank lending survey for the euro area in recent quarters suggests that problems in accessing securitisation markets are having an impact on banks' willingness and ability to lend.

1 For an explanation of securitisation in the euro area, see the article entitled "Securitisation in the euro area" in the February 2008 issue of the Monthly Bulletin.
2 D. Marqués-Ibáñez and M. Scheicher, "Securitisation: Causes and Consequences", in A. Berger, P. Molyneux and J. Wilson (eds.), *Handbook of Banking*, Oxford University Press, forthcoming.

This is likely to also be the case in the near future, given a dislocated investor base that suffered very heavy losses during the financial crisis, the high level of uncertainty and an excess pre-crisis supply.

These developments in securitisation activity have produced significant changes both in the financial structure of most developed countries and in the role of banks therein. In this respect, the use of securitisation prior to the financial crisis modified the functioning of credit markets, reducing the fundamental role of liquidity transformation traditionally performed by financial intermediaries. The changing role of banks from that of "originating and holding" to one of "originating, repackaging and selling" also had implications for the incentives and ability of banks to grant credit. Indeed, from a macroeconomic perspective, securitisation brought about significant changes in the credit markets, thereby altering loan dynamics. In this respect, one of the consequences of securitisation from a macroeconomic perspective was an overall increase in the aggregate loan supply. This was due to the characteristics of securitisation activity that releases previously illiquid parts of the credit spectrum, thereby encouraging a larger mobilisation of funds from investors. Furthermore, by fully removing loans from their balance sheet, banks were often able to obtain regulatory capital relief, which could also be used to expand loan supply. From a microeconomic point of view, the ability to securitise part of their assets gave banks access to additional funding that could, in turn, be used to grant additional loans. Recent studies suggest that the expansion of credit supply in recent years was partly driven by securitisation. In particular, there is evidence that credit growth is higher in those areas experiencing larger increases in securitisation activity and that banks that are more active in the securitisation market also seem to supply more loans.[3]

In addition, securitisation may have altered the monitoring function performed by banks.[4] By moving instruments from banks' balance sheets to the markets, there may have been fewer incentives for financial intermediaries to screen borrowers. This is consistent with recent evidence suggesting that securitisation might have led to looser lending standards.[5] By making banks more dependent on market funding, securitisation could strengthen the connections between banks' lending, banks' funding and systemic developments in financial markets. As a result, banks' incentives and abilities to lend are expected to depend on financial market conditions to a larger extent than in the past when banks were overwhelmingly funded via bank deposits. This is mainly because deposits tend to have a more stable remuneration and are, by definition, less dependent on financial market conditions than tradable instruments. Overall, under more extreme circumstances, securitisation could have a significant impact on the banking sector's ability to grant credit.

The return of a robust securitisation market, however, is expected to take a very different form to that seen in the pre-crisis period. In particular, a sharp reduction in the level of complexity and leverage of the instruments issued is anticipated in a more regulated market. In this respect, a higher level of transparency and more aligned incentives are crucial for an efficient securitisation market.

3 A. Sufi and A. Mian, "The consequences of mortgage credit expansion: evidence from the U.S. mortgage default crisis", *Quarterly Journal of Economics*, Vol. 124(4), 2009; and Y. Altunbas, L. Gambacorta and D. Marqués-Ibáñez, "Securitisation and the bank lending channel", *European Economic Review*, forthcoming.

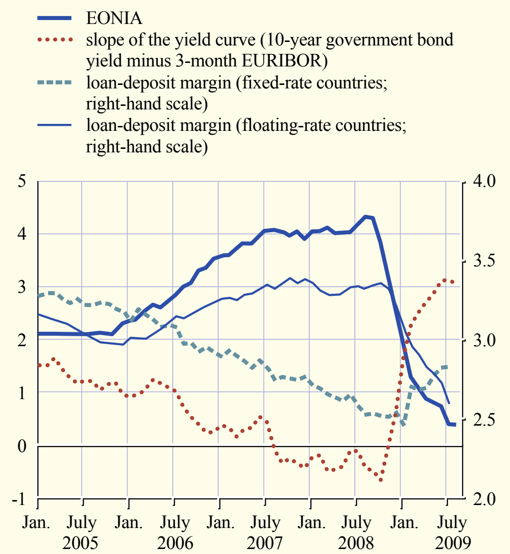
4 See B. Holmström and J. Tirole, "Financial intermediation, loanable funds, and the real sector", *The Quarterly Journal of Economics*, Vol. 112(3), 1997, pp. 663-691; and A. Ashcraft and T. Schuermann, "The seven deadly frictions of subprime mortgage credit securitization", *The Investment Professional*, autumn 2008.

5 B. Keys, T. Mukherjee, A. Seru and V. Vig, "Did securitization lead to lax screening? Evidence from subprime loans 2001-2006", *The Quarterly Journal of Economics*, Vol. 125(1), 2010.

Turning to the bank capital channel as part of the broader definition of the bank lending channel, there is some empirical evidence suggesting that euro area banks with low capitalisation are more sensitive to changes in monetary policy than banks which are well-capitalised.[23] A recent study examines the importance of monetary policy for bank profitability in the euro area, distinguishing between the different elements of bank earnings.[24] First, the nature of the impact of monetary policy on banks' net interest income, via its effect on the level of short-term interest rates and the slope of the yield curve, hinges crucially on the respective bank's business model. In particular, it brought to light the fact that traditional banks, i.e. banks characterised by operations with a maturity mismatch in the sense of lending long term and funding short term, are most strongly affected by monetary policy. Thus, it is of relevance whether banks lend predominantly at floating rates or at fixed rates. In fact, there are considerable differences across euro area countries as regards the typical initial rate fixation period of bank loans. For example, it is found that a reduction of policy rates and a steepening of the yield curve have a positive impact on the banks' net interest income in countries where banks lend mainly at fixed long-term rates, whereas the opposite effect is found in countries where banks lend to a larger degree at floating and short-term rates (see Chart 7). Second, as a consequence of its effects on asset prices, a reduction in policy rates tends to have positive valuation effects on the banks' trading books. A third finding is that, by impacting on the collateral values and the cash flows of bank borrowers, the policy-induced changes in asset prices in turn affect the level of write-offs in banks' loan books, as well as the loan loss provisions that banks will have to make.

Chart 7 MFI loan-deposit margins and the yield curve

(percentages per annum; percentage points)



Sources: ECB and Reuters.
Notes: The category "fixed-rate countries" comprises Belgium, Germany, France and the Netherlands, and are defined as countries where more than 50% of the mortgage loans are at interest rates fixed for an initial period of more than five years. The category "floating-rate countries" consists of the remaining euro area countries. See also ECB, "Differences in MFI interest rates across euro area countries", September 2006.

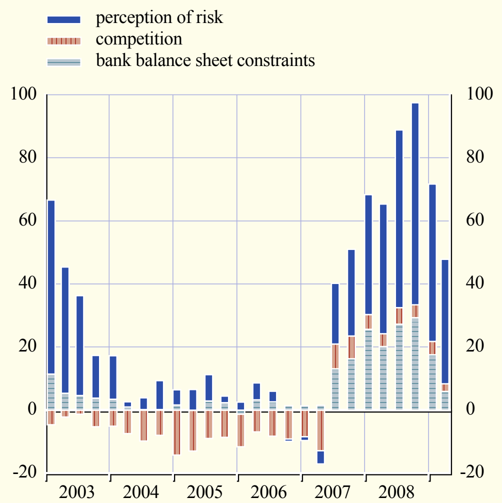
Monetary policy-induced changes to banks' balance sheets, as well as other shocks that affect bank soundness, may cause banks to alter their loan supply. This can be reflected in the credit volumes made available by the banks, as well as in the terms and conditions stipulated for credit. By way of illustration, Chart 8 shows that, in certain periods, bank balance sheet constraints have contributed to a significant net tightening of bank credit standards, most notably during the recent

23 See, for example, Y. Altunbas, G. de Bondt and D. Marqués-Ibáñez, op. cit.; L. Gambacorta and P.E. Mistrulli, "Does bank capital affect lending behaviour?", *Journal of Financial Intermediation*, Vol. 13(4), 2004, pp. 436-457; for US-based evidence, see, for example, R.P. Kishan and T.P. Opiela, "Bank capital and loan asymmetry in the transmission of monetary policy", *Journal of Banking and Finance,* Vol. 30, 2006, pp. 259-285; and T. Bayoumi and O. Melander, "Credit Matters: Empirical Evidence on U.S. Macro-Financial Linkages", *IMF Working Paper Series*, No 08/169, International Monetary Fund, 2008; for Japan, see, for example, W. Watanabe, "Prudential Regulation and the 'Credit Crunch': Evidence from Japan", *Journal of Money, Credit and Banking*, Vol. 39, No 2–3, 2007, pp. 639-665.

24 See H.S. Hempell and C. Kok Sørensen, "Does monetary policy affect bank profitability and bank loan supply? Empirical evidence for the euro area", *Working Paper Series*, ECB, forthcoming.

Chart 8 Factors contributing to changes in credit standards on loans to enterprises

(net percentages)



Sources: Eurosystem bank lending survey and ECB calculations.
Notes: The "perception-of-risk" factor refers to the "industry and firm-specific outlook", the "expectations regarding general economic activity", and the "risk on collateral demanded"; the "competition" factor refers to competition from "other banks", "non-banks" and "market financing"; the "balance-sheet-constraints" factor refers to "costs related to banks' capital position", "banks' ability to access market financing" and "banks' liquidity position". The net percentages reported for the three groups of contributing factors are simple averages of the underlying factors listed above.

financial crisis.[25] Indeed, a recent study[26] exploiting information from the bank lending survey in a country-panel estimation approach provides evidence of the importance of balance sheet constraint factors for bank lending. These factors, as taken from the bank lending survey, can be interpreted as "pure" credit-supply effects since they focus exclusively on factors inherent to the respective banks, whereas the bank lending survey factors concerning banks' perceptions of risks that contribute to a tightening of credit standards relate to borrowers' quality, i.e. to the firms' balance sheet channel as described above, and are thereby only indirectly linked to the banks' own situation.

Supply-side constraints in a narrower sense, more specifically "costs related to banks' capital position", are found to be particularly important in the case of corporate lending. They have a significant negative impact on the growth rate of banks' lending to non-financial corporations, even after controlling for various demand-side factors (including the banks' perceptions of demand, as also reported in the bank lending survey).[27] The estimates with respect to loans to non-financial corporations suggest that a net tightening of credit standards on account of the banks' cost of capital would result in some decline in the quarterly growth rate of bank lending to non-financial corporations. Furthermore, higher industry and firm-specific risk perceptions by banks, as taken from the bank lending survey, impact negatively on overall bank lending to non-financial corporations even when controlling additionally for changes in loan demand as perceived by the banks participating, according to the responses to a separate question in the survey. This supports the assumption of these effects being attributable to the supply side of bank lending, reflecting the impact of a borrower balance sheet channel and increased risk aversion of banks.

In the case of lending to households for house purchase, the impact of "pure" supply-side constraints is less clear-cut when similar estimation techniques are employed. There seems to be far stronger evidence for primarily demand-driven development, particularly when information on loan demand is included, as is provided by the bank lending survey in responses to a separate question. Furthermore, as regards recent developments in the period of turmoil, the tightening of credit standards for housing loans indicates that there was less pressure on the development of housing loans from the supply side than in the case of loans to non-financial corporations (see Charts 5 and 6).

25 Empirical evidence on the importance of capital constraints for loan supply in terms of the tightening of banks' lending standards for the euro area is provided in A. Maddaloni, J.L. Peydró and S. Scopel, "Does monetary policy affect bank credit standards?", paper presented at the CEPR/ESI 12th Annual Conference on the Evolving Financial System and the Transmission Mechanism of Monetary Policy, Basel, September 2008; and Hempell and Kok Sørensen (2009), op. cit.; for the United States, see, for example, T. Bayoumi and O. Melander (2008), op. cit.
26 See H.S. Hempell and C. Kok Sørensen, "The impact of supply constraints on bank lending in the euro area", *Working Paper Series*, ECB, forthcoming.
27 This finding is in line with the findings of studies exploring the importance of capital on banks' lending decisions, as cited above.

MONETARY POLICY IMPACT ON BORROWERS' BALANCE SHEETS AND LOAN SUPPLY

Regarding the balance sheet channel, where monetary policy is deemed to impact on bank loan supply via its effect on the net worth of borrowers' balance sheets, recent empirical evidence based on the analysis of loan applications from firms points to the existence of this mechanism.[28] Data on loan applications allow the questions of whether and why banks grant loans to be analysed and help to disentangle the impact arising from loan supply from that of loan demand. The empirical evidence suggests that the probability of banks granting loans to firms with higher leverage and lower liquidity ratios increases when monetary policy rates decline. The associated increase in the loan volume may have a positive influence on economic activity, given the key importance of banks as suppliers of external finance, especially in the euro area. In addition, if the more capital-constrained firms belong to sectors with higher productivity (e.g. biotech firms), the induced change in the composition of bank loan portfolios may spur economic growth even more.[29] Hence, monetary policy may influence economic activity not only by changing bank loan volumes, but also by affecting the composition of bank loans.

In the framework of the balance sheet channel of monetary policy transmission, lower policy rates do not imply that banks are taking higher risks, since borrowers' net worth tends to increase when short-term interest rates are lower, for example through higher values of collateral. In this context, banks lend to firms with an improved financial position, which are therefore less risky.

Recent empirical evidence, however, suggests that low short-term rates may also induce banks to grant loans with a higher actual risk (a mechanism labelled the "risk-taking channel", as outlined in Section 2) when risk is measured by ex ante credit standards or by default probabilities. When short-term interest rates are low, banks tend to soften their credit standards and the originated loans tend to have a high default risk. In addition, banks with relatively low capital engage in more risk-taking, and the interest rate spreads on such loans do not account for the high credit risks taken.[30] The impact of low short-term interest rates may also be strengthened when banks engage in large-scale securitisation activity. All these effects are present when improvements in borrowers' collateral risk and value are taken into account, thus suggesting that banks take more risk when short-term interest rates are low.[31]

IMPACT OF BANK LOAN SUPPLY ON ECONOMIC ACTIVITY

The final part of this article investigates the linkages between the banking sector and the real economy. In particular, it analyses the impact of loan supply restrictions on economic activity and inflation. For the credit and risk-taking channels to be operative, bank loan supply should ultimately affect economic activity and

28 See G. Jiménez, S. Ongena, J.L. Peydró, and J. Saurina, "Identifying loan supply and balance-sheet channels with loan applications", paper presented at the Fourth BI-CEPR Conference on Money, Banking and Finance: Corporate Governance, Capital Structure and Firm Performance, Rome, October 2009.

29 See K. Matsuyama, "Credit Traps and Credit Cycles," *American Economic Review*, 2007, 97(1), pp. 503-16.

30 See G. Jiménez, S. Ongena, J.L. Peydró, and J. Saurina, "Hazardous Times for Monetary Policy: What Do Twenty-Three Million Bank Loans Say About the Effects of Monetary Policy on Credit Risk-Taking?", paper presented at the American Finance Association Meetings, San Francisco, 2009; V. Ioannidou, S. Ongena and J.L. Peydró, "Monetary policy, risk-taking and pricing: evidence from a natural experiment", paper presented at the NBER Summer Institute, Cambridge, MA, 2009; A. Maddaloni and J.L. Peydró, "Bank risk-taking, securitisation, supervision and low interest rates", paper presented at the conference entitled "The Financial Crisis", New Haven, CT, 2009; Maddaloni et al. (2009), op. cit.; and Marqués-Ibáñez et al. (2009), op. cit. They all show that bank risk matters for monetary policy. When short-term interest rates are lower, the reduction of spreads is not unique to loans, but also holds true for equity and bond spreads. For effects of short-term interest rates on the pricing of equity, see, for example, Bernanke and Kuttner (2005), op. cit.; for the effects on the pricing of bonds, see Manganelli and Wolswijk (2007), op. cit. As explained in Section 2, low levels of interest rates may induce a search for yield (see Rajan (2005), op. cit.). Securitised loans provide assets with attractive yields, but owing to a reduced screening and monitoring of securitised loans by banks, the interaction between low policy rates and high securitisation may imply softer lending standards by banks (see A. Mian and A. Sufi (2009), op. cit.).

31 See Maddaloni and Peydró (2009), op. cit.

inflation. This would apply if companies and consumers cannot perfectly replace bank loans with other means of financing, such as bonds or equities. However, while the theoretical mechanisms have been discussed and analysed in depth, empirical evidence supporting these mechanisms, and estimates of the economic significance of the effects involved, remains a challenge for researchers.

There are different empirical approaches that can be used to analyse this impact. For the euro area, two recent studies based on panel econometric techniques using country-based macroeconomic data find that changes in credit supply have a non-negligible impact on real economic activity in the region.[32] These findings continue to hold true even when controlling for bank credit standards on lending as reported in the bank lending survey.

Lending standards can also be used directly as a measure of credit supply in the economy.[33] Indeed, credit standards from bank lending surveys have predictive power for future developments in credit and economic growth. This has been shown for the United States where longer time series are available, and more recently also for the euro area.[34] This suggests that the credit standards applied to borrowers affect the actual credit granted by banks, in turn influencing economic activity.

Survey answers related to the factors affecting loan supply provide a simple and intuitive way of distinguishing the different mechanisms of monetary policy transmission. In particular, the mechanisms of transmission related to the bank lending channel and the balance sheet channel can be identified using the answers from the survey related to bank balance sheet constraints and risk perceptions related to borrower collateral and outlook. Ultimately, the relative impact on real economic activity and prices can be assessed as well. In addition, bank lending surveys contain explicit information on reported demand for loans to firms and loans to households.

A vector autoregression (VAR) methodology provides a useful empirical framework for analysing these mechanisms.[35] The derived impulse response functions are a simple tool to illustrate the dynamic impact arising from a shock to one of the variables, and thus allow the question to be analysed as to whether a tightening in loan supply has a dampening impact on economic activity. Chart 9 plots the responses of GDP and a price index to a tightening of credit standards for all kinds of loans, as measured by the bank lending survey. In this context, the tightening implies restrictions on all types of terms and conditions for a loan (loan margins, volume, maturity and collateral requirements). GDP declines in response to tightened supply conditions. The impact is similar for restrictions on loan supply to non-financial corporations and mortgage loans, while it is not significant for consumer loans. This latter result may reflect the low relative importance that this segment of the credit market has in most euro area countries, despite the significant rates of increase recorded over the last few years.[36] The effect of supply restrictions on GDP reaches a peak after around one year and fades away after around three years.

32 See Cappiello et al., op. cit., and Čihák and Brooks (2008), op. cit.

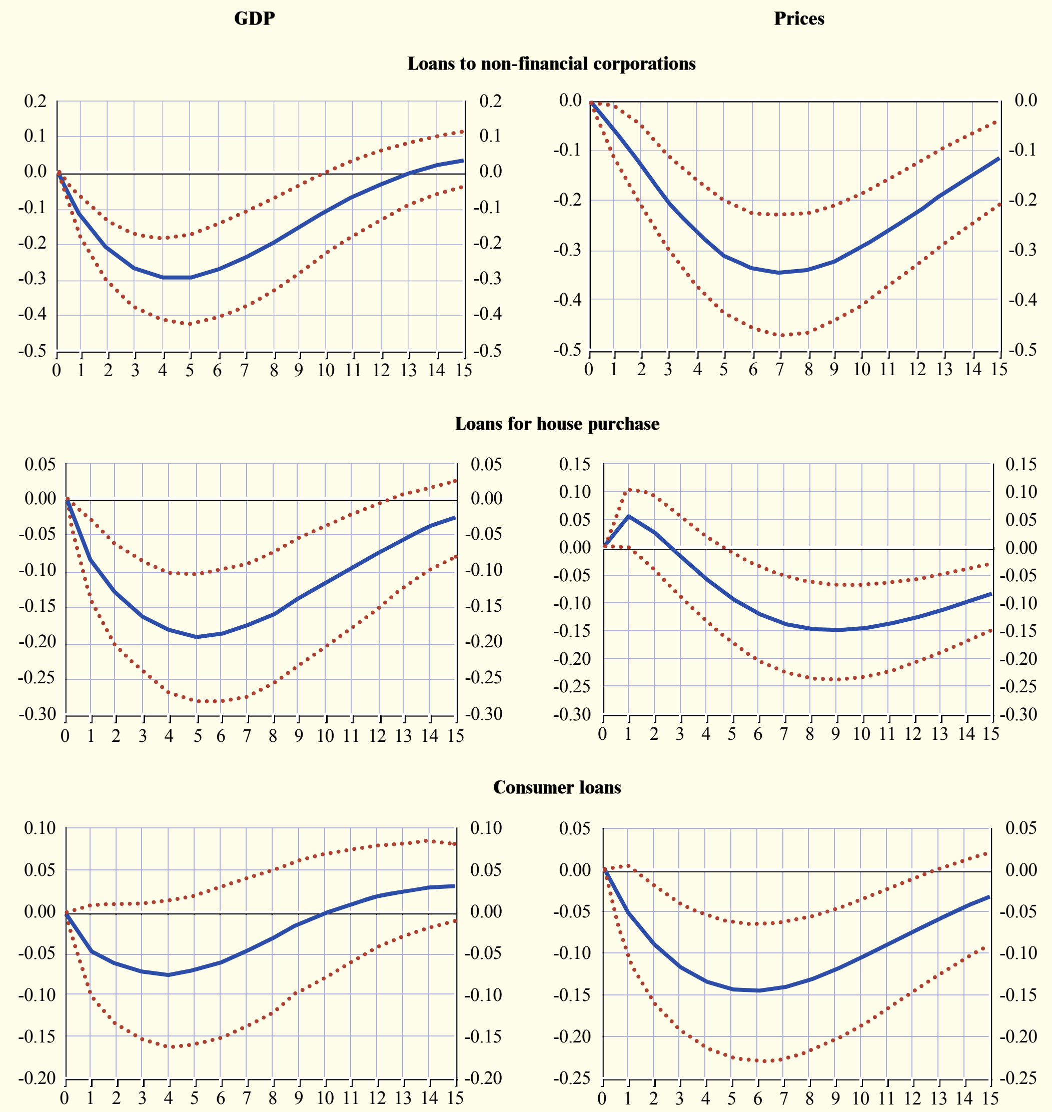
33 For US evidence, see, for example, Bayoumi and Melander (2008), op. cit., and A. Swiston, "A U.S. Financial Conditions Index: Putting Credit Where Credit is Due", *IMF Working Paper Series*, 08/161, International Monetary Fund, 2008.

34 For US evidence, see C. Lown and D.P. Morgan, "The Credit Cycle and the Business Cycle: New Findings Using the Loan Officer Opinion Survey", *Journal of Money, Credit and Banking*, Vol. 38, No 6, September 2006, pp. 1575-1597. For euro area evidence, see G. de Bondt, A. Maddaloni, J.L. Peydró and S. Scopel, "The bank lending survey matters: first empirical evidence for euro area credit and output", *Working Paper Series*, ECB, forthcoming.

35 For details, see M. Ciccarelli, A. Maddaloni and J.L. Peydró, "Trusting the Bankers: a New Look at the Credit Channel of Monetary Transmission", paper presented at the C.R.E.D.I.T. conference, Venice, September 2009. The panel VAR for the euro area includes GDP, prices, short-term interest rates, loan demand (proxied by the changes in demand volume from the bank lending survey) and loan supply conditions (proxied by the changes in credit standards from the bank lending survey).

36 Consumer loans account for less than 10% of total loans outstanding in the euro area.

Chart 9 Response of GDP and prices to credit supply restrictions



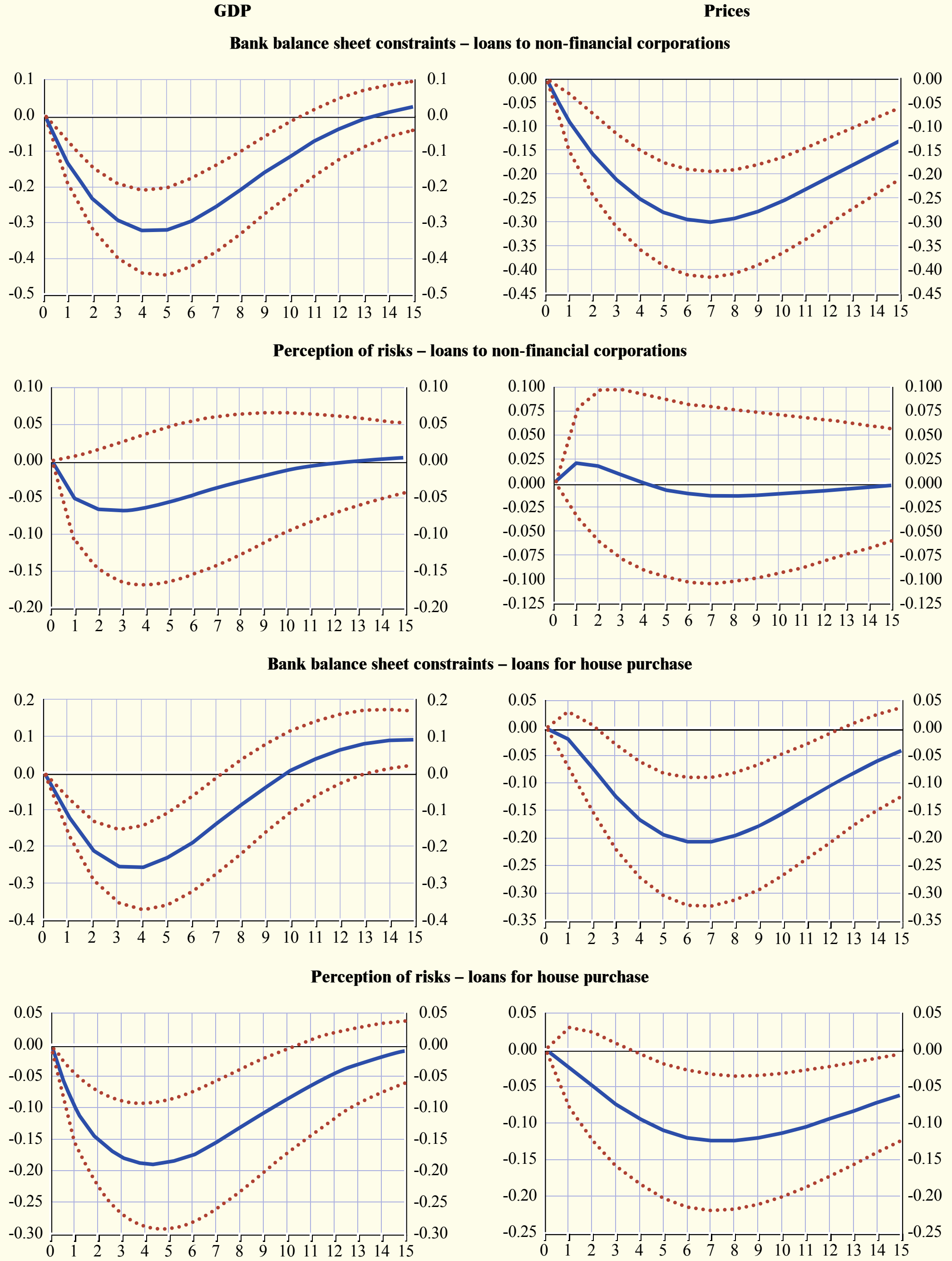
Source: Ciccarelli et al. (2009).
Notes: These graphs plot the response of log real GDP and a GDP deflator to a shock to credit supply in the order of one standard deviation. Credit supply is measured by the answers related to credit standards applied to loans to non-financial corporations, loans to households for house purchase and consumer loans as reported in the Eurosystem bank lending survey. The confidence bands are 68% Bayesian credible bands.

Restrictions on credit supply also have an effect on the dynamics of prices. Chart 9 shows that a restriction on credit for all categories of loan results in a decline in inflation.[37] Compared with the impact on GDP, the effect on prices takes more time to reach a peak.

The panel VAR approach can also help to disentangle the relative importance of the balance sheet and the bank lending channels. These transmission mechanisms were identified

37 The price index is the GDP deflator.

Chart 10 Response of GDP and prices to credit supply restrictions due to bank balance sheet constraints and perception of risk



Source: Ciccarelli et al. (2009).
Notes: These graphs plot the response of log real GDP and a GDP deflator to a shock to credit supply in the order of one standard deviation. Credit supply is measured by the answers related to "bank balance sheet constraints" and "perception of (borrower) risk" applied to loans to non-financial corporations and loans to households for house purchase as reported in the Eurosystem bank lending survey. The confidence bands are 68% Bayesian credible bands.

using survey responses related to whether banks changed their standards on account of "bank balance sheet constraints" and/or as a result of the "perception of (borrower) risk". The impulse response functions shown in Chart 10 suggest that the functioning of the two channels in the euro area differs somewhat for loans to households for house purchase and loans to non-financial corporations. For mortgage loans, both supply channels are active, and their size is comparable. In the case of loans to non-financial corporations, only the bank lending channel seems to have an impact on economic activity.

In sum, available empirical evidence suggests that the various credit channels discussed in Section 2 are part of the monetary policy transmission in the euro area. More precisely, empirical findings indicate that the bank lending channel – including the bank capital channel – is of more relevance than suggested by earlier studies undertaken at the turn of the century. Moreover, there is increasing evidence of the existence of a balance sheet channel of monetary policy transmission in the euro area. Finally, recent empirical results point to an amplification of monetary policy impulses via the so-called risk-taking channel.

During the current financial crisis and particularly in the aftermath of the default of Lehman Brothers, credit supply frictions most likely impacted on banks' credit standards, with adverse implications for the provision of credit and economic activity. There are, however, as yet only few empirical studies that support this interpretation, as the number of observations for this period is still limited. At the same time, monetary policy action has contributed to addressing the impairment in credit supply by substantially lowering policy rates and by employing special (non-standard) measures such as the introduction of long-term refinancing operations of up to one year, the widening of the collateral framework and the purchase of covered bonds. These policy measures may indeed have contributed to the decrease in the net tightening of credit standards, as reported in the most recent bank lending survey rounds.[38] However, credit supply constraints may still exist for certain borrower segments in the euro area and, accordingly, there is a need for banks to pass the effects of the policy actions taken on to their borrowers and to fully exploit recapitalisation opportunities. Finally, it is essential for market adjustments to proceed, even though the required adjustments might vary across regions and market segments.

4 CONCLUDING REMARKS

This article has presented new evidence concerning the impact of monetary policy on bank loan supply and economic activity in the euro area. It has also introduced new empirical evidence based on information provided by the bank lending survey for the euro area. This new source of data offers the potential to better disentangle the relationship between loan supply and loan demand, which has been hard to assess empirically with available quantitative aggregate economic data. The empirical results have provided indications of the existence of a credit channel in the euro area having become more visible in the period of financial turmoil since mid-2007.

As regards the bank lending channel, the current turmoil has put substantial strain on banks' ability to fund themselves via deposits and markets. As regards market-based funding, securitisation, an important source of refinancing for banks, has suffered significantly over the last two years. Moreover, the deterioration of banks' capital positions, also as a result of their substantially weaker profitability, has put their balance sheets under additional stress. All in all, these different pressures on banks' balance sheets and their cost of funds seem to have affected bank loan supply to the household and corporate sector in the current crisis. In addition, the deterioration of borrower creditworthiness has had a substantial impact on the quality

38 See, for instance, Box 2, entitled "The results of the July 2009 bank lending survey for the euro area", in the August 2009 issue of the Monthly Bulletin.

of loan demand and has put further strain on banks' ability and willingness to lend. This has become particularly apparent in the risk-related information provided by the bank lending survey.

At the same time, the empirical results indicate that the worsening of overall economic conditions and the economic outlook has weighed heavily on the demand for loans. Depending on the methodology applied, empirical findings suggest that the current weak development of overall bank lending in the euro area is mainly affected by particularly low demand for loans from the real sector. However, this does not rule out the possibility that there are also constraints on credit availability, at least for certain borrower segments.

The monetary policy pursued by the ECB over the past two years since the eruption of the financial crisis should be seen against this background. Safeguarding price stability as its primary goal, the policy measures, taken by the ECB since mid-2007 have supported demand, mainly through consecutive reductions of the key ECB interest rates, and have bolstered loan supply, in particular through its "non-standard" policy measures, such as the provision of funding to the banking system via its long-term full allotment liquidity operations and the purchase of euro-denominated covered bonds. These monetary policy actions should be seen in the context of the predominant position of the banking system in providing funds to the firms and households in the euro area. It is therefore important that euro area banks take the opportunity to pass on the liquidity support provided by the Eurosystem to their ultimate borrowers, which in turn should support spending and investment in the period ahead.

RECENT DEVELOPMENTS IN THE BALANCE SHEETS OF THE EUROSYSTEM, THE FEDERAL RESERVE SYSTEM AND THE BANK OF JAPAN

During the financial market turmoil, which started in August 2007, the size and composition of central bank balance sheets have changed significantly as a result of exceptional monetary policy operations. This article explains these recent developments using simplified versions of the balance sheets of the Eurosystem, the Federal Reserve System (hereinafter referred to as "the Federal Reserve") and the Bank of Japan. The massive expansion and increasing complexity of the balance sheets of these three central banks, especially in the aftermath of the bankruptcy of Lehman Brothers in September 2008, are evidence of their strong response to the severe deterioration in financial and economic conditions.

1 INTRODUCTION

The balance sheet of a central bank provides detailed information about how it uses its monetary policy instruments. It is therefore also a useful guide for understanding how monetary policy is implemented. The changes in balance sheets that have occurred since the start of the financial market turmoil show that central banks have used existing tools in innovative ways, as well as introduced new ones, in order to relieve liquidity shortages and ensure the smooth functioning of money markets, which is essential for the transmission of monetary policy. As central banks have stepped up their intermediation role in money markets and offered crucial support to other credit markets during the financial turmoil, particularly after the bankruptcy of Lehman Brothers in September 2008, the size and complexity of their balance sheets have increased significantly.

This article describes and compares the evolution of the balance sheets of the Eurosystem, the Federal Reserve and the Bank of Japan.[1] As there are differences in the monetary policy implementation frameworks and accounting standards of these central banks, the comparison is not based on their detailed financial statements but on simplified versions thereof (hereinafter referred to as "simplified balance sheets").

Between June 2007 and December 2008, the total assets of the Eurosystem and the Federal Reserve grew considerably, by 90% and 160% respectively, as a result of the measures introduced in response to the financial turmoil. With the improvement in money market conditions in the first half of 2009, the total assets of the Eurosystem declined by about 20% and those of the Federal Reserve by 10%. However, high demand for the Eurosystem's first one-year refinancing operation, conducted on 24 June 2009, triggered an increase once again in the size of the Eurosystem's balance sheet, almost to its peak level. By contrast, the Bank of Japan's balance sheet was relatively large in 2007 owing to the significant increase in outstanding banknotes in the late 1990s, which meant that the level of banknotes in circulation remained above its long-term trend. The Bank of Japan's balance sheet therefore grew by only 25% between June 2007 and March 2009, when it peaked as a result of the financial turmoil.

Several factors have contributed to the considerable expansion and increased complexity of the balance sheets of these three central banks during the financial turmoil. Prior to September 2008, the Eurosystem and the Federal Reserve increased the number of refinancing operations, especially at term maturities, and introduced foreign currency liquidity-providing operations. At the same time, the Bank of Japan relied on instruments that were developed during the financial crisis in Japan in the 1990s and therefore already contained unconventional elements, such as longer maturities and a wider range of eligible collateral. Subsequently, during the more intense phase of the financial turmoil, when interest rates came close to zero, all three central banks focused increasingly on the transmission of monetary policy to the real sector of the economy. As a result, it became essential to

1 This article covers the period up to the end of August 2009.

support major credit markets through outright asset purchases or special lending facilities. Section 2 introduces the concept of simplified balance sheets and Section 3 reviews the developments in the balance sheets of the three central banks in more detail.

2 SIMPLIFIED BALANCE SHEETS: RATIONALE AND DEFINITION

The Eurosystem, the Federal Reserve and the Bank of Japan have different frameworks for the implementation of monetary policy and different reporting rules, which is reflected in the structure of their balance sheets. Thus, in order to make a comparison of these balance sheets easier and more meaningful, it is based on simplified versions thereof (the box describes the construction of the simplified balance sheets in more detail).

The simplified balance sheet aggregates and nets several items reported in the financial statement in order to highlight monetary policy implementation and facilitate liquidity analysis. It presents the relationship between the size and type of monetary policy instrument, in both domestic and foreign currencies, as well as the main autonomous liquidity factors.

The three main categories of item on the simplified balance sheet are (i) autonomous liquidity factors, (ii) foreign currency liquidity-providing operations that were introduced during the financial market turmoil to provide foreign currency to domestic counterparties, and (iii) monetary policy instruments that are used to steer domestic money market interest rates and, as of September 2008, to support certain credit market segments (see Table 1). All of these items appear on both the asset side and the liability side of the balance sheet.

Autonomous liquidity factors are balance sheet items such as banknotes in circulation and government deposits, over which central banks have little or no control, but which may affect interest rates or liquidity conditions in the short run. For the purposes of this article, autonomous liquidity factors on the asset side of the balance sheet include net foreign assets (i.e. foreign currency denominated assets held outright for foreign exchange intervention or for investment purposes) and, in the case of the Eurosystem, domestic assets that are held outright by NCBs and not used for monetary policy implementation. On the liability side, they include banknotes in circulation, government deposits (i.e. Treasury departments' current account holdings with NCBs) and a residual item called "other autonomous factors (net)".

The foreign currency liquidity-providing operations, which have been carried out in response to the financial market turmoil, consist of swaps and repos through which central banks supply foreign currency to domestic interbank markets. The foreign currency for these operations has been obtained through swap arrangements with partner central banks.

Monetary policy instruments also appear on both the asset side and the liability side of the simplified balance sheet. Short-term and long-term repo operations, lending facilities and outright portfolios are on the asset side, while the current accounts held by credit institutions to fulfil minimum reserve requirements or for transaction purposes, liquidity-absorbing operations (e.g. fixed-term deposits and reverse repos), deposit facilities and other liquidity-absorbing tools are reported on the liability side.

Table 1 Simplified balance sheets of the Eurosystem, the Federal Reserve and the Bank of Japan as at the end of August 2009

Assets			Liabilities		
(a) Eurosystem[1] (EUR billions)					
Autonomous liquidity factors					
Net foreign assets	392	(317)	Banknotes in circulation	767	(633)
Domestic assets[2]	341	(131)	Government deposits	136	(70)
			Other autonomous factors (net)	189	(27)
Foreign currency liquidity-providing operations					
USD repos	31	(0)	Claims of the Federal Reserve	31	(0)
DKK swaps	0	(0)	Claims of the Swiss National Bank	19	(0)
SEK swaps	3	(0)			
Monetary policy instruments					
Covered bond portfolio	9	(0)	Current accounts	203	(182)
Main refinancing operations	78	(313)	Absorbing operations	0	(0)
Longer-term refinancing operations	634	(150)	Deposit facility	143	(1)
Fine-tuning operations	0	(0)			
Marginal lending facility	0	(1)			
Total	1,488	(913)		1,488	(913)
(b) Federal Reserve[3] (USD billions)					
Autonomous liquidity factors					
Net foreign assets	38	(34)	Banknotes in circulation	870	(775)
			Government deposits	13	(4)
			Other autonomous factors (net)	76	(49)
Foreign currency liquidity-providing operations					
Central bank liquidity swaps	60	(0)			
Monetary policy instruments					
Domestic assets	1,485	(790)	Current accounts	862	(16)
Repos	0	(20)	Reverse repos	0	(0)
Term Auction Facility	221	(0)	Treasury supplementary financing account	200	(0)
Other lending	217	(0)			
Total	2,021	(845)		2,021	(845)
(c) Bank of Japan[1] (JPY 100 billions)					
Autonomous liquidity factors					
Foreign assets	54	(57)	Banknotes in circulation	762	(758)
			Government deposits	29	(42)
			Other autonomous factors (net)	139	(-59)
Foreign currency liquidity-providing operations					
USD repos	8	(0)	Claims of the Federal Reserve	8	(0)
Monetary policy instruments					
Domestic assets	596	(578)	Current accounts	119	(97)
Repos	399	(204)	Reverse repos	0	(0)
Other lending	0	(0)	Bank of Japan bills sold	0	(0)
Total	1,056	(838)		1,056	(838)

Sources: ECB calculations based on the Eurosystem's weekly financial statement (weekly data); the Federal Reserve's H.4.1 statistical release, Table 9 "Consolidated statement of condition of all Federal Reserve banks" (previously Table 8), and Wednesday Historical Levels, Table 16 (weekly data); Bank of Japan accounts and "Monetary Base and the Bank of Japan's transactions" (monthly data).
1) As at 28 August 2009 (figures as at 29 June 2007 are provided in parentheses).
2) Of which the sub-item "general government debt denominated in euro" stood at €37 billion on 29 June 2007 and at €36 billion on 28 August 2009.
3) As at 26 August 2009 (figures as at 27 June 2007 are provided in parentheses).

Box

SIMPLIFIED BALANCE SHEETS: METHODOLOGY

The simplified balance sheets standardise the information presented in the central banks' financial statements by aggregating and netting certain items, with the degree of netting dependent on the level of detail in the respective financial statement. For example, the Eurosystem's financial statement provides very detailed information on accounts unrelated to monetary policy. The ratio of total assets on the simplified balance sheet to total assets on the financial statement is approximately 4:5 for the Eurosystem and the Bank of Japan and almost 1:1 for the Federal Reserve.

The simplified balance sheets have three main categories of asset and liability: autonomous liquidity factors, foreign currency liquidity-providing operations and monetary policy instruments.

Autonomous liquidity factors

On the asset side of the simplified balance sheet, autonomous liquidity factors comprise the item "net foreign assets", which covers all accounts denominated in foreign currency, including gold and special drawing rights but excluding the foreign exchange liquidity-providing operations, and subtracts liabilities from assets. The Eurosystem's simplified balance sheet has an additional autonomous factor on the asset side, namely "domestic assets". These are securities and government debt denominated in euro which are held outright by euro area central banks for investment purposes at their own financial risk. These portfolios are subject to maximum size limits, agreed at the Eurosystem level, in order to ensure that they do not interfere with the implementation of the single monetary policy.

The liquidity-absorbing autonomous factors, reported on the liability side of the simplified balance sheet, are banknotes and government deposits. A residual category called "other autonomous factors (net)" is computed as the difference between the sum of all liability accounts and the sum of all asset accounts of the financial statement that are not reported on the simplified balance sheet. None of these netted items are linked to the implementation of monetary policy.

At the end of 2008 an accounting reclassification changed the composition of the Eurosystem's weekly financial statement so that part of the central banks' investment portfolios were moved from item A9 ("other assets") to item A7 ("securities by euro area residents denominated in euro"). While this accounting reclassification did not affect the size of the weekly financial statement, it resulted in an expansion of the Eurosystem's simplified balance sheet since, unlike item A9, item A7 is not netted out under the item "other autonomous factors (net)". The resulting level shift of €157.4 billion in "domestic assets" recorded in the simplified balance sheet on 2 January 2009 reflects, to some extent, the actual expansion of investment portfolios in the period from mid-2007 to the end of 2008. Prior to the accounting reclassification, this had been reported under "other assets" in the weekly financial statement.[1]

Foreign currency liquidity-providing operations

Central banks usually report all foreign currency operations under the same foreign asset and liability items of their financial statements. However, the operations introduced in response to the

1 See the press release of 7 January 2009, available at http://www.ecb.europa.eu/press/pr/wfs/2009/html/fs081231.en.html.

financial turmoil are presented separately in the simplified balance sheets used for the purposes of this article. In these operations, the Federal Reserve provides other central banks with US dollars and thus acquires a claim reported under "central bank liquidity swaps" in its balance sheet. In exchange for the US dollar funds, the Federal Reserve receives euro (yen) funds and deposits them with the Eurosystem (Bank of Japan). This euro (yen) deposit is shown under "claims of the Federal Reserve" on the liability side of the Eurosystem's (Bank of Japan's) balance sheet.[2] The US dollar funds received from the Federal Reserve are currently being used by the Eurosystem to conduct US dollar liquidity-providing operations with its counterparties in the form of repos. The item "USD repos", which appears on the asset side of the Eurosystem's simplified balance sheet, indicates the claim denominated in US dollars that the Eurosystem acquires vis-à-vis its counterparties in the repo operations. Similarly, the USD repos conducted by the Bank of Japan are shown as an asset in its balance sheet.

Until January 2009 the Eurosystem also conducted US dollar liquidity-providing operations in the form of swaps. In these swap operations, the Eurosystem supplied its counterparties with US dollars in exchange for euro, which were debited (subtracted) from the current accounts of the counterparties. The CHF/EUR swap operations, conducted in cooperation with the Swiss National Bank, are similar transactions: the Swiss National Bank receives euro in exchange for Swiss francs and deposits the euro with the Eurosystem. This euro deposit is reported under the liability item "claims of the Swiss National Bank". The Eurosystem also has reciprocal currency arrangements with Danmarks Nationalbank and Sveriges Riksbank. Through the EUR/DKK and EUR/SEK swaps, credit institutions in Denmark and Sweden receive euro in exchange for domestic currency. The Eurosystem deposits the Danish kroner and the Swedish kronor with the respective central banks and thus acquires claims denominated in foreign currency, which are reported under "DKK swaps" and "SEK swaps" on the Eurosystem's simplified balance sheet.

Monetary policy instruments

The main differences in the simplified balance sheets of the three central banks being analysed in this article are in the items reported under monetary policy instruments. In the case of the Eurosystem, the simplified balance sheet shows the liquidity provided through one-week main refinancing operations; one, three, six and 12-month longer-term refinancing operations; fine-tuning operations; and the overnight marginal lending facility. A large set of collateral, containing both private and public debt, is eligible for these operations, which are currently open to around 2,200 counterparties. In addition, the Eurosystem's monetary policy instruments include the covered bond portfolio which has been built up since July 2009 and which is clearly separated from outright portfolios held by euro area central banks ("domestic assets").

While in the case of the Eurosystem and to a lesser extent the Bank of Japan, refinancing operations have tended to account for a large share of total assets on the simplified balance sheet, even before the financial turmoil, such operations accounted for a relatively small share of total assets in the case of the Federal Reserve, with repos traditionally being used to address only temporary fluctuations in the banking system's liquidity needs.

For both the Federal Reserve and the Bank of Japan, outright portfolios (domestic assets) play an active role in the implementation of their monetary policies and are, for the purposes of this

2 The forward leg of the swap transactions is booked off-balance sheet.

article, reported as monetary policy instruments in the simplified balance sheet. The securities currently held by the Federal Reserve include Treasury bills, notes and bonds, federal agency debt securities and, since January 2009, federal agency mortgage-backed securities. Before the start of the financial market turmoil, the Federal Reserve tended to steer the size of its outright portfolio towards the level of outstanding banknotes. The assets currently held by the Bank of Japan include government bonds, Treasury discount bills and stocks held in pecuniary trusts, as well as commercial paper and corporate bonds since February and March 2009 respectively. The outright holdings of Japanese government bonds have been kept below the amount of banknotes issued.

Additionally, the asset side of the Federal Reserve's simplified balance sheet shows the Term Auction Facility, which was introduced in response to the financial turmoil. Compared with the Federal Reserve's regular repo operations, a larger number of counterparties (approximately 7,000 vis-à-vis the 18 in the regular repo operations) are able to participate in these operations against a broadened range of collateral. In the case of the Federal Reserve, the simplified balance sheet item "other lending" consists of the "other loans" and "net portfolio holdings" reported in its financial statement and contains many of the credit easing measures undertaken by the Federal Reserve (see Section 3.1 for more details). In the case of the Bank of Japan, "other lending" includes special fund-supplying operations against corporate debt that were introduced in January 2009, as well as the complementary lending facility, which provides overnight loans to counterparties upon request.

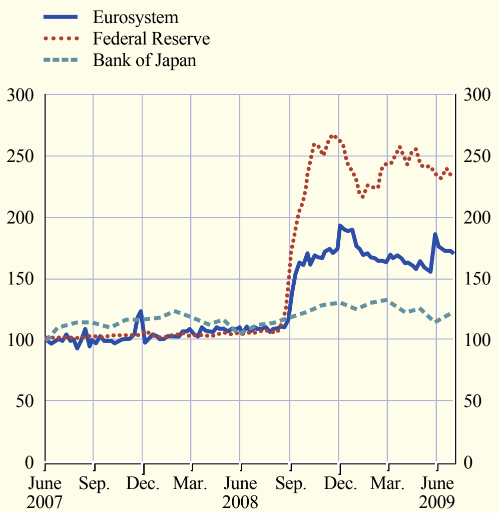
The monetary policy instruments reported on the liability side of the simplified balance sheet include the current accounts of credit institutions, as well as several other liquidity-absorbing monetary policy instruments. The current accounts cover the minimum reserve requirements, as well as the "excess reserve" holdings, i.e. the current account holdings in excess of the minimum reserve requirements. The Eurosystem offers a deposit standing facility that enables counterparties to deposit liquidity on an overnight basis. The "absorbing operations" item on the Eurosystem's simplified balance sheet consists of the collection of fixed-term deposits, which, in contrast to the reverse repos of the Federal Reserve and the Bank of Japan, do not involve a transfer of collateral to counterparties. The "US Treasury supplementary financing account" contains deposits made by the US Treasury with the Federal Reserve as part of a scheme that was introduced in September 2008 in order to absorb some of the excess liquidity provided through the new lending facilities. Finally, the item "Bank of Japan bills sold" contains bills issued by the Bank of Japan.

3 BALANCE SHEET DEVELOPMENTS SINCE JUNE 2007

During the first phase of the financial turmoil, which lasted until September 2008, the size of the central banks' balance sheets did not change noticeably (see Chart 1). Liquidity injections were offset through the sale of central bank assets or downward adjustments to the size of the refinancing operations towards the end of the maintenance period, in order to ensure that no excess liquidity remained in the banking system. However, after the financial turmoil intensified in the fourth quarter of 2008, the Eurosystem undertook a number of enhanced credit support measures and the Federal Reserve introduced a credit easing programme, both of which triggered a significant expansion in their respective balance sheets. Subsequent improvements in money market conditions during the first half of 2009 led to a reduction in the total assets of the Eurosystem and the Federal Reserve. However, high demand for

Chart 1 Total assets on the simplified balance sheet

(June 2007 = 100)



Sources: Eurosystem, Federal Reserve, Bank of Japan and ECB calculations.
Note: The increase in the Eurosystem's total assets recorded on 2 January 2009 resulted from an accounting reclassification. Expansions of investment portfolios in previous years were reflected on the asset side of the simplified balance sheet (see the box).

the one-year refinancing operation, conducted on 24 June 2009, triggered a second increase in the size of the Eurosystem's balance sheet. Owing to the high level of outstanding banknotes caused by above-trend growth in the late 1990s, the Bank of Japan's balance sheet was relatively large before the start of the financial market turmoil, with the result that its increase in size over the past two years has been smaller.

Table 2 Total assets on the simplified balance sheet relative to GDP and banknotes in circulation

	Eurosystem	Federal Reserve	Bank of Japan
	Relative to GDP (%)		
June 2007	10	6	16
Peak	19	15	23
Peak reference date	2/01/09	17/12/08	31/03/09
August 2009	16	14	22
	Relative to banknotes in circulation (%)		
June 2007	144	109	111
Peak	231	266	144
Peak reference date	2/01/09	17/12/08	31/03/09
August 2009	194	232	139

Sources: Eurosystem, Federal Reserve, Bank of Japan and ECB calculations.

Table 2 shows total assets as a share of GDP and as a share of banknotes in circulation for the euro area, the United States and Japan. Prior to the implementation of the turmoil-related measures, the balance sheets of these three central banks differed in size relative to GDP and banknotes in circulation. The Federal Reserve had the smallest balance sheet relative to both GDP and banknotes in circulation, while the Eurosystem and the Bank of Japan had the largest in terms of banknotes in circulation and relative to GDP respectively. These differences can be explained, at least in part, by various factors, such as different financial market structures, monetary policy implementation frameworks and economic conditions. The increase in central bank assets since October 2008 has made the Federal Reserve's balance sheet the largest relative to banknotes, even if it has remained the smallest in terms of GDP. The following sections describe the factors that contributed to the expansion of central bank assets.

3.1 IMPACT OF LIQUIDITY-PROVIDING INSTRUMENTS

The significant increase in size and the change in composition of the simplified balance sheets were triggered by the measures taken by the central banks to address the tensions in the money markets with a view to ensuring the smooth implementation of monetary policy.

EUROSYSTEM

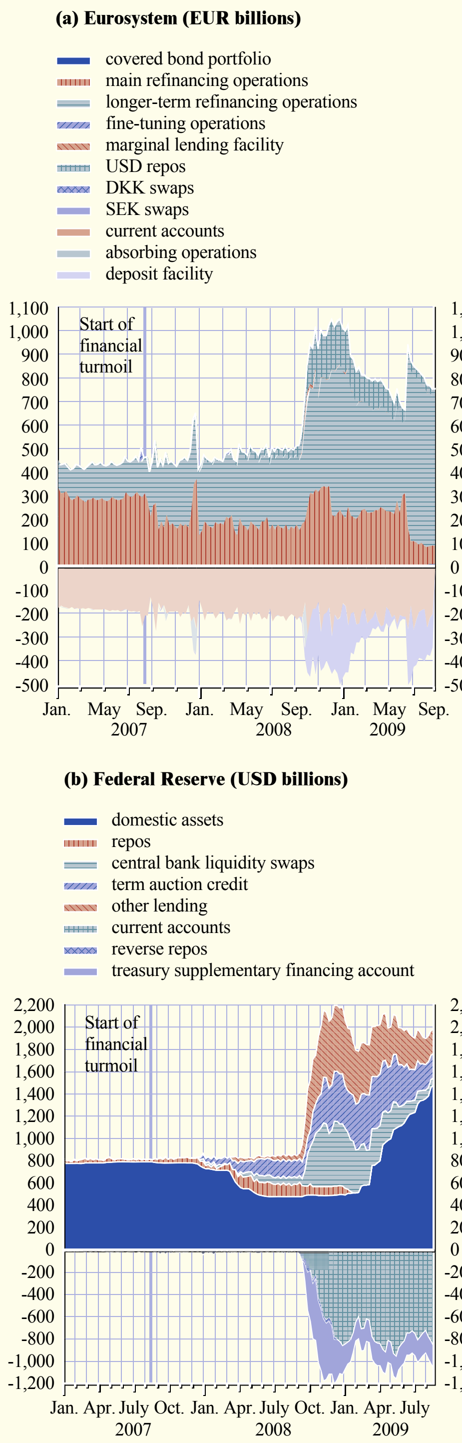
During the first phase of the financial market turmoil, the main change to the Eurosystem's approach to liquidity management – the increase in the allotment amounts and frequency of longer-term refinancing operations (LTROs) – did not affect the size of the simplified balance sheet. It only affected the ratio of LTROs to one-week refinancing operations, with LTROs constituting one-third of the total outstanding refinancing before the financial turmoil and two-thirds in September 2008.

In October 2008 the Eurosystem launched a series of enhanced credit support measures, which were supplemented by several additional tools in May 2009. First, the Eurosystem started to conduct all refinancing operations at a fixed rate while allotting all bids received from counterparties. This operational change was coupled with a temporary expansion of the already long list of collateral eligible for open market operations – the second building block of the enhanced credit support package. Third, the number and frequency of LTROs with maturities ranging from one to six months were raised. These three facets of the enhanced credit support programme resulted in a significant increase in the size of the Eurosystem's balance sheet. The outstanding amount of LTROs went up from €150 billion in June 2007 to over €600 billion at the end of 2008, almost doubling the total amount of outstanding refinancing, which peaked at €850 billion on 2 January 2009 (see Chart 2(a)). The outstanding amount of main refinancing operations (MROs) also increased from an average of €190 billion during the first phase of the financial turmoil to €340 billion at the beginning of December 2008; thereafter it decreased.

In the first half of 2009, as money market conditions had improved, demand for one, three and six-month LTROs declined gradually to €400 billion. Nevertheless, the Eurosystem left the exceptional liquidity measures in place to encourage banks to lend to the real sector. Moreover, on 24 June 2009, it carried out its first one-year LTRO, which was introduced as an extension of the third enhanced credit support measure mentioned above. Counterparties' interest in this operation was very high and the allotted amount was €442 billion, resulting once again in a significant increase in the size of the Eurosystem's balance sheet. The total amount of outstanding refinancing reached €900 billion at the end of June 2009.

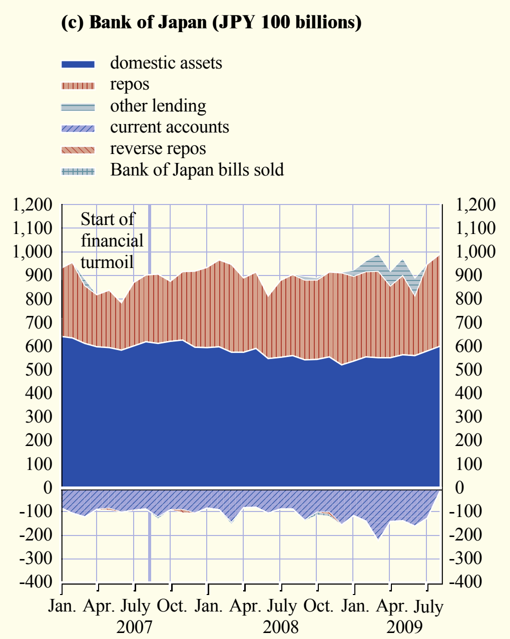
In July 2009 the Eurosystem implemented the fourth building block of the enhanced credit support programme, namely the outright purchase of covered bonds. A portfolio worth

Chart 2 Monetary policy instruments



Sources: Eurosystem, Federal Reserve (weekly data) and Bank of Japan (monthly data).

Chart 2 Monetary policy instruments



Sources: Eurosystem, Federal Reserve (weekly data) and Bank of Japan (monthly data).

€9 billion was purchased during the first two months and the total amount is expected to reach €60 billion by the end of June 2010. This measure brought about an important change in the Eurosystem's balance sheet: the item "securities of euro area residents denominated in euro" became divided into two sub-items, i.e. the covered bond portfolio, used for monetary policy implementation, and the investment assets of the euro area central banks, which are an autonomous factor.

FEDERAL RESERVE

The regular repo operations of the Federal Reserve, normally used to correct temporary fluctuations in the banking system's liquidity needs, amounted to USD 30 billion on average during the first half of 2007. In early 2008 the Federal Reserve launched a one-month term repo programme, which pushed up the outstanding amount of repos to USD 130 billion in May 2008. As the lending programmes introduced following the bankruptcy of Lehman Brothers generated large levels of excess reserve balances, the Federal Reserve stopped conducting its regular repos in January 2009 (see Chart 2(b)). In December 2007 the Federal Reserve launched the Term Auction Facility (TAF) in order to lend term funds, raising the maximum maturity to three months in 2008. The outstanding amount of the TAF peaked at almost USD 500 billion in March 2009 and has since fallen to around USD 220 billion.

In addition to the regular repos and the TAF, changes in the outright portfolio have affected the size and composition of the Federal Reserve's balance sheet during the financial turmoil. Initially, the Federal Reserve sold Treasury securities worth around USD 300 billion between June 2007 and September 2008 in order to compensate for the liquidity provided through the TAF and the other new lending programmes. However, in the context of its credit easing policy, the Federal Reserve started to purchase federal agency debt securities in September 2008 and federal agency mortgage-backed securities in January 2009. This portfolio totalled USD 740 billion in August 2009. Moreover, in April 2009 the Federal Reserve resumed its purchases of Treasury securities and thus had increased its portfolio by USD 270 billion by the end of August 2009.

Finally, the item "other lending" contributed significantly to the strong expansion of the Federal Reserve's balance sheet. This item includes the discount window, which is a standing lending facility available to depository institutions. After the Federal Reserve reduced the spread between the discount window rate and its target for the federal funds rate, from 100 to 50 basis points in August 2007 and to 25 basis points in March 2008, and extended the maturity of discount window lending from overnight to 30 days and 90 days respectively, the use of the discount window increased from an average of USD 200 million in June 2007 to almost USD 100 billion in October 2008. Moreover, in March 2008, the primary dealers (i.e. a limited group of non-bank financial intermediaries which constitute the counterparties of the Federal Reserve for the usual open market operations) were given access to a similar overnight standing lending facility – the Primary Dealer Credit Facility.

The Federal Reserve balance sheet item "other lending" also includes several credit easing tools that were introduced after September 2008. First, the Federal Reserve launched the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility to finance credit institutions' purchases of asset-backed commercial paper from money market mutual funds. In October 2008 the Commercial Paper Funding Facility was established to enhance the liquidity of the commercial paper market and the Money Market Investor Funding Facility to provide liquidity to money market investors. In March 2009 the Term Asset-backed Securities Loan Facility was launched to support the issuance of asset-backed securities collateralised by consumer and small business loans. These new lending programmes, the greater use of the discount window, the funding provided in the context of the merger between Bear Stearns and JPMorgan Chase and the restructuring of AIG increased "other lending" from USD 190 million at the end of June 2007 to a peak of USD 600 billion at the end of 2008. As was the case with the Eurosystem's LTROs, the improvement in financial market conditions led to a decrease in demand for the new lending facilities to USD 220 billion by the end of August 2009.

BANK OF JAPAN

Like the Eurosystem and the Federal Reserve, the Bank of Japan has also expanded the size and changed the composition of its balance sheet, but not on such a large scale. First, since June 2007, it has increased the level of its repo operations by around JPY 19 trillion (see Chart 2(c)). Second, the Bank of Japan's holdings of Japanese government bonds declined in 2007 and 2008, mainly because purchases of Japanese government bonds were lower than those of redemptions. To support credit markets during the financial turmoil, the Bank of Japan started to purchase commercial paper in February 2009 and corporate bonds in March 2009, the total amounts in August 2009 being JPY 100 billion and JPY 250 billion respectively. Finally, in order to facilitate corporate financing, in January 2009 the Bank of Japan introduced special fund-supplying operations with a fixed rate, for an unlimited amount and backed by corporate debt. These operations meant that the item "other lending" reached JPY 7.5 trillion in March 2009.

CENTRAL BANK COLLABORATION

A major innovation that marked an important step in central bank collaboration during the global financial turmoil was introduced in December 2007, when the ECB and several other central banks decided to take joint action with the Federal Reserve by providing US dollar liquidity against domestic collateral to their domestic counterparties through swap arrangements. While the central banks have traditionally relied on swap lines solely for foreign exchange intervention, the activation thereof during the financial market turmoil addressed money market frictions and brought about a qualitative change in the composition of the central banks' simplified balance sheets. The total outstanding amount of US dollar swap operations on the simplified balance sheet of the Federal Reserve reached almost USD 600 billion, a quarter of its total assets, in mid-December 2008. In the same month almost half of the USD 600 billion in central bank liquidity swaps (equivalent to €200 billion) were on the liability side of the Eurosystem's simplified balance sheets, while the corresponding figure for the Bank of Japan was one-fifth (equivalent to JPY 11 trillion). In 2009 international demand for US dollar refinancing declined gradually to reach USD 60 billion on the Federal Reserve's simplified balance sheet in August, of which the equivalent of €31 billion was supplied in the euro area and the equivalent of around JPY 770 billion in Japan.

In addition to the US dollar operations, since October 2008 the Eurosystem, in cooperation with the Swiss National Bank, has conducted CHF/EUR swaps, providing the equivalent of €33 billion on average. Since November 2008 the Eurosystem has also provided an average of €3 billion to Danish credit institutions through an EUR/DKK swap agreement with Danmarks Nationalbank. Similarly, since June 2009 the Eurosystem has supplied €3 billion to counterparties of Sveriges Riksbank through an EUR/SEK swap line. These foreign currency liquidity-providing operations were the fifth building block of the Eurosystem's enhanced credit support programme.

3.2 DEVELOPMENTS STEMMING FROM LIQUIDITY-ABSORBING INSTRUMENTS

The three central banks have absorbed excess liquidity by means of different instruments. For the Eurosystem, the liability item that has seen the largest increase is the deposit facility. First, it rose from around €1 billion at the end of June 2007 to over €300 billion at the end of 2008. Subsequently, the average amount placed in the deposit facility declined gradually to less than €20 billion by June 2009, but rose again to €190 billion on average during the summer. The Eurosystem also absorbed liquidity through fine-tuning operations in the course of the maintenance period on several occasions in December 2007, January 2008 and October 2008, as well as at the end of most maintenance periods.

As mentioned above, the size of the Federal Reserve's balance sheet did not increase significantly between June 2007 and September 2008, because the excess liquidity provided through the new lending facilities was withdrawn through the sale and redemption of Treasury securities worth around USD 300 billion – this raised the amount of one category of assets and reduced the amount of another. However, this was no longer possible after the massive liquidity injections resulting from the measures implemented in October 2008, when the Federal Reserve reached an agreement with the Treasury, according to which the latter would issue securities and deposit the proceeds in a supplementary account with the Federal Reserve. This measure absorbed USD 500 billion in October and November 2008, with USD 200 billion still outstanding in August 2009.

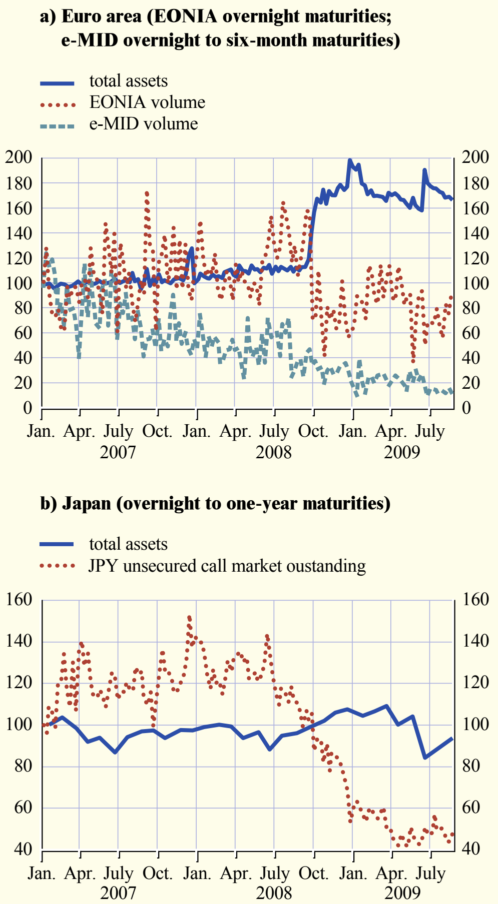
For its part, before November 2008, the Bank of Japan occasionally absorbed liquidity through the sale of Bank of Japan bills and reverse repos of Japanese government securities, the outstanding amounts of which were around JPY 1 trillion at most.

US and Japanese credit institutions' current account balances with their respective central banks, which cover minimum reserve requirements and excess reserves, have also increased since October 2008. This is due to the introduction of the remuneration of excess reserves which has enabled banks to hold excess reserves at no cost. The Federal Reserve began remunerating required and excess reserves in October 2008 and, the following month, the Bank of Japan introduced a temporary Complementary Deposit Facility, which is reported together with the current accounts on the balance sheet, in order to pay interest on excess reserves. These measures became important for the absorption of excess liquidity and led to significant increases in the current accounts – from less than USD 20 billion in June 2007 to USD 860 billion in August 2009 in the case of the Federal Reserve and from less than JPY 10 trillion to JPY 12 trillion in the case of the Bank of Japan.

The massive increases in liquidity provision on the asset side of the balance sheet and liquidity absorption on the liability side show the important role that the central banks played as intermediaries when money markets were not functioning properly, particularly in the months following the collapse of Lehman Brothers in September 2008. By stepping in to relieve the liquidity shortages in October 2008, the central banks partially replaced a large part of the money market as a source of funding for

Chart 3 Central banks' total assets and money market turnover

(January 2007 = 100)



Sources: Eurosystem, e-MID, Bank of Japan, Japanese Brokers Association and ECB calculations.

credit institutions. For example, the volume of trading on the euro interbank overnight market and on the e-MID[2] market dropped when the Eurosystem introduced unlimited refinancing at a fixed rate and reduced the standing facilities corridor to 100 basis points around the interest rate on the MROs (see Chart 3(a)). With a view to reactivating the euro money market, the standing facilities corridor was widened again to 200 basis points at the end of January 2009. Thereafter, it was reduced to 150 basis points in May. As shown in Chart 3(a), overnight volumes increased and the Eurosystem's total assets declined between January and June 2009.[3] The increase in the Bank of Japan's repo operations and excess reserves between October 2008 and July 2009 was also associated with a decrease in money market activity (see Chart 3(b)).[4]

The intermediation role of the central banks, which was particularly important in the months following the collapse of Lehman Brothers, is consistent with the Eurosystem's enhanced credit support programme, the Federal Reserve's credit easing policy and the Bank of Japan's measures to bolster the corporate debt market.

3.3 TRENDS IN AUTONOMOUS FACTORS

During the financial turmoil, the liability side of the simplified balance sheets of the three central banks also grew as a result of the increase in autonomous liquidity factors, in particular euro banknotes, euro area government deposits and US Treasury deposits. The increase in the size of these autonomous factors explains why the liquidity provision by means of monetary policy instruments explained in Section 3.1 increased more than the liquidity absorption explained in Section 3.2. The increase in the size of these autonomous factors was coupled with an increase in their volatility.

The financial turmoil affected demand for banknotes, particularly in the autumn of 2008. Chart 4(a) shows that, in addition to the long-term upward trend and the seasonal increases in the quantity of banknotes in circulation around holiday periods, there was a significant rise in demand for euro banknotes and, to a lesser extent, for US dollar banknotes at the end of September 2008. In the first half of October the above-trend demand for euro banknotes was approximately €35 billion, approximately two-thirds of which was for

2 e-MID is the largest European electronic market for unsecured interbank deposits.

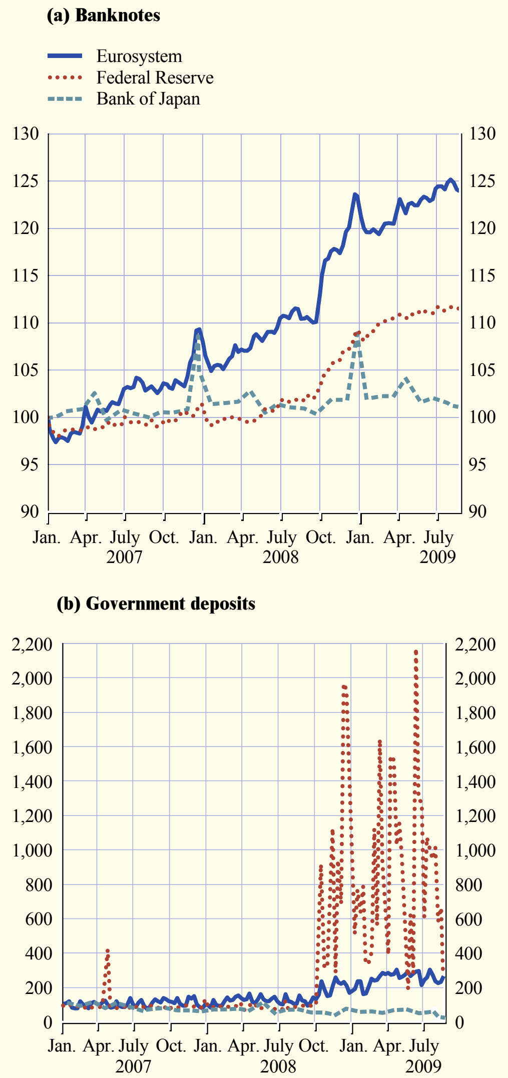
3 For a discussion on the impact of the narrow corridor between the standing facilities on euro overnight markets, see the article entitled "The implementation of monetary policy since August 2007" in the July 2009 issue of the Monthly Bulletin.

4 Data on US dollar overnight trading volumes are not publicly available.

€500 banknotes. Since high-denomination banknotes are usually used as a store of value (i.e. as a substitute for bank deposits) and not for transaction purposes, the high demand may be related to a lack of confidence in the banking system at that time. Moreover, a considerable proportion of the demand for €500 banknotes stemmed from banks located close to the borders of the euro area or from banks that handle the distribution of banknotes in countries outside the euro area, particularly in eastern Europe. This extraordinary demand for euro banknotes tapered off at the end of October 2008 after governments had announced extraordinary measures to support the banking sector. The level of currency in circulation, however, has remained above its long-term trend. Similarly, the growth in the Federal Reserve's banknotes outstanding, which had been decelerating since 2003, rose in May 2008, driven mainly by greater demand from Latin America and, later in the year, from eastern Europe and within the United States.

Chart 4 Autonomous liquidity factors

(January 2007 = 100)



Sources: Eurosystem, Federal Reserve, Bank of Japan and ECB calculations.

The size and volatility of the deposits by euro area governments and the US Treasury with the Eurosystem and the Federal Reserve respectively rose significantly in the last quarter of 2008 (see Chart 4(b)). One reason for this development was the large and varying payments related to various government programmes introduced in response to the financial turmoil. The US government, for example, kept a high balance in its Treasury General Account at the Federal Reserve in order to accommodate outflows related to the Troubled Asset Relief Program. Moreover, Treasury departments found it increasingly difficult to place funds in the market.

Finally, the investment portfolios of the euro area central banks, shown under "domestic assets" on the Eurosystem's simplified balance sheet (see Table 1(a)), have increased since June 2007. Most of this increase in "domestic assets" did not appear in the simplified balance sheet until an accounting reclassification took place at the end of December 2008 (see the box). The increase in euro area central banks' investment portfolios is within the limits stipulated in a Eurosystem agreement that ensures that the investment portfolios held by euro area central banks do not interfere with the single monetary policy. Euro area central banks acquire euro-denominated assets, for example, to boost monetary income, to invest their own funds and to provide agent services to governments (e.g. government pension funds), foreign central banks and foreign governments (e.g. reserve management services).

4 CONCLUSION

In response to the financial turmoil, the Eurosystem, the Federal Reserve and the Bank of Japan introduced significant measures to support the continued access of financial institutions to liquidity, despite the dysfunctioning of money markets, and to reduce the tension in credit markets, and thereby ensure the smooth transmission of monetary policy to the real sector of the economy. These measures turned the central banks into important money market intermediaries and led to considerable increases in the size and complexity of their balance sheets.

Prior to October 2008 the three central banks focused on addressing the dysfunctioning of the money market by increasing the outstanding amounts and/or the average maturity of their refinancing operations. Since October 2008 they have increasingly aimed to support the flow of credit to the private sector and repair the monetary policy transmission mechanism in a broader sense. As the euro area economy depends much more on the banking sector than the US economy does,[5] the Eurosystem has implemented an enhanced credit support programme, emphasising the provision of liquidity to credit institutions, including by means of covered bond purchases. Owing to the economic importance of capital markets in the United States, the Federal Reserve has conducted a credit easing policy, targeting different segments of the credit market. The Bank of Japan has introduced special measures in support of the corporate financing market, which has been particularly hard-hit as a result of the downturn. In addition to the domestic monetary policy measures, the three central banks (and several others) have joined forces in an unprecedented global effort to mitigate the impact of the worst financial turmoil in decades by supplying foreign currency to local banking systems via central bank swap lines.

5 Euro area non-financial corporations obtained an average of 70% of their external financing from banks between 2004 and 2008, while US corporations relied on banks for slightly more than 20% of their financing needs during the same period. For details, see the article entitled "The external financing of households and non-financial corporations: a comparison of the euro area and the United States" in the April 2009 issue of the Monthly Bulletin.

FINANCIAL DEVELOPMENT IN EMERGING ECONOMIES – STOCK-TAKING AND POLICY IMPLICATIONS

Domestic financial development is an issue with broad economic and policy implications, which this article addresses by focusing on emerging and developing economies, also taking account of their financial and economic links to advanced economies. Four implications of financial development stand out from the perspective of emerging and developing economies. First, progress in financial development is likely to be associated with higher potential growth via, for example, an increase in investment levels, as a vast body of literature has explored. Second, more developed domestic financial markets tend, on the whole, to increase the resilience of emerging economies, provided they are based on very strong and rigorous prudential surveillance. Third, deeper and more liquid markets are also likely to attract foreign investors, as developments in gross private capital inflows to emerging economies confirm. Larger cross-border financial exposures may, under certain circumstances, give rise to sudden retrenchments in capital flows, as the experience with the ongoing financial crisis illustrates. Fourth, the existence of major differences in the level of financial development between advanced and most emerging economies has been one of the factors underlying the accumulation of global imbalances in the years preceding the financial crisis. It could, therefore, be inferred that a greater degree of symmetry in financial globalisation – that is, a process of catching-up of emerging economies in financial terms – may, over the longer run, contribute to more sustainable saving-investment and current account configurations via higher domestic demand in, and lower official capital outflows from, emerging and developing economies. This also requires appropriate improvements to reinforce the stability of the global financial sector.

Against this backdrop, this article presents and discusses measures of domestic financial development in emerging economies in comparison with advanced economies. The article then addresses two of the aforementioned facets of financial development: (i) its relationship with global imbalances and the ensuing implications both from an emerging market and a global perspective; and (ii) the link between domestic financial development and financial stability, focusing on rapid bank-based financial development in eastern and south-eastern Europe as a case study.

1 INTRODUCTION

Domestic financial development can be defined as the capability of a country to channel savings into investment within its own borders. This capability hinges on institutional and organisational progress in the local financial system, which reduces asymmetric information, brings in new important market segments, promotes financial innovation, adds possibilities for agents to engage in financial transactions, reduces transaction costs and increases competition.[1] Given this definition, the notion of "domestic financial development" should be kept distinct from other concepts, such as those of "financial system", "financial integration" and "financial openness".[2] In particular, for the purposes of this article the distinction between financial stability and domestic financial development is of the essence: a country can be very developed in financial terms and yet experience financial crises if its performance from a financial stability perspective is inadequate, as the ongoing crisis has clearly illustrated.

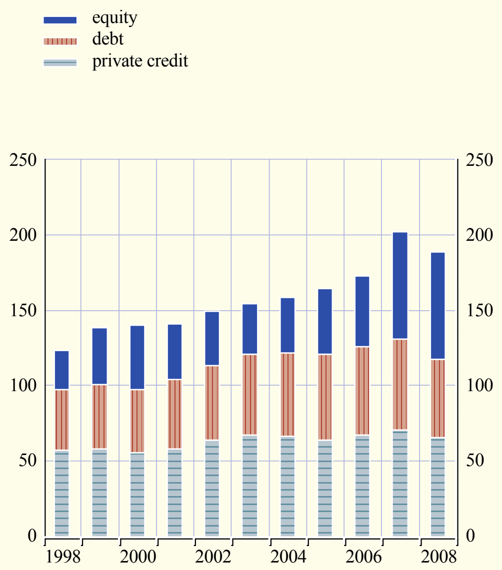
In view of the broad economic and policy implications of domestic financial development, the international community has been paying increasing attention to the issue, its implications and the required policy actions (e.g. in the fields of regulatory and microeconomic reforms, macroeconomic management and cooperation among central banks). International fora and

1 See P. Hartmann, F. Heider, E. Papaioannou and M. Lo Duca (2007), "The role of financial markets and innovation in productivity and growth in Europe", ECB Occasional Paper No 72.

2 Regarding the conceptual background to which this article refers, see the article entitled, "Assessing the performance of financial systems", in the October 2005 issue of the ECB's Monthly Bulletin; and ECB (2008), "Financial integration in Europe".

Chart 1 Total funding sources of emerging economies

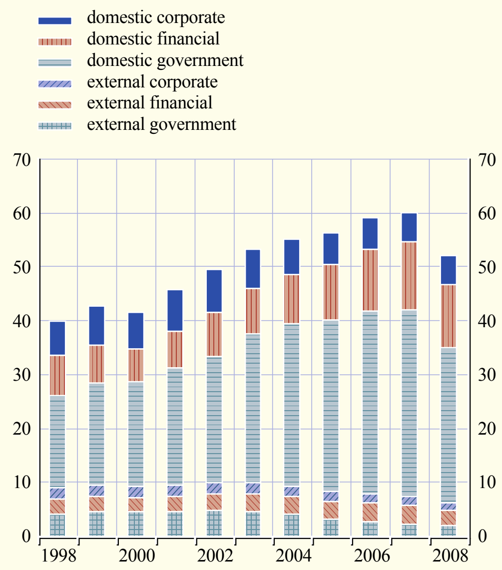
(percentages of GDP)



Sources: BIS, IMF World Economic Outlook and Datastream.
Note: The 17 emerging market economies (EMEs) portrayed in Charts 1, 2 and 3 are: Argentina, Brazil, Chile, China, Hong Kong SAR, India, Indonesia, Malaysia, Mexico, the Philippines, Singapore, South Africa, South Korea, Taiwan PoC, Thailand, Turkey and Venezuela.

Chart 2 External versus domestic debt of emerging economies

(percentages of GDP)



Sources: BIS, IMF World Economic Outlook and Datastream.
Note: See the note to Chart 1.

organisations, such as the G7/G8, the G20, the International Monetary Fund, the World Bank and the Bank for International Settlements, have called for progress in domestic financial development in emerging and developing economies (hereafter referred to as "emerging economies" for the sake of brevity) in order to enhance their resilience and contribute to an orderly unwinding of global imbalances via lower net flows of capital from surplus to deficit countries.[3] As regards the complex link between domestic financial development, capital flows and financial stability, the BIS-based Committee on the Global Financial System (CGFS) and the G20 have recently published reports addressing this among other issues.

Some stylised facts suggest that the pace of domestic financial development has been accelerating somewhat since the late 1990s in most emerging economies:

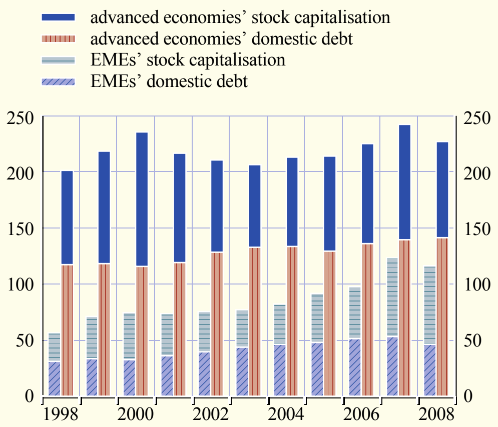
Looking at the overall financing of these economies, i.e. including both domestic and external funding, the ratio of total private bank loans, debt instruments and equity liabilities (the latter excluding external funding) to GDP increased significantly in the period 1998-2007, to over 200% of GDP (see Chart 1). The subsequent financial crisis produced a decrease of this broad measure in 2008. However, in annual terms this decline was relatively contained compared with the major retrenchment in foreign private capital flows to emerging economies that took place especially in the last quarter of that year.

Focusing on debt liabilities, in line with the G8 action plan emerging economies have been reducing their issuance of external debt since 2003, thus increasingly relying on domestic

3 For instance, in October 2007 G7 finance ministers and central bank governors welcomed the G8 action plan for developing local bond markets in emerging economies.

Chart 3 Domestic market funding in emerging and advanced economies

(as a percentage of GDP)



Sources: BIS, IMF World Economic Outlook and Datastream.
Notes: The 17 emerging market economies (EMEs) portrayed in Charts 1, 2 and 3 are: Argentina, Brazil, Chile, China, Hong Kong SAR, India, Indonesia, Malaysia, Mexico, the Philippines, Singapore, South Africa, South Korea, Taiwan PoC, Thailand, Turkey and Venezuela. Advanced economies comprise the United States, Japan and the following EU countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

debt – a process that has resulted in lower vulnerability to e.g. exchange rate shocks. This process has been driven by sovereign issuers (until 2007) and, to a lesser extent, banks. Conversely, the ratio to GDP of debt securities issued domestically and abroad by the corporate sector has not changed significantly in the period 1998-2008 (see Chart 2).

Finally, while starting from very low levels, in the period 1998-2008 the domestic market-based funding (i.e. excluding bank loans) increased at a much faster pace in emerging economies than in advanced economies (defined here as the United States, Japan and a sub-set of 14 EU countries), i.e. by 105% against 13%. As a result, in 2008 the funding of emerging economies in domestic markets accounted for 117% of their GDP (more than half the ratio for the advanced economies) compared with only 57% in 1998 (which was less than one-third of the ratio for advanced economies) (see Chart 3).

These stylised facts and the above considerations call for a more thorough measurement and assessment of domestic financial development in emerging economies. In doing this, Section 2 presents and discusses measures of domestic financial development in such economies, using advanced economies as a point of reference. Section 3 examines the relationship between domestic financial development and macroeconomic variables such as savings, investment and current account balances, and the ensuing implications both from an emerging market and a global perspective. Finally, Section 4 addresses the link between domestic financial development and financial stability, with the main focus on eastern and south-eastern Europe during the financial crisis.

2 MEASURING DOMESTIC FINANCIAL DEVELOPMENT IN EMERGING ECONOMIES

In this section, the degree of domestic financial development reached by 26 emerging economies – the G20 members, the main non-G20 commodity exporters and other systemically relevant emerging economies – is compared with domestic financial development in all G7 economies except Canada (with euro area G7 members grouped in a weighted aggregate called the "euro area G3"). The year chosen is 2006, a period which is indicative of the degree of domestic financial development reached across the globe prior to the process of rebalancing triggered by the financial crisis under way since summer 2007.[4]

Domestic financial development is measured on the basis of a composite normalised index[5] including three dimensions (institutions, etc.), eight sub-dimensions (quality of institutions, etc.) and twenty-two variables summarised in

4 In 2006 (the year preceding the financial crisis) the size of financial markets is likely to have been inflated by factors such as the search for yield and the underpricing of risks. This raises the question of whether certain financial markets, e.g. in advanced economies, were inflated more than others – an aspect that should be borne in mind as a caveat.

5 The composite indices discussed in this section are based on an original methodology and database described in E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), "Domestic financial development in emerging economies: evidence and implications", ECB Occasional Paper No 102.

Table 1. In particular, the three broad dimensions are designed to capture different aspects relevant for domestic financial development, namely: (i) the institutions and rules supporting domestic financial development, as indicated by the World Bank "Doing Business" database and the International Country Risk Guide (ICRG); (ii) the relative size of financial markets in each economy and the possibility for economic agents to access such markets efficiently; and (iii) a number of proxies trying to summarise the "performance" of each market in terms of market liquidity, banking efficiency and the degree of "crowding in" of the private sector in comparison with the relative weight of the government and the central bank.

The main rankings and scores obtained with the DFD (domestic financial development) index are summarised in Table 2, which shows that in 2006 the bulk of emerging economies still needed to make substantial progress to achieve a degree of domestic financial development close to the selected G7 economies. The latter indeed presented a (non-weighted) average score of about 68 (out of a maximum score of 100),

Table 1 Index of domestic financial development: dimensions and variables used

1. Institutions		2. Size of and access to markets			3. Market performance		
Quality of institutions	**Regulatory and judicial framework**	**Size of "traditional" private financial markets**	**Financial innovation**	**Possibility for residents to access finance**	**Banks' efficiency**	**Liquidity (market turnover)**	**Distribution of domestic asset base between the private and the official sector**
Level of corruption (-)	Strength, impartiality and observance of the legal system (+)	Stock market value/GDP (+)	Gross issuance of ABS and MBS/GDP (+)	Number of bank branches per 100,000 inhabitants (+)	Banks' costs-to-income ratio (-)	Value of shares traded as a ratio of equity market capitalisation (three-year moving average) (+)	Central bank claims on the private sector over total claims on the private sector (-)
Bureaucratic quality (+)	Investor protection (strength of minority shareholders) (+)	Private bond market/GDP (+)		Number of ATM machines per 100,000 inhabitants (+)			Amount of public sector funding over total bank claims (-)
	Strength of collateral and bankruptcy laws in protecting the rights of borrowers and lenders (+)	Total bank claims/GDP (+)		Life insurance penetration (volume of life insurance premiums/GDP) (+)			Domestic private debt over domestic government debt (-)
	Degree of information available in lending operations (+)	Assets of non-bank financial institutions/ GDP (+)		Non-life insurance penetration (volume of non-life insurance premiums/GDP) (+)			
	Efficiency in enforcing contracts and resolving commercial disputes (+)			Cost of maintaining a savings account (annual fees) (-)			

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit. (see pp. 52-54 for the specific source of each variable).
Notes: Expected effect on DFD in parentheses. ABS stands for asset-backed securities and MBS for mortgage-backed securities.

whereas the average score was below 48 for the emerging market group taken as a whole. At the same time, the scope for catching-up varies considerably from country to country. Three Asian financial centres (Hong Kong SAR, Singapore and Taiwan PoC) and South Korea present scores comparable to those of G7 economies. An intermediate group of countries, ranging between Malaysia and Kuwait, shows intermediate scores between 58 and 48. Finally, a large group of 14 countries (54% of the sample) includes slightly or much lower scores, spanning from Saudi Arabia (46) to Venezuela (29). Regarding G7 members, in 2006 the United States ranked first across all dimensions of financial development. Similar conclusions have been drawn in other contributions to the literature.[6]

Table 2 also illustrates that there may be some variance among the three aforementioned broad

6 See, in particular, World Economic Forum (2008), "The Financial Development Report". For a seminal contribution, see T. Beck, A. Demirgüç-Kunt and R. Levine (2000), "A New Database on Financial Development and Structure", World Bank Economic Review No 14.

Table 2 Index of domestic financial development: rankings and scores

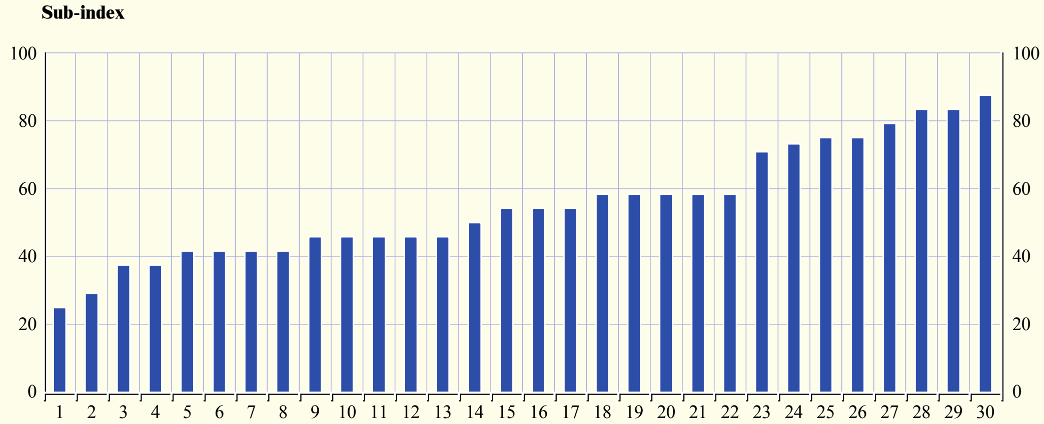
(2006)

Country/economy	Composite index of domestic financial development (DFD) Rank	Composite index of domestic financial development (DFD) Score (scale 1-100)	1st dimension: Institutions and rules supporting DFD Rank	2nd dimension: Financial market size and access to finance Rank	3rd dimension: Selected proxies of financial market performance Rank
United States	1	77.3	1	1	1
Hong Kong SAR	2	69.8	3	7	4
United Kingdom	2	69.8	4	3	11
Japan	4	66.2	5	2	22
Singapore	4	66.2	2	9	16
South Korea	6	64.6	8	5	2
Taiwan PoC	7	61.7	12	4	6
Euro area G3	8	58.6	10	6	5
Malaysia	9	57.9	7	11	8
Bahrain	10	55.4	13	12	7
Israel	11	54.4	6	10	18
Qatar	12	51.8	9	20	17
South Africa	13	49.8	18	8	13
China	14	49.5	21	16	3
Chile	15	48.4	11	13	25
Kuwait	16	48.1	15	17	15
Saudi Arabia	17	45.9	19	26	20
Turkey	18	45.5	16	21	12
Thailand	19	45.0	20	18	9
UAE	20	44.0	26	15	14
Mexico	21	43.2	14	23	21
India	22	42.4	22	19	24
Egypt	23	42.2	29	22	23
Oman	24	41.1	23	28	10
Brazil	25	40.8	24	14	26
Argentina	26	39.6	17	29	29
Philippines	27	36.9	27	24	28
Russia	27	36.9	28	27	19
Indonesia	29	34.1	25	30	30
Venezuela	30	29.4	30	25	27

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chart 4 Quality of institutions

(2006)

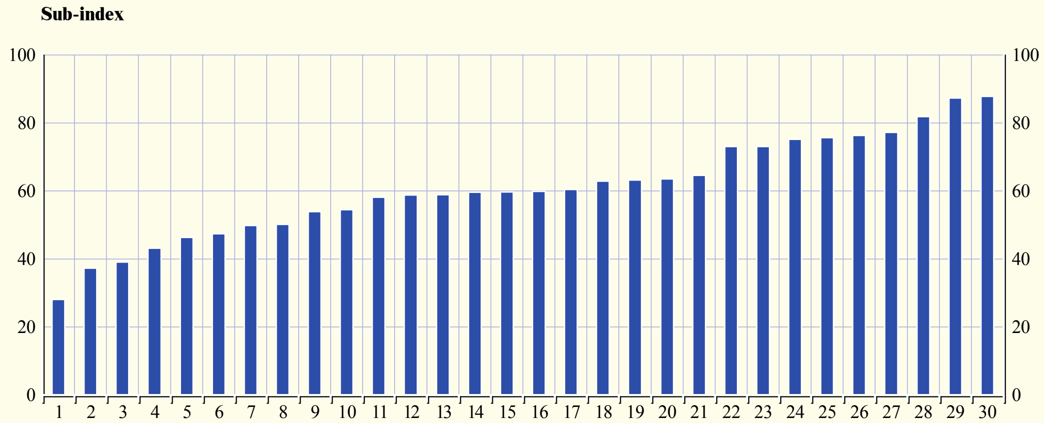


1 Venezuela (VEN)
2 Russia (RUS)
3 China (CHN)
4 Thailand (THA)
5 Bahrain (BHR)
6 Brazil (BRA)
7 Egypt (EGY)
8 Saudi Arabia (SAU)
9 Indonesia (IDN)
10 Oman (OMN)
11 Qatar (QAT)
12 South Africa (ZAF)
13 Turkey (TUR)
14 Kuwait (KWT)
15 Mexico (MEX)
16 Philippines (PHL)
17 United Arab Emirates (UAE)
18 Argentina (ARG)
19 India (IND)
20 Korea (KOR)
21 Malaysia (MYS)
22 Taiwan (TWN)
23 Hong Kong (HKG)
24 Euro area G3 (EUR)
25 Chile (CHL)
26 Israel (ISR)
27 Japan (JPN)
28 US (USA)
29 UK (GBR)
30 Singapore (SGP)

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chart 5 Regulatory framework

(2006)



1 VEN
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4 UAE
5 RUS
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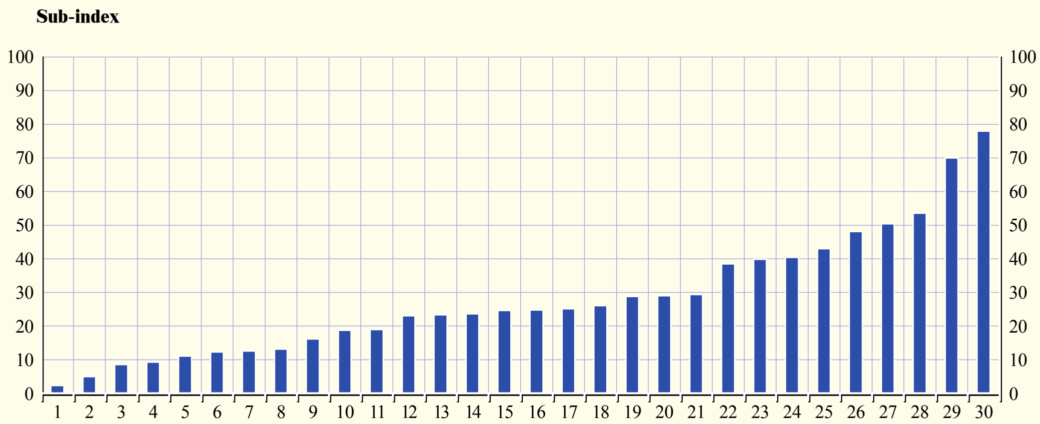
7 IND
8 BRA
9 OMN
10 ARG
11 MEX
12 ZAF
13 SAU
14 KWT
15 CHN
16 THA
17 TUR
18 CHL
19 TWN
20 BHR
21 EUR
22 ISR
23 KOR
24 MYS
25 QAT
26 JPN
27 GBR
28 SGP
29 USA
30 HKG

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chart 6 Financial market size

(2006)



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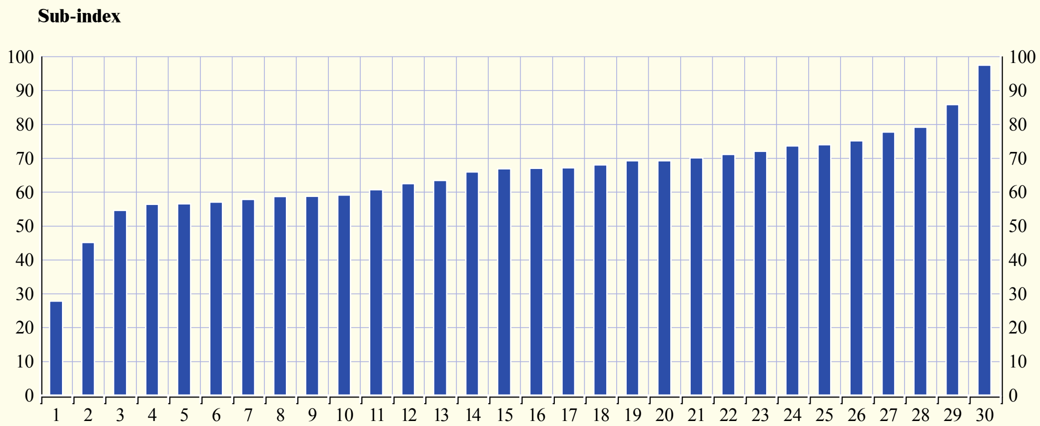
13 UAE
14 CHN
15 ISR
16 KWT
17 BHR
18 SAU
19 THA
20 CHL
21 QAT
22 TWN
23 SGP
24 KOR
25 GBR
26 MYS
27 HKG
28 ZAF
29 JPN
30 USA

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chart 7 Distribution of the domestic asset base

(2006)



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15 KWT
16 MEX
17 UAE
18 BHR
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21 EUR
22 ZAF
23 RUS
24 ISR
25 OMN
26 TWN
27 MYS
28 KOR
29 HKG
30 USA

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

dimensions of domestic financial development (in short, institutions, size and performance). A deeper analysis of some of the eight sub-dimensions listed in Table 1 helps to explain this variance. Regarding the quality of institutions underpinning domestic financial development, Singapore, Israel and Chile are the emerging economies ranking in the top positions, whereas Venezuela, Russia, China and Thailand present the lowest scores. In the sample, 27% of the economies considered present scores above 60, the bulk (60%) between 40 and 60, and 13% below 40 (see Chart 4). Turning to the sub-dimension of regulatory framework, most of the sample ranges between 50 and 70. Hong Kong SAR, Singapore, Qatar, Malaysia and South Korea have the best regulatory environments, while Venezuela, Egypt and the Philippines rank lowest (see Chart 5).

The sub-dimension "traditional size measures" comprises the size of the stock market and the private bond market,[7] as well as the assets of banks and non-banking financial institutions, as a share of GDP. These measures are "traditional" in the sense that they are the most widely quoted in the literature on domestic financial development. The highest values are reached by South Africa, Hong Kong SAR, Singapore, Taiwan PoC, Malaysia and South Korea. After Qatar, Chile and Thailand – which present intermediate scores – a gradual decline in values characterises the other economies until Venezuela's value of 2 only is reached (see Chart 6).

Finally, the distribution of the domestic asset base is portrayed by three variables: (i) central bank claims on the private sector over total claims on the private sector; (ii) the amount of funding accruing to the public sector over total bank claims; and (iii) domestic private debt over domestic government debt. This is a particularly important sub-dimension, as it captures possible crowding-out effects stemming from the public sector. Chart 7 shows that Hong Kong SAR leads on this score (86), followed by South Korea (79). Indonesia (28) and Turkey (55) are at the bottom.

A complementary picture is provided in Charts 8 and 9, where the focus is shifted from individual countries to a geographical distribution of the scores in the composite DFD index across different emerging market groupings and regions. Looking, for instance, at the so-called BRICs (Brazil, Russia, India and China), on the whole, their prominence in the global economy in terms of their contribution to world trade and GDP growth is not yet mirrored by an adequate level of financial development[8] (see Chart 8). Similarly, further progress in domestic financial development in the countries participating in the Gulf Cooperation Council would contribute to the domestic absorption of net savings in this region, thus limiting the need to reinvest the windfall from oil exports in financial assets of advanced economies, thereby helping unwind global external imbalances (see Chart 9). Similar considerations apply to the broader group of commodity exporters (see Chart 8).

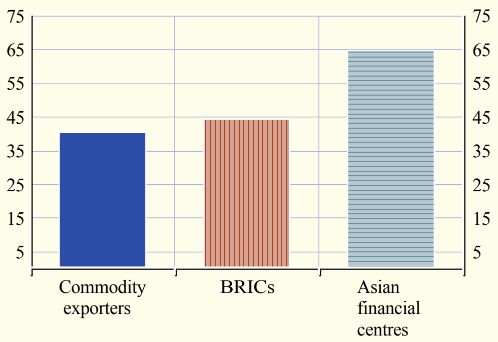
As a last point, Chart 10 illustrates the positive relationship between the "institutions/rules" and the "size/access" dimensions of the index. Interestingly, this chart also suggests that in 2006 the United States tended to be oversized in relation to the institutional index. Conversely, financial systems such as those of

7 While the importance of public debt in the earlier stages of domestic financial development is not denied, here this variable is not included since its excessive growth would not be desirable for an economy.

8 An unexpected finding that calls for further inspection relates to China, which ranks only 21st on the institutional dimension and 16th on the size and access measures, but 3rd in the sub-index of "performance" – admittedly the most controversial component of the index presented here. This result reflects a very low cost-to-income ratio for the banking system, which is not only due to low labour costs, but also – more importantly – to the setting by the central bank of benchmark interest rates on loans and deposits, which artificially ensure wide interest rate margins for the banking system. Moreover, statistics on the distribution of the asset base between the private and public sector tend to underestimate the proportion of banks in the country that are state-run. As a result, the scores in the performance component should be interpreted with caution, and indeed they decrease once the definition of "performance" is adjusted for the aforementioned factors.

Chart 8 Composite index of DFD: breakdown by selected country groupings

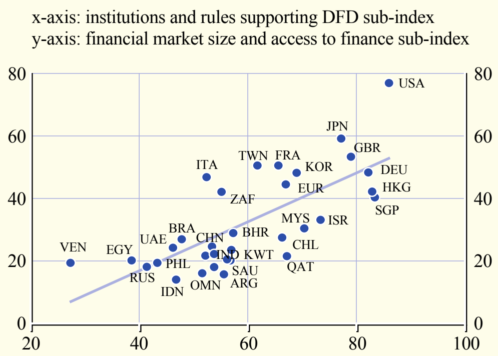
(GDP-weighted data)



Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.
Notes: Key commodity exporters are Chile, Venezuela, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates and Russia. The BRICs are Brazil, Russia, India and China. The Asian financial centres are Hong Kong SAR, Singapore and Taiwan PoC.

Chart 10 Relationship between financial market size and institutional quality

(2006)

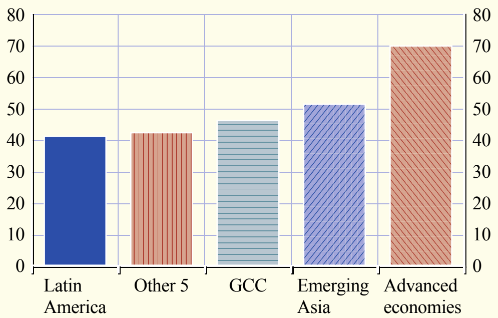


Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chile, Israel and Singapore present relatively strong institutions that are not fully reflected in their size and performance scores. The question why certain emerging economies have not yet fully translated their successful institutional and regulatory environments into well-sized and high-performing financial intermediaries and markets is certainly one that deserves further attention.

Chart 9 Composite index of DFD: geographical breakdown

(GDP-weighted data)



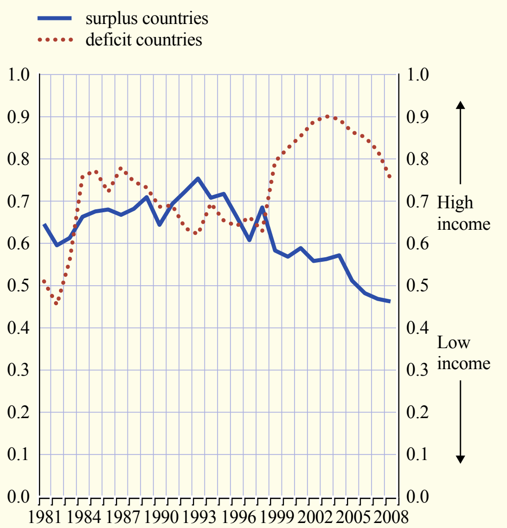
Sources: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.
Notes: Latin American economies are Argentina, Brazil, Chile, Mexico and Venezuela. Gulf Cooperation Council (GCC) economies are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. Emerging Asian economies are China, Hong Kong SAR, India, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Taiwan PoC and Thailand. The "other 5" economies are Egypt, Israel, Russia, Turkey and South Africa. Advanced economies comprise all G7 countries except Canada.

3 FINANCIAL UNDERDEVELOPMENT IN EMERGING ECONOMIES, INTERNATIONAL CAPITAL FLOWS AND GLOBAL IMBALANCES

3.1 REVIEW OF THE LITERATURE

In recent years, the group of countries with current account surpluses, i.e. recording net total outflows of capital, has on the whole been recording increasingly lower incomes per capita, despite the presence in the group of some rich countries such as Japan or Germany (see Chart 11). This section addresses the question of whether financial underdevelopment may have been one of the factors accounting for this phenomenon, which conventional economic models see as a puzzle. In fact, financial integration between two groups of economies with different levels of economic development – which are labelled here as "high income per capita countries" (HICs) and "low income per

Chart 11 Weighted average of income in the two groups of countries with current account deficits and surpluses



Source: IMF World Economic Outlook.
Notes: The sample includes 83 countries. The vertical axis measures the weighted average of per capita incomes in the two groups of countries recording, respectively, current account surpluses and deficits. To this end, the sample has been split into these two groups for each year of the period 1981-2008. For both groups, the share of each country in the group's total current account balance has been calculated and then multiplied by the relative income per capita of the country concerned, in turn measured as a share, ranging between zero and one, of the income per capita of the richest country in the sample in each year. Data have been adjusted for purchasing power.

capita countries" (LICs) – is expected to lead to net capital flows from HICs to LICs, where the rate of return on capital and potential growth are higher. This expected outcome could be called a "first-order effect". However, the recent experience has contradicted this expectation since total net capital has been flowing from emerging economies (taken, of course, as a whole since there are several exceptions, such as countries in central and eastern Europe) to advanced economies. Nonetheless, an important qualification is that in net terms private capital has continued to flow to LICs, as conventional models would have predicted, but this has been more than compensated for by official capital directed by emerging economies to advanced economies.[9]

Some recent contributions to the economic literature have argued[10] that a more important role than that of the aforementioned first-order effect may have been played by a second-order effect originating in financially underdeveloped LICs. The existence of underdeveloped financial markets tends indeed to feed private savings and hold back domestic demand, since consumers and firms face borrowing constraints[11] impeding both consumption smoothing over time and the financing of investment opportunities. As a result, economies with underdeveloped financial markets have, all other things being equal, a propensity to channel their excess savings abroad.

It is well known that trade development has preceded domestic financial development in emerging economies. Since a developed financial system cannot be created overnight, it is not surprising that several emerging economies have exploited their cheaper labour costs and other comparative advantages to integrate into the world economy, whereas their endowment and comparative advantages in the provision of financial services and instruments have remained relatively limited. Moreover, with globalisation, net lenders in LICs gain easy access to global assets of HICs, but only specialised investors and lenders in HICs gain equal access to net private borrowers in LICs, because the latter's liabilities are more local in nature, thus engendering a problem of asymmetric information. As a result, and despite the ongoing financial crisis, HICs are likely to continue to have a comparative advantage in the provision of financial services for some time to

9 This qualification is discussed further below. The expression "private capital" refers here to the financial account of the balance of payments net of "official capital", in turn defined as changes in reserve assets plus any other capital flows triggered by the public sector (e.g. sovereign wealth funds).
10 For an overview of arguments, see L. Bini Smaghi (2007), "Global capital and national monetary policies", speech given at the European and Economic Financial Centre, London, January.
11 The term "borrowing constraints" should be understood as a catchword referring to a broad and complex set of financial market features that are captured by the DFD index presented in Section 2 of this article. For instance, low domestic financial market liquidity tends to result in high domestic asset price volatility, thus creating incentives to invest abroad rather than domestically. Moreover, information asymmetries (due e.g. to an insufficient lenders' knowledge of borrowers) reduce the investment opportunities that can be financed in a profitable way, thus forcing extra savings to be channelled abroad. Finally, limits on consumer credit also contribute to containing domestic demand by limiting consumer spending.

come. This helps to explain the constellation of current accounts in which LICs tend to have a surplus and HICs a deficit.

In support of this interpretation, several authors[12] have claimed that the world has a shortage of supply of financial assets, to which fast-growing emerging economies would have contributed by seeking to store value in financial assets that they do not produce. These economies are indeed experiencing a large increase in their disposable income, but have not been able to sell in advance rights over their output – i.e. to create financial assets – owing to their financial underdevelopment. In this context, the fact that advanced economies such as the Anglo-Saxon ones have been supplying financial assets to those emerging economies which are unable to produce them would help to partly explain their external imbalances in the form of current account deficits.[13]

Other authors[14] have asked why the majority of emerging economies in the past recorded current account deficits despite even less developed local financial systems. The shift from deficit to surplus can only be understood in conjunction with a number of shocks to output growth and total savings of emerging economies that have occurred over the past 12 years: (i) the Asian crisis in the late 1990s, which resulted in a negative demand shock followed by the promotion of export-led growth, sometimes coupled with a massive accumulation of foreign exchange reserves and heavily managed exchange rates; and (ii) two positive supply shocks in the 2000s – a productivity shock and rising commodity prices – to which the domestic demand of several emerging economies has not reacted in a proportionate way owing to structural factors such as demographic trends and the lack of adequate welfare provision.[15] The extra precautionary savings engendered by such shocks to the income of emerging economies have tended to be channelled abroad due to their financial underdevelopment, thus resulting in current account surpluses.

Differences in the degree of financial development can also help to explain portfolio composition, i.e. the reason why, as already mentioned, private capital tends to flow to LICs, as one would expect, whereas it is mainly official capital that is directed to HICs via the accumulation of foreign assets by central banks and sovereign wealth funds. Whatever the origin of excess savings in emerging economies, they tend to be channelled abroad by the official sector for three main reasons that can be partly related to financial underdevelopment: (i) the inefficiency of the private sector of most emerging economies in channelling savings abroad; (ii) the presence, in some countries, of asymmetric capital controls discouraging portfolio capital outflows; (iii) the attempt to create "national buffers" against future financial crises by accumulating foreign exchange reserves in a context of fixed or heavily managed exchange rate regimes.[16]

Regarding, finally, regional peculiarities, some authors[17] have focused on the case of emerging economies in central and eastern Europe,

12 See, for instance, R. J. Caballero (2006), "On the macroeconomics of asset shortages", NBER Working Paper No 12753; R. J. Caballero, E. Farhi and P.-O. Gourinchas (2007), "An equilibrium model of 'global imbalances' and low interest rates", American Economic Review; and R. J. Caballero, E. Farhi and P.-O. Gourinchas (2008), "Financial crash, commodity prices and global imbalances", paper presented at the ECB Conference on Global Financial Linkages, Transmission of Shocks and Asset Prices, Frankfurt am Main, 2 December.

13 Differently from the previous authors, who focus on a country's ability to supply assets, other authors have highlighted the link between financial underdevelopment and savings, hence the demand for financial assets. See E. G. Mendoza, V. Quadrini and J.-V. Rios-Rull (2007), "Financial integration, financial deepness and global imbalances", NBER Working Paper No 12909.

14 See, for instance, R. S. Kroszner (2007), "International capital flows and emerging market economies", speech given in Buenos Aires, 15 May.

15 For further details, see T. Bracke, M. Bussière, M. Fidora and R. Straub (2008), "A framework for assessing global imbalances", ECB Occasional Paper No 78.

16 See, for instance, Eurosystem (2006), "The accumulation of foreign reserves", ECB Occasional Paper No 43, prepared by a Task Force of the International Relations Committee.

17 See, for instance, P. R. Lane and G. M. Milesi-Ferretti (2006), "Capital flows to central and emerging Europe", Discussion Paper No 161 of the Institute for International Integration Studies (IIIS); A. Abiad, D. Leigh and A. Mody (2008), "International finance, capital mobility and income convergence: Is Europe different?", paper presented at the Economic Policy Forty-Eighth Panel Meeting hosted by the Banque de France, Paris, 24-25 October.

which provides a counter-example supporting a more conventional textbook perspective. Other authors[18] have observed that the low-return emerging market regions, such as Latin America, have over time received more capital than high-return regions such as the "Asian Tigers". This finding would further qualify the puzzle "why does capital not flow to poor countries?" into "why does capital not flow to high-return poor countries?"

In line with the literature summarised above, econometric analysis[19] has also supported the idea that financial underdevelopment in emerging economies has been one structural factor contributing to the accumulation of global imbalances and, in particular, to the phenomenon of net capital flowing "uphill" from LICs to HICs.

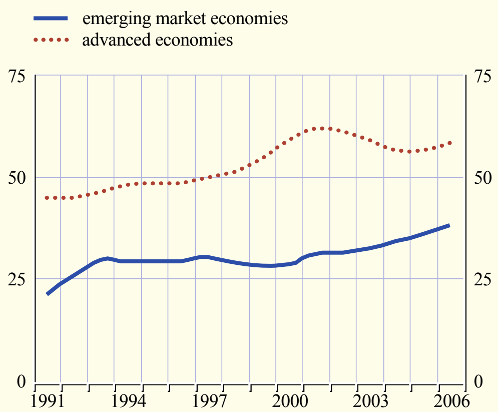
3.2 LOOKING FORWARD: POSSIBLE GLOBAL IMPLICATIONS OF FINANCIAL CATCHING-UP OF EMERGING ECONOMIES

While, as shown in Section 2, the scope for financial catching-up in emerging economies is still substantial, there is some indication that this process may have already started in certain countries. In particular, Charts 12 and 13 – which, due to data constraints in the time series, only focus on a narrower version of the index of financial market size described in Table 1[20] – show some interesting results:

- Chart 12 highlights that, in terms of financial market size, emerging market economies (EMEs) taken as a whole recorded some (limited) financial convergence towards advanced economies between 2002, i.e. after the bursting of the IT asset bubble, and 2006;

- Chart 13 focuses on selected emerging financial markets and shows that: (i) most of them grew in relative size between 1992 and 2006; (ii) Korea, Saudi Arabia and India have been clearly converging, in most recent years, towards advanced economies, as presented in Section 2.

Chart 12 Index of financial market size in emerging and advanced economies



Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.
Notes: The index of financial market size portrayed in Charts 12 and 13 is narrower than the index of financial market size described in Table 1 (see footnote 20 for details). The emerging market economies portrayed in Chart 12 are Argentina, Brazil, Chile, China, Hong Kong SAR, India, Indonesia, Malaysia, Mexico, the Philippines, Singapore, South Africa, South Korea, Taiwan PoC, Thailand, Turkey and Venezuela. Advanced economies comprise all G7 countries except Canada.

As Charts 12 and 13 confirm, this process of financial convergence, at least in certain emerging economies, seems to have been significantly influenced by financial crisis episodes affecting either advanced or emerging economies.

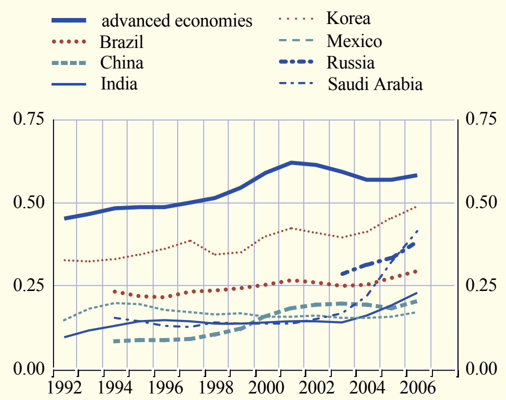
Looking forward, the ongoing crisis has shown that the financial sector in several economies, notably advanced economies and the United States in particular, is deleveraging and, ultimately, needs to shrink – a process which is indeed taking place. At the same time, once the negative spillover effects of the financial crisis on emerging economies has faded away, it is quite possible

18 L. E. Ohanian and M. L. J. Wright (2007), "Where did capital flow? Fifty years of international rate of return differentials and capital flows", paper presented at the ECB Conference on Global Financial Linkages, Transmission of Shocks and Asset Prices, Frankfurt am Main, 2 December 2008.

19 See M. D. Chinn and H. Ito (2005), "What matters for financial development? Capital controls, institutions, and interactions", NBER Working Paper No 11370; M. D. Chinn and H. Ito (2007), "East Asia and global imbalances: Saving, investment and financial development", NBER Working Paper No 13364; and Dorrucci et al. (2009), op. cit.

20 Due to data restrictions, this narrower index only comprises: (i) market capitalisation over GDP, calculated as a three-year moving average in order to smooth out sudden spikes; and (ii) non-life insurance penetration.

Chart 13 Index of financial market size: selected emerging market economies compared with advanced economies



Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.
Notes: The index of financial market size portrayed in Charts 12 and 13 is narrower than the index of financial market size described in Table 1 (see footnote 20 for details). Advanced economies comprise all G7 countries except Canada.

that investors will look with renewed interest at their financial markets – a process which has also been observable in recent months. As a result, the gap between advanced and emerging economies in terms of domestic financial development might further narrow in the years to come.

More generally, if financial globalisation were to become more symmetric in nature, the view may no longer hold true that, thanks to the opening-up of capital accounts and developed financial markets, it would always be possible for financially developed economies to smooth consumption, share risk abroad and finance large current account deficits under any circumstances and over any time horizons.

4 DOMESTIC FINANCIAL DEVELOPMENT AND FINANCIAL STABILITY

4.1 A FEW GENERAL LESSONS FROM THE FINANCIAL CRISIS

Recent reports by the Committee on the Global Financial System (CGFS) and the G20[21] have discussed, among other things, the link between domestic financial development in emerging economies and financial stability in the light of the ongoing financial crisis. Both publications have remarked that limited progress in financial innovation has implied, as a welcome indirect by-product, very limited exposures of emerging economies to sub-prime mortgage markets. As a result, emerging financial markets were able to retain the confidence of international investors in the early stages of the crisis, and until summer 2008 suffered from limited spillover effects from the financial turmoil occurring in advanced economies. However, when the crisis intensified in mid-September 2008, factors such as global deleveraging, the sudden evaporation of market liquidity and flight to safety had a major impact on emerging financial markets, but these markets proved to be overall more resilient than in past crisis episodes (though the most financially developed ones were not necessarily the most resilient).

While the enhanced liquidity of financial markets in emerging economies has strengthened their financial resilience somewhat, the experience with the crisis has shown that considerable scope remains for further progress. For instance, in many countries local currency debt and interest rate derivatives markets are still in the early stages of development, which implies that shocks affecting capital inflows can lead to larger changes in financial asset prices than in deeper markets. Moreover, several markets suffer from vulnerability owing to a narrow investor base. Broadening the investor base calls for further reforms, e.g. of relevant regulations, pension funds and other institutional investors, capital market infrastructure, and the way central banks as fiscal agents design bond issuance and trading. Finally, market resilience can also be improved through well-developed hedging markets.[22]

21 See Committee on the Global Financial System (2009), "Capital flows and emerging market economies", report submitted by a working group established by the CGFS, CGFS Papers No 33 (January); and G20 (2008), "Study Group on Global Credit Market Disruptions", paper prepared by Australia.
22 For a broader discussion of the link between financial development and financial stability in emerging economies, see A. de la Torre, J. C. Gozzi and S. L. Schmukler (2007), "Financial Development: Maturing and Emerging Policy Issues", *The World Bank Research Observer*, Vol. 22, No 1.

Another important aspect is that the process of domestic financial development has been coupled with a significant foreign bank presence in many emerging economies, which raises a number of issues of potential relevance in the context of the current crisis. This topic is discussed in the remainder of this section, focusing on the case of eastern and south-eastern Europe during the financial crisis.

4.2 RAPID BANK-BASED FINANCIAL DEVELOPMENT: A CASE STUDY

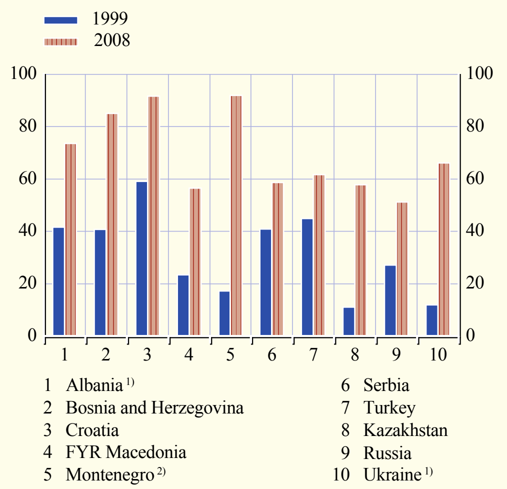
Several economies in eastern and south-eastern Europe have experienced very rapid bank-based financial development in recent years. Although financial intermediation, as measured by the share of total assets of the banking system in GDP, still lags far behind the euro area average of more than 300%, it has significantly trended upwards in the last decade (see Chart 14). Despite this general tendency, there are important differences across the countries concerned, both in the levels reached and in the pace of increase over this period. In Turkey, for instance, the increase in the size of the banking sector relative to GDP was among the smallest in the region.

The fast bank-driven domestic financial development has been facilitated by the entry of foreign banks into these countries. The privatisation of formerly state-owned banks often involved foreign buyers, who – given the growth potential of this market segment in such economies – entered the market as strategic investors and expanded their activities very rapidly afterwards. Therefore, in most countries foreign penetration increased substantially, again with considerable cross-country differences.[23] In the western Balkan economies, banking systems are dominated by foreign banks, with a share of foreign ownership in terms of assets close to or above 80% (see Chart 15). However, prevailing shares of foreign bank assets are significantly lower in other economies of the region, particularly in Russia and Turkey (below 20%). The parent companies of the foreign-owned banks are typically headquartered in the euro area. Their strategic focus on emerging Europe is also illustrated by the large increase in euro area bank claims on this region during the past ten

23 See World Bank (2009), "Global Development Finance 2009: Charting a Global Recovery".

Chart 14 Ratio of banking sector assets to GDP

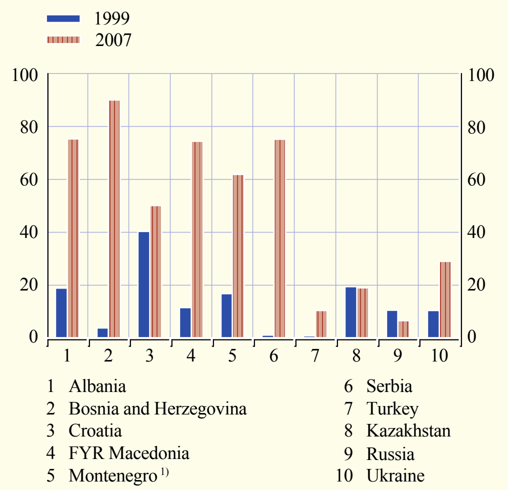
(percentages)



Sources: IMF, Haver Analytics.
1) Latest data point: 2007.
2) Earliest data point: 2003.

Chart 15 The ratio of foreign bank assets to total assets

(percentages)



Sources: European Bank for Reconstruction and Development, Haver Analytics for Turkey.
1) Earliest data point: 2003.

years, which significantly surpassed exposures to other emerging market regions (see Chart 16).

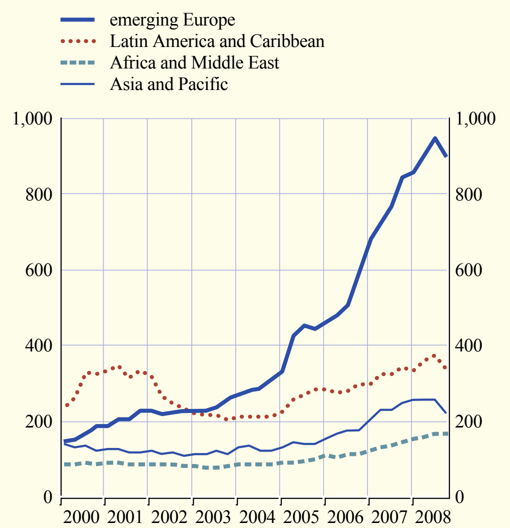
This financial development, spurred by foreign bank presence, has supported economic development and real convergence in the region. Since financing by parent banks is generally more stable than many other forms of capital inflows, especially portfolio investment, this bank-based development model offers numerous advantages. In addition, foreign banks contributed to economic transition in these countries not only by providing capital to financial systems, but also by transferring reputation, know-how, managerial skills and information technology. Moreover, foreign banks may act as a stabilising force in the case of domestic shocks. In general, more developed and more integrated financial markets allow access to international borrowing on more favourable terms, and thus raise domestic investment relative to domestic savings through the bank funding channel. In fact, the economic literature summarised in Section 3.1 suggests that this factor was crucial in bringing about, differently from other emerging economies, the "downhill" flow of capital from more capital-rich advanced economies to emerging Europe.[24]

At the same time, this rapid process of bank-based financial development has been coupled with some financial and macroeconomic vulnerabilities. On the financial side, these vulnerabilities have been manifest from rapid credit growth[25] (see Chart 17), which was enhanced by a fierce competition for market share among banks.[26] This led to increased credit

24 See S. Herrmann and A. Winkler (2008), "Real convergence, financial markets, and the current account: Emerging Europe versus emerging Asia", ECB Occasional Paper No 88.
25 Credit growth in the region exceeded that of other emerging markets. In 2004-08, credit to the private sector expanded, on average, by 44% annually in the countries analysed here (taking a simple average of the country growth rates), while the corresponding measure was 31% in Latin America and only 12% in emerging Asia.
26 See ECB (2008), "Financial stability challenges in candidate countries: Managing the transition to deeper and more market-oriented financial systems", by an expert group of the International Relations Committee, ECB Occasional Paper No 95.

Chart 16 Consolidated foreign claims on selected emerging market regions of banks headquartered in the euro area

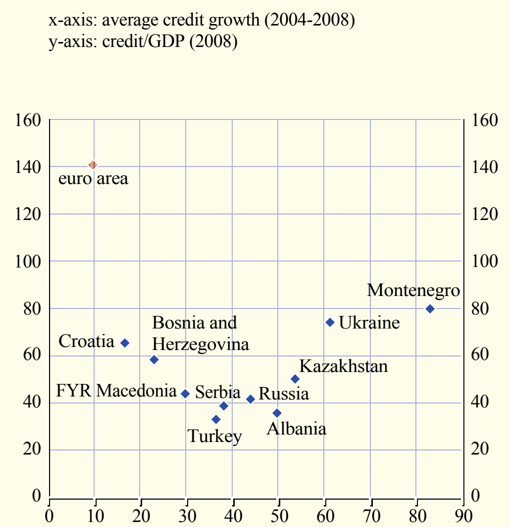
(EUR billions)



Source: BIS.
Note: Emerging Europe, as defined in the BIS statistics, comprises Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Turkey and Ukraine.

Chart 17 Average credit growth and the ratio of credit to GDP

(annual percentage changes; percentages)



Sources: ECB, IMF, Haver Analytics and national sources.

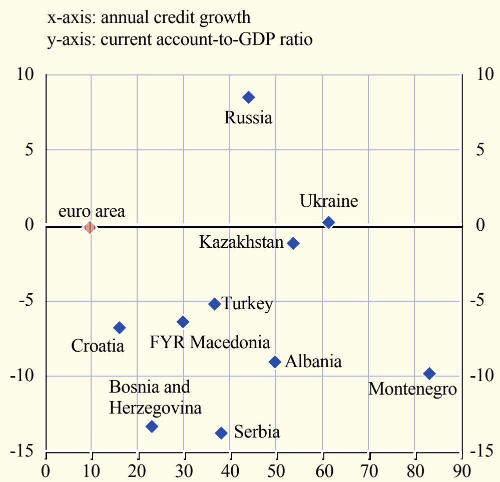
risks, as well as a large expansion of private sector debt. In fact, the fast expansion is in line with the catching-up process, and the room for convergence is indeed substantial, since the credit-to-GDP ratio in the region is still well below euro area levels. Nevertheless, the strong rate of increase and the expansion to customers without a credit history made the assessment of creditworthiness particularly challenging. The resulting vulnerabilities are partly magnified by the use of foreign currency loans to unhedged borrowers in some economies.[27]

On the macroeconomic side, the easier availability of credit and the pent-up demand led to increasing consumption and boosted gross fixed capital formation. As a result, domestic demand became the main contributor to output growth. The mirror image of domestic demand largely financed by the strong credit growth was the widening current account deficit (see Chart 18). This exposed countries to external financial vulnerabilities, which illustrates the importance of the link between macroeconomic imbalances and financial stability. In resource-rich economies such as Russia, external vulnerabilities were of a different origin, related to the high dependence on commodity prices. But as a result of elevated growth rates and booming domestic demand, several eastern and south-eastern European economies started showing signs of overheating, materialising in high inflation rates and/or high current account deficits.[28]

The current global financial crisis has suddenly exposed some of these vulnerabilities.[29] Although the direct impact on regional financial markets was limited as banks in the region had only a very small exposure to structured products, the second wave of the crisis hit these economies hard, especially via a collapse in external trade. Since most of the economies analysed here are small open economies or depend largely on commodity exports, they were strongly affected by the decline in external demand. As real economic activity declines, loan portfolios are expected to deteriorate. Moreover, banks often faced deposit withdrawal pressures in the region due to confidence effects

Chart 18 Average credit growth and current account-to-GDP ratio (2004-08)

(annual percentage changes; percentages)



Sources: ECB, IMF, Haver Analytics and national sources.

and, given their large external funding needs, were negatively affected by a reduced or more expensive access to international borrowing. Support from the parent companies may, for these reasons, be crucial in some cases. In general, foreign banks can be in a better position to recapitalise their subsidiaries or branches in the region than purely domestic banks. However, if the foreign parent banks have been hit by the financial crisis, their presence opens another potential transmission channel to these emerging countries.

In conclusion, the foreign bank-based banking models of eastern and south-eastern Europe are currently being put to the test. On the one

27 On the side of households and companies, taking out loans in foreign currency was motivated by the large interest rate differentials, while due to the real convergence process currencies seemed to be more prone to appreciation pressures. But it was also often in line with the incentives of the banks, given that the major source of funding for these foreign-owned banks was capital from their parent companies.

28 The impact of high credit growth on inflation and on current account positions was determined, inter alia, by the exchange rate regime of the countries concerned. In particular, the highest rates of inflation were experienced in countries with fixed exchange rates, where relative productivity gains could not translate into nominal currency appreciation.

29 See IMF (2009), "Regional Economic Outlook on Europe: Addressing the Crisis".

hand, foreign bank presence has acted as an anchor of stability across most countries, also during the crisis, as foreign funding pressures remained overall limited. Many parent banks have repeatedly communicated that they remain committed to the region and, in the case of a few countries under an IMF program, have formalised this commitment through voluntary agreements to maintain their exposure. At the same time, banks have partly acted as a transmission channel of shocks, which is potentially bi-directional, i.e. from advanced to emerging economies via the bank lending channel, as well as vice versa, e.g. in the case of a deterioration in profitability in the region. At the current juncture, it is too early to judge the overall performance of this financial development model in case of stress. However, it is by now well recognised that the presence of foreign banks, while providing many advantages, can become a source of shocks for both counterparties, which needs to be better taken into account by regulators and in risk assessments in the future.

5 CONCLUSION

Domestic financial development in emerging economies is a crucial ingredient in the pursuit of more symmetric financial globalisation, which in turn could play an important role in reducing global imbalances. While more developed financial markets are generally found to be beneficial for economic development, a process of rapid financial deepening may, under certain circumstances, entail some risks to financial stability. The quality of domestic financial development and the parallel development of financial supervision and regulation are, therefore, crucial for the avoidance of financial crises. In particular, financial development models relying to a very large extent on just one element of the financial system (e.g. banks or markets) may tend to be more vulnerable in times of crisis. Domestic financial development resting on more broad-based financial structures could prove to be more stable in the medium to long run.

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

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ENLARGEMENT OF THE EURO AREA ON 1 JANUARY 2009 TO INCLUDE SLOVAKIA

Unless otherwise indicated, all data series covering observations for 2009 relate to the Euro 16 (the euro area including Slovakia) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), the statistical series relating to the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate. Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for the respective year of entry into the euro area of Greece (2001), Slovenia (2007), Cyprus (2008), Malta (2008) and Slovakia (2009), calculated from bases covering the year prior to the year of entry, use a series in which the impact of these countries' joining the euro area is taken into account. Historical data referring to the euro area before the entry of Slovakia are available on the ECB's website at http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html

Conventions used in the tables

"-"	data do not exist/data are not applicable
"."	data are not yet available
"…"	nil or negligible
"billion"	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
2007	6.5	9.9	11.2	-	10.8	18.6	4.28	4.38
2008	2.4	9.7	9.7	-	9.5	18.7	4.64	3.69
2008 Q4	2.7	8.9	8.2	-	7.4	20.0	4.24	3.69
2009 Q1	5.3	7.2	6.0	-	4.6	26.2	2.01	3.77
Q2	8.0	5.5	4.3	-	2.2	27.8	1.31	3.99
Q3	.	.	.	-	.	.	0.87	3.64
2009 Apr.	8.3	5.9	4.9	4.6	2.3	28.5	1.42	3.79
May	7.9	5.0	3.8	4.1	1.8	27.9	1.28	4.18
June	9.4	4.9	3.6	3.4	1.5	26.0	1.23	3.99
July	12.1	4.7	3.0	3.0	0.7	26.7	0.97	3.74
Aug.	13.6	4.6	2.5	.	0.1	.	0.86	3.68
Sep.	.	.	.	.	.	.	0.77	3.64

2. Prices, output, demand and labour markets [5]

	HICP [1]	Industrial producer prices	Hourly labour costs	Real GDP	Industrial production excluding construction	Capacity utilisation in manufacturing (percentages)	Employment	Unemployment (% of labour force)
	1	2	3	4	5	6	7	8
2007	2.1	2.7	2.5	2.8	3.7	84.1	1.8	7.5
2008	3.3	6.1	3.4	0.7	-1.7	81.8	0.8	7.5
2009 Q1	1.0	-2.0	3.6	-4.9	-18.4	72.5	-1.2	8.8
Q2	0.2	-5.7	4.0	-4.8	-18.5	69.9	-1.8	9.3
Q3	.	.	.	.	.	.	.	.
2009 Apr.	0.6	-4.8	-	-	-21.3	70.3	-	9.2
May	0.0	-5.9	-	-	-17.6	-	-	9.3
June	-0.1	-6.5	-	-	-16.6	-	-	9.4
July	-0.7	-8.4	-	-	-15.9	69.5	-	9.5
Aug.	-0.2	-7.5	-	-	.	-	-	9.6
Sep.	-0.3	.	-	-	.	-	-	.

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 [6] (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
2007	24.8	46.4	-92.5	159.7	347.2	107.9	109.0	1.3705
2008	-89.0	-6.0	-242.3	441.5	374.2	113.0	113.6	1.4708
2008 Q4	-28.5	-0.6	-77.7	204.2	374.2	109.1	109.6	1.3180
2009 Q1	-40.8	-10.3	-38.5	179.4	395.7	111.9	112.2	1.3029
Q2	-18.0	11.2	-8.9	94.0	381.5	113.2	113.4	1.3632
Q3	.	.	.	.	.	114.3	114.3	1.4303
2009 Apr.	-7.4	3.9	-4.5	-9.0	386.3	112.5	112.8	1.3190
May	-11.6	2.2	4.8	58.0	392.2	113.0	113.2	1.3650
June	1.0	5.1	-9.2	44.9	381.5	114.0	114.3	1.4016
July	9.4	12.6	5.3	-23.0	386.5	113.8	113.8	1.4088
Aug.	.	.	.	.	428.0	113.9	113.9	1.4268
Sep.	.	.	.	.	.	115.2	115.3	1.4562

Sources: ECB, European Commission (Eurostat and Economic and Financial Affairs DG) and Reuters.
Note: For more information on the data, see the relevant tables later in this section.
1) Data refer to the changing composition of the euro area. For further information, see the General notes.
2) Annual percentage changes of monthly data refer to the end of the month, whereas those of quarterly and yearly data refer to the annual change in the period average of the series. See the Technical notes for details.
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 table 4.7.
5) Unless otherwise indicated, data refer to Euro 16.
6) For the definition of the trading partner groups and other information, please refer to the General notes.

MONETARY POLICY STATISTICS

1.1 Consolidated financial statement of the Eurosystem
(EUR millions)

1. Assets

	2009 11 September	2009 18 September	2009 25 September	2009 2 October
Gold and gold receivables	232,024	231,971	231,913	238,169
Claims on non-euro area residents in foreign currency	198,135	196,666	196,308	194,400
Claims on euro area residents in foreign currency	58,215	59,131	58,096	52,323
Claims on non-euro area residents in euro	16,333	15,612	15,007	15,141
Lending to euro area credit institutions in euro	689,256	683,837	681,048	734,324
Main refinancing operations	93,285	87,800	85,004	66,767
Longer-term refinancing operations	595,862	595,862	595,863	667,440
Fine-tuning reverse operations	0	0	0	0
Structural reverse operations	0	0	0	0
Marginal lending facility	85	149	141	91
Credits related to margin calls	24	25	40	26
Other claims on euro area credit institutions in euro	24,022	24,686	26,356	24,675
Securities of euro area residents in euro	316,605	317,451	319,065	320,756
Securities held for monetary policy purposes	11,140	12,779	14,239	15,579
Other securities	305,465	304,672	304,826	305,177
General government debt in euro	36,230	36,230	36,229	36,204
Other assets	231,653	227,388	226,220	228,574
Total assets	1,802,473	1,792,972	1,790,242	1,844,567

2. Liabilities

	2009 11 September	2009 18 September	2009 25 September	2009 2 October
Banknotes in circulation	769,238	767,516	766,140	770,946
Liabilities to euro area credit institutions in euro	331,855	325,234	306,532	368,906
Current accounts (covering the minimum reserve system)	243,037	236,238	189,778	218,307
Deposit facility	88,815	88,995	116,751	150,597
Fixed-term deposits	0	0	0	0
Fine-tuning reverse operations	0	0	0	0
Deposits related to margin calls	3	1	2	2
Other liabilities to euro area credit institutions in euro	207	169	154	158
Debt certificates issued	0	0	0	0
Liabilities to other euro area residents in euro	138,358	145,745	160,743	151,750
Liabilities to non-euro area residents in euro	89,347	83,366	85,716	76,339
Liabilities to euro area residents in foreign currency	2,068	3,150	3,030	3,865
Liabilities to non-euro area residents in foreign currency	12,144	10,999	10,712	8,841
Counterpart of special drawing rights allocated by the IMF	51,481	51,481	51,481	50,906
Other liabilities	147,020	144,557	144,980	147,644
Revaluation accounts	187,797	187,797	187,797	192,254
Capital and reserves	72,958	72,959	72,959	72,958
Total liabilities	1,802,473	1,792,972	1,790,242	1,844,567

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 to the deposit and marginal lending facilities and to the main refinancing operations (changes effective from the first main refinancing operation following the Governing Council discussion), unless otherwise indicated.
2) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new monetary regime by market participants.
3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.
4) As of 9 October 2008 the ECB reduced the standing facilities corridor from 200 basis points to 100 basis points around the interest rate on the main refinancing operations. 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 tenders [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 tenders	Variable rate tenders			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				
2009 10 June	302,077	604	302,077	1.00	-	-	-	7
17	309,621	670	309,621	1.00	-	-	-	7
24	167,902	530	167,902	1.00	-	-	-	7
1 July	105,905	405	105,905	1.00	-	-	-	7
8	106,406	397	106,406	1.00	-	-	-	7
15	100,294	389	100,294	1.00	-	-	-	7
22	88,272	396	88,272	1.00	-	-	-	7
29	94,780	382	94,780	1.00	-	-	-	7
5 Aug.	80,785	348	80,785	1.00	-	-	-	7
12	73,596	320	73,596	1.00	-	-	-	7
19	76,056	330	76,056	1.00	-	-	-	7
26	77,530	325	77,530	1.00	-	-	-	7
2 Sep.	72,086	286	72,086	1.00	-	-	-	7
9	93,285	311	93,285	1.00	-	-	-	7
16	87,800	318	87,800	1.00	-	-	-	7
23	85,004	332	85,004	1.00	-	-	-	7
30	66,767	244	66,767	1.00	-	-	-	7
7 Oct.	62,620	224	62,620	1.00	-	-	-	7
				Longer-term refinancing operations				
2009 9 July	9,067	56	9,067	1.00	-	-	-	189
30	9,492	68	9,492	1.00	-	-	-	91
12 Aug.	30,686	90	30,686	1.00	-	-	-	28
13	13,024	20	13,024	1.00	-	-	-	91
13	11,875	53	11,875	1.00	-	-	-	182
27	8,321	35	8,321	1.00	-	-	-	91
9 Sep.	10,627	45	10,627	1.00	-	-	-	35
10	3,686	23	3,686	1.00	-	-	-	182
10	3,161	14	3,161	1.00	-	-	-	91
1 Oct.	2,769	19	2,769	1.00	-	-	-	77
1	75,241	589	75,241	1.00	-	-	-	364
8	1,128	8	1,128	1.00	-	-	-	98
8	2,368	22	2,368	1.00	-	-	-	182

2. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Number of participants	Allotment (amount)	Fixed rate tenders	Variable rate tenders				Running for (...) days
					Fixed rate	Minimum bid rate	Maximum bid rate	Marginal rate [5)]	Weighted average rate	
	1	2	3	4	5	6	7	8	9	10
2008 3 Oct.	Collection of fixed-term deposits	193,844	54	193,844	4.25	-	-	-	-	3
6	Collection of fixed-term deposits	171,947	111	171,947	4.25	-	-	-	-	1
7	Collection of fixed-term deposits	147,491	97	147,491	4.25	-	-	-	-	1
9	Reverse transaction	24,682	99	24,682	3.75	-	-	-	-	6
11 Nov.	Collection of fixed-term deposits	149,656	117	79,940	-	-	3.75	3.60	3.51	1
9 Dec.	Collection of fixed-term deposits	152,655	95	137,456	-	-	3.25	3.05	2.94	1
2009 20 Jan.	Collection of fixed-term deposits	143,835	103	140,013	-	-	2.50	2.30	2.15	1
10 Feb.	Collection of fixed-term deposits	130,435	119	129,135	-	-	2.00	1.80	1.36	1
10 Mar.	Collection of fixed-term deposits	111,502	119	110,832	-	-	2.00	1.80	1.52	1
7 Apr.	Collection of fixed-term deposits	105,486	114	103,876	-	-	1.50	1.30	1.12	1
12 May	Collection of fixed-term deposits	109,091	128	108,056	-	-	1.25	1.05	0.93	1
9 June	Collection of fixed-term deposits	91,551	101	57,912	-	-	1.00	0.80	0.77	1
7 July	Collection of fixed-term deposits	279,477	165	275,986	-	-	1.00	0.80	0.64	1
11 Aug.	Collection of fixed-term deposits	238,847	159	238,345	-	-	1.00	0.80	0.70	1
8 Sep.	Collection of fixed-term deposits	196,299	157	195,099	-	-	1.00	0.80	0.73	1

Source: ECB.

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

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

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

4) 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.

1.4 Minimum reserve and liquidity statistics

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

1. Reserve base of credit institutions subject to reserve requirements

Reserve base as at [1]	Total	Liabilities to which a 2% reserve coefficient is applied		Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6
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 Mar.	18,269.2	10,015.6	845.4	2,443.0	1,203.2	3,761.9
Apr.	18,447.1	10,085.4	846.1	2,452.5	1,253.3	3,809.8
May	18,487.3	9,972.0	854.6	2,404.7	1,224.1	4,031.9
June	18,518.3	10,003.9	818.8	2,432.6	1,207.0	4,056.0
July	18,432.0	9,890.4	818.9	2,436.0	1,204.6	4,082.1

2. Reserve maintenance

Maintenance period ending on:	Required reserves	Credit institutions' current accounts	Excess reserves	Deficiencies	Interest rate on minimum reserves
	1	2	3	4	5
2007	195.9	196.8	1.0	0.0	4.17
2008	217.2	218.7	1.5	0.0	3.25
2009 9 June	216.7	217.9	1.2	0.0	1.00
7 July	218.1	219.2	1.1	0.0	1.00
11 Aug.	216.0	216.9	0.9	0.0	1.00
8 Sep.	215.9	216.9	1.0	0.0	1.00
13 Oct.	213.7	.	.	.	.

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) [4]		
	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 20 Jan.	581.3	219.2	613.6	2.9	0.0	238.5	3.3	753.1	99.9	100.6	221.5	1,213.1
10 Feb.	547.4	224.9	551.4	2.1	0.0	175.4	6.1	740.2	102.7	79.3	222.1	1,137.7
10 Mar.	512.7	224.3	472.4	1.6	0.0	95.5	4.0	741.5	110.1	41.4	218.6	1,055.5
7 Apr.	508.0	230.5	443.1	1.1	0.0	57.8	3.7	747.3	139.0	13.3	221.6	1,026.6
12 May	512.4	239.7	426.9	0.7	0.0	42.7	3.1	757.5	141.9	13.7	220.8	1,021.0
9 June	487.9	238.8	400.6	0.7	0.0	22.3	2.1	759.8	141.7	-15.8	217.9	1,000.0
7 July	457.1	221.4	504.9	1.3	0.0	119.7	9.9	763.1	137.9	-65.1	219.2	1,102.0
11 Aug.	433.6	94.1	694.0	0.3	2.8	185.1	22.1	770.8	133.9	-103.9	216.9	1,172.8
8 Sep.	427.6	74.8	645.4	0.3	8.4	136.7	18.5	769.1	125.7	-110.4	216.9	1,122.7

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.
4) Starting from 1 January 2009, includes monetary policy operations which were conducted by Národná banka Slovenska before 1 January 2009 and were still outstanding after this date.

MONEY, BANKING AND INVESTMENT FUNDS

2.1 Aggregated balance sheet of euro area MFIs [1]

(EUR billions; outstanding amounts at end of period)

1. Assets

	Total	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Money market fund shares/units [2]	Holdings of shares/other equity issued by euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	MFIs	Total	General government	Other euro area residents	MFIs					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Eurosystem													
2007	2,046.1	1,031.7	17.8	0.6	1,013.3	268.6	225.1	1.9	41.6	-	17.4	395.3	15.2	318.0
2008	2,982.9	1,809.4	18.6	0.6	1,790.1	350.8	308.0	2.4	40.3	-	14.4	476.7	15.7	316.0
2009 Q1	2,783.6	1,555.3	18.7	0.7	1,535.9	374.1	322.7	2.5	48.9	-	13.9	490.3	15.7	334.2
2009 Apr.	2,710.2	1,479.4	18.1	0.7	1,460.7	378.1	326.5	2.4	49.2	-	14.7	487.5	15.8	334.7
May	2,678.1	1,452.0	18.1	0.7	1,433.2	375.6	322.9	2.5	50.2	-	15.0	488.8	15.8	330.9
June	2,893.4	1,671.5	17.7	0.7	1,653.1	385.4	327.0	2.7	55.7	-	15.0	480.8	16.4	324.4
July	2,734.4	1,500.7	17.7	0.7	1,482.4	391.8	327.8	3.0	60.9	-	15.3	483.7	16.5	326.5
Aug. (p)	2,723.6	1,451.3	17.6	0.7	1,433.1	400.6	332.2	3.3	65.2	-	15.7	518.5	16.4	321.1
	MFIs excluding the Eurosystem													
2007	29,448.1	16,894.2	954.5	10,139.0	5,800.8	3,890.1	1,196.9	952.9	1,740.3	93.5	1,293.8	4,886.1	205.7	2,184.7
2008	31,841.0	18,053.4	967.6	10,768.1	6,317.7	4,630.8	1,244.7	1,406.3	1,979.8	98.7	1,199.7	4,756.6	211.6	2,890.2
2009 Q1	31,746.7	17,907.6	970.7	10,810.3	6,126.7	4,920.1	1,387.3	1,446.9	2,085.8	104.1	1,185.5	4,545.2	215.1	2,869.0
2009 Apr.	31,862.9	17,907.6	982.4	10,806.7	6,118.5	4,993.8	1,405.1	1,473.1	2,115.6	104.0	1,217.7	4,611.1	214.0	2,814.7
May	31,528.1	17,859.4	974.7	10,804.0	6,080.7	5,042.5	1,422.0	1,477.4	2,143.2	102.6	1,214.7	4,477.2	214.5	2,617.3
June	31,818.3	18,059.4	998.5	10,834.5	6,226.3	5,075.2	1,466.5	1,488.2	2,120.5	95.5	1,198.6	4,430.2	215.2	2,744.2
July	31,717.7	17,955.8	999.3	10,799.3	6,157.2	5,101.3	1,475.8	1,486.3	2,139.1	95.3	1,205.9	4,388.1	215.8	2,755.5
Aug. (p)	31,496.9	17,786.5	1,003.5	10,731.3	6,051.7	5,100.1	1,476.5	1,488.5	2,135.1	94.8	1,213.9	4,342.1	216.0	2,743.5

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	2,046.1	697.0	714.7	23.9	19.1	671.8	-	0.1	238.0	119.2	277.1
2008	2,982.9	784.7	1,217.5	68.8	16.6	1,132.1	-	0.1	274.0	383.3	323.4
2009 Q1	2,783.6	768.9	1,114.9	135.6	23.3	956.0	-	0.1	296.4	301.6	301.8
2009 Apr.	2,710.2	781.0	1,046.9	140.3	21.5	885.1	-	0.1	293.2	274.9	314.1
May	2,678.1	783.4	1,053.1	137.2	19.0	897.0	-	0.1	291.5	249.0	300.9
June	2,893.4	785.9	1,257.5	125.1	23.6	1,108.7	-	0.1	283.3	208.0	358.6
July	2,734.4	795.1	1,106.7	128.2	20.2	958.2	-	0.1	286.7	192.5	353.4
Aug. (p)	2,723.6	790.0	1,097.0	124.0	21.7	951.3	-	0.1	288.6	224.8	323.2
	MFIs excluding the Eurosystem										
2007	29,448.1	-	15,098.2	126.9	8,885.4	6,085.8	754.1	4,631.0	1,683.6	4,533.7	2,747.4
2008	31,841.0	-	16,759.8	190.8	9,710.5	6,858.5	825.4	4,848.3	1,767.5	4,396.0	3,244.0
2009 Q1	31,746.7	-	16,608.2	216.2	9,785.4	6,606.6	885.2	4,936.1	1,778.3	4,344.4	3,194.4
2009 Apr.	31,862.9	-	16,646.0	197.2	9,870.7	6,578.1	886.1	4,976.7	1,790.6	4,399.9	3,163.6
May	31,528.1	-	16,567.9	194.4	9,877.2	6,496.3	874.5	5,000.4	1,803.3	4,268.4	3,013.7
June	31,818.3	-	16,787.6	227.5	9,931.3	6,628.8	837.3	4,984.1	1,826.4	4,232.3	3,150.5
July	31,717.7	-	16,623.0	170.2	9,902.5	6,550.3	853.5	5,008.2	1,842.7	4,193.2	3,197.0
Aug. (p)	31,496.9	-	16,459.3	149.2	9,883.3	6,426.7	854.4	5,000.3	1,863.3	4,132.4	3,187.2

Source: ECB.

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

2.2 Consolidated balance sheet of euro area MFIs [1]

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

1. Assets

	Total	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets	Fixed assets	Remaining assets
		Total	General government	Other euro area residents	Total	General government	Other euro area residents				
	1	2	3	4	5	6	7	8	9	10	11
	Outstanding amounts										
2007	22,317.5	11,111.9	972.3	10,139.6	2,376.9	1,422.0	954.9	882.2	5,281.4	220.9	2,444.3
2008	24,107.9	11,755.0	986.2	10,768.8	2,961.5	1,552.7	1,408.8	786.3	5,233.4	227.3	3,144.4
2009 Q1	24,150.3	11,800.3	989.4	10,810.9	3,159.5	1,710.1	1,449.4	770.0	5,035.5	230.8	3,154.3
2009 Apr.	24,236.3	11,807.9	1,000.5	10,807.4	3,207.0	1,731.6	1,475.4	795.5	5,098.5	229.8	3,097.7
May	23,908.2	11,797.4	992.8	10,804.6	3,224.8	1,744.9	1,479.9	792.9	4,966.0	230.2	2,896.8
June	24,075.2	11,851.4	1,016.2	10,835.2	3,284.4	1,793.5	1,491.0	779.3	4,911.0	231.6	3,017.6
July	24,023.8	11,816.9	1,017.0	10,799.9	3,293.0	1,803.6	1,489.4	777.4	4,871.8	232.3	3,032.4
Aug. (p)	23,936.1	11,753.0	1,021.1	10,731.9	3,300.5	1,808.7	1,491.8	773.9	4,860.6	232.4	3,015.8
	Transactions										
2007	2,574.0	1,014.8	-9.9	1,024.7	232.2	-46.3	278.5	55.5	807.6	-0.5	464.4
2008	1,561.5	601.1	12.5	588.6	373.1	58.2	314.9	-56.0	-72.1	-2.1	716.8
2009 Q1	-142.0	6.3	2.1	4.2	178.9	141.9	37.0	-4.5	-276.2	2.1	-48.5
Q2	-229.3	72.2	27.3	44.9	136.5	89.6	46.9	4.5	-66.4	0.6	-377.6
2009 Apr.	60.0	6.8	11.3	-4.5	48.2	21.2	27.0	21.2	42.4	-1.1	-57.5
May	-219.1	6.6	-7.4	14.0	29.0	20.7	8.2	-3.3	-50.8	0.4	-202.0
June	-70.2	58.8	23.4	35.4	59.4	47.7	11.6	-13.4	-58.0	1.3	-118.2
July	-55.0	-27.7	0.8	-28.5	3.1	6.1	-3.0	-6.1	-38.8	1.0	13.5
Aug. (p)	-60.4	-60.8	4.1	-64.9	4.7	3.5	1.3	-6.5	20.5	0.1	-15.9

2. Liabilities

	Total	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Money market fund shares/ units [2]	Debt securities issued [3]	Capital and reserves	External liabilities	Remaining liabilities	Excess of inter-MFI liabilities
	1	2	3	4	5	6	7	8	9	10
	Outstanding amounts									
2007	22,317.5	638.6	150.8	8,904.5	660.4	2,849.3	1,492.7	4,652.9	3,024.5	-56.5
2008	24,107.9	722.9	259.6	9,727.2	726.3	2,828.3	1,613.8	4,779.3	3,567.3	-117.2
2009 Q1	24,150.3	719.9	351.8	9,808.7	780.8	2,801.4	1,645.2	4,646.0	3,496.2	-100.0
2009 Apr.	24,236.3	729.2	337.5	9,892.2	781.8	2,811.9	1,646.9	4,674.8	3,477.7	-116.0
May	23,908.2	732.0	331.5	9,896.2	771.6	2,807.1	1,658.1	4,517.4	3,314.5	-120.7
June	24,075.2	735.0	352.7	9,954.9	741.6	2,808.0	1,675.3	4,440.4	3,509.0	-141.9
July	24,023.8	745.5	298.4	9,922.7	758.0	2,808.2	1,685.6	4,385.7	3,550.4	-131.0
Aug. (p)	23,936.1	741.2	273.2	9,905.1	759.3	2,800.1	1,696.2	4,357.2	3,510.4	-106.8
	Transactions									
2007	2,574.0	45.8	-13.4	838.8	54.5	269.7	150.1	824.2	474.5	-70.5
2008	1,561.5	83.2	106.1	606.8	29.8	-27.3	142.6	86.7	559.5	-26.0
2009 Q1	-142.0	-4.3	89.3	25.6	55.8	-37.4	17.2	-200.3	-107.3	19.5
Q2	-229.3	15.0	0.9	154.8	-20.1	21.3	34.0	-167.2	-223.3	-44.6
2009 Apr.	60.0	9.3	-14.0	80.5	2.3	5.5	4.5	7.6	-20.3	-15.4
May	-219.1	2.8	-5.9	16.5	0.6	15.0	12.2	-82.5	-166.5	-11.2
June	-70.2	3.0	20.8	57.8	-23.1	0.8	17.3	-92.4	-36.4	-18.0
July	-55.0	10.5	-54.2	-31.9	16.1	-1.7	6.5	-52.1	35.1	16.8
Aug. (p)	-60.4	-4.3	-13.8	-15.2	1.1	-2.0	4.6	-8.8	-43.7	21.7

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

2.3 Monetary statistics [1]

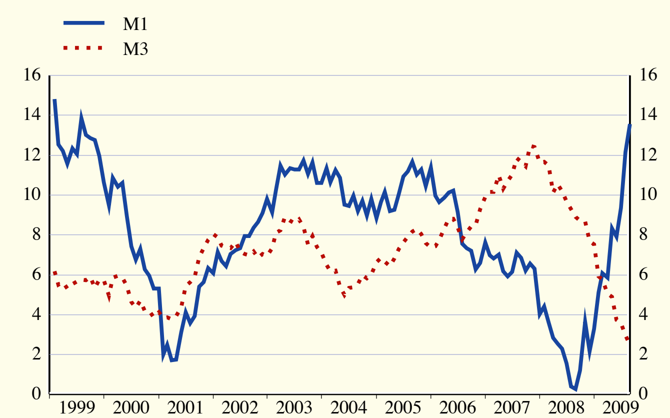
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

1. Monetary aggregates [2] and counterparts

	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	3,837.7	3,518.3	7,356.1	1,308.1	8,664.2	-	5,968.1	2,416.2	12,003.9	10,156.5	-	602.8
2008	3,981.9	4,046.2	8,028.1	1,379.2	9,407.3	-	6,294.4	2,562.2	12,985.7	10,784.5	-	427.0
2009 Q1	4,122.6	3,964.2	8,086.8	1,313.2	9,400.0	-	6,443.0	2,687.5	13,032.2	10,808.8	-	389.4
2009 Apr.	4,199.8	3,961.8	8,161.5	1,315.1	9,476.6	-	6,468.7	2,712.9	13,011.8	10,792.0	-	453.3
May	4,192.4	3,938.3	8,130.7	1,280.0	9,410.7	-	6,500.8	2,721.9	13,020.7	10,793.4	-	498.5
June	4,242.7	3,905.3	8,148.0	1,276.8	9,424.8	-	6,533.8	2,793.0	13,067.0	10,808.5	-	472.1
July	4,339.4	3,857.6	8,197.1	1,250.4	9,447.5	-	6,561.9	2,815.6	13,038.0	10,767.2	-	486.1
Aug. (p)	4,404.4	3,834.8	8,239.1	1,208.4	9,447.6	-	6,616.7	2,845.7	13,052.1	10,757.9	-	517.4
	Transactions											
2007	148.8	529.7	678.5	223.9	902.4	-	467.1	-59.6	1,362.1	1,028.5	1,119.9	-18.4
2008	125.9	487.0	612.9	44.8	657.7	-	174.2	70.7	843.2	587.4	749.2	-160.2
2009 Q1	105.2	-98.5	6.7	-62.4	-55.7	-	114.9	108.8	16.7	-13.8	7.7	-48.9
Q2	139.8	-68.3	71.6	-18.7	52.9	-	108.8	112.1	56.3	20.2	40.7	102.5
2009 Apr.	93.0	-18.0	75.0	2.9	77.8	-	20.7	25.1	-24.3	-17.7	-2.8	64.4
May	-3.7	-16.7	-20.4	-26.0	-46.4	-	56.3	16.7	28.7	18.1	22.3	52.1
June	50.5	-33.5	17.0	4.4	21.4	-	31.8	70.3	51.9	19.9	21.3	-14.0
July	96.7	-47.4	49.3	-27.8	21.5	-	23.6	18.7	-27.9	-34.6	-33.0	11.9
Aug. (p)	65.7	-21.9	43.8	-42.2	1.6	-	55.8	28.4	13.1	-6.2	-0.6	43.2
	Growth rates											
2007 Dec.	4.0	17.9	10.2	20.4	11.6	11.9	8.6	-2.6	12.8	11.2	12.1	-18.4
2008 Dec.	3.3	13.7	8.3	3.4	7.5	7.0	2.9	2.9	7.0	5.8	7.2	-160.2
2009 Mar.	5.9	6.4	6.2	-1.1	5.1	5.2	4.2	7.6	4.6	3.1	4.7	-146.3
2009 Apr.	8.3	3.5	5.9	-1.2	4.9	4.6	4.1	7.9	3.6	2.3	3.9	-31.1
May	7.9	2.1	5.0	-3.7	3.8	4.1	4.7	8.2	3.1	1.8	3.3	76.2
June	9.4	0.4	4.9	-4.0	3.6	3.4	5.0	10.7	2.9	1.5	2.7	104.9
July	12.1	-2.7	4.7	-6.8	3.0	3.0	4.9	10.9	1.8	0.7	1.9	126.9
Aug. (p)	13.6	-4.1	4.6	-9.9	2.5	.	5.2	11.5	1.1	0.1	1.3	164.9

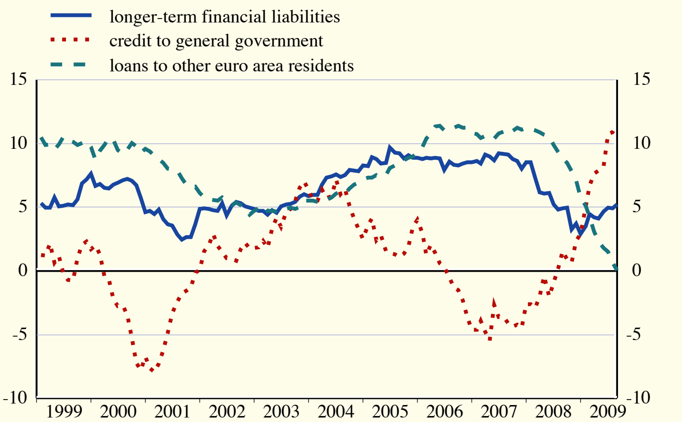
C1 Monetary aggregates [1]

(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) vis-à-vis non-MFI euro area residents excluding central government (M1, M2, M3: see glossary).
3) Values in the section "growth rates" are sums of the transactions during the 12 months ending in the period indicated.
4) Adjustment for the derecognition of loans from the MFI balance sheet on account of their sale or securitisation.

2.3 Monetary statistics [1]

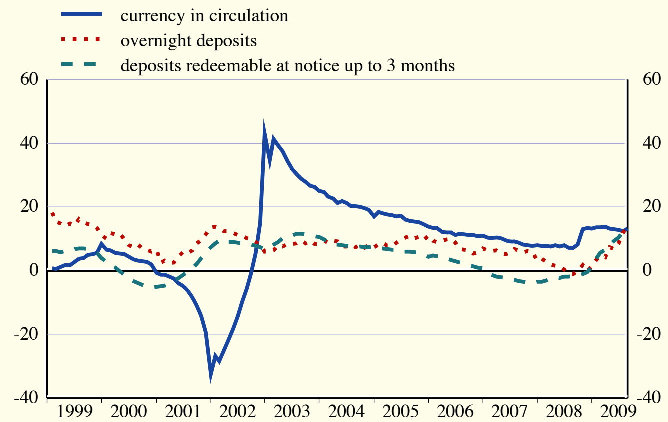
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	Currency in circulation	Overnight deposits	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Repos	Money market fund shares/units	Debt securities up to 2 years	Debt securities over 2 years	Deposits redeemable at notice over 3 months	Deposits with agreed maturity over 2 years	Capital and reserves
	1	2	3	4	5	6	7	8	9	10	11
					Outstanding amounts						
2007	625.6	3,212.2	1,977.3	1,541.1	307.3	686.2	314.6	2,547.4	119.3	1,814.8	1,486.6
2008	709.9	3,272.0	2,478.8	1,567.4	354.1	756.2	268.9	2,573.1	121.2	1,992.8	1,607.2
2009 Q1	727.5	3,395.2	2,321.7	1,642.5	336.1	780.4	196.6	2,605.6	124.2	2,073.6	1,639.5
2009 Apr.	729.8	3,470.0	2,294.3	1,667.5	337.1	770.3	207.7	2,603.8	125.9	2,090.1	1,648.9
May	730.0	3,462.4	2,257.6	1,680.7	326.1	753.1	200.8	2,599.5	128.2	2,100.1	1,673.1
June	734.2	3,508.5	2,208.9	1,696.3	355.1	738.2	183.5	2,608.6	129.4	2,115.4	1,680.4
July	733.6	3,605.8	2,134.6	1,723.0	331.0	745.0	174.4	2,619.2	130.9	2,130.3	1,681.4
Aug. (p)	742.8	3,661.6	2,090.9	1,743.9	306.3	746.9	155.2	2,637.9	132.2	2,145.7	1,700.9
					Transactions						
2007	46.7	102.1	582.3	-52.5	42.2	58.7	123.0	147.5	9.7	160.4	149.5
2008	83.3	42.6	467.2	19.8	48.1	33.2	-36.5	10.8	0.6	20.8	142.1
2009 Q1	16.2	89.1	-173.3	74.8	-18.0	25.6	-69.9	19.3	2.2	75.3	18.1
Q2	6.8	133.1	-122.9	54.6	19.2	-23.4	-14.5	18.9	4.5	40.6	44.8
2009 Apr.	2.3	90.7	-43.7	25.7	0.9	-8.8	10.7	-6.4	1.0	14.0	12.2
May	0.2	-3.9	-30.0	13.3	-10.8	-6.7	-8.6	17.1	2.2	11.8	25.1
June	4.2	46.3	-49.2	15.6	29.0	-7.9	-16.6	8.2	1.2	14.8	7.5
July	-0.6	97.3	-74.2	26.8	-24.1	6.5	-10.2	9.9	1.5	15.0	-2.8
Aug. (p)	9.2	56.6	-42.8	20.9	-24.6	1.7	-19.3	24.8	1.3	16.1	13.5
					Growth rates						
2007 Dec.	8.1	3.3	41.3	-3.4	15.8	9.2	63.4	6.2	9.5	9.7	11.4
2008 Dec.	13.3	1.3	23.4	1.3	15.6	4.8	-12.1	0.4	0.5	1.1	9.7
2009 Mar.	13.8	4.3	6.4	6.6	8.0	4.1	-26.7	0.8	3.7	4.9	9.1
2009 Apr.	13.2	7.4	0.5	8.0	3.6	3.2	-20.1	0.2	5.1	5.5	9.1
May	13.1	6.9	-2.7	9.4	1.9	2.7	-27.5	0.4	7.7	5.6	10.5
June	12.8	8.7	-6.1	10.4	5.4	2.7	-33.6	0.4	9.3	6.1	10.8
July	12.5	12.1	-12.1	12.3	-3.3	3.7	-38.6	0.1	10.9	6.9	10.1
Aug. (p)	13.2	13.6	-15.1	13.7	-8.5	1.9	-43.9	0.8	12.8	7.4	9.5

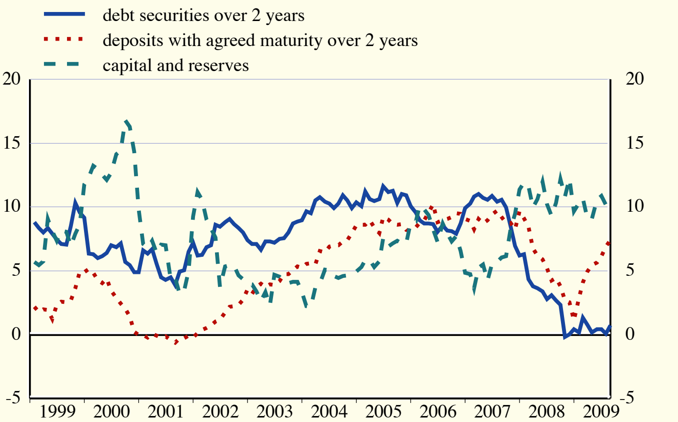
C3 Components of monetary aggregates [1]

(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)]

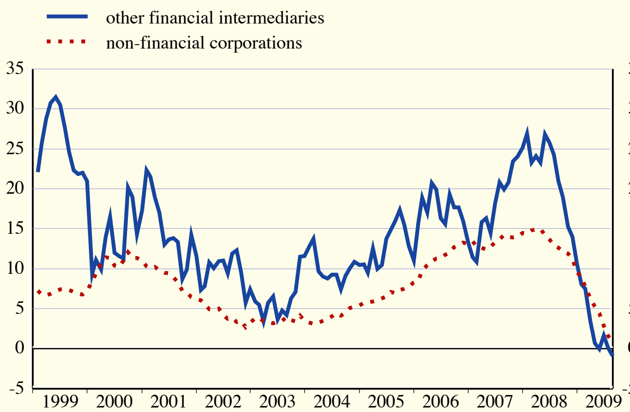
(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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

	Insurance corporations and pension funds	Other financial interme-diaries [3)]	Non-financial corporations				Households [4)]			
	Total	Total	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Consumer credit	Loans for house purchase	Other loans
	1	2	3	4	5	6	7	8	9	10
				Outstanding amounts						
2007	107.4	880.4	4,380.5	1,279.7	859.5	2,241.2	4,788.2	616.1	3,425.2	746.9
2008	103.7	977.9	4,820.6	1,380.4	960.8	2,479.4	4,882.3	630.6	3,487.6	764.1
2009 Q1	103.2	969.6	4,847.2	1,339.0	981.0	2,527.3	4,888.8	640.8	3,486.3	761.6
2009 Apr.	101.7	961.4	4,840.8	1,323.4	986.8	2,530.6	4,888.1	635.2	3,488.1	764.7
May	101.6	977.2	4,827.3	1,316.5	982.0	2,528.8	4,887.2	633.7	3,486.6	766.9
June	105.5	1,022.2	4,789.6	1,286.8	975.8	2,527.0	4,891.2	635.4	3,487.7	768.1
July	97.4	1,012.6	4,764.5	1,254.7	968.9	2,541.0	4,892.7	632.1	3,493.7	766.9
Aug. (p)	94.7	996.4	4,766.5	1,256.5	963.6	2,546.3	4,900.3	630.7	3,500.6	769.0
				Transactions						
2007	16.8	177.2	555.0	145.2	156.0	253.8	279.5	31.5	228.0	20.0
2008	-4.2	90.3	421.0	87.9	120.1	213.1	80.3	10.7	52.2	17.4
2009 Q1	-3.9	-15.3	13.0	-40.4	14.1	39.3	-7.5	2.5	-8.6	-1.4
Q2	3.8	53.1	-40.2	-47.0	0.3	6.4	3.6	-5.0	2.6	6.0
2009 Apr.	-1.5	-9.3	-3.6	-15.0	6.3	5.1	-3.2	-5.7	1.0	1.5
May	0.1	19.9	-3.9	-4.0	-2.0	2.1	2.1	-1.0	0.1	3.0
June	5.2	42.6	-32.7	-27.9	-3.9	-0.8	4.7	1.7	1.6	1.5
July	-8.2	-10.3	-21.9	-31.3	-5.7	15.1	5.8	-0.2	6.4	-0.5
Aug. (p)	-2.6	-15.3	3.3	2.9	-5.7	6.1	8.4	0.8	5.5	2.1
				Growth rates						
2007 Dec.	18.2	24.9	14.5	12.7	22.0	12.8	6.2	5.4	7.1	2.7
2008 Dec.	-3.9	10.3	9.6	6.9	13.9	9.4	1.7	1.7	1.5	2.3
2009 Mar.	-5.5	3.5	6.2	-0.3	11.1	8.2	0.4	0.9	0.1	1.3
2009 Apr.	-2.0	0.5	5.2	-1.7	10.7	7.1	0.0	-0.5	-0.2	1.5
May	-3.0	-0.1	4.4	-2.6	9.7	6.4	-0.2	-0.7	-0.5	1.8
June	1.2	1.7	2.8	-5.3	7.4	5.8	0.2	-0.8	0.1	1.5
July	-3.2	-0.1	1.6	-8.3	6.1	5.5	0.0	-1.0	-0.1	1.4
Aug. (p)	-8.2	-1.0	0.7	-8.9	3.9	5.0	-0.2	-0.9	-0.4	1.4

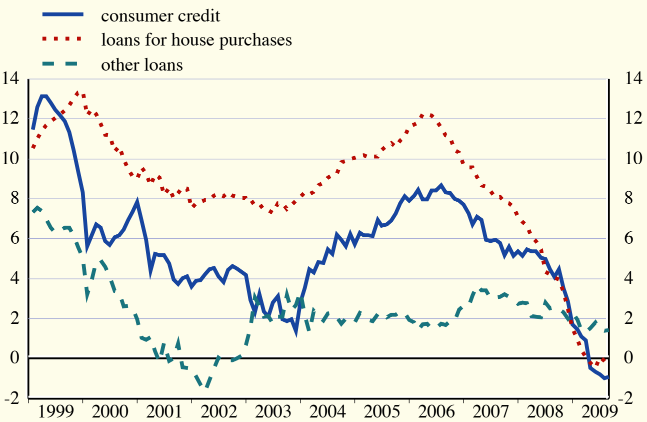
C5 Loans to other financial intermediaries and non-financial corporations [2)]

(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 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 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts											
2008	92.3	68.5	5.7	18.0	960.5	553.9	168.8	237.8	4,827.0	1,378.3	960.6	2,488.1
2009 Q1	102.1	75.7	6.2	20.2	986.1	568.6	180.0	237.5	4,843.0	1,336.2	981.4	2,525.3
2009 May	105.7	78.9	5.7	21.0	993.3	575.7	179.4	238.3	4,826.3	1,312.4	982.8	2,531.2
June	108.3	83.1	7.5	17.7	1,022.8	597.8	183.0	242.1	4,804.2	1,300.8	975.9	2,527.5
July	101.2	76.2	7.4	17.7	1,009.4	576.6	186.1	246.7	4,785.7	1,268.9	972.1	2,544.7
Aug. (p)	94.6	69.6	7.9	17.2	981.8	552.2	182.5	247.1	4,753.1	1,244.7	963.0	2,545.4
	Transactions											
2007	15.0	16.7	-5.2	3.5	175.0	113.4	34.1	27.5	555.7	144.9	156.1	254.7
2008	-3.8	-2.9	-1.8	0.9	91.1	27.2	21.5	42.4	421.7	87.6	120.1	213.9
2009 Q1	6.5	5.8	0.6	0.1	18.6	10.0	11.1	-2.6	2.3	-41.1	14.8	28.6
Q2	7.7	7.5	1.3	-1.1	37.3	31.3	1.7	4.3	-21.3	-30.2	0.0	8.9
2009 May	2.1	1.8	0.0	0.4	13.9	15.4	-0.2	-1.2	-8.5	-12.9	-0.8	5.2
June	4.0	4.1	1.9	-2.0	27.1	22.7	1.9	2.5	-17.0	-9.7	-4.6	-2.7
July	-7.1	-6.9	-0.2	0.0	-14.2	-21.5	2.9	4.5	-15.4	-31.1	-2.6	18.3
Aug. (p)	-6.6	-6.6	0.5	-0.5	-26.7	-23.2	-4.2	0.7	-31.2	-23.2	-9.5	1.5
	Growth rates											
2008 Dec.	-3.9	-4.0	-23.7	5.0	10.6	5.4	14.6	22.1	9.6	6.8	13.9	9.4
2009 Mar.	-5.2	-7.2	-18.0	10.4	3.4	-5.3	19.6	17.3	6.3	-0.3	11.1	8.2
2009 May	-3.2	-4.4	-22.7	11.2	-0.1	-9.2	16.7	15.8	4.4	-2.6	9.7	6.4
June	1.3	1.5	-1.1	3.2	1.6	-4.7	13.3	11.6	2.8	-5.3	7.4	5.8
July	-3.2	-5.5	16.3	1.6	0.0	-6.1	12.6	7.8	1.6	-8.3	6.1	5.5
Aug. (p)	-8.2	-11.3	19.5	-3.3	-1.0	-7.1	9.6	7.5	0.8	-8.9	3.9	5.0

3. Loans to households [4)]

	Total	Consumer credit				Loans for house purchase				Other loans			
		Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Outstanding amounts												
2008	4,888.4	632.8	138.8	196.1	298.0	3,490.3	17.2	67.5	3,405.7	765.2	155.0	90.5	519.6
2009 Q1	4,879.1	637.8	136.3	199.9	301.7	3,480.9	16.3	65.6	3,399.0	760.4	150.7	88.7	521.0
2009 May	4,878.6	632.4	133.3	197.6	301.4	3,481.6	16.2	65.4	3,400.0	764.7	147.2	88.9	528.6
June	4,899.1	638.9	136.0	199.0	303.9	3,487.6	16.1	65.8	3,405.6	772.7	154.0	88.4	530.3
July	4,903.0	635.8	134.7	198.4	302.7	3,499.5	16.1	65.9	3,417.5	767.7	146.8	88.8	532.1
Aug. (p)	4,901.8	631.2	133.5	196.7	301.0	3,502.7	16.1	66.0	3,420.7	767.8	146.0	88.2	533.6
	Transactions												
2007	278.9	31.5	3.8	1.1	26.6	227.4	0.9	2.3	224.1	20.1	1.7	4.4	14.0
2008	79.6	10.7	1.1	-9.1	18.6	51.6	1.1	-3.8	54.3	17.4	2.5	-5.3	20.2
2009 Q1	-23.2	-2.7	-2.4	-2.1	1.8	-16.8	-0.9	-3.3	-12.5	-3.7	-4.2	-1.5	2.1
Q2	21.2	1.4	0.0	-0.6	2.0	7.9	-0.5	0.2	8.1	11.9	3.7	0.0	8.2
2009 May	6.4	-0.6	-1.1	-0.3	0.8	3.7	0.0	-0.1	3.8	3.3	-0.7	0.0	4.0
June	21.3	6.4	2.9	1.4	2.2	6.5	-0.1	0.5	6.1	8.3	6.9	-0.3	1.7
July	8.2	0.1	-1.1	0.5	0.7	12.4	0.0	0.1	12.2	-4.3	-7.1	0.4	2.4
Aug. (p)	-0.4	-2.3	-0.9	-1.6	0.1	1.8	-0.1	0.0	1.9	0.2	-0.8	-0.5	1.5
	Growth rates												
2008 Dec.	1.7	1.7	0.8	-4.4	6.7	1.5	7.0	-5.2	1.6	2.3	1.7	-5.1	4.1
2009 Mar.	0.4	0.9	0.2	-4.5	5.1	0.1	1.0	-9.0	0.3	1.3	-0.2	-7.2	3.5
2009 May	-0.1	-0.7	-1.8	-6.0	3.7	-0.5	0.1	-9.2	-0.3	1.8	-0.7	-4.8	3.9
June	0.2	-0.8	-2.2	-5.3	3.1	0.1	-0.3	-8.7	0.3	1.5	-1.9	-5.5	3.8
July	0.0	-1.0	-2.6	-4.9	2.5	-0.1	0.2	-8.7	0.0	1.4	-2.7	-4.9	3.8
Aug. (p)	-0.2	-0.9	-1.9	-5.3	2.5	-0.4	-1.0	-8.4	-0.2	1.4	-3.1	-4.3	3.8

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

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

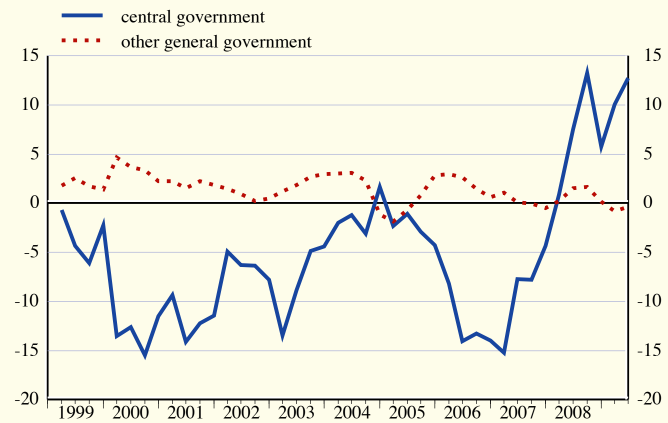
(EUR billions and annual growth rates; not seasonally adjusted; outstanding amounts and growth rates at end of period, transactions during period)

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									
2006	809.0	104.0	232.5	446.6	25.8	2,931.8	2,070.6	861.2	63.1	798.1
2007	954.5	213.4	217.6	494.0	29.4	3,307.6	2,352.4	955.1	59.8	895.3
2008 Q3	978.8	225.6	210.0	497.8	45.4	3,525.7	2,461.8	1,063.9	61.8	1,002.0
Q4	967.6	226.9	210.1	508.4	22.2	3,250.1	2,284.6	965.5	57.8	907.7
2009 Q1	970.7	232.8	205.6	511.3	21.0	3,056.6	2,100.4	956.2	59.2	896.9
Q2 (p)	998.5	249.1	206.5	520.6	22.3	2,954.3	2,018.1	935.7	57.4	878.3
	Transactions									
2007	-8.0	-4.5	-13.0	6.0	3.6	541.6	382.1	159.5	0.3	159.2
2008	13.3	12.3	-8.1	16.3	-7.2	-51.7	-82.8	30.9	0.6	30.3
2008 Q3	4.5	4.9	-5.2	1.4	3.4	90.8	73.5	17.3	-3.2	20.5
Q4	-9.4	1.1	-0.2	12.8	-23.2	-256.3	-182.5	-73.9	-0.7	-73.2
2009 Q1	2.0	5.5	-4.4	2.3	-1.2	-236.8	-211.7	-25.3	0.3	-25.6
Q2 (p)	28.3	16.7	0.9	9.4	1.3	-65.0	-59.1	-6.1	-0.7	-5.4
	Growth rates									
2006 Dec.	-1.6	-14.0	-5.8	5.2	-11.6	21.9	24.0	17.2	-0.1	18.9
2007 Dec.	-1.0	-4.3	-5.6	1.3	13.8	18.6	18.6	18.8	0.5	20.3
2008 Sep.	3.4	13.2	-1.9	2.7	9.6	8.0	5.2	15.0	1.8	15.9
Dec.	1.4	5.8	-3.7	3.3	-24.4	-1.5	-3.5	3.3	0.9	3.5
2009 Mar.	1.5	10.0	-3.6	3.6	-43.5	-14.2	-16.7	-8.3	-3.3	-8.6
June (p)	2.6	12.7	-4.1	5.2	-46.9	-13.6	-15.8	-8.4	-6.8	-8.5

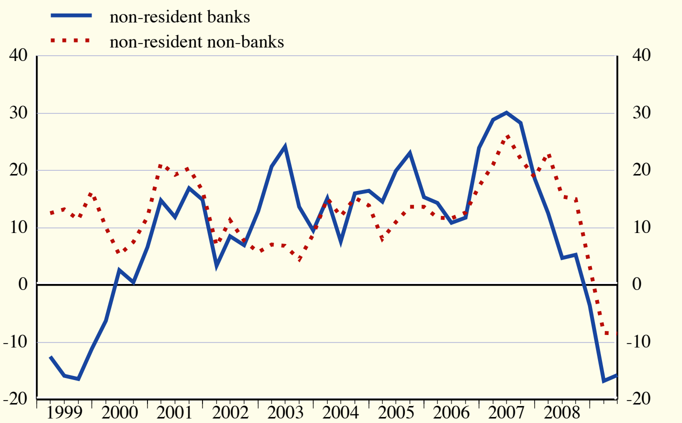
C7 Loans to government [2)]

(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 ESA 95.
2) Data refer to the changing composition of the euro area. For further information, see the General notes.
3) The term “banks” is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

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

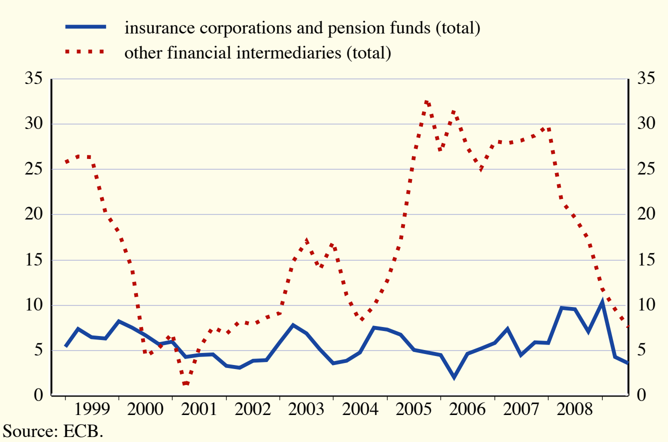
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

1. Deposits by financial intermediaries

	Insurance corporations and pension funds							Other financial intermediaries 3)						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Outstanding amounts													
2007	691.7	70.9	70.5	527.5	0.8	1.1	20.8	1,466.4	312.5	345.7	648.6	12.2	0.3	147.1
2008	765.4	83.8	117.1	538.9	1.1	1.5	23.1	1,804.1	320.9	420.5	853.4	12.3	0.1	197.0
2009 Q1	763.5	91.7	99.8	546.8	2.3	1.5	21.4	1,838.8	333.3	350.8	905.4	14.4	0.0	234.7
2009 Apr.	766.0	90.1	101.2	550.6	1.8	1.5	20.8	1,866.7	326.2	372.7	914.6	15.0	0.0	238.1
May	759.0	83.6	100.5	551.9	1.9	1.5	19.7	1,854.2	309.0	364.7	926.5	14.7	0.0	239.2
June	753.3	85.4	93.7	552.0	1.7	1.5	19.0	1,891.8	335.5	343.3	943.8	14.1	0.0	255.0
July	752.3	86.2	93.7	552.1	1.8	1.5	16.9	1,854.1	315.5	346.9	945.6	14.6	0.0	231.4
Aug. (p)	751.5	87.1	89.8	552.6	1.8	1.5	18.7	1,833.2	303.3	353.2	938.8	14.5	0.1	223.3
	Transactions													
2007	38.5	0.8	10.5	31.9	-0.3	-0.3	-4.1	339.0	34.0	98.7	180.4	1.7	0.1	24.1
2008	71.7	12.4	44.9	12.4	-0.3	0.1	2.2	172.9	4.6	71.4	46.6	-0.3	-0.3	50.9
2009 Q1	-6.7	5.5	-18.8	7.8	0.5	0.0	-1.7	30.9	8.8	-68.4	50.6	2.1	0.0	37.7
Q2	-10.1	-6.3	-6.1	5.2	-0.5	0.0	-2.4	57.4	19.9	-19.8	37.0	-0.2	0.0	20.4
2009 Apr.	2.3	-1.7	1.3	3.8	-0.5	0.0	-0.6	26.6	9.3	6.6	6.7	0.6	0.0	3.4
May	-6.7	-6.4	-0.6	1.3	0.1	0.0	-1.1	-5.8	-15.7	-4.5	13.5	-0.2	0.0	1.2
June	-5.8	1.8	-6.8	0.1	-0.1	0.0	-0.7	36.6	26.4	-21.9	16.8	-0.6	0.0	15.8
July	-1.0	0.9	0.0	0.1	0.1	0.0	-2.1	-37.6	-19.9	3.6	1.9	0.5	0.0	-23.6
Aug. (p)	-0.6	0.9	-3.9	0.5	0.0	0.0	1.8	-19.4	-12.0	6.7	-6.0	-0.1	0.1	-8.1
	Growth rates													
2007 Dec.	5.9	1.1	17.5	6.4	-25.3	-	-16.4	29.9	12.0	39.7	38.5	16.4	-	19.1
2008 Dec.	10.3	17.3	62.1	2.4	-23.4	-	10.5	11.8	1.4	20.8	7.2	-2.3	-	34.6
2009 Mar.	4.3	8.9	13.9	2.4	-3.4	-	-2.2	9.6	-2.2	-2.3	13.6	6.4	-	39.4
2009 Apr.	4.8	16.6	10.4	2.8	-13.5	-	-8.1	9.0	7.5	-8.9	13.5	4.2	-	31.9
May	4.1	16.6	6.7	2.7	-1.0	-	-9.5	7.5	0.1	-9.0	12.6	14.3	-	32.0
June	3.6	12.8	6.1	2.4	-13.3	-	-4.1	7.6	3.0	-14.4	12.7	15.6	-	39.9
July	3.6	20.1	3.6	2.3	-3.2	-	-16.0	5.3	8.5	-21.7	12.8	1.9	-	30.3
Aug. (p)	4.3	27.4	1.2	2.3	3.8	-	-4.3	3.9	9.7	-23.5	12.7	11.7	-	21.8

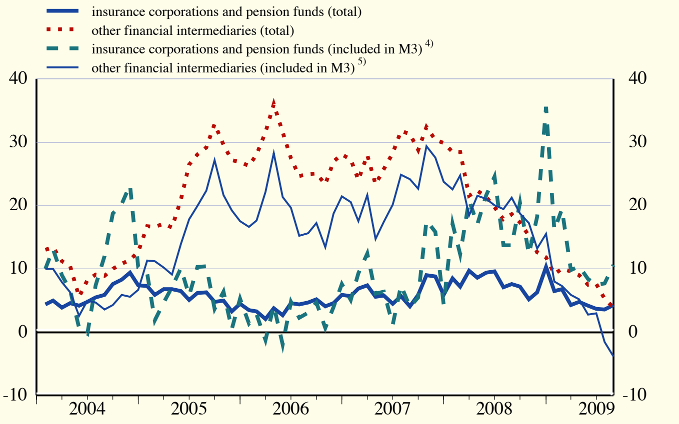
C9 Total deposits by sector 2)

(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 ESA 95.
2) Data refer to the changing composition of the euro area. For further information, see the General notes.
3) This category includes investment funds.
4) Covers deposits in columns 2, 3, 5 and 7.
5) Covers deposits in columns 9, 10, 12 and 14.

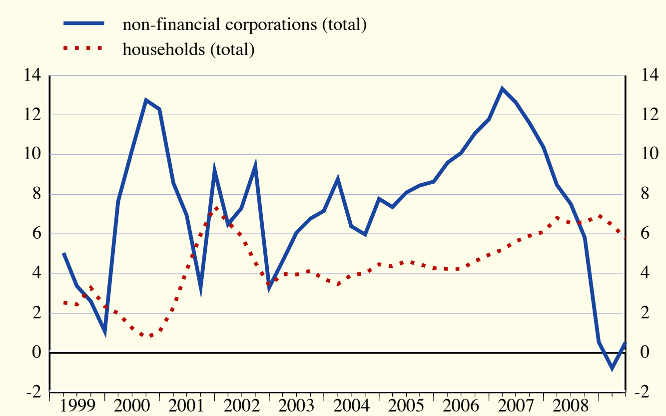
2.5 Deposits held with MFIs, breakdown [1), 2)]

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

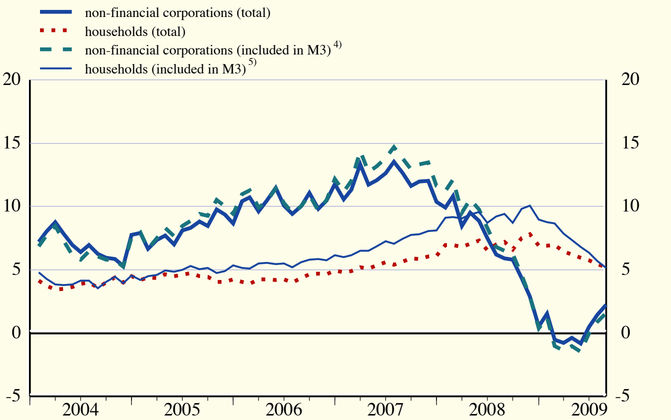
2. Deposits by non-financial corporations and households

	Non-financial corporations							Households [3)]						
	Total	Overnight	With agreed maturity		Redeemable at notice		Repos	Total	Overnight	With agreed maturity		Redeemable at notice		Repos
			Up to 2 years	Over 2 years	Up to 3 months	Over 3 months				Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts														
2007	1,488.8	888.9	485.3	59.6	29.9	1.4	23.7	4,990.6	1,778.9	993.3	561.6	1,458.6	111.1	87.1
2008	1,516.5	889.9	508.6	64.6	28.3	1.3	23.7	5,370.2	1,814.7	1,350.1	517.9	1,490.2	113.6	83.7
2009 Q1	1,487.2	877.8	480.5	71.0	38.7	1.3	17.9	5,447.9	1,900.3	1,281.3	524.4	1,565.5	114.9	61.4
2009 Apr.	1,504.5	881.3	486.1	72.3	43.7	1.4	19.7	5,483.9	1,957.9	1,242.2	527.9	1,583.2	115.8	56.8
May	1,514.3	897.0	475.6	72.6	47.3	1.4	20.4	5,498.6	1,986.5	1,214.9	531.6	1,594.2	117.3	54.2
June	1,530.5	922.8	464.3	72.3	50.1	1.5	19.6	5,507.2	2,012.1	1,186.6	535.4	1,604.0	118.2	50.9
July	1,530.6	918.8	463.2	74.4	54.4	1.5	18.4	5,517.4	2,030.1	1,155.2	543.9	1,617.9	119.4	50.9
Aug. (p)	1,541.2	934.7	455.3	76.4	56.8	1.5	16.5	5,509.0	2,033.2	1,123.0	552.0	1,632.5	120.1	48.1
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	8.2	-4.5	13.3	3.3	-3.6	-0.3	0.0	347.6	28.6	335.6	-43.1	28.1	1.7	-3.4
2009 Q1	-39.3	-17.4	-32.2	5.0	11.1	0.0	-5.8	41.2	64.3	-80.3	3.9	75.1	0.5	-22.2
Q2	47.2	47.7	-15.1	1.4	11.4	0.1	1.7	60.1	111.1	-93.3	11.0	39.2	2.7	-10.6
2009 Apr.	17.7	4.2	5.2	1.3	5.1	0.0	1.9	34.5	56.5	-39.4	3.5	18.3	0.3	-4.7
May	13.0	17.4	-9.0	0.5	3.5	0.0	0.6	16.9	28.9	-25.7	3.7	11.1	1.4	-2.6
June	16.5	26.0	-11.3	-0.3	2.8	0.1	-0.8	8.6	25.6	-28.3	3.8	9.8	1.0	-3.3
July	0.2	-4.0	-1.1	2.1	4.3	0.0	-1.2	10.1	17.8	-31.4	8.5	14.0	1.1	0.1
Aug. (p)	11.3	16.3	-7.5	2.1	2.5	0.0	-1.9	-8.2	3.3	-32.1	8.1	14.7	0.8	-2.8
Growth rates														
2007 Dec.	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 Dec.	0.6	-0.5	2.8	5.4	-11.4	-16.2	0.0	6.9	1.6	33.2	-7.7	1.9	1.5	-3.9
2009 Mar.	-0.8	1.2	-6.6	13.4	31.5	-9.5	-21.9	6.5	6.8	15.2	-4.6	6.6	4.7	-35.8
2009 Apr.	-0.4	2.6	-9.6	14.2	54.1	-3.3	-5.9	6.2	9.1	8.3	-3.2	7.9	6.2	-41.8
May	-0.8	2.9	-12.0	13.5	68.4	-2.4	-4.3	5.9	10.3	3.7	-1.7	8.7	8.9	-46.8
June	0.5	4.8	-11.7	12.5	79.6	1.0	-13.0	5.8	11.3	-0.5	-0.1	9.5	10.5	-48.4
July	1.4	7.2	-13.5	13.2	107.2	5.4	-20.0	5.5	13.3	-6.7	2.1	11.2	12.1	-52.5
Aug. (p)	2.2	9.8	-15.7	16.5	119.7	5.2	-28.8	5.2	15.1	-11.5	3.9	12.3	14.0	-56.5

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 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)]

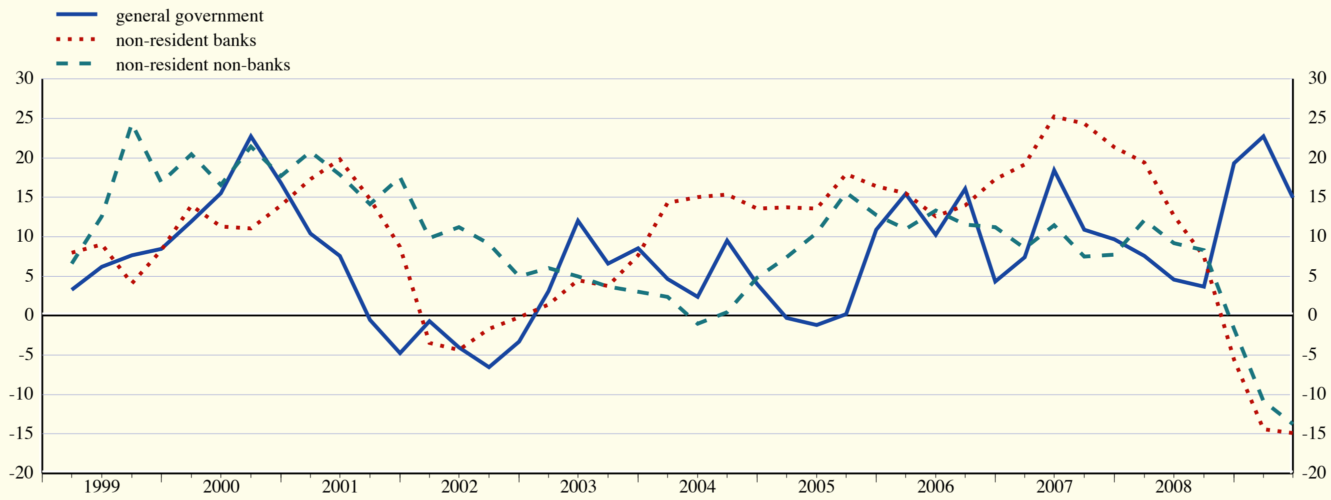
(EUR billions and annual growth rates; outstanding amounts and growth rates at end of period, transactions during period)

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					
2006	329.6	124.1	45.4	91.4	68.8	3,430.0	2,561.5	868.6	128.5	740.1
2007	374.8	126.9	59.0	108.5	80.4	3,857.3	2,948.5	908.8	143.3	765.5
2008 Q3	401.7	139.9	61.7	114.4	85.7	4,145.6	3,142.2	1,003.4	141.8	861.6
Q4	445.1	190.8	52.3	116.1	85.9	3,707.4	2,809.9	897.5	65.8	831.7
2009 Q1	464.2	216.2	50.6	114.3	83.0	3,660.2	2,780.9	879.3	63.6	815.7
Q2 (p)	475.9	227.5	48.9	117.8	81.6	3,560.7	2,699.3	861.4	62.5	798.9
					Transactions					
2007	31.9	-3.1	13.6	9.8	11.6	610.6	543.5	67.1	20.2	46.8
2008	72.3	63.5	-6.5	8.4	7.0	-181.9	-164.8	-17.1	-36.8	19.6
2008 Q3	-10.8	-16.0	5.2	0.8	-0.8	-15.4	-16.8	1.3	8.7	-7.4
Q4	45.9	50.8	-9.2	2.7	1.5	-427.4	-331.5	-95.9	-35.3	-60.6
2009 Q1	15.4	22.5	-1.7	-2.5	-2.9	-106.9	-75.6	-31.3	-2.6	-28.7
Q2 (p)	11.3	11.3	-1.6	3.5	-1.9	-58.6	-46.9	-11.6	-0.8	-10.8
					Growth rates					
2006 Dec.	4.3	-16.6	18.4	9.3	52.1	15.7	17.3	11.2	5.3	12.4
2007 Dec.	9.7	-2.4	29.9	10.7	16.9	17.9	21.4	7.8	15.8	6.3
2008 Sep.	3.7	-6.8	2.9	8.3	18.9	7.7	7.5	8.3	-1.2	10.1
Dec.	19.3	49.9	-11.0	7.7	8.7	-4.6	-5.5	-1.7	-25.5	2.7
2009 Mar.	22.7	52.6	2.2	5.3	6.5	-13.6	-14.5	-10.8	-24.0	-8.7
June (p)	15.0	43.9	-13.0	3.9	-4.9	-14.6	-14.9	-13.7	-24.0	-12.2

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 ESA 95.
2) Data refer to the changing composition of the euro area. For further information, see the General notes.
3) The term “banks” is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

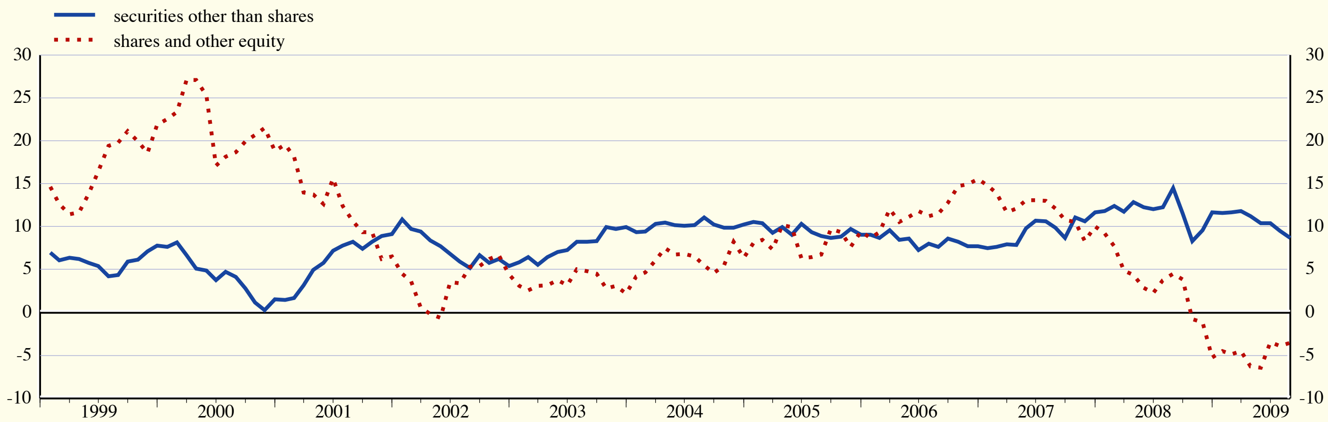
2.6 MFI holdings of securities, breakdown [1), 2)]

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

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts											
2007	5,124.7	1,656.3	84.0	1,180.3	16.6	919.6	33.3	1,234.6	1,636.5	424.5	869.3	342.7
2008	5,858.4	1,887.4	92.4	1,225.4	19.3	1,355.2	51.2	1,227.5	1,477.1	423.2	776.5	277.4
2009 Q1	6,135.8	1,982.3	103.5	1,366.7	20.6	1,396.3	50.6	1,215.7	1,456.8	424.6	760.9	271.3
2009 Apr.	6,211.4	2,013.8	101.8	1,384.2	20.9	1,422.2	50.9	1,217.6	1,491.8	432.0	785.6	274.1
May	6,239.3	2,037.5	105.7	1,402.8	19.2	1,429.9	47.5	1,196.7	1,488.8	431.8	782.8	274.1
June	6,273.4	2,014.1	106.4	1,446.2	20.3	1,440.9	47.3	1,198.2	1,474.5	429.5	769.1	275.9
July	6,286.5	2,031.5	107.6	1,456.8	18.9	1,438.3	48.1	1,185.3	1,487.3	438.9	767.0	281.4
Aug. (p)	6,301.9	2,029.8	105.4	1,458.6	17.9	1,441.0	47.5	1,201.7	1,496.4	450.8	763.1	282.4
	Transactions											
2007	543.8	136.1	18.0	-86.2	1.5	269.5	9.5	195.4	147.8	51.3	55.4	41.0
2008	600.3	212.5	6.0	36.6	1.9	295.3	19.1	28.8	-84.1	22.9	-56.4	-50.5
2009 Q1	253.0	95.3	8.6	133.7	0.4	39.7	-2.7	-22.0	-4.7	3.2	-4.6	-3.4
Q2	160.1	32.0	3.7	84.1	0.3	48.7	-2.0	-6.8	16.1	8.4	4.2	3.4
2009 Apr.	65.8	31.2	-3.2	17.6	0.1	27.5	-0.3	-7.2	28.6	5.7	21.1	1.8
May	64.1	24.4	6.8	23.1	-0.8	9.6	-1.4	2.5	1.3	4.9	-3.4	-0.3
June	30.3	-23.6	0.1	43.4	1.0	11.6	-0.2	-2.1	-13.8	-2.2	-13.5	1.9
July	16.1	20.6	1.2	8.0	-1.4	-3.8	0.5	-9.1	6.0	6.6	-6.1	5.4
Aug. (p)	18.1	-3.8	-1.2	0.3	-1.0	1.3	-0.2	22.7	4.1	10.3	-6.5	0.3
	Growth rates											
2007 Dec.	11.7	8.7	25.3	-6.8	10.7	43.3	33.4	17.7	10.0	13.7	6.9	13.9
2008 Dec.	11.7	12.7	8.2	3.1	9.9	32.2	57.5	2.4	-5.3	5.4	-6.7	-15.3
2009 Mar.	11.8	14.4	10.7	12.5	16.4	30.2	3.1	-5.2	-4.5	0.6	-6.6	-6.4
2009 Apr.	11.2	14.9	2.7	12.8	20.3	28.7	-3.9	-7.0	-6.3	0.6	-9.6	-6.6
May	10.4	13.5	2.0	14.0	18.4	26.5	-6.8	-8.0	-6.5	-0.8	-9.3	-6.7
June	10.4	11.8	1.4	18.0	19.3	24.3	-6.2	-8.0	-3.5	1.0	-5.7	-4.0
July	9.5	11.8	-1.6	18.2	12.4	22.0	-6.0	-9.7	-3.9	2.2	-8.6	0.6
Aug. (p)	8.7	10.7	-1.8	18.3	13.8	19.1	-6.7	-9.2	-3.5	5.8	-9.4	-0.1

C14 MFI holdings of securities [2)]

(annual growth rates)



Source: ECB.

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

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

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

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

	Consumer credit				Lending for house purchase				Other lending			
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11	12
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	-4.5	-1.1	-1.5	-1.9	-2.7	0.0	-0.2	-2.5	-6.7	-1.2	-2.3	-3.2
2009 Q1	-1.8	-0.5	-0.5	-0.8	-1.2	0.0	-0.1	-1.1	-2.2	-0.7	-0.2	-1.3
Q2	-1.5	-0.3	-0.5	-0.8	-1.0	0.0	0.0	-0.9	-1.1	-0.1	-0.2	-0.8
2009 Apr.	-0.6	0.0	-0.2	-0.3	-0.2	0.0	0.0	-0.2	-0.2	0.0	0.0	-0.2
May	-0.3	0.0	-0.1	-0.2	-0.3	0.0	0.0	-0.3	-0.4	-0.1	0.0	-0.3
June	-0.6	-0.2	-0.2	-0.2	-0.4	0.0	0.0	-0.4	-0.6	-0.1	-0.1	-0.4
July	-0.7	-0.1	-0.3	-0.4	-0.3	0.0	0.0	-0.3	-0.6	-0.1	-0.1	-0.4
Aug. (p)	-0.5	-0.1	-0.1	-0.2	-0.2	0.0	0.0	-0.2	-0.4	-0.1	0.0	-0.2

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

	Non-financial corporations				Non-euro area residents		
	Total	Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Total	Up to 1 year	Over 1 year
	1	2	3	4	5	6	7
2007	-12.5	-2.1	-5.4	-4.9	-5.2	-3.4	-1.8
2008	-17.7	-4.0	-9.1	-4.5	-6.6	-3.4	-3.2
2009 Q1	-7.1	-3.5	-1.6	-2.0	-2.7	-1.3	-1.3
Q2	-5.8	-1.7	-2.4	-1.7	-1.1	-0.3	-0.8
2009 Apr.	-1.8	-0.7	-0.6	-0.6	0.1	-0.1	0.2
May	-1.3	-0.3	-0.6	-0.3	-0.3	-0.1	-0.2
June	-2.7	-0.7	-1.2	-0.8	-0.9	-0.2	-0.7
July	-2.6	-0.8	-0.9	-0.9	-0.4	-0.2	-0.2
Aug. (p)	-1.4	-0.7	-0.4	-0.3	-0.1	-0.1	0.0

3. Revaluation of securities held by MFIs

	Securities other than shares								Shares and other equity			
	Total	MFIs		General government		Other euro area residents		Non-euro area residents	Total	MFIs	Non-MFIs	Non-euro area residents
		Euro	Non-euro	Euro	Non-euro	Euro	Non-euro					
	1	2	3	4	5	6	7	8	9	10	11	12
2007	-14.2	-3.3	0.1	-0.3	-0.2	-3.2	-0.6	-6.7	27.6	3.8	11.7	12.1
2008	-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 Q1	-14.4	-0.5	-0.1	-3.1	0.0	-2.8	0.4	-8.3	-16.0	-3.5	-11.4	-1.1
Q2	-2.4	2.0	0.1	-2.0	-0.1	-1.6	0.3	-1.0	8.2	2.3	4.7	1.3
2009 Apr.	-0.3	1.1	0.1	-0.2	0.0	-1.8	0.2	0.3	6.5	1.7	3.6	1.1
May	-2.1	1.2	0.0	-2.0	-0.2	0.2	0.0	-1.5	2.2	0.8	1.2	0.2
June	0.0	-0.4	0.0	0.2	0.0	-0.1	0.0	0.2	-0.4	-0.2	-0.2	-0.1
July	6.7	1.0	0.1	2.7	0.0	0.9	0.2	1.8	6.8	2.9	3.9	0.1
Aug. (p)	6.8	1.8	0.1	1.4	0.0	1.5	0.0	1.9	5.0	1.6	2.7	0.7

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

2.8 Currency breakdown of selected MFI balance sheet items [1),2)]
(percentages of total; outstanding amounts in EUR billions; end of period)

1. Deposits

	MFIs [3)]							Non-MFIs						
	All currencies (outstanding amount)	Euro [4)]	Non-euro currencies					All currencies (outstanding amount)	Euro [4)]	Non-euro currencies				
			Total							Total				
				USD	JPY	CHF	GBP				USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	By euro area residents													
2006	5,239.3	90.7	9.3	5.6	0.4	1.5	1.2	8,025.9	96.4	3.6	2.2	0.3	0.1	0.6
2007	6,085.8	92.1	7.9	4.8	0.4	1.1	1.0	9,012.4	96.4	3.6	2.2	0.4	0.1	0.5
2008 Q3	6,746.8	89.4	10.6	6.9	0.4	1.5	1.0	9,487.6	96.2	3.8	2.2	0.5	0.1	0.6
Q4	6,858.5	89.7	10.3	7.3	0.4	1.2	0.8	9,901.3	96.9	3.1	1.9	0.5	0.1	0.4
2009 Q1	6,606.6	90.9	9.1	6.3	0.3	1.2	0.7	10,001.6	96.9	3.1	1.9	0.4	0.1	0.5
Q2 (p)	6,628.8	92.2	7.8	5.1	0.3	1.1	0.8	10,158.8	97.0	3.0	1.8	0.3	0.1	0.5
	By non-euro area residents													
2006	2,561.5	45.4	54.6	35.0	2.3	2.7	11.5	868.6	50.8	49.2	31.9	1.3	2.0	10.4
2007	2,948.5	46.9	53.1	33.6	2.9	2.4	11.0	908.8	50.1	49.9	32.9	1.6	1.8	9.9
2008 Q3	3,142.2	45.8	54.2	35.2	3.2	2.7	9.8	1,003.4	52.6	47.4	30.3	1.3	1.5	10.3
Q4	2,809.9	48.2	51.8	33.4	2.8	2.6	10.2	897.5	54.9	45.1	28.7	1.4	1.9	9.4
2009 Q1	2,780.9	47.2	52.8	34.8	2.1	2.6	10.4	879.3	52.7	47.3	31.6	1.2	1.9	8.4
Q2 (p)	2,699.3	49.0	51.0	32.8	1.9	2.6	10.9	861.4	51.9	48.1	33.1	1.3	1.8	7.7

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
2006	4,470.8	80.6	19.4	10.0	1.6	1.9	3.5
2007	4,933.2	81.5	18.5	9.2	1.7	1.9	3.4
2008 Q3	5,168.4	81.9	18.1	8.9	1.9	1.8	3.3
Q4	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 (p)	5,224.2	83.5	16.5	8.4	1.9	1.8	2.6

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

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

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

3. Loans

	MFIs[3]							Non-MFIs						
	All currencies (outstanding amount)	Euro[4]	Non-euro currencies					All currencies (outstanding amount)	Euro[4]	Non-euro currencies				
			Total							Total				
				USD	JPY	CHF	GBP				USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	To euro area residents													
2006	4,938.0	-	-	-	-	-	-	9,943.7	96.4	3.6	1.6	0.2	1.1	0.5
2007	5,800.8	-	-	-	-	-	-	11,093.4	96.2	3.8	1.8	0.2	0.9	0.6
2008 Q3	6,355.5	-	-	-	-	-	-	11,778.9	95.8	4.2	2.1	0.2	1.0	0.5
Q4	6,317.7	-	-	-	-	-	-	11,735.7	95.9	4.1	2.1	0.3	1.0	0.4
2009 Q1	6,126.7	-	-	-	-	-	-	11,780.9	95.9	4.1	2.1	0.3	1.0	0.5
Q2 (p)	6,226.3	-	-	-	-	-	-	11,833.0	96.1	3.9	2.0	0.2	1.0	0.5
	To non-euro area residents													
2006	2,070.6	50.9	49.1	28.7	2.0	2.3	11.0	861.2	39.3	60.7	43.1	1.1	4.0	8.6
2007	2,352.4	48.3	51.7	28.8	2.3	2.4	12.7	955.1	40.9	59.1	41.2	1.2	3.7	8.2
2008 Q3	2,461.8	42.7	57.3	33.2	2.9	2.6	12.4	1,063.9	41.4	58.6	40.5	1.5	3.9	8.0
Q4	2,284.6	45.8	54.2	31.8	3.0	2.6	11.3	965.5	40.5	59.5	41.9	1.4	4.3	7.4
2009 Q1	2,100.4	44.8	55.2	31.2	2.7	3.1	12.7	956.2	38.1	61.9	44.5	1.0	4.2	7.8
Q2 (p)	2,018.1	45.5	54.5	29.5	2.9	3.1	13.5	935.7	39.5	60.5	43.0	0.9	4.0	7.8

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							Total				
				USD	JPY	CHF	GBP				USD	JPY	CHF	GBP
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Issued by euro area residents													
2006	1,636.9	95.6	4.4	2.3	0.2	0.3	1.3	1,924.6	97.6	2.4	1.3	0.3	0.1	0.7
2007	1,740.3	95.2	4.8	2.4	0.3	0.3	1.5	2,149.8	97.7	2.3	1.4	0.2	0.1	0.5
2008 Q3	1,905.6	94.6	5.4	2.9	0.4	0.3	1.5	2,302.2	97.2	2.8	1.9	0.3	0.1	0.4
Q4	1,979.8	95.3	4.7	2.6	0.4	0.2	1.2	2,651.1	97.3	2.7	1.7	0.3	0.1	0.4
2009 Q1	2,085.8	95.0	5.0	2.7	0.2	0.4	1.3	2,834.3	97.5	2.5	1.7	0.2	0.1	0.4
Q2 (p)	2,120.5	95.0	5.0	2.5	0.5	0.4	1.3	2,954.7	97.7	2.3	1.5	0.2	0.1	0.3
	Issued by non-euro area residents													
2006	515.3	52.3	47.7	28.8	0.7	0.4	14.5	594.5	38.9	61.1	36.5	4.9	0.8	14.2
2007	582.3	53.9	46.1	27.3	0.7	0.4	14.4	652.2	35.9	64.1	39.3	4.5	0.8	12.6
2008 Q3	645.1	51.1	48.9	30.7	0.8	0.5	14.2	663.4	37.2	62.8	38.1	6.4	0.9	10.5
Q4	580.8	54.0	46.0	28.6	0.9	0.5	13.3	646.7	39.0	61.0	37.1	6.4	0.8	11.0
2009 Q1	597.9	52.1	47.9	27.6	0.3	1.6	13.9	617.9	34.1	65.9	40.5	4.3	0.8	15.3
Q2 (p)	570.1	55.3	44.7	24.7	1.7	1.4	14.4	628.2	33.5	66.5	40.3	4.2	0.9	16.0

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

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

(EUR billions; outstanding amounts at end of period)

1. Assets

	Total	Deposits	Holdings of securities other than shares			Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
			Total	Up to 1 year	Over 1 year				
	1	2	3	4	5	6	7	8	9
2007 Q4	5,783.4	353.7	1,994.3	184.2	1,810.1	2,077.7	784.6	189.1	384.1
2008 Q1	5,162.7	365.9	1,858.8	164.8	1,693.9	1,670.4	720.3	197.1	350.2
Q2	5,017.4	359.6	1,808.2	157.5	1,650.7	1,624.6	691.2	204.9	328.8
Q3	4,715.2	377.4	1,748.3	148.1	1,600.1	1,411.5	641.9	202.8	333.4
Q4	4,232.3	352.1	1,687.9	132.4	1,555.5	1,132.7	566.7	200.2	292.7
2009 Q1 (p)	4,095.6	344.6	1,699.3	121.7	1,577.6	1,044.4	529.7	202.3	275.3

2. Liabilities

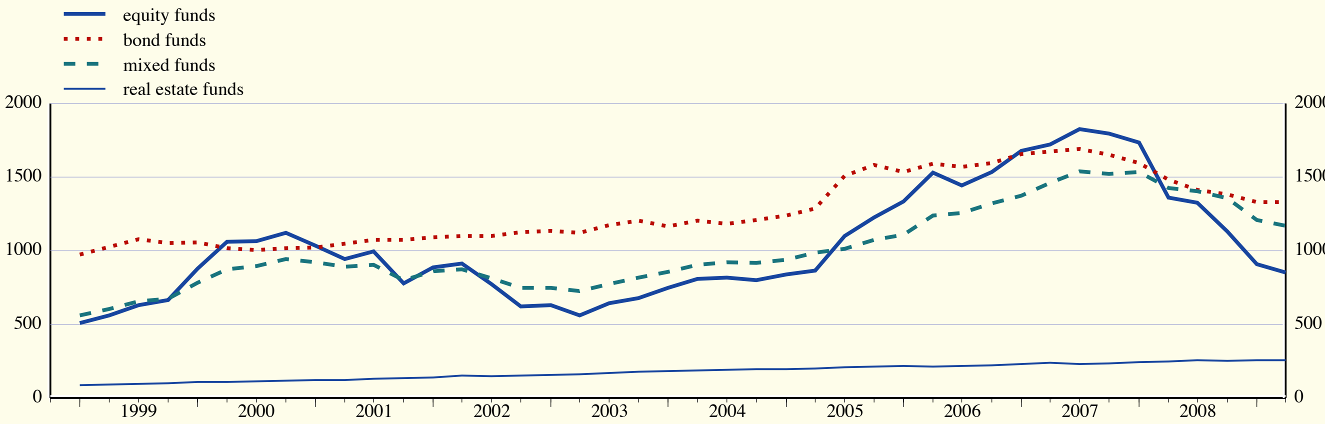
	Total	Deposits and loans taken	Investment fund shares	Other liabilities
	1	2	3	4
2007 Q4	5,783.4	76.8	5,413.5	293.1
2008 Q1	5,162.7	76.4	4,848.6	237.7
Q2	5,017.4	74.8	4,723.1	219.5
Q3	4,715.2	71.0	4,415.4	228.8
Q4	4,232.3	64.7	3,983.1	184.5
2009 Q1 (p)	4,095.6	74.6	3,836.6	184.4

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

	Total	Funds by investment policy					Funds by type of investor	
		Equity funds	Bond funds	Mixed funds	Real estate funds	Other funds	General public funds	Special investors' funds
	1	2	3	4	5	6	7	8
2007 Q4	5,783.4	1,735.7	1,597.4	1,535.8	244.3	670.2	4,346.8	1,436.7
2008 Q1	5,162.7	1,362.8	1,483.8	1,428.1	249.7	638.3	3,780.2	1,382.5
Q2	5,017.4	1,325.4	1,413.9	1,405.6	256.3	616.2	3,649.3	1,368.1
Q3	4,715.2	1,132.4	1,383.2	1,359.3	253.2	587.1	3,343.0	1,372.3
Q4	4,232.3	908.4	1,330.8	1,210.8	257.1	525.2	2,950.7	1,281.6
2009 Q1 (p)	4,095.6	854.6	1,330.8	1,170.6	257.4	482.2	2,825.4	1,270.2

C15 Total assets of investment funds

(EUR billions)



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

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

1. Funds by investment policy

	Total	Deposits	Holdings of securities other than shares: Total	Holdings of securities other than shares: Up to 1 year	Holdings of securities other than shares: Over 1 year	Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
	1	2	3	4	5	6	7	8	9
				Equity funds					
2007 Q4	1,735.7	58.1	71.8	26.5	45.2	1,464.4	79.5	-	61.9
2008 Q1	1,362.8	51.3	63.1	21.3	41.8	1,131.0	65.7	-	51.7
Q2	1,325.4	54.3	65.1	22.0	43.1	1,088.7	65.7	-	51.6
Q3	1,132.4	48.3	61.3	20.2	41.1	915.3	57.2	-	50.2
Q4	908.4	37.3	65.2	19.4	45.8	715.4	47.2	-	43.3
2009 Q1 (p)	854.6	38.8	63.8	16.5	47.3	660.7	45.2	-	46.1
				Bond funds					
2007 Q4	1,597.4	116.1	1,273.6	92.8	1,180.8	58.0	49.8	-	99.8
2008 Q1	1,483.8	124.7	1,168.2	80.3	1,087.9	56.8	45.5	-	88.6
Q2	1,413.9	115.9	1,118.8	74.6	1,044.2	57.9	42.7	-	78.6
Q3	1,383.2	128.7	1,074.0	67.9	1,006.1	55.7	41.3	-	83.5
Q4	1,330.8	122.2	1,034.2	62.2	971.9	57.5	36.4	-	80.5
2009 Q1 (p)	1,330.8	117.5	1,044.6	62.1	982.5	49.1	38.6	-	80.9
				Mixed funds					
2007 Q4	1,535.8	89.8	547.2	47.3	499.8	393.2	343.7	0.7	161.4
2008 Q1	1,428.1	97.9	528.1	46.4	481.8	339.5	314.0	1.2	147.3
Q2	1,405.6	99.1	520.1	42.6	477.5	341.7	308.0	0.8	135.9
Q3	1,359.3	109.0	512.8	42.2	470.6	312.1	287.4	1.1	137.0
Q4	1,210.8	110.3	494.9	34.3	460.6	245.2	235.8	1.2	123.4
2009 Q1 (p)	1,170.6	109.4	498.5	28.2	470.3	227.2	224.0	1.8	109.6
				Real estate funds					
2007 Q4	244.3	19.7	6.0	1.5	4.5	3.4	12.5	187.9	14.7
2008 Q1	249.7	19.9	5.3	1.1	4.2	3.1	11.3	195.4	14.6
Q2	256.3	18.0	5.9	1.1	4.8	3.0	10.1	203.5	15.8
Q3	253.2	19.0	4.7	1.3	3.4	3.1	9.3	201.2	16.0
Q4	257.1	14.4	4.8	1.1	3.7	12.7	6.8	198.5	19.8
2009 Q1 (p)	257.4	14.4	5.1	1.1	4.0	12.3	7.5	200.1	18.1

2. Funds by type of investor

	Total	Deposits	Holdings of securities other than shares	Holdings of shares/ other equity	Holdings of investment fund shares	Fixed assets	Other assets
	1	2	3	4	5	6	7
				General public funds			
2007 Q4	4,346.8	280.2	1,337.7	1,717.7	570.2	149.1	291.8
2008 Q1	3,780.2	278.0	1,219.2	1,362.3	514.7	154.1	252.0
Q2	3,649.3	264.9	1,178.3	1,327.0	486.0	155.0	238.1
Q3	3,343.0	265.4	1,105.7	1,140.8	441.4	152.4	237.3
Q4	2,950.7	244.6	1,037.6	933.0	382.6	146.7	206.2
2009 Q1 (p)	2,825.4	243.5	1,029.9	864.7	342.8	144.5	199.9
				Special investors' funds			
2007 Q4	1,436.7	73.4	656.6	360.0	214.5	40.0	92.2
2008 Q1	1,382.5	88.0	639.6	308.1	205.6	43.0	98.2
Q2	1,368.1	94.8	629.9	297.6	205.2	49.9	90.7
Q3	1,372.3	112.0	642.5	270.7	200.5	50.5	96.1
Q4	1,281.6	107.5	650.2	199.7	184.1	53.5	86.5
2009 Q1 (p)	1,270.2	101.1	669.4	179.7	186.9	57.8	75.3

Source: ECB.

EURO AREA ACCOUNTS

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

Uses 2009 Q1	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Exports of goods and services						421.2
Trade balance [1]						11.0
Generation of income account						
Gross value added (basic prices)						
Taxes less subsidies on products						
Gross domestic product (market prices)						
Compensation of employees	1,047.9	102.7	663.6	52.0	229.7	
Other taxes less subsidies on production	24.2	2.7	14.2	3.6	3.8	
Consumption of fixed capital	351.0	94.5	199.1	11.6	45.7	
Net operating surplus and mixed income [1]	540.7	279.4	226.5	35.8	-0.9	
Allocation of primary income account						
Net operating surplus and mixed income						
Compensation of employees						4.6
Taxes less subsidies on production						
Property income	777.7	42.7	288.7	380.7	65.6	109.5
Interest	481.8	40.4	83.1	292.7	65.6	66.7
Other property income	295.8	2.3	205.6	87.9	0.0	42.8
Net national income [1]	1,824.2	1,549.3	33.8	39.0	202.0	
Secondary distribution of income account						
Net national income						
Current taxes on income, wealth, etc.	231.0	201.3	23.9	5.6	0.2	1.3
Social contributions	403.2	403.2				0.6
Social benefits other than social transfers in kind	422.2	1.4	15.6	31.7	373.6	0.7
Other current transfers	192.5	71.3	25.2	45.9	50.1	8.1
Net non-life insurance premiums	43.7	31.8	10.3	0.9	0.7	1.4
Non-life insurance claims	43.8			43.8		0.6
Other	105.0	39.5	14.9	1.2	49.4	6.1
Net disposable income [1]	1,793.4	1,384.1	-4.7	48.2	365.8	
Use of income account						
Net disposable income						
Final consumption expenditure	1,743.6	1,279.3			464.2	
Individual consumption expenditure	1,562.6	1,279.3			283.3	
Collective consumption expenditure	181.0				181.0	
Adjustment for the change in net equity of households in pension fund reserves	15.3	0.1	0.2	15.0	0.0	0.0
Net saving/current external account [1]	49.9	120.0	-4.9	33.2	-98.4	55.2
Capital account						
Net saving / current external account						
Gross capital formation	456.1	140.8	256.2	12.9	46.3	
Gross fixed capital formation	438.3	138.2	241.3	12.7	46.1	
Changes in inventories and acquisitions less disposals of valuables	17.9	2.6	14.9	0.2	0.2	
Consumption of fixed capital						
Acquisitions less disposals of non-produced non-financial assets	0.6	-1.4	1.3	0.1	0.6	-0.6
Capital transfers	34.4	6.1	-0.2	1.2	27.3	3.7
Capital taxes	5.0	4.8	0.2	0.0		0.0
Other capital transfers	29.4	1.3	-0.3	1.2	27.3	3.7
Net lending (+)/net borrowing (-) (from capital account) [1]	-54.3	83.8	-47.0	31.4	-122.5	54.3
Statistical discrepancy	0.0	13.1	-13.1	0.0	0.0	0.0

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

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

(EUR billions)

Resources 2009 Q1	Euro area	Households	Non-financial corporations	Financial corporations	General government	Rest of the world
External account						
Imports of goods and services						432.1
Trade balance						
Generation of income account						
Gross value added (basic prices)	1,963.9	479.2	1,103.4	103.0	278.3	
Taxes less subsidies on products	224.8					
Gross domestic product (market prices)[2]	2,188.7					
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	540.7	279.4	226.5	35.8	-0.9	
Compensation of employees	1,050.4	1,050.4				2.1
Taxes less subsidies on production	247.2				247.2	1.9
Property income	763.5	262.2	96.0	383.9	21.3	123.6
Interest	463.4	72.4	48.3	334.9	7.9	85.1
Other property income	300.1	189.9	47.8	49.1	13.4	38.5
Net national income						
Secondary distribution of income account						
Net national income	1,824.2	1,549.3	33.8	39.0	202.0	
Current taxes on income, wealth, etc.	231.9				231.9	0.4
Social contributions	402.7	1.1	15.6	47.4	338.6	1.1
Social benefits other than social transfers in kind	419.6	419.6				3.4
Other current transfers	163.9	91.4	10.4	45.0	17.2	36.7
Net non-life insurance premiums	43.8			43.8		1.3
Non-life insurance claims	42.8	34.2	7.7	0.7	0.3	1.6
Other	77.3	57.2	2.8	0.5	16.9	33.8
Net disposable income						
Use of income account						
Net disposable income	1,793.4	1,384.1	-4.7	48.2	365.8	
Final consumption expenditure						
Individual consumption expenditure						
Collective consumption expenditure						
Adjustment for the change in net equity of households in pension fund reserves	15.3	15.3				0.0
Net saving/current external account						
Capital account						
Net saving / current external account	49.9	120.0	-4.9	33.2	-98.4	55.2
Gross capital formation						
Gross fixed capital formation						
Changes in inventories and acquisitions less disposals of valuables						
Consumption of fixed capital	351.0	94.5	199.1	11.6	45.7	
Acquisitions less disposals of non-produced non-financial assets						
Capital transfers	35.9	14.8	16.0	0.7	4.4	2.2
Capital taxes	5.0				5.0	0.0
Other capital transfers	30.9	14.8	16.0	0.7	-0.6	2.2
Net lending (+)/net borrowing (-) (from capital account)						
Statistical discrepancy						

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

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

(EUR billions)

Assets 2009 Q1	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		16,629.4	14,160.4	23,728.5	9,484.6	5,963.5	3,159.6	14,898.2
Monetary gold and special drawing rights (SDRs)				221.8				
Currency and deposits		6,120.0	1,835.6	2,393.9	1,800.1	874.8	641.5	4,206.6
Short-term debt securities		60.3	94.3	154.5	327.8	331.2	37.6	855.6
Long-term debt securities		1,256.5	213.8	4,253.6	1,631.7	2,017.2	322.8	2,942.3
Loans		65.7	2,531.9	12,755.1	2,112.2	364.8	442.6	1,775.9
of which long-term		47.7	1,404.8	9,679.5	1,684.7	287.6	354.5	.
Shares and other equity		3,750.4	6,067.4	1,599.1	3,413.1	1,919.6	1,136.0	4,434.8
Quoted shares		611.6	1,106.3	470.7	1,505.7	426.0	263.2	.
Unquoted shares and other equity		1,820.0	4,652.7	915.5	1,374.8	433.0	751.9	.
Mutual fund shares		1,318.9	308.5	212.9	532.6	1,060.6	120.9	.
Insurance technical reserves		5,148.6	136.9	1.8	0.0	142.3	3.1	149.3
Other accounts receivable and financial derivatives		227.9	3,280.4	2,348.6	199.6	313.5	575.9	533.8
Net financial worth								
Financial account, transactions in financial assets								
Total transactions in financial assets		101.5	-5.9	-116.1	118.4	54.8	94.6	-131.3
Monetary gold and special drawing rights (SDRs)				-0.9				0.9
Currency and deposits		27.3	-41.6	-223.9	59.4	-1.4	92.8	-188.2
Short-term debt securities		-14.8	-7.9	-9.1	3.2	7.4	-11.6	45.9
Long-term debt securities		37.3	-18.0	161.2	9.7	32.3	-4.6	67.3
Loans		-1.1	80.9	-31.1	75.0	2.8	4.3	-31.9
of which long-term		-1.1	62.4	19.9	76.9	10.6	4.4	.
Shares and other equity		12.4	77.2	-5.5	-35.3	2.8	10.5	21.6
Quoted shares		3.0	26.7	-3.1	-30.7	-0.2	2.3	.
Unquoted shares and other equity		6.4	38.2	16.1	27.3	4.4	7.9	.
Mutual fund shares		3.0	12.3	-18.4	-31.8	-1.3	0.2	.
Insurance technical reserves		42.6	1.2	0.0	0.0	3.7	0.0	-10.5
Other accounts receivable and financial derivatives		-2.3	-97.8	-6.9	6.4	7.2	3.3	-36.4
Changes in net financial worth due to transactions								
Other changes account, financial assets								
Total other changes in financial assets		-264.6	-348.9	58.5	-91.9	-71.2	-44.1	-41.5
Monetary gold and special drawing rights (SDRs)				24.4				
Currency and deposits		14.4	-3.4	25.4	5.8	4.2	0.0	47.2
Short-term debt securities		-0.5	-0.2	-1.3	7.7	0.3	-0.5	0.9
Long-term debt securities		-2.0	-8.7	13.6	-5.2	1.8	-1.1	0.0
Loans		0.0	8.3	23.1	6.1	-4.3	0.0	-1.3
of which long-term		0.0	5.6	15.6	4.1	-2.5	-0.1	.
Shares and other equity		-247.1	-389.9	-61.6	-107.5	-75.8	-40.1	-98.6
Quoted shares		-89.5	-151.6	-50.4	-75.9	-33.1	-42.0	.
Unquoted shares and other equity		-120.8	-225.0	-33.3	-54.5	-23.2	5.3	.
Mutual fund shares		-36.8	-13.3	22.1	22.9	-19.5	-3.4	.
Insurance technical reserves		-36.6	0.0	0.0	0.0	0.1	0.0	2.6
Other accounts receivable and financial derivatives		7.2	45.1	34.8	1.2	2.6	-2.5	7.8
Other changes in net financial worth								
Closing balance sheet, financial assets								
Total financial assets		16,466.3	13,805.6	23,670.9	9,511.0	5,947.1	3,210.0	14,724.6
Monetary gold and special drawing rights (SDRs)				245.2				
Currency and deposits		6,161.7	1,790.6	2,195.4	1,865.3	877.7	734.4	4,065.6
Short-term debt securities		45.0	86.2	144.2	338.6	338.9	25.6	902.4
Long-term debt securities		1,291.9	187.1	4,428.4	1,636.2	2,051.2	317.1	3,009.5
Loans		64.6	2,621.1	12,747.2	2,193.4	363.3	446.8	1,742.7
of which long-term		46.7	1,472.8	9,715.0	1,765.7	295.8	358.8	.
Shares and other equity		3,515.8	5,754.8	1,532.0	3,270.3	1,846.6	1,106.4	4,357.8
Quoted shares		525.1	981.4	417.1	1,399.1	392.7	223.5	.
Unquoted shares and other equity		1,705.5	4,465.9	898.3	1,347.6	414.2	765.1	.
Mutual fund shares		1,285.1	307.5	216.6	523.6	1,039.7	117.8	.
Insurance technical reserves		5,154.6	138.1	1.9	0.0	146.1	3.1	141.4
Other accounts receivable and financial derivatives		232.8	3,227.6	2,376.6	207.2	323.2	576.6	505.2
Net financial worth								

Source: ECB.

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

Liabilities 2009 Q1	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		6,357.4	22,408.4	23,111.9	9,233.0	6,114.7	7,468.4	13,108.5
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			26.0	14,889.7	23.5	1.9	254.6	2,676.9
Short-term debt securities			281.6	327.3	125.8	10.9	847.7	268.0
Long-term debt securities			453.9	2,767.8	2,084.2	32.3	4,704.3	2,595.5
Loans		5,688.0	8,207.0		1,735.4	212.8	1,257.4	2,947.5
of which long-term		5,354.4	5,600.8		805.1	72.1	1,071.6	.
Shares and other equity			10,273.1	2,445.9	5,057.2	459.6	4.3	4,080.3
Quoted shares			2,866.1	375.2	111.7	165.2	0.0	.
Unquoted shares and other equity			7,407.0	917.7	1,015.7	293.6	4.3	.
Mutual fund shares				1,153.0	3,929.8			.
Insurance technical reserves		33.6	328.7	61.9	0.6	5,156.8	0.5	
Other accounts payable and financial derivatives		635.7	2,838.0	2,619.3	206.2	240.4	399.6	540.3
Net financial worth [1]	-1,568.0	10,272.0	-8,248.0	616.6	251.5	-151.2	-4,308.9	
Financial account, transactions in liabilities								
Total transactions in liabilities		4.6	54.2	-163.1	114.5	74.3	217.1	-185.6
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.3	-92.4	-2.0	0.2	-8.9	-172.6
Short-term debt securities			0.7	-74.7	-20.9	-0.2	95.4	12.7
Long-term debt securities			17.6	31.7	130.4	2.1	154.2	-50.9
Loans		-10.2	30.4		55.3	2.9	-1.8	22.2
of which long-term		-2.6	79.1		18.6	0.6	-7.3	.
Shares and other equity			58.9	68.3	-49.3	1.3	0.0	4.5
Quoted shares			9.6	9.6	0.1	0.0	0.0	.
Unquoted shares and other equity			49.2	6.0	20.0	1.3	0.0	.
Mutual fund shares				52.7	-69.4			.
Insurance technical reserves		0.1	0.2	1.7	0.2	34.8	0.0	
Other accounts payable and financial derivatives		14.7	-53.9	-97.8	0.8	33.1	-21.8	-1.6
Changes in net financial worth due to transactions [1]	-54.3	96.9	-60.1	47.0	3.8	-19.4	-122.5	54.3
Other changes account, liabilities								
Total other changes in liabilities		1.6	-636.1	87.1	-100.5	-115.5	8.5	-73.1
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			0.0	67.4	0.0	0.0	-0.1	26.3
Short-term debt securities			2.1	5.1	0.4	0.0	-0.7	-0.5
Long-term debt securities			1.0	5.9	-12.1	-3.7	6.9	0.3
Loans		0.6	12.5		17.3	3.4	0.3	-2.3
of which long-term		1.8	12.3		12.7	2.8	0.3	.
Shares and other equity			-695.0	-69.1	-114.0	-58.2	-0.1	-84.1
Quoted shares			-358.6	-66.9	-21.6	-42.8	0.0	.
Unquoted shares and other equity			-336.4	0.4	-25.0	-15.3	-0.1	.
Mutual fund shares				-2.6	-67.3			.
Insurance technical reserves		0.0	0.0	0.0	0.0	-33.9	0.0	
Other accounts payable and financial derivatives		1.0	43.3	77.7	7.9	-23.1	2.3	-12.9
Other changes in net financial worth [1]	-7.3	-266.2	287.3	-28.6	8.6	44.3	-52.7	31.7
Closing balance sheet, liabilities								
Total liabilities		6,363.6	21,826.5	23,035.8	9,247.1	6,073.5	7,694.1	12,849.8
Monetary gold and special drawing rights (SDRs)								
Currency and deposits			26.3	14,864.8	21.5	2.1	245.6	2,530.6
Short-term debt securities			284.4	257.7	105.3	10.7	942.4	280.3
Long-term debt securities			472.5	2,805.4	2,202.5	30.7	4,865.5	2,544.9
Loans		5,678.5	8,249.9		1,808.1	219.1	1,256.0	2,967.5
of which long-term		5,353.6	5,692.2		836.5	75.5	1,064.7	.
Shares and other equity			9,637.0	2,445.1	4,894.0	402.8	4.2	4,000.7
Quoted shares			2,517.1	318.0	90.1	122.4	0.0	.
Unquoted shares and other equity			7,119.9	924.0	1,010.7	279.6	4.2	.
Mutual fund shares				1,203.1	3,793.2			.
Insurance technical reserves		33.7	328.9	63.6	0.8	5,157.7	0.5	
Other accounts payable and financial derivatives		651.4	2,827.4	2,599.2	215.0	250.4	380.0	525.8
Net financial worth [1]	-1,629.6	10,102.7	-8,020.9	635.1	263.9	-126.4	-4,484.0	

Source: ECB.

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

Uses	2005	2006	2007	2007 Q2-2008 Q1	2007 Q3-2008 Q2	2007 Q4-2008 Q3	2008 Q1-2008 Q4	2008 Q2-2009 Q1
Generation of income account								
Gross value added (basic prices)								
Taxes less subsidies on products								
Gross domestic product (market prices)								
Compensation of employees	3,905.8	4,068.0	4,252.2	4,300.7	4,350.5	4,395.5	4,429.5	4,435.0
Other taxes less subsidies on production	129.9	129.6	137.6	137.2	137.6	138.6	135.2	133.7
Consumption of fixed capital	1,185.2	1,243.6	1,310.3	1,324.9	1,340.7	1,356.1	1,370.3	1,384.4
Net operating surplus and mixed income [1]	2,075.9	2,190.4	2,332.4	2,358.9	2,390.5	2,397.9	2,380.1	2,307.8
Allocation of primary income account								
Net operating surplus and mixed income								
Compensation of employees								
Taxes less subsidies on production								
Property income	2,616.1	3,039.9	3,562.1	3,667.3	3,774.7	3,862.4	3,890.9	3,805.8
Interest	1,346.6	1,644.5	2,033.5	2,123.1	2,203.2	2,275.5	2,299.4	2,225.5
Other property income	1,269.5	1,395.4	1,528.6	1,544.2	1,571.5	1,586.9	1,591.5	1,580.4
Net national income [1]	6,969.8	7,312.0	7,689.2	7,753.4	7,814.6	7,862.1	7,848.9	7,750.6
Secondary distribution of income account								
Net national income								
Current taxes on income, wealth, etc.	935.6	1,027.8	1,111.6	1,128.3	1,140.0	1,142.1	1,124.9	1,116.1
Social contributions	1,477.8	1,539.7	1,598.3	1,613.9	1,630.2	1,648.0	1,662.8	1,671.7
Social benefits other than social transfers in kind	1,504.8	1,554.6	1,598.3	1,611.3	1,626.5	1,645.7	1,663.0	1,686.3
Other current transfers	710.3	718.4	746.2	756.6	764.9	768.2	776.2	772.2
Net non-life insurance premiums	178.8	177.7	181.5	182.1	183.5	184.2	184.9	183.0
Non-life insurance claims	179.6	177.9	181.0	181.6	183.3	184.1	185.4	183.4
Other	351.9	362.8	383.7	393.0	398.1	399.9	405.8	405.7
Net disposable income [1]	6,882.9	7,220.6	7,594.3	7,653.6	7,713.4	7,763.4	7,746.8	7,649.1
Use of income account								
Net disposable income								
Final consumption expenditure	6,358.5	6,632.0	6,888.9	6,960.7	7,038.3	7,110.9	7,148.4	7,157.6
Individual consumption expenditure	5,693.0	5,947.5	6,177.7	6,241.6	6,309.1	6,373.0	6,402.6	6,402.6
Collective consumption expenditure	665.5	684.6	711.1	719.1	729.2	737.9	745.8	754.9
Adjustment for the change in net equity of households in pension funds reserves	60.8	59.3	60.1	61.3	64.1	66.1	66.8	67.8
Net saving [1]	524.7	588.8	705.7	693.1	675.3	652.6	598.5	491.7
Capital account								
Net saving								
Gross capital formation	1,715.7	1,872.0	2,017.6	2,039.5	2,064.8	2,084.7	2,079.5	2,016.3
Gross fixed capital formation	1,710.1	1,855.9	1,995.9	2,016.6	2,044.3	2,061.1	2,043.7	1,992.0
Changes in inventories and acquisitions less disposals of valuables	5.6	16.0	21.7	23.0	20.5	23.6	35.8	24.4
Consumption of fixed capital								
Acquisitions less disposals of non-produced non-financial assets	-0.1	0.5	-0.1	0.1	0.4	0.4	0.5	0.9
Capital transfers	182.6	175.5	163.1	163.4	167.8	161.7	162.3	160.8
Capital taxes	24.4	22.5	23.7	23.3	23.6	23.9	23.6	23.3
Other capital transfers	158.1	152.9	139.3	140.1	144.2	137.8	138.7	137.5
Net lending (+)/net borrowing (-) (from capital account) [1]	7.9	-25.6	12.2	-6.6	-33.7	-62.1	-98.4	-131.0

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

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

(EUR billions; four-quarter cumulated flows)

Resources	2005	2006	2007	2007 Q2-2008 Q1	2007 Q3-2008 Q2	2007 Q4-2008 Q3	2008 Q1-2008 Q4	2008 Q2-2009 Q1
Generation of income account								
Gross value added (basic prices)	7,296.8	7,631.6	8,032.4	8,121.7	8,219.3	8,288.2	8,315.0	8,260.9
Taxes less subsidies on products	845.4	914.2	958.9	958.2	954.3	952.3	945.4	928.6
Gross domestic product (market prices)[2)]	8,142.1	8,545.8	8,991.3	9,079.8	9,173.6	9,240.4	9,260.4	9,189.4
Compensation of employees								
Other taxes less subsidies on production								
Consumption of fixed capital								
Net operating surplus and mixed income								
Allocation of primary income account								
Net operating surplus and mixed income	2,075.9	2,190.4	2,332.4	2,358.9	2,390.5	2,397.9	2,380.1	2,307.8
Compensation of employees	3,912.8	4,075.3	4,260.0	4,308.8	4,358.6	4,403.7	4,437.5	4,442.8
Taxes less subsidies on production	988.1	1,055.0	1,103.1	1,100.3	1,096.7	1,095.9	1,085.3	1,066.9
Property income	2,609.0	3,031.2	3,555.9	3,652.7	3,743.5	3,827.1	3,836.8	3,738.9
Interest	1,319.4	1,618.2	1,993.6	2,075.0	2,148.1	2,217.6	2,239.1	2,163.2
Other property income	1,289.7	1,413.1	1,562.4	1,577.7	1,595.4	1,609.5	1,597.7	1,575.7
Net national income								
Secondary distribution of income account								
Net national income	6,969.8	7,312.0	7,689.2	7,753.4	7,814.6	7,862.1	7,848.9	7,750.6
Current taxes on income, wealth, etc.	939.4	1,032.8	1,119.1	1,135.7	1,147.8	1,149.7	1,132.8	1,123.9
Social contributions	1,477.1	1,538.9	1,597.6	1,613.1	1,629.4	1,647.2	1,661.9	1,670.8
Social benefits other than social transfers in kind	1,497.0	1,546.3	1,589.0	1,601.9	1,616.8	1,636.1	1,653.0	1,676.1
Other current transfers	628.2	631.2	653.8	659.7	666.4	672.2	677.0	674.0
Net non-life insurance premiums	179.6	177.9	181.0	181.6	183.3	184.1	185.4	183.4
Non-life insurance claims	177.3	175.1	178.7	179.3	180.6	181.2	182.0	179.8
Other	271.3	278.2	294.1	298.8	302.6	307.0	309.6	310.8
Net disposable income								
Use of income account								
Net disposable income	6,882.9	7,220.6	7,594.3	7,653.6	7,713.4	7,763.4	7,746.8	7,649.1
Final consumption expenditure								
Individual consumption expenditure								
Collective consumption expenditure								
Adjustment for the change in net equity of households in pension funds reserves	61.0	59.6	60.3	61.5	64.3	66.3	67.0	67.9
Net saving								
Capital account								
Net saving	524.7	588.8	705.7	693.1	675.3	652.6	598.5	491.7
Gross capital formation								
Gross fixed capital formation								
Changes in inventories and acquisitions less disposals of valuables								
Consumption of fixed capital	1,185.2	1,243.6	1,310.3	1,324.9	1,340.7	1,356.1	1,370.3	1,384.4
Acquisitions less disposals of non-produced non-financial assets								
Capital transfers	196.2	189.9	176.9	178.6	183.3	176.0	175.2	170.9
Capital taxes	24.4	22.5	23.7	23.3	23.6	23.9	23.6	23.3
Other capital transfers	171.8	167.4	153.1	155.2	159.7	152.0	151.6	147.7
Net lending (+)/net borrowing (-) (from capital account)								

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

3.3 Households

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

	2005	2006	2007	2007 Q2-2008 Q1	2007 Q3-2008 Q2	2007 Q4-2008 Q3	2008 Q1-2008 Q4	2008 Q2-2009 Q1
Income, saving and changes in net worth								
Compensation of employees (+)	3,912.8	4,075.3	4,260.0	4,308.8	4,358.6	4,403.7	4,437.5	4,442.8
Gross operating surplus and mixed income (+)	1,331.0	1,407.3	1,486.6	1,506.2	1,525.8	1,541.9	1,550.8	1,540.2
Interest receivable (+)	230.6	269.1	306.1	316.9	328.9	339.5	342.1	332.2
Interest payable (-)	130.8	165.5	209.4	217.6	226.0	233.1	231.9	216.0
Other property income receivable (+)	717.8	761.2	802.5	806.5	813.7	819.6	812.8	811.1
Other property income payable (-)	9.5	9.7	9.8	9.7	9.8	9.7	9.7	9.8
Current taxes on income and wealth (-)	741.0	793.4	851.9	866.7	882.4	889.7	892.3	889.8
Net social contributions (-)	1,473.9	1,535.6	1,594.0	1,609.6	1,625.9	1,643.6	1,658.4	1,667.3
Net social benefits (+)	1,491.8	1,540.9	1,583.3	1,596.2	1,611.1	1,630.3	1,647.2	1,670.3
Net current transfers receivable (+)	66.8	67.4	70.7	71.2	74.2	75.6	77.3	77.9
= Gross disposable income	5,395.6	5,616.9	5,844.1	5,902.0	5,968.2	6,034.4	6,075.5	6,091.7
Final consumption expenditure (-)	4,693.4	4,899.7	5,088.5	5,141.3	5,193.7	5,246.2	5,262.1	5,249.2
Changes in net worth in pension funds (+)	60.6	59.2	59.8	61.1	63.8	65.8	66.5	67.5
= Gross saving	762.8	776.4	815.4	821.8	838.3	854.0	880.0	910.0
Consumption of fixed capital (-)	318.7	336.4	354.6	358.3	362.7	366.3	368.8	372.3
Net capital transfers receivable (+)	24.1	22.3	15.0	15.9	16.4	16.6	16.4	16.0
Other changes in net worth [1] (+)	510.6	563.9	37.3	-760.9	-1,167.5	-1,346.4	-1,785.1	-1,417.9
= Changes in net worth [1]	978.9	1,026.3	513.1	-281.5	-675.5	-842.1	-1,257.6	-864.2
Investment, financing and changes in net worth								
Net acquisition of non-financial assets (+)	546.6	600.4	639.4	643.8	645.3	644.3	635.1	617.2
Consumption of fixed capital (-)	318.7	336.4	354.6	358.3	362.7	366.3	368.8	372.3
Main items of financial investment (+)								
Short-term assets	206.4	305.7	421.0	443.8	421.5	427.5	438.0	386.0
Currency and deposits	246.9	284.1	349.4	385.0	386.4	391.5	436.8	400.4
Money market fund shares	-20.2	0.9	40.0	34.0	10.5	13.5	-9.6	2.1
Debt securities [2]	-20.3	20.8	31.6	24.8	24.6	22.5	10.8	-16.5
Long-term assets	426.0	350.1	186.9	122.4	123.6	71.4	33.1	78.7
Deposits	-4.7	0.8	-29.5	-34.8	-35.9	-39.7	-32.4	-18.3
Debt securities	0.5	69.9	9.7	29.6	60.5	69.1	49.0	59.6
Shares and other equity	136.6	-33.7	-61.8	-119.2	-127.5	-169.2	-158.2	-122.1
Quoted, unquoted shares and other equity	70.3	-11.1	8.8	-20.2	-13.6	-31.6	-17.0	0.1
Mutual fund shares	66.2	-22.5	-70.5	-99.0	-113.9	-137.6	-141.2	-122.2
Life insurance and pension fund reserves	293.7	313.1	268.5	246.7	226.5	211.1	174.6	159.6
Main items of financing (-)								
Loans	397.7	396.8	351.1	318.1	288.1	251.2	200.6	141.7
of which from euro area MFIs	358.5	347.4	281.5	249.1	196.5	181.0	78.9	17.2
Other changes in financial assets (+)								
Shares and other equity	446.5	509.9	10.9	-681.4	-1,024.3	-1,065.1	-1,394.2	-1,111.6
Life insurance and pension fund reserves	105.5	54.7	-2.0	-80.2	-129.9	-182.7	-250.7	-210.6
Remaining net flows (+)	-35.7	-61.3	-37.4	-53.3	-60.9	-120.0	-149.5	-109.9
= Changes in net worth [1]	978.9	1,026.3	513.1	-281.5	-675.5	-842.1	-1,257.6	-864.2
Financial balance sheet								
Financial assets (+)								
Short-term assets	4,486.5	4,747.9	5,209.4	5,362.3	5,482.8	5,540.0	5,714.6	5,787.8
Currency and deposits	4,174.1	4,454.2	4,844.2	4,937.1	5,055.3	5,104.9	5,313.7	5,377.7
Money market fund shares	296.4	257.6	296.0	347.0	346.5	348.7	327.4	352.0
Debt securities [2]	16.1	36.1	69.2	78.1	81.1	86.4	73.5	58.1
Long-term assets	10,933.2	11,902.7	12,066.4	11,401.5	11,125.1	10,760.6	10,278.0	10,034.6
Deposits	936.9	942.2	875.6	832.3	821.9	803.5	806.3	784.1
Debt securities	1,199.5	1,280.0	1,293.0	1,309.9	1,294.8	1,258.7	1,243.3	1,278.8
Shares and other equity	4,549.8	5,065.7	5,016.4	4,400.4	4,130.1	3,839.6	3,423.0	3,163.8
Quoted, unquoted shares and other equity	3,203.3	3,643.8	3,637.8	3,189.2	2,970.6	2,756.7	2,431.6	2,230.7
Mutual fund shares	1,346.5	1,421.8	1,378.7	1,211.1	1,159.5	1,083.0	991.4	933.1
Life insurance and pension fund reserves	4,247.1	4,614.8	4,881.3	4,859.0	4,878.3	4,858.7	4,805.3	4,808.0
Remaining net assets (+)	77.7	60.8	16.6	-3.5	-4.4	5.6	-32.5	-41.2
Liabilities (-)								
Loans	4,763.2	5,159.6	5,494.9	5,542.0	5,607.0	5,655.1	5,688.0	5,678.5
of which from euro area MFIs	4,201.0	4,553.0	4,824.7	4,860.8	4,887.0	4,938.3	4,901.4	4,879.6
= Net financial wealth	10,734.3	11,551.8	11,797.4	11,218.3	10,996.5	10,651.1	10,272.0	10,102.7

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

3.4 Non-financial corporations

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

	2005	2006	2007	2007 Q2-2008 Q1	2007 Q3-2008 Q2	2007 Q4-2008 Q3	2008 Q1-2008 Q4	2008 Q2-2009 Q1
Income and saving								
Gross value added (basic prices) (+)	4,175.6	4,380.6	4,631.9	4,683.7	4,740.1	4,777.8	4,780.5	4,722.8
Compensation of employees (-)	2,478.4	2,591.8	2,719.7	2,754.1	2,784.9	2,814.5	2,835.3	2,831.5
Other taxes less subsidies on production (-)	73.0	75.9	81.3	81.7	82.4	83.5	80.4	79.0
= Gross operating surplus (+)	1,624.1	1,712.9	1,830.8	1,848.0	1,872.8	1,879.8	1,864.8	1,812.2
Consumption of fixed capital (-)	672.1	703.2	741.3	749.8	759.0	768.3	777.6	786.1
= Net operating surplus (+)	952.0	1,009.7	1,089.5	1,098.2	1,113.9	1,111.5	1,087.2	1,026.2
Property income receivable (+)	437.3	496.1	574.4	587.1	602.3	610.7	614.1	593.8
Interest receivable	136.7	162.5	197.6	207.3	215.9	221.2	223.7	217.0
Other property income receivable	300.6	333.6	376.8	379.8	386.4	389.5	390.4	376.8
Interest and rents payable (-)	236.3	282.1	339.0	357.7	375.7	392.2	403.0	392.9
= Net entrepreneurial income (+)	1,153.1	1,223.7	1,324.9	1,327.5	1,340.5	1,329.9	1,298.2	1,227.0
Distributed income (-)	882.6	953.2	1,021.3	1,025.1	1,048.7	1,057.9	1,058.5	1,059.0
Taxes on income and wealth payable (-)	149.6	189.2	211.8	213.8	213.9	210.0	192.4	187.4
Social contributions receivable (+)	72.8	74.7	64.9	63.8	63.3	63.2	62.9	63.0
Social benefits payable (-)	60.7	60.5	62.4	62.7	62.5	62.4	62.3	62.2
Other net transfers (-)	61.9	65.9	57.3	57.2	58.2	57.9	57.1	56.8
= Net saving	71.0	29.6	37.2	32.5	20.5	5.0	-9.2	-75.4
Investment, financing and saving								
Net acquisition of non-financial assets (+)	255.6	311.1	366.6	372.5	380.5	388.5	376.0	320.0
Gross fixed capital formation (+)	920.5	994.0	1,084.1	1,098.6	1,118.5	1,133.6	1,119.9	1,084.5
Consumption of fixed capital (-)	672.1	703.2	741.3	749.8	759.0	768.3	777.6	786.1
Net acquisition of other non-financial assets (+)	7.2	20.2	23.9	23.8	21.0	23.2	33.6	21.6
Main items of financial investment (+)								
Short-term assets	128.3	164.1	161.9	164.2	121.4	94.3	47.8	-26.8
Currency and deposits	113.6	146.1	154.9	127.7	115.9	90.2	16.5	-11.2
Money market fund shares	8.3	2.6	-18.1	-10.0	-9.3	7.9	31.5	19.4
Debt securities [1]	6.3	15.4	25.2	46.5	14.8	-3.8	-0.2	-35.1
Long-term assets	370.2	475.2	474.1	497.9	500.7	538.1	641.2	640.0
Deposits	28.0	28.5	24.3	5.3	-25.6	2.8	10.7	17.1
Debt securities	-34.9	1.2	-48.2	-88.2	-105.7	-60.2	-36.6	3.5
Shares and other equity	242.8	261.8	328.0	367.5	389.0	353.7	354.1	325.5
Other, mainly intercompany loans	134.4	183.7	169.9	213.3	242.9	241.8	313.0	293.9
Remaining net assets (+)	105.6	165.2	208.9	137.5	62.9	-9.1	-78.2	-149.2
Main items of financing (-)								
Debt	447.0	757.4	802.5	778.6	733.6	734.4	668.8	553.3
of which loans from euro area MFIs	264.5	448.9	558.9	592.1	562.6	515.7	422.0	284.9
of which debt securities	13.6	40.1	40.2	37.4	15.9	38.2	42.6	52.4
Shares and other equity	279.7	256.1	304.3	292.4	241.5	199.4	249.7	225.7
Quoted shares	104.1	42.0	42.2	23.5	-12.6	-29.2	1.8	9.9
Unquoted shares and other equity	175.6	214.1	262.1	269.0	254.1	228.6	247.9	215.7
Net capital transfers receivable (-)	62.0	72.5	68.4	69.6	73.6	75.7	75.5	77.9
= Net saving	71.0	29.6	37.2	32.5	20.5	5.0	-9.2	-75.4
Financial balance sheet								
Financial assets								
Short-term assets	1,517.5	1,675.2	1,820.4	1,842.2	1,845.0	1,855.2	1,871.4	1,841.0
Currency and deposits	1,229.3	1,367.0	1,519.3	1,506.6	1,534.6	1,548.7	1,553.5	1,517.0
Money market fund shares	176.5	184.9	162.0	183.0	183.2	184.4	189.8	204.1
Debt securities [1]	111.8	123.3	139.1	152.6	127.2	122.1	128.1	119.9
Long-term assets	8,667.0	10,024.9	10,750.3	10,098.1	9,897.4	9,630.1	8,871.7	8,598.8
Deposits	191.2	223.6	266.8	256.8	243.3	268.7	282.1	273.6
Debt securities	281.5	282.9	236.3	170.6	160.9	167.8	180.1	153.5
Shares and other equity	6,328.5	7,486.0	8,025.8	7,355.1	7,112.3	6,755.7	5,877.6	5,550.7
Other, mainly intercompany loans	1,865.9	2,032.4	2,221.5	2,315.7	2,380.9	2,437.9	2,531.9	2,621.1
Remaining net assets	386.5	457.0	638.9	642.0	599.6	608.6	605.3	564.6
Liabilities								
Debt	7,097.8	7,834.6	8,593.8	8,749.4	8,957.7	9,117.0	9,271.2	9,335.8
of which loans from euro area MFIs	3,429.3	3,878.8	4,418.2	4,559.5	4,683.3	4,775.9	4,841.9	4,843.0
of which debt securities	675.7	694.5	695.1	696.0	701.3	716.1	735.5	757.0
Shares and other equity	10,974.7	12,938.0	13,932.0	12,581.4	12,141.1	11,377.0	10,273.1	9,637.0
Quoted shares	3,712.2	4,491.5	5,008.5	4,229.2	3,999.5	3,459.8	2,866.1	2,517.1
Unquoted shares and other equity	7,262.5	8,446.5	8,923.5	8,352.2	8,141.7	7,917.2	7,407.0	7,119.9

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

3.5 Insurance corporations and pension funds

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

	2005	2006	2007	2007 Q2-2008 Q1	2007 Q3-2008 Q2	2007 Q4-2008 Q3	2008 Q1-2008 Q4	2008 Q2-2009 Q1
Financial account, financial transactions								
Main items of financial investment (+)								
Short-term assets	25.6	64.8	87.8	110.0	102.8	88.8	106.7	50.7
Currency and deposits	7.2	11.0	6.4	32.7	35.7	32.1	59.1	18.7
Money market fund shares	-0.5	3.5	3.1	15.8	14.2	20.9	22.2	13.6
Debt securities [1]	18.9	50.2	78.3	61.6	52.9	35.8	25.3	18.4
Long-term assets	284.3	317.1	220.4	214.1	172.9	156.3	131.9	111.6
Deposits	17.2	76.8	51.5	27.8	15.8	0.6	-1.2	9.9
Debt securities	133.1	126.7	92.9	83.0	74.1	90.4	70.1	72.6
Loans	-4.1	2.5	-13.6	20.2	16.3	20.0	30.3	6.3
Quoted shares	30.8	-1.4	-5.8	-2.9	-1.7	-9.4	-6.0	-4.4
Unquoted shares and other equity	19.9	28.6	29.6	44.7	39.7	41.7	34.3	26.0
Mutual fund shares	87.4	84.1	65.8	41.3	28.5	12.8	4.5	1.2
Remaining net assets (+)	12.2	3.2	-26.7	-20.9	-17.4	-7.8	23.7	-5.2
Main items of financing (-)								
Debt securities	-0.4	5.7	3.9	4.4	5.1	5.4	9.3	9.8
Loans	17.3	35.9	21.7	44.0	18.1	4.1	21.7	-9.9
Shares and other equity	10.6	11.5	1.7	-0.9	-1.9	-7.1	3.6	4.5
Insurance technical reserves	335.5	323.9	287.0	269.6	252.2	237.8	193.1	160.2
Net equity of households in life insurance and pension fund reserves	292.8	310.0	283.3	264.3	242.1	222.5	179.0	152.1
Prepayments of insurance premiums and reserves for outstanding claims	42.6	14.0	3.6	5.4	10.2	15.3	14.2	8.1
= Changes in net financial worth due to transactions	-40.9	8.1	-32.8	-13.8	-15.3	-3.0	34.6	-7.4
Other changes account								
Other changes in financial assets (+)								
Shares and other equity	190.7	180.5	-12.0	-218.4	-327.5	-399.1	-540.5	-437.6
Other net assets	76.1	-34.5	-58.7	-1.9	-19.1	-27.8	35.0	27.1
Other changes in liabilities (-)								
Shares and other equity	118.4	35.0	-31.4	-92.7	-148.2	-146.7	-187.7	-188.4
Insurance technical reserves	137.8	52.9	-3.3	-80.8	-132.3	-188.5	-255.5	-215.5
Net equity of households in life insurance and pension fund reserves	146.9	56.2	-2.8	-78.1	-127.6	-180.8	-246.2	-208.6
Prepayments of insurance premiums and reserves for outstanding claims	-9.1	-3.3	-0.4	-2.7	-4.7	-7.7	-9.3	-6.9
= Other changes in net financial worth	10.6	58.2	-36.0	-46.8	-66.1	-91.6	-62.3	-6.6
Financial balance sheet								
Financial assets (+)								
Short-term assets	437.2	509.4	591.2	650.1	659.3	664.1	702.3	707.8
Currency and deposits	146.6	157.1	164.6	192.5	182.6	189.5	226.6	216.8
Money market fund shares	75.6	81.5	82.4	95.4	94.8	98.3	102.2	109.9
Debt securities [1]	215.0	270.8	344.1	362.2	381.9	376.3	373.5	381.1
Long-term assets	4,608.2	5,045.0	5,198.6	5,102.6	5,039.0	4,974.1	4,805.3	4,770.0
Deposits	524.7	602.4	650.6	649.3	653.4	648.7	648.2	660.8
Debt securities	1,776.4	1,848.5	1,893.5	1,941.7	1,921.2	1,966.9	1,974.9	2,009.1
Loans	353.5	351.2	331.8	359.1	355.0	356.9	364.8	363.3
Quoted shares	653.3	725.1	708.3	613.9	595.1	536.3	426.0	392.7
Unquoted shares and other equity	392.8	471.0	506.5	485.5	468.7	455.7	433.0	414.2
Mutual fund shares	907.5	1,046.9	1,107.9	1,053.1	1,045.7	1,009.6	958.4	929.8
Remaining net assets (+)	176.9	203.3	171.9	192.0	176.9	175.5	213.5	216.9
Liabilities (-)								
Debt securities	21.3	35.9	35.2	35.8	36.5	36.7	43.2	41.5
Loans	136.4	167.7	187.2	221.6	211.4	206.7	212.8	219.1
Shares and other equity	626.9	673.4	643.6	586.6	548.3	527.1	459.6	402.8
Insurance technical reserves	4,558.7	4,935.5	5,219.2	5,213.0	5,237.5	5,221.3	5,156.8	5,157.7
Net equity of households in life insurance and pension fund reserves	3,892.0	4,258.2	4,538.7	4,526.1	4,547.7	4,530.5	4,471.5	4,469.6
Prepayments of insurance premiums and reserves for outstanding claims	666.7	677.3	680.5	686.9	689.8	690.8	685.4	688.1
= Net financial wealth	-121.0	-54.7	-123.5	-112.3	-158.5	-178.0	-151.2	-126.4

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

4 FINANCIAL MARKETS

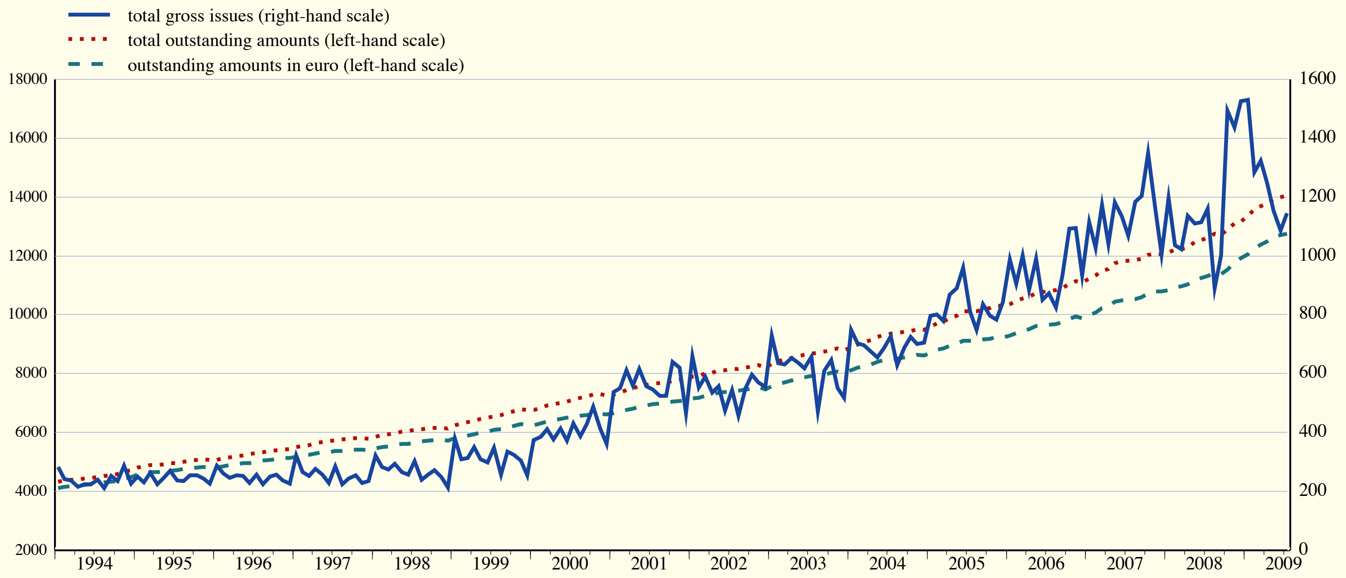
4.1 Securities, other than shares, by original maturity, residency of the issuer and currency

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

	Total in euro [1]			By euro area residents								
				In euro			In all currencies					
	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Outstanding amounts	Gross issues	Net issues	Annual growth rates	Seasonally adjusted [2]	
											Net issues	6-month growth rates
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2008 July	13,506.6	1,139.6	11.2	11,308.9	1,073.9	55.6	12,614.3	1,160.7	75.0	7.1	100.9	7.1
Aug.	13,632.4	880.7	123.0	11,416.8	816.0	105.2	12,744.0	889.5	110.5	7.8	146.5	9.0
Sep.	13,635.5	1,022.1	1.5	11,384.4	930.5	-33.7	12,704.1	1,001.3	-43.2	7.0	8.1	8.7
Oct.	13,733.5	1,454.3	97.4	11,535.3	1,417.3	150.3	12,903.2	1,494.5	145.4	6.9	119.4	9.5
Nov.	13,953.5	1,422.3	218.5	11,764.4	1,369.7	227.9	13,098.0	1,437.1	213.9	8.1	193.3	11.0
Dec.	14,139.1	1,537.5	189.1	11,916.6	1,448.8	155.9	13,170.4	1,526.0	142.6	9.5	228.7	13.1
2009 Jan.	14,239.2	1,500.7	95.5	12,057.3	1,451.4	137.1	13,372.6	1,530.0	146.3	10.1	104.4	13.1
Feb.	14,431.3	1,259.2	189.7	12,243.3	1,200.0	183.8	13,576.0	1,285.5	203.4	11.1	156.1	13.1
Mar.	14,606.0	1,318.0	173.2	12,382.0	1,229.8	137.3	13,680.3	1,323.1	148.3	11.9	132.9	15.2
Apr.	14,683.8	1,230.4	77.5	12,482.8	1,164.1	100.4	13,794.3	1,247.1	108.4	12.1	90.6	14.6
May	14,888.5	1,157.4	205.3	12,653.6	1,068.0	171.6	13,930.3	1,154.4	166.8	12.0	106.9	12.9
June	14,973.9	1,082.7	87.2	12,711.9	1,004.0	59.9	13,996.9	1,086.8	73.0	11.9	91.5	10.5
July	.	.	.	12,761.1	1,066.2	51.9	14,060.7	1,146.0	67.4	11.7	101.2	10.4
	Long-term											
2008 July	12,113.9	208.9	25.2	10,055.9	178.6	30.1	11,154.0	196.7	35.7	5.3	68.4	5.7
Aug.	12,203.1	160.0	87.2	10,133.8	133.8	76.1	11,252.6	149.2	76.8	6.1	121.4	7.7
Sep.	12,192.1	183.6	-10.2	10,111.8	145.5	-21.2	11,236.2	158.6	-31.6	5.7	0.8	7.5
Oct.	12,216.6	199.0	24.8	10,147.8	182.8	36.3	11,329.3	195.4	30.8	5.3	32.9	6.7
Nov.	12,393.7	275.5	174.4	10,325.3	253.9	175.0	11,486.8	262.8	166.1	6.2	138.5	8.0
Dec.	12,572.4	362.9	179.8	10,496.5	328.3	172.7	11,581.0	340.0	153.4	7.3	165.0	9.7
2009 Jan.	12,649.7	291.7	75.1	10,587.0	276.9	89.3	11,716.3	300.3	89.9	8.2	116.4	10.6
Feb.	12,819.3	300.6	168.5	10,748.6	269.6	160.7	11,889.0	296.7	172.9	9.2	135.6	10.7
Mar.	13,002.4	319.8	153.3	10,921.6	280.2	143.3	12,026.4	301.8	144.4	10.4	141.7	13.3
Apr.	13,078.6	289.1	77.2	10,989.8	254.2	69.3	12,104.7	273.0	72.8	10.3	69.6	14.0
May	13,278.9	336.5	201.4	11,157.2	278.6	168.6	12,252.6	298.9	172.6	10.6	110.0	13.3
June	13,395.4	307.0	117.0	11,264.4	271.9	107.5	12,378.9	305.7	127.6	10.8	100.5	11.9
July	.	.	.	11,291.0	244.9	29.0	12,415.0	269.4	39.1	10.8	80.4	11.1

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

(EUR billions)



Sources: ECB and BIS (for issues by non-euro area residents).
1) Total euro-denominated securities, other than shares, issued by euro area residents and non-euro area residents.
2) For the calculation of the growth rates, see the Technical notes. The 6-month growth rates have been annualised.

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

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

1. Outstanding amounts and gross issues

	Outstanding amounts						Gross issues[1]					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2007	12,066	5,046	1,506	653	4,534	327	1,138	841	59	109	116	12
2008	13,170	5,268	1,929	696	4,937	340	1,177	817	74	100	162	24
2008 Q3	12,704	5,267	1,686	681	4,747	324	1,017	691	54	97	148	27
Q4	13,170	5,268	1,929	696	4,937	340	1,486	1,006	136	107	209	28
2009 Q1	13,680	5,394	2,038	719	5,187	343	1,380	922	78	92	251	35
Q2	13,997	5,432	2,119	750	5,344	351	1,163	748	62	89	244	20
2009 Apr.	13,794	5,423	2,072	730	5,219	350	1,247	806	65	90	259	26
May	13,930	5,459	2,100	742	5,280	350	1,154	744	67	88	239	17
June	13,997	5,432	2,119	750	5,344	351	1,087	693	54	88	235	16
July	14,061	5,447	2,153	763	5,344	353	1,146	718	68	94	250	14
	Short-term											
2007	1,287	787	36	100	345	18	946	754	18	101	64	9
2008	1,589	822	61	115	566	25	962	723	26	92	101	19
2008 Q3	1,468	826	62	111	457	13	849	614	25	92	94	24
Q4	1,589	822	61	115	566	25	1,220	911	38	95	152	23
2009 Q1	1,654	838	41	98	659	18	1,080	806	17	74	156	27
Q2	1,618	785	37	84	696	16	870	631	14	69	143	13
2009 Apr.	1,690	830	42	95	705	17	974	694	16	74	173	16
May	1,678	832	40	89	701	15	856	626	13	64	142	10
June	1,618	785	37	84	696	16	781	572	15	69	113	12
July	1,646	779	35	84	731	17	877	615	11	77	167	7
	Long-term[2]											
2007	10,779	4,259	1,469	553	4,189	309	191	86	41	8	52	3
2008	11,581	4,446	1,868	581	4,371	315	215	95	48	8	61	4
2008 Q3	11,236	4,441	1,624	570	4,290	311	168	76	29	5	54	3
Q4	11,581	4,446	1,868	581	4,371	315	266	95	98	11	57	5
2009 Q1	12,026	4,555	1,997	621	4,528	324	300	116	61	18	96	8
Q2	12,379	4,647	2,082	666	4,648	336	293	117	47	20	101	7
2009 Apr.	12,105	4,593	2,029	636	4,514	333	273	112	49	16	86	10
May	12,253	4,626	2,060	653	4,579	335	299	118	54	24	96	6
June	12,379	4,647	2,082	666	4,648	336	306	121	39	20	122	4
July	12,415	4,667	2,119	679	4,613	337	269	103	58	18	83	7
	Of which long-term fixed rate											
2007	7,324	2,263	594	419	3,797	250	107	44	10	5	45	3
2008	7,614	2,328	636	445	3,955	250	119	48	9	6	53	3
2008 Q3	7,534	2,370	619	432	3,865	248	101	42	7	3	47	2
Q4	7,614	2,328	636	445	3,955	250	120	42	13	10	53	2
2009 Q1	7,934	2,398	703	487	4,094	252	208	72	27	18	86	5
Q2	8,243	2,495	748	532	4,209	259	207	71	23	19	90	5
2009 Apr.	7,986	2,422	719	501	4,085	258	183	62	21	15	77	7
May	8,108	2,461	728	519	4,139	260	208	77	20	23	84	5
June	8,243	2,495	748	532	4,209	259	230	74	28	18	109	2
July	8,258	2,511	767	545	4,175	259	180	62	24	17	72	6
	Of which long-term variable rate											
2007	3,001	1,621	857	123	342	58	69	31	30	3	4	0
2008	3,479	1,723	1,202	126	363	64	81	36	38	1	5	1
2008 Q3	3,229	1,698	978	129	362	61	53	24	21	2	4	1
Q4	3,479	1,723	1,202	126	363	64	129	39	83	1	3	2
2009 Q1	3,589	1,756	1,269	124	369	70	75	32	34	0	5	3
Q2	3,620	1,739	1,308	124	374	75	65	30	24	1	7	2
2009 Apr.	3,605	1,763	1,285	124	360	73	72	37	27	1	5	3
May	3,619	1,750	1,306	123	367	73	72	26	34	1	9	1
June	3,620	1,739	1,308	124	374	75	50	28	11	2	7	2
July	3,639	1,744	1,326	123	369	76	73	30	33	0	7	1

Source: ECB.

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

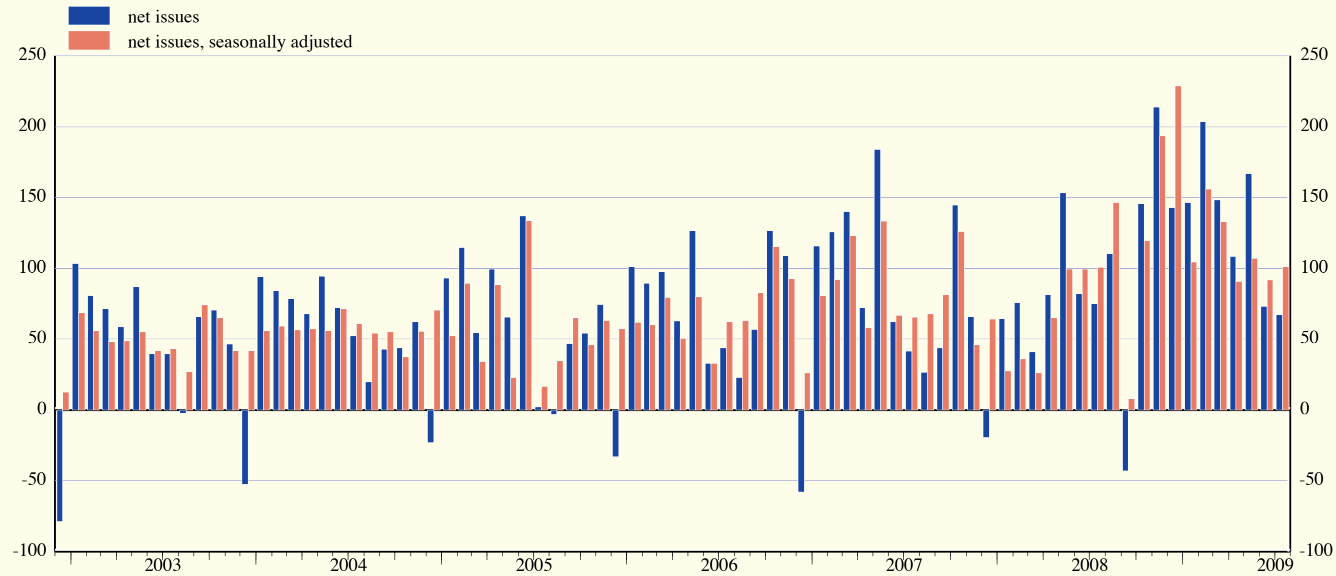
2) The residual difference between total long-term debt securities and fixed and variable rate long-term debt securities consists of zero coupon bonds and revaluation effects.

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

2. Net issues

	Non-seasonally adjusted [1]						Seasonally adjusted [1]					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2007	83.6	40.7	27.6	4.2	9.9	1.2	83.7	41.3	27.1	4.3	10.0	1.1
2008	95.1	23.2	35.2	3.9	31.7	1.1	95.8	23.3	34.4	4.0	33.1	0.9
2008 Q3	47.4	10.9	18.6	2.0	14.7	1.2	85.2	20.0	32.9	4.7	25.3	2.2
Q4	167.3	11.4	81.6	6.0	63.0	5.3	180.4	21.6	56.5	9.0	90.7	2.8
2009 Q1	166.0	40.5	35.5	7.0	82.1	0.9	131.1	21.1	45.4	5.1	56.9	2.5
Q2	116.0	21.0	27.8	10.6	53.8	2.9	96.3	20.3	27.5	6.5	39.1	3.0
2009 Apr.	108.4	28.0	31.7	10.2	31.3	7.2	90.6	16.2	37.4	6.4	23.9	6.8
May	166.8	54.2	33.2	13.5	66.0	-0.2	106.9	30.8	30.5	5.9	39.3	0.5
June	73.0	-19.4	18.3	8.1	64.1	1.8	91.5	13.8	14.6	7.3	54.0	1.7
July	67.4	18.0	34.6	12.3	0.3	2.2	101.2	13.5	48.2	12.4	24.5	2.7
	Long-term											
2007	61.7	23.9	27.0	2.4	7.8	0.7	61.3	24.1	26.4	2.4	7.7	0.7
2008	65.8	16.2	33.2	2.5	13.3	0.5	65.0	16.4	32.4	2.6	13.2	0.5
2008 Q3	26.9	7.4	15.2	2.6	1.3	0.5	63.5	16.2	29.6	4.1	12.2	1.5
Q4	116.8	2.9	81.8	4.4	26.2	1.5	112.1	12.5	57.2	4.7	37.0	0.7
2009 Q1	135.7	25.8	42.3	12.9	51.7	3.1	131.3	17.1	52.4	14.4	44.4	3.0
Q2	124.4	35.3	29.1	15.1	41.0	3.8	93.3	24.6	28.2	11.5	25.4	3.7
2009 Apr.	72.8	36.1	30.5	13.2	-15.3	8.3	69.6	27.8	36.5	11.8	-14.3	7.7
May	172.6	47.3	35.2	19.0	69.0	2.2	110.0	24.5	30.9	12.4	39.6	2.5
June	127.6	22.5	21.7	13.2	69.3	1.0	100.5	21.5	17.3	10.2	50.8	0.8
July	39.1	23.3	36.7	12.5	-34.7	1.3	80.4	22.4	51.7	13.1	-8.7	1.9

C17 Net issues of securities, other than shares, seasonally adjusted and non-seasonally adjusted
(EUR billions; transactions during the month; nominal values)

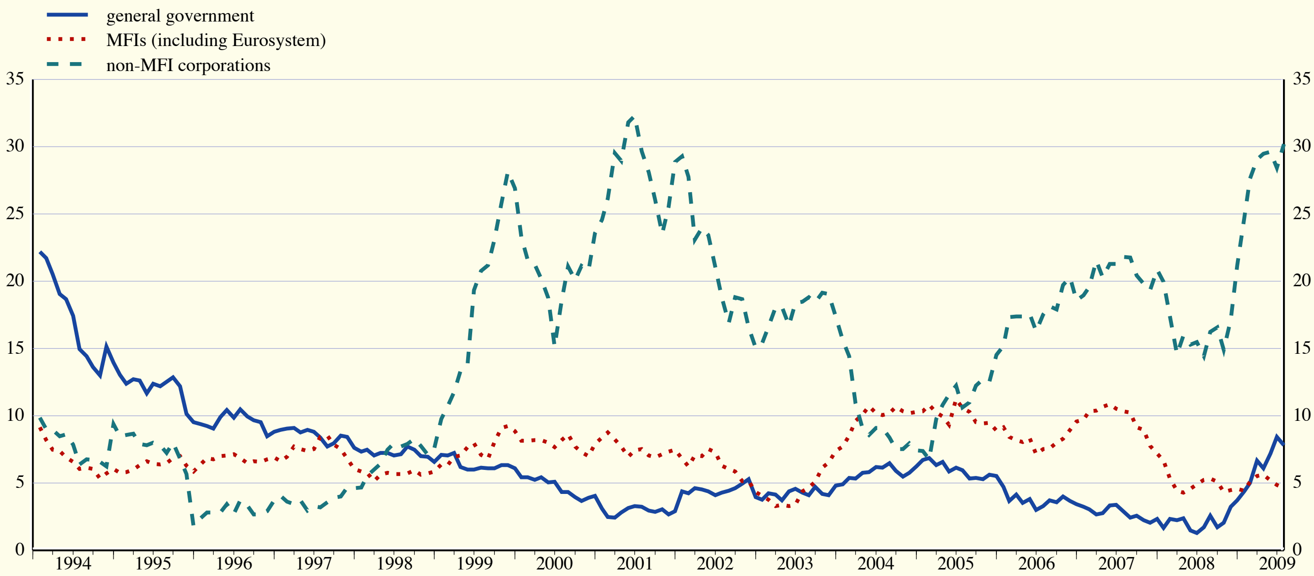


Source: ECB.
1) Monthly averages of/monthly data for the transactions during this period.

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

	Annual growth rates (non-seasonally adjusted)						6-month seasonally adjusted growth rates					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	1	2	3	4	5	6	7	8	9	10	11	12
	Total											
2008 July	7.1	8.6	21.5	2.7	2.1	3.3	7.1	7.0	22.4	2.0	3.6	2.4
Aug.	7.8	8.4	23.9	4.9	3.0	3.4	9.0	8.8	27.9	3.1	4.5	5.9
Sep.	7.0	6.9	23.8	6.0	2.6	2.3	8.7	8.1	28.4	5.3	3.9	5.9
Oct.	6.9	5.3	21.0	4.3	5.0	2.8	9.5	6.7	25.8	5.1	8.2	9.9
Nov.	8.1	5.7	24.0	4.2	6.7	2.8	11.0	5.1	30.8	4.9	12.5	7.1
Dec.	9.5	5.5	28.0	7.2	8.4	3.9	13.1	4.8	35.7	12.7	15.5	9.6
2009 Jan.	10.1	5.3	30.3	7.0	9.6	5.4	13.1	3.6	38.4	12.2	16.0	8.5
Feb.	11.1	6.3	32.3	8.0	10.1	6.5	13.1	3.8	36.7	13.1	16.0	7.1
Mar.	11.9	6.5	33.4	9.0	11.5	7.9	15.2	4.9	38.5	12.8	19.5	9.9
Apr.	12.1	6.3	33.5	10.0	11.6	10.6	14.6	6.1	41.6	15.3	14.8	11.3
May	12.0	5.5	33.1	9.9	12.6	9.5	12.9	5.8	35.3	15.5	12.6	11.8
June	11.9	4.8	30.0	11.4	13.6	9.7	10.5	4.7	24.4	10.1	11.8	10.1
July	11.7	4.2	31.0	12.6	13.5	9.5	10.4	4.8	24.2	13.1	10.9	10.6
	Long-term											
2008 July	5.3	5.2	19.5	2.2	1.6	3.1	5.7	5.8	20.1	0.8	1.9	2.5
Aug.	6.1	5.3	21.6	3.1	2.5	3.5	7.7	7.2	27.0	2.1	2.8	5.0
Sep.	5.7	5.1	21.5	4.5	1.7	2.2	7.5	7.1	27.1	5.5	1.9	4.3
Oct.	5.3	4.3	19.3	3.8	2.1	1.4	6.7	6.0	23.8	4.5	2.1	5.5
Nov.	6.2	4.5	22.6	3.2	3.4	1.3	8.0	4.6	29.6	3.6	5.2	3.0
Dec.	7.3	4.6	27.0	5.5	3.8	2.1	9.7	4.0	35.8	9.7	7.1	4.3
2009 Jan.	8.2	4.4	30.9	8.2	4.4	3.3	10.6	3.1	42.6	16.0	7.1	4.1
Feb.	9.2	5.1	34.1	10.5	5.1	3.9	10.7	3.0	41.4	19.4	7.3	2.9
Mar.	10.4	5.5	35.0	13.0	6.7	5.7	13.3	4.0	43.4	21.0	11.7	7.2
Apr.	10.3	5.6	34.9	14.8	5.9	8.6	14.0	5.3	46.9	26.0	9.9	11.8
May	10.6	5.2	34.6	16.1	7.1	8.5	13.3	5.7	39.6	30.1	9.0	14.2
June	10.8	4.8	31.9	18.7	8.4	8.5	11.9	5.6	28.1	28.3	9.7	13.1
July	10.8	4.6	33.6	20.7	7.8	8.2	11.1	6.1	25.3	25.5	8.4	12.4

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



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

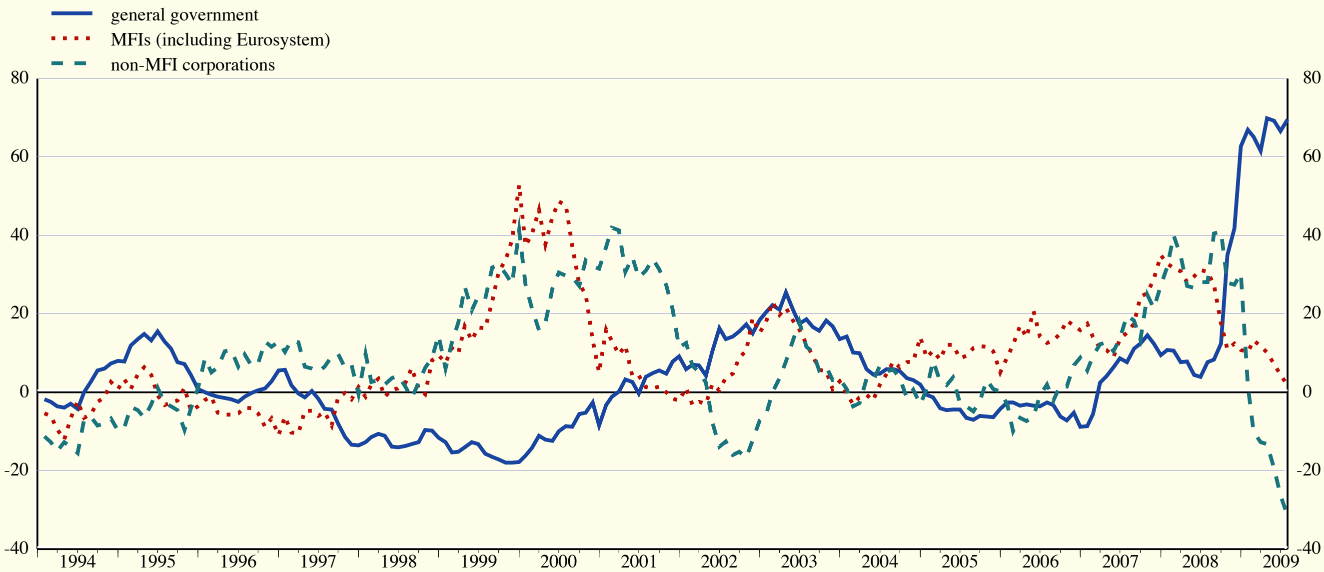
4.3 Growth rates of securities, other than shares, issued by euro area residents [1] (cont'd)

(percentage changes)

	Long-term fixed rate						Long-term variable rate					
	Total	MFIs (including Eurosystem)	Non-MFI corporations		General government		Total	MFIs (including Eurosystem)	Non-MFI corporations		General government	
			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government			Financial corporations other than MFIs	Non-financial corporations	Central government	Other general government
	13	14	15	16	17	18	19	20	21	22	23	24
						In all currencies combined						
2007	5.2	7.2	17.0	4.0	2.5	6.6	15.8	11.1	37.8	18.6	3.8	-1.8
2008	3.0	4.9	5.7	4.2	1.5	1.4	12.9	5.5	33.7	7.1	7.6	3.2
2008 Q3	3.0	5.5	5.0	3.5	1.3	2.0	12.4	5.3	32.4	3.2	7.7	6.0
Q4	3.2	4.5	4.9	4.5	2.3	-0.8	13.1	5.7	34.1	4.5	3.8	10.2
2009 Q1	6.1	5.0	13.1	12.3	5.3	1.4	15.9	5.3	45.1	0.5	0.8	11.1
Q2	9.0	6.9	20.4	21.0	7.4	4.5	14.8	3.3	44.4	-1.1	-0.6	20.6
2009 Feb.	6.7	5.5	15.7	14.0	5.6	2.0	16.2	5.1	47.0	0.2	0.2	9.7
Mar.	8.4	6.6	18.1	17.6	7.3	2.6	16.4	5.0	47.2	-0.7	0.4	16.7
Apr.	8.4	6.7	19.7	20.0	6.6	5.3	15.7	4.5	45.8	-0.6	-1.5	20.3
May	9.2	7.2	21.0	21.9	7.4	5.0	14.2	2.2	44.5	-1.8	-0.5	20.9
June	10.2	6.9	22.5	24.8	9.1	4.2	12.6	1.3	38.9	-1.0	0.1	24.6
July	10.3	6.7	26.0	27.9	8.6	3.7	12.5	1.5	39.6	-3.0	-2.5	24.9
						In euro						
2007	4.6	6.5	13.7	2.3	2.7	6.7	15.1	10.3	35.4	18.2	3.9	-2.4
2008	2.9	4.8	6.1	2.1	1.7	1.3	14.3	6.5	35.2	7.2	7.9	2.0
2008 Q3	2.9	5.4	6.0	1.1	1.5	1.8	14.3	6.8	34.3	3.9	8.1	4.6
Q4	3.3	4.7	7.2	2.2	2.5	-1.2	15.4	7.7	36.8	5.2	4.0	9.2
2009 Q1	6.5	6.1	16.4	9.5	5.5	0.8	18.8	7.9	48.1	0.5	0.9	11.0
Q2	9.6	8.8	23.3	19.2	7.6	3.9	17.5	5.4	47.5	-2.0	-0.7	22.5
2009 Feb.	7.1	6.6	19.5	11.1	5.8	1.4	19.1	7.5	50.0	0.2	0.3	10.1
Mar.	8.9	8.1	21.7	15.4	7.5	1.9	19.2	7.5	50.3	-1.5	0.3	17.7
Apr.	9.0	8.6	23.0	18.0	6.8	4.6	18.4	6.6	48.9	-1.3	-1.6	22.2
May	9.8	9.4	23.8	20.2	7.6	4.4	17.0	4.3	47.6	-2.8	-0.6	22.9
June	10.8	8.8	24.4	23.5	9.4	3.5	15.1	3.1	41.9	-2.0	-0.2	26.8
July	10.9	8.8	28.0	26.5	8.8	3.0	14.9	3.5	42.0	-3.7	-3.0	27.2

C19 Annual growth rates of short-term debt securities, by sector of the issuer, in all currencies combined

(annual percentage changes)



Source: ECB.

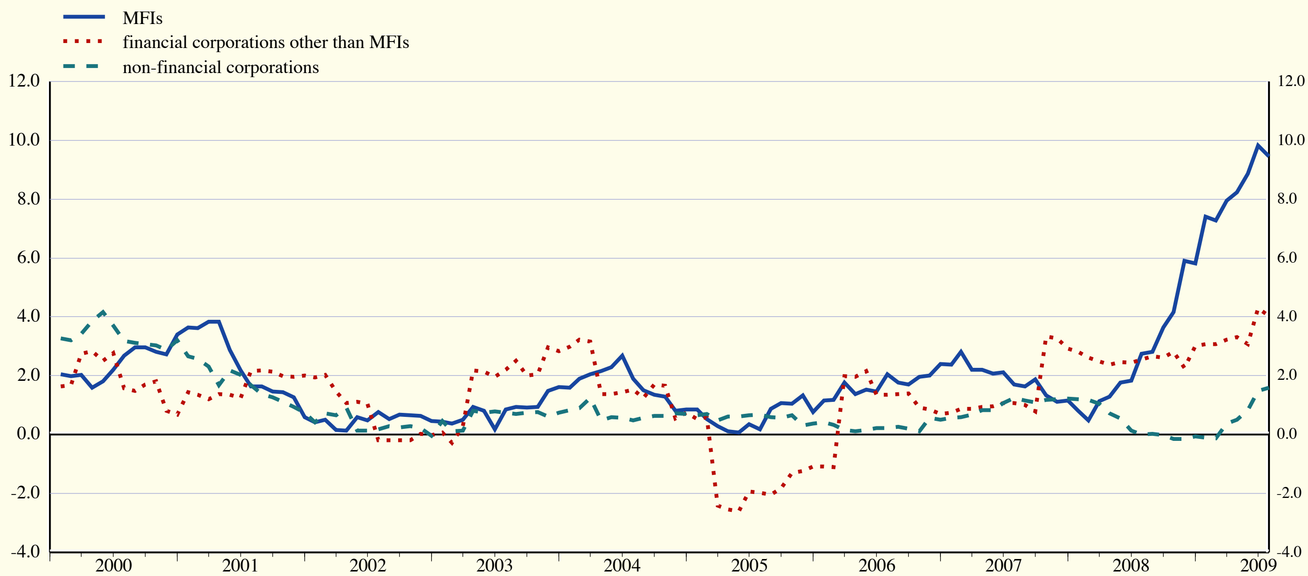
1) Annual percentage changes of monthly data refer to the end of the month, whereas those of quarterly and yearly data refer to the annual change in the period average of the series. See the Technical notes for details.

4.4 Quoted shares issued by euro area residents [1)]
(EUR billions, unless otherwise indicated; market values)

1. Outstanding amounts and annual growth rates
(outstanding amounts as end-of-period)

	Total			MFIs		Financial corporations other than MFIs		Non-financial corporations	
	Total	Index Dec. 01 = 100	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)	Total	Annual growth rates (%)
	1	2	3	4	5	6	7	8	9
2007 July	6,740.3	104.0	1.3	1,101.6	1.7	608.9	1.1	5,029.8	1.2
Aug.	6,626.8	103.9	1.2	1,062.0	1.6	583.9	1.0	4,981.0	1.2
Sep.	6,690.9	104.0	1.2	1,050.6	1.9	597.3	0.8	5,042.9	1.1
Oct.	6,945.9	104.3	1.4	1,074.6	1.3	628.2	3.3	5,243.1	1.2
Nov.	6,631.8	104.3	1.4	1,034.6	1.1	578.6	3.3	5,018.6	1.2
Dec.	6,588.7	104.4	1.4	1,019.0	1.2	578.4	2.9	4,991.2	1.2
2008 Jan.	5,766.1	104.4	1.3	889.8	0.8	497.0	2.8	4,379.3	1.2
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	4,391.6	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	3,980.2	0.1
July	4,972.6	104.6	0.6	691.6	2.8	427.9	2.5	3,853.1	0.0
Aug.	4,999.2	104.6	0.6	665.5	2.8	438.0	2.7	3,895.6	0.0
Sep.	4,430.0	104.7	0.7	612.2	3.6	381.8	2.6	3,436.0	0.0
Oct.	3,743.7	105.0	0.7	451.9	4.2	280.1	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.	3,482.5	105.4	1.0	377.0	5.8	269.0	3.0	2,836.5	-0.1
2009 Jan.	3,286.8	105.6	1.1	344.6	7.4	239.9	3.1	2,702.3	-0.1
Feb.	2,922.1	105.6	1.1	276.7	7.3	189.0	3.1	2,456.4	-0.1
Mar.	3,009.9	106.1	1.5	315.8	8.0	204.8	3.2	2,489.2	0.4
Apr.	3,435.5	106.2	1.7	414.4	8.2	249.9	3.3	2,771.3	0.5
May	3,580.6	106.5	2.0	455.2	8.9	254.8	3.1	2,870.6	0.8
June	3,530.7	107.3	2.7	448.5	9.8	257.9	4.3	2,824.3	1.5
July	3,815.2	107.5	2.7	509.4	9.5	278.3	4.0	3,027.5	1.6

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



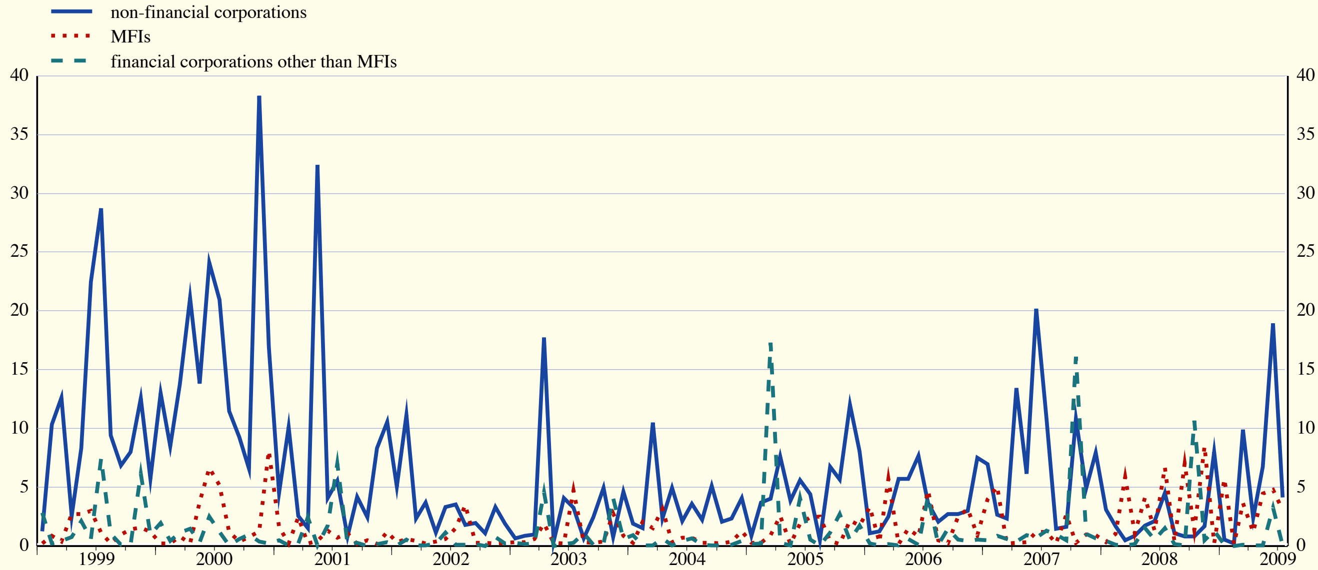
Source: ECB.
1) For the calculation of the index and the growth rates, see the Technical notes.

4.4 Quoted shares issued by euro area residents [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
2007 July	13.3	1.8	11.5	1.2	0.0	1.2	1.3	0.3	1.0	10.9	1.5	9.3
Aug.	2.5	6.6	-4.2	0.0	0.1	-0.1	1.0	1.4	-0.5	1.5	5.1	-3.6
Sep.	4.7	2.5	2.2	2.6	0.0	2.6	0.4	0.3	0.1	1.6	2.1	-0.5
Oct.	27.2	8.0	19.1	0.2	3.2	-3.0	16.1	0.5	15.6	10.8	4.3	6.5
Nov.	6.8	3.3	3.5	0.9	0.0	0.9	1.0	1.3	-0.3	4.9	2.0	2.9
Dec.	9.5	4.6	4.9	0.9	0.0	0.9	0.7	2.2	-1.5	7.9	2.5	5.5
2008 Jan.	3.6	1.4	2.3	0.1	0.0	0.1	0.4	0.7	-0.2	3.1	0.7	2.4
Feb.	2.8	1.9	0.9	1.0	0.0	1.0	0.1	0.3	-0.2	1.7	1.6	0.1
Mar.	6.4	6.0	0.3	5.9	0.0	5.9	0.0	0.5	-0.4	0.4	5.6	-5.1
Apr.	2.0	3.0	-0.9	1.1	0.0	1.1	0.1	0.5	-0.3	0.8	2.5	-1.7
May	7.3	6.0	1.4	4.1	0.1	4.1	1.5	0.3	1.2	1.7	5.6	-3.9
June	3.9	4.8	-0.9	1.3	0.0	1.3	0.5	0.1	0.4	2.1	4.7	-2.6
July	12.7	3.4	9.4	6.7	0.0	6.7	1.5	0.5	1.0	4.5	2.9	1.6
Aug.	1.5	3.0	-1.4	0.3	0.0	0.3	0.1	0.0	0.1	1.1	3.0	-1.9
Sep.	7.8	2.8	5.0	7.0	0.0	7.0	0.0	0.1	-0.1	0.8	2.7	-1.9
Oct.	12.8	0.6	12.2	1.4	0.0	1.4	10.7	0.0	10.7	0.8	0.6	0.1
Nov.	10.6	2.9	7.7	8.4	0.5	8.0	0.5	2.1	-1.6	1.7	0.3	1.4
Dec.	9.3	2.6	6.8	0.0	0.0	0.0	1.3	0.0	1.2	8.0	2.5	5.5
2009 Jan.	6.3	0.5	5.8	5.7	0.0	5.7	0.1	0.0	0.0	0.5	0.4	0.1
Feb.	0.2	0.9	-0.7	0.0	0.0	0.0	0.0	0.1	-0.1	0.2	0.8	-0.6
Mar.	13.6	0.2	13.4	3.6	0.0	3.6	0.1	0.0	0.1	9.9	0.2	9.7
Apr.	3.7	0.3	3.4	1.2	0.0	1.2	0.1	0.0	0.0	2.4	0.3	2.1
May	11.2	0.3	10.9	4.4	0.0	4.4	0.0	0.0	0.0	6.7	0.3	6.5
June	27.0	1.7	25.3	4.8	0.0	4.8	3.3	0.0	3.2	18.9	1.6	17.3
July	7.2	0.2	6.9	3.0	0.0	3.0	0.0	0.0	0.0	4.1	0.2	3.9

C21 Gross issues of quoted shares by sector of the issuer
(EUR billions; transactions during the month; market values)



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

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

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

1. Interest rates on deposits (new business)

	Deposits from households						Deposits from non-financial corporations				Repos
	Overnight [2]	With agreed maturity			Redeemable at notice [2], [3]		Overnight [2]	With agreed maturity			
		Up to 1 year	Over 1 and up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 1 year	Over 1 and up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9	10	11
2008 Sep.	1.32	4.65	4.85	3.36	2.97	4.01	2.20	4.52	5.19	4.69	4.27
Oct.	1.34	4.77	4.85	3.57	3.01	4.12	2.20	4.26	5.12	4.57	3.66
Nov.	1.29	4.26	4.67	3.71	3.02	4.20	1.98	3.53	4.58	4.18	3.19
Dec.	1.16	3.75	4.35	3.69	2.95	4.17	1.63	2.87	4.23	4.09	2.63
2009 Jan.	1.02	3.27	3.90	3.52	2.88	4.08	1.28	2.25	3.81	3.78	2.05
Feb.	0.90	2.62	3.40	3.23	2.49	3.98	1.12	1.61	3.21	3.89	1.55
Mar.	0.80	2.24	2.96	3.07	2.31	3.87	0.96	1.36	2.97	3.30	1.23
Apr.	0.66	2.01	2.70	2.87	2.22	3.75	0.80	1.15	2.64	3.07	1.12
May	0.61	1.89	2.42	2.71	1.99	3.62	0.76	1.08	2.39	3.12	1.02
June	0.56	1.86	2.38	2.57	1.95	3.52	0.66	1.04	2.18	2.58	0.93
July	0.52	1.86	2.41	2.62	1.89	3.38	0.57	0.81	2.48	2.93	0.68
Aug.	0.50	1.72	2.33	2.67	1.67	3.23	0.55	0.71	2.06	2.94	0.57

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
2008 Sep.	10.80	8.77	7.20	8.70	8.85	5.80	5.43	5.28	5.37	5.71	6.24	6.36	5.77
Oct.	10.83	8.88	7.22	8.69	8.92	5.84	5.42	5.28	5.37	5.70	6.37	6.26	5.80
Nov.	10.78	8.98	7.17	8.69	8.92	5.63	5.34	5.22	5.28	5.58	5.84	6.15	5.75
Dec.	10.46	8.22	7.03	8.39	8.50	5.09	5.06	5.10	5.13	5.30	4.99	5.75	5.29
2009 Jan.	10.13	8.33	7.03	8.63	8.67	4.37	4.77	4.92	5.00	4.86	4.43	5.44	5.23
Feb.	10.14	8.15	6.65	8.49	8.38	3.97	4.54	4.80	4.89	4.60	4.08	5.03	5.16
Mar.	9.94	7.51	6.51	8.31	8.05	3.65	4.33	4.61	4.72	4.37	3.83	4.72	5.05
Apr.	9.71	7.43	6.50	8.27	8.05	3.38	4.19	4.55	4.67	4.22	3.54	4.69	4.90
May	9.62	7.87	6.44	8.17	8.08	3.22	4.13	4.50	4.58	4.11	3.60	4.71	4.90
June	9.54	7.30	6.36	8.03	7.83	3.12	4.01	4.51	4.58	4.03	3.54	4.76	4.95
July	9.30	7.67	6.49	8.04	8.02	3.03	4.09	4.54	4.54	4.02	3.35	4.77	4.91
Aug.	9.26	7.96	6.51	7.95	8.13	3.00	4.06	4.54	4.45	4.05	3.20	4.70	4.74

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

	Bank overdrafts [2]	Other loans up to EUR 1 million by initial rate fixation			Other loans over EUR 1 million by initial rate fixation		
		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years	Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7
2008 Sep.	6.91	6.34	6.37	5.64	5.62	5.83	5.64
Oct.	6.89	6.52	6.35	5.57	5.59	5.75	5.08
Nov.	6.66	6.04	6.10	5.41	4.86	5.02	4.97
Dec.	6.26	5.38	5.78	5.32	4.28	4.50	4.76
2009 Jan.	5.68	4.73	5.46	5.24	3.52	3.96	4.58
Feb.	5.40	4.32	5.25	4.96	3.12	3.52	4.23
Mar.	5.10	4.03	5.07	4.75	2.85	3.22	3.87
Apr.	4.76	3.82	5.02	4.60	2.55	3.34	4.01
May	4.67	3.73	5.01	4.52	2.49	3.22	3.96
June	4.58	3.64	4.86	4.50	2.57	3.08	3.70
July	4.34	3.57	4.79	4.32	2.38	2.89	3.90
Aug.	4.25	3.42	4.68	4.23	2.32	2.81	3.83

Source: ECB.
1) Data refer to the changing composition of the euro area. For further information, see the General notes.
2) For this instrument category, new business and outstanding amounts coincide. End-of-period.
3) For this instrument category, households and non-financial corporations are merged and allocated to the household sector, since the outstanding amounts of non-financial corporations are negligible compared with those of the household sector in all participating Member States combined.
4) The annual percentage rate of charge covers the total cost of a loan. The total cost comprises an interest rate component and a component of other (related) charges, such as the cost of inquiries, administration, preparation of documents, guarantees, etc.

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

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

4. Interest rates on deposits (outstanding amounts)

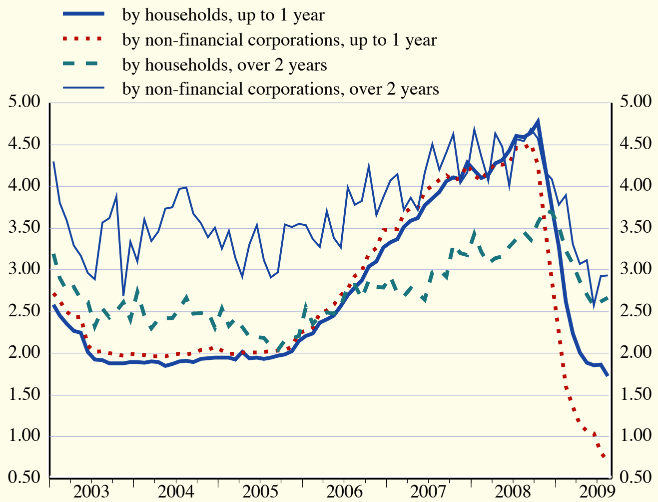
	Deposits from households					Deposits from non-financial corporations			Repos
	Overnight [2]	With agreed maturity		Redeemable at notice [2,3]		Overnight [2]	With agreed maturity		
		Up to 2 years	Over 2 years	Up to 3 months	Over 3 months		Up to 2 years	Over 2 years	
	1	2	3	4	5	6	7	8	9
2008 Sep.	1.32	4.45	3.11	2.97	4.01	2.20	4.73	4.45	4.32
Oct.	1.34	4.54	3.08	3.01	4.12	2.20	4.68	4.45	4.06
Nov.	1.29	4.51	3.12	3.02	4.20	1.98	4.44	4.40	3.95
Dec.	1.16	4.41	3.07	2.95	4.17	1.63	4.01	4.30	3.56
2009 Jan.	1.02	4.16	3.10	2.88	4.08	1.28	3.49	4.11	3.09
Feb.	0.90	3.98	3.17	2.49	3.98	1.12	3.19	4.00	2.68
Mar.	0.80	3.78	3.06	2.31	3.87	0.96	2.82	3.87	2.29
Apr.	0.66	3.54	3.11	2.22	3.75	0.80	2.53	3.84	1.95
May	0.61	3.38	3.04	1.99	3.62	0.76	2.41	3.70	1.79
June	0.56	3.25	3.07	1.95	3.52	0.66	2.21	3.65	1.63
July	0.52	3.07	3.03	1.89	3.38	0.57	1.99	3.53	1.53
Aug.	0.50	2.94	3.00	1.67	3.23	0.55	1.92	3.42	1.53

5. Interest rates on loans (outstanding amounts)

	Loans to households						Loans to non-financial corporations		
	Lending for house purchase, with maturity			Consumer credit and other loans, with maturity			With maturity		
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9
2008 Sep.	5.77	5.03	5.14	9.38	7.47	6.47	6.39	5.90	5.54
Oct.	5.78	5.06	5.17	9.45	7.48	6.47	6.43	5.99	5.58
Nov.	5.71	5.01	5.16	9.24	7.48	6.46	6.16	5.81	5.51
Dec.	5.49	4.90	5.08	9.02	7.38	6.38	5.72	5.42	5.27
2009 Jan.	5.22	4.72	4.93	8.72	7.22	6.22	5.11	4.89	4.89
Feb.	5.14	4.75	4.91	8.61	7.27	6.21	4.77	4.59	4.74
Mar.	4.92	4.63	4.78	8.43	7.08	6.07	4.41	4.28	4.48
Apr.	4.70	4.49	4.65	8.19	7.00	5.92	4.12	3.97	4.25
May	4.59	4.45	4.56	8.08	6.92	5.84	4.01	3.84	4.12
June	4.51	4.40	4.46	7.98	6.91	5.79	3.93	3.72	4.00
July	4.32	4.31	4.36	7.82	6.79	5.70	3.73	3.59	3.81
Aug.	4.24	4.24	4.28	7.80	6.73	5.65	3.65	3.50	3.72

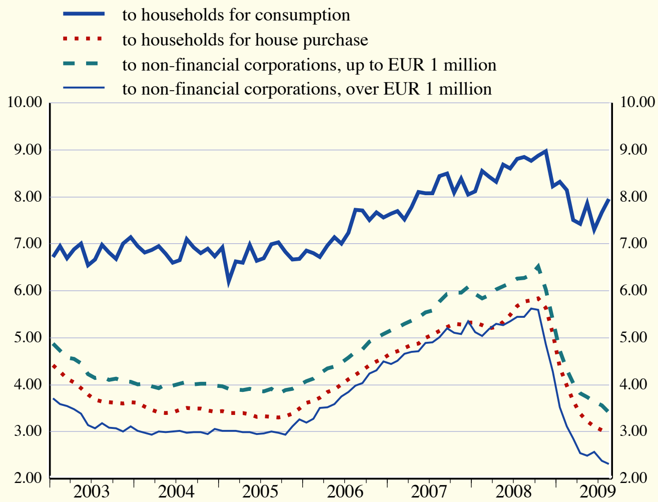
C22 New deposits with agreed maturity

(percentages per annum excluding charges; period averages)



C23 New loans at floating rate and up to 1 year initial rate fixation

(percentages per annum excluding charges; period averages)



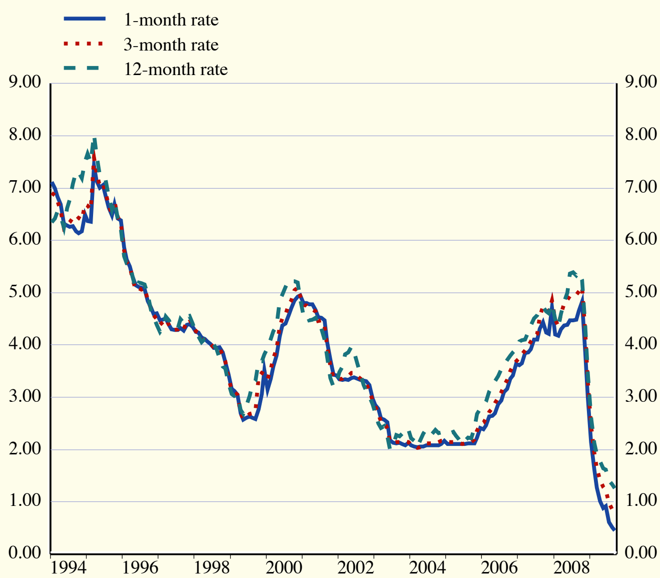
Source: ECB.

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

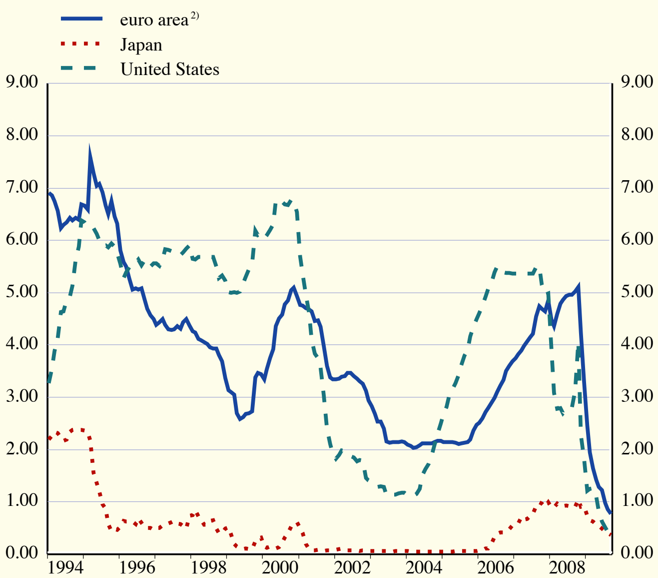
4.6 Money market interest rates
(percentages per annum; period averages)

	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
2006	2.83	2.94	3.08	3.23	3.44	5.20	0.30
2007	3.87	4.08	4.28	4.35	4.45	5.30	0.79
2008	3.87	4.28	4.64	4.73	4.83	2.93	0.93
2008 Q3	4.25	4.54	4.98	5.18	5.37	2.91	0.90
Q4	3.17	3.92	4.24	4.31	4.38	2.77	0.96
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
2008 Sep.	4.27	4.66	5.02	5.22	5.38	3.12	0.91
Oct.	3.82	4.83	5.11	5.18	5.25	4.06	1.04
Nov.	3.15	3.84	4.24	4.29	4.35	2.28	0.91
Dec.	2.49	2.99	3.29	3.37	3.45	1.83	0.92
2009 Jan.	1.81	2.14	2.46	2.54	2.62	1.21	0.73
Feb.	1.26	1.63	1.94	2.03	2.14	1.24	0.64
Mar.	1.06	1.27	1.64	1.77	1.91	1.27	0.62
Apr.	0.84	1.01	1.42	1.61	1.77	1.11	0.57
May	0.78	0.88	1.28	1.48	1.64	0.82	0.53
June	0.70	0.91	1.23	1.44	1.61	0.62	0.49
July	0.36	0.61	0.97	1.21	1.41	0.52	0.43
Aug.	0.35	0.51	0.86	1.12	1.33	0.42	0.40
Sep.	0.36	0.46	0.77	1.04	1.26	0.30	0.36

C24 Euro area money market rates [2]
(monthly; percentages per annum)



C25 3-month money market rates
(monthly; percentages per annum)



Source: ECB.
1) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP. For further information, see the General notes.
2) Data refer to the changing composition of the euro area. For further information, see the General notes.

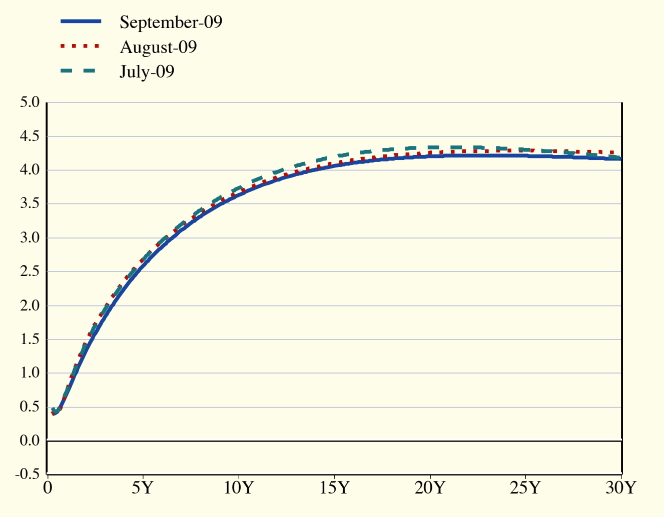
4.7 Euro area yield curves [1)]

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

	Spot rates								Instantaneous forward rates			
	3 months	1 year	2 years	5 years	7 years	10 years	10 years - 3 months (spread)	10 years - 2 years (spread)	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
2006	3.44	3.76	3.82	3.83	3.86	3.91	0.47	0.09	3.92	3.85	3.88	4.08
2007	3.85	4.00	4.01	4.11	4.23	4.38	0.52	0.36	4.06	4.02	4.40	4.78
2008	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2008 Q2	4.21	4.49	4.62	4.63	4.65	4.73	0.52	0.11	4.73	4.72	4.64	5.00
Q3	3.71	3.60	3.59	3.88	4.09	4.34	0.63	0.75	3.52	3.67	4.45	5.00
Q4	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2009 Q1	0.78	0.88	1.46	2.70	3.23	3.77	3.00	2.31	1.41	2.58	4.24	5.19
Q2	0.62	0.90	1.50	2.85	3.42	3.99	3.37	2.49	1.47	2.67	4.54	5.42
2008 Sep.	3.71	3.60	3.59	3.88	4.09	4.34	0.63	0.75	3.52	3.67	4.45	5.00
Oct.	2.52	2.86	2.68	3.58	3.95	4.25	1.74	1.58	2.27	2.99	4.80	4.97
Nov.	2.00	2.10	2.38	3.16	3.49	3.77	1.78	1.40	2.33	2.97	4.16	4.48
Dec.	1.75	1.85	2.14	2.95	3.32	3.69	1.94	1.55	2.09	2.76	4.04	4.60
2009 Jan.	1.19	1.27	1.79	3.02	3.53	4.02	2.83	2.24	1.70	2.85	4.53	5.26
Feb.	0.93	1.01	1.56	2.79	3.31	3.85	2.93	2.30	1.48	2.64	4.32	5.25
Mar.	0.78	0.88	1.46	2.70	3.23	3.77	3.00	2.31	1.41	2.58	4.24	5.19
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

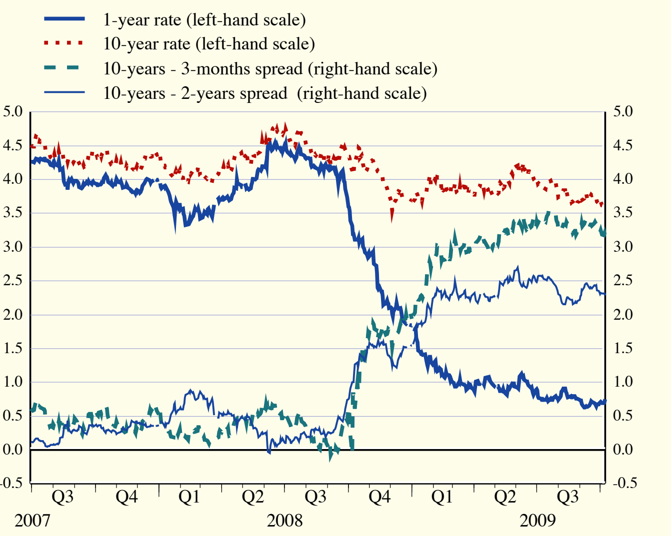
C26 Euro area spot yield curves

(percentages per annum; end-of-period)



C27 Euro area spot rates and spreads

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



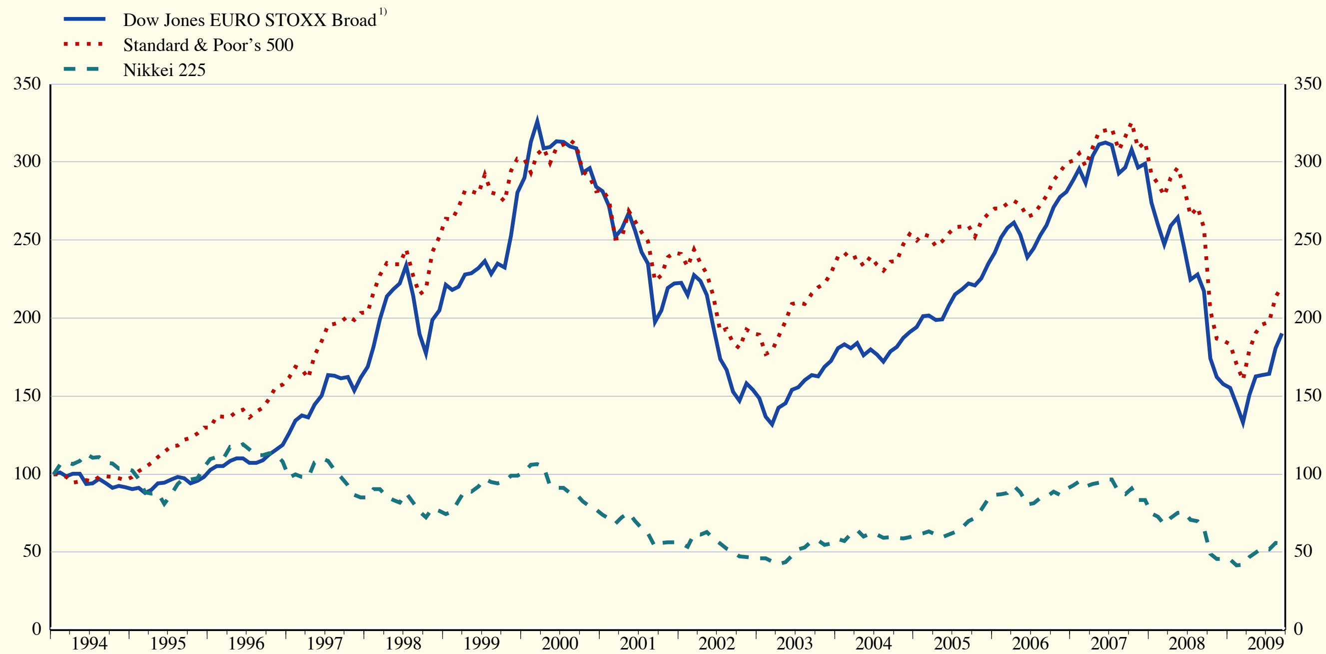
Source: ECB, underlying data provided by EuroMTS, ratings provided by Fitch Ratings.

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

4.8 Stock market indices
(index levels in points; period averages)

	Dow Jones EURO STOXX indices[1]												United States	Japan
	Benchmark		Main industry indices											
	Broad	50	Basic materials	Consumer services	Consumer goods	Oil & gas	Financials	Industrials	Technology	Utilities	Telecom.	Health care	Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2006	357.3	3,795.4	402.3	205.0	293.7	419.8	370.3	391.3	345.3	440.0	416.8	530.2	1,310.5	16,124.0
2007	416.4	4,315.8	543.8	235.4	366.5	449.6	408.3	488.4	383.4	561.4	492.7	519.2	1,476.5	16,984.4
2008	313.7	3,319.5	480.4	169.3	290.7	380.9	265.0	350.9	282.5	502.0	431.5	411.5	1,220.7	12,151.6
2008 Q3	309.7	3,278.8	506.0	162.2	282.2	382.8	260.5	345.7	285.6	494.8	412.4	407.4	1,252.7	12,758.7
Q4	228.7	2,497.7	320.7	136.5	236.9	287.6	169.3	238.1	200.0	384.7	387.0	358.1	910.9	8,700.4
2009 Q1	200.2	2,166.4	293.6	131.6	207.9	272.5	126.3	223.0	175.7	340.6	367.2	345.7	810.1	7,968.8
Q2	220.5	2,376.6	326.9	136.6	229.5	287.3	158.6	251.0	201.1	337.7	351.5	343.8	892.0	9,274.8
Q3	247.2	2,660.6	369.0	142.0	257.1	296.8	192.7	286.0	211.3	361.1	386.0	365.1	994.6	10,128.8
2008 Sep.	301.3	3,193.7	474.6	161.8	287.4	358.2	255.8	332.2	271.8	465.8	413.2	400.6	1,220.0	12,126.2
Oct.	241.5	2,627.3	342.1	135.6	249.1	287.9	195.0	245.1	212.8	392.4	378.2	363.7	968.8	9,080.5
Nov.	225.0	2,452.9	315.2	136.2	237.6	294.8	159.0	229.5	197.7	393.6	386.0	361.7	883.3	8,502.7
Dec.	219.0	2,407.0	304.0	137.8	224.2	281.0	152.5	238.7	189.4	369.2	396.6	349.4	877.2	8,492.1
2009 Jan.	215.5	2,344.9	309.7	136.8	220.8	280.5	143.4	236.4	188.1	376.5	384.1	364.8	866.6	8,402.5
Feb.	200.4	2,159.8	299.2	132.7	208.0	280.9	123.3	226.1	175.7	341.0	361.7	354.1	806.3	7,707.3
Mar.	184.6	1,993.9	272.5	125.3	194.9	256.9	111.8	206.8	163.5	304.2	355.2	319.1	757.1	7,772.8
Apr.	209.3	2,256.3	308.4	134.6	219.0	268.1	145.0	237.9	196.0	323.2	356.8	327.7	848.5	8,755.5
May	225.7	2,426.7	331.6	140.1	233.8	296.0	164.5	259.8	203.1	346.3	348.0	346.7	901.7	9,257.7
June	226.7	2,449.0	341.0	135.3	235.9	298.3	166.8	255.5	204.3	343.8	349.6	357.0	926.1	9,810.3
July	228.0	2,462.1	337.9	134.8	243.7	288.6	170.6	256.8	198.8	334.7	364.8	352.9	934.1	9,678.3
Aug.	250.7	2,702.7	377.6	142.1	261.8	293.2	198.6	290.3	208.5	365.7	387.2	364.1	1,009.7	10,430.4
Sep.	264.0	2,827.9	393.3	149.5	266.5	308.7	210.2	312.5	227.2	384.4	407.0	378.8	1,044.6	10,302.9

C28 Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225
(January 1994 = 100; monthly averages)



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

PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

5

5.1 HICP, other prices and costs
(annual percentage changes, unless otherwise indicated)

1. Harmonised Index of Consumer Prices [1]

	Total					Total (s.a., percentage change on previous period)						Memo item: Administered prices [2]	
	Index 2005 = 100	Total	Total excl. unprocessed food and energy	Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
% of total [3]	100.0	100.0	83.0	58.6	41.4	100.0	11.9	7.5	29.7	9.6	41.4	89.3	10.7
	1	2	3	4	5	6	7	8	9	10	11	12	13
2005	100.0	2.2	1.5	2.1	2.3	-	-	-	-	-	-	2.1	2.5
2006	102.2	2.2	1.5	2.3	2.0	-	-	-	-	-	-	2.1	2.7
2007	104.4	2.1	2.0	1.9	2.5	-	-	-	-	-	-	2.1	2.1
2008	107.8	3.3	2.4	3.8	2.6	-	-	-	-	-	-	3.3	3.0
2008 Q2	108.1	3.6	2.5	4.5	2.4	1.1	1.1	1.1	0.2	6.0	0.5	3.7	2.8
Q3	108.4	3.8	2.5	4.7	2.6	0.8	0.8	1.0	0.2	2.1	0.7	3.9	3.3
Q4	108.2	2.3	2.2	2.1	2.6	-0.6	0.2	0.3	0.2	-8.7	0.5	2.1	3.4
2009 Q1	107.4	1.0	1.6	0.1	2.2	-0.3	-0.1	0.3	0.1	-4.9	0.4	0.7	2.9
Q2	108.3	0.2	1.5	-1.2	2.2	0.3	0.1	-0.8	0.2	0.7	0.4	0.0	1.7
2009 Apr.	108.2	0.6	1.7	-0.7	2.5	0.1	0.0	-0.5	0.1	0.2	0.2	0.4	1.9
May	108.3	0.0	1.5	-1.4	2.1	0.0	0.0	-0.4	0.0	0.4	0.0	-0.2	1.6
June	108.5	-0.1	1.3	-1.6	2.0	0.3	0.4	-0.3	0.0	2.5	0.1	-0.4	1.6
July	107.8	-0.7	1.2	-2.4	1.9	-0.1	0.1	-0.5	0.0	-1.8	0.1	-0.9	1.2
Aug.	108.1	-0.2	1.2	-1.5	1.8	0.3	0.1	-0.3	0.1	1.8	0.2	-0.3	1.0
Sep. [4]	.	-0.3	.	.	.	.	.	.	.	.	.	.	.

	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]	19.3	11.9	7.5	39.3	29.7	9.6	10.1	6.0	6.3	3.2	14.9	6.8
	14	15	16	17	18	19	20	21	22	23	24	25
2005	1.6	2.0	0.8	2.4	0.3	10.1	2.6	2.0	2.7	-2.2	2.3	3.1
2006	2.4	2.1	2.8	2.3	0.6	7.7	2.5	2.1	2.5	-3.3	2.3	2.3
2007	2.8	2.8	3.0	1.4	1.0	2.6	2.7	2.0	2.6	-1.9	2.9	3.2
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
2008 Q2	5.7	6.9	3.7	3.9	0.8	13.6	2.3	1.9	3.6	-1.8	3.0	2.2
Q3	5.6	6.7	3.9	4.2	0.7	15.1	2.3	1.9	4.4	-2.4	3.4	2.3
Q4	3.8	4.3	3.0	1.2	0.9	2.1	2.2	1.9	4.5	-2.0	3.3	2.2
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
2009 Mar.	1.9	1.6	2.4	-1.5	0.8	-8.1	2.0	1.8	3.1	-1.8	2.2	2.0
Apr.	1.4	1.2	1.6	-1.7	0.8	-8.8	2.0	1.8	3.5	-1.6	3.4	2.1
May	0.9	1.0	0.7	-2.5	0.8	-11.6	2.1	1.8	3.1	-1.0	2.4	2.0
June	0.7	1.1	0.0	-2.7	0.6	-11.7	2.1	1.8	2.7	-0.9	2.2	1.9
July	0.0	0.8	-1.1	-3.6	0.5	-14.4	2.1	1.8	2.6	-0.8	1.9	2.0
Aug.	-0.1	0.6	-1.2	-2.3	0.6	-10.2	2.0	1.8	2.5	-0.7	1.8	2.0

Sources: Eurostat and ECB calculations.
1) Data refer to the changing composition of the euro area. For further information, see the General notes.
2) ECB estimates based on Eurostat data; these experimental statistics can only provide an approximate measure of price administration since changes in administered prices cannot be fully isolated from other influences. Please refer to http://www.ecb.europa.eu/stats/prices/hicp/html/index.en.html for a note explaining the methodology used in the compilation of this indicator.
3) Referring to the index period 2009.
4) Estimate based on provisional national releases usually covering around 95% of the euro area, as well as on early information on energy prices.

2. Industry, construction and residential property prices [1]

	Industrial producer prices excluding construction										Construction [2]	Residential property prices [3]
	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 [4]	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
2005	100.0	4.1	3.1	1.6	2.8	1.2	1.1	1.3	0.9	13.5	3.7	7.5
2006	105.1	5.1	3.5	2.8	4.6	1.6	1.7	1.4	1.5	13.4	4.9	6.5
2007	107.9	2.7	3.0	3.2	4.6	2.2	2.3	2.4	2.1	1.2	4.1	4.4
2008	114.4	6.1	4.8	3.5	4.0	2.1	3.9	2.8	4.1	14.1	3.5	1.7
2008 Q2	114.8	7.0	6.4	3.7	4.0	2.0	4.8	2.8	5.1	17.2	3.5	2.8 [5]
Q3	117.2	8.4	6.7	4.2	5.4	2.3	4.2	2.7	4.4	21.5	4.9	-
Q4	113.7	3.4	0.7	2.4	2.6	2.5	2.0	2.6	1.9	6.7	3.2	0.6 [5]
2009 Q1	109.8	-2.0	-4.3	-1.1	-2.7	1.8	-1.0	1.9	-1.4	-4.1	3.3	-
Q2	108.3	-5.7	-6.8	-3.0	-5.7	0.6	-2.0	1.5	-2.5	-13.2	0.2	.
2009 Mar.	109.1	-3.2	-5.4	-1.9	-3.9	1.5	-1.6	1.8	-2.0	-6.9	-	-
Apr.	108.1	-4.8	-5.9	-2.5	-5.1	1.1	-1.8	1.6	-2.2	-11.1	-	-
May	108.1	-5.9	-7.1	-3.0	-5.7	0.5	-2.0	1.4	-2.5	-13.7	-	-
June	108.5	-6.5	-7.3	-3.5	-6.4	0.3	-2.3	1.6	-2.9	-14.7	-	-
July	107.8	-8.4	-8.2	-4.1	-7.5	0.0	-2.5	1.2	-3.0	-19.9	-	-
Aug.	108.2	-7.5	-7.0	-4.2	-7.4	-0.2	-2.6	1.2	-3.1	-16.9	-	-

3. Commodity prices and gross domestic product deflators [1]

	Oil prices [6] (EUR per barrel)	Non-energy commodity prices						GDP deflators							
		Import-weighted [7]			Use-weighted [8]			Total (s.a. index 2000 = 100)	Total	Domestic demand				Exports [9]	Imports [9]
		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	44.3	55.7								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2005	44.6	11.9	0.9	17.9	9.0	2.5	14.4	111.6	2.0	2.3	2.1	2.3	2.5	2.4	3.4
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	2.7	3.9
2007	52.8	7.5	14.3	5.0	5.1	9.4	2.7	116.4	2.3	2.3	2.2	1.7	2.6	1.7	1.5
2008	65.9	2.0	18.2	-4.3	-1.7	9.7	-8.5	119.1	2.3	2.8	2.9	2.9	2.2	2.5	3.8
2008 Q2	78.5	2.5	32.4	-7.5	-0.3	20.3	-11.1	118.9	2.3	3.1	3.3	3.7	2.3	2.7	4.7
Q3	77.6	6.8	16.2	2.8	0.6	4.3	-1.9	119.4	2.3	3.2	3.4	2.8	2.6	3.4	5.7
Q4	43.5	-10.1	-7.7	-11.2	-14.5	-12.9	-15.8	120.0	2.4	2.1	2.0	2.2	1.7	1.4	0.6
2009 Q1	35.1	-29.1	-14.8	-36.0	-28.5	-17.3	-36.8	120.1	1.9	1.1	0.5	2.7	0.6	-2.5	-4.5
Q2	43.8	-24.5	-11.1	-31.0	-22.5	-9.9	-31.4	120.1	1.1	0.0	-0.4	1.6	-0.7	-4.0	-6.8
2009 Apr.	39.0	-25.4	-11.7	-31.9	-23.7	-10.8	-32.8	-	-	-	-	-	-	-	-
May	42.8	-24.5	-8.3	-32.1	-22.0	-6.7	-32.6	-	-	-	-	-	-	-	-
June	49.5	-23.5	-13.1	-28.8	-21.7	-12.0	-28.9	-	-	-	-	-	-	-	-
July	46.5	-22.8	-15.1	-26.6	-21.4	-13.7	-26.8	-	-	-	-	-	-	-	-
Aug.	51.1	-16.2	-10.2	-19.1	-17.4	-15.7	-18.7	-	-	-	-	-	-	-	-
Sep.	46.9	-16.7	-10.8	-19.4	-17.3	-15.3	-18.7	-	-	-	-	-	-	-	-

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) Data refer to the Euro 16.
2) Input prices for residential buildings.
3) Experimental data based on non-harmonised national sources (see the ECB website for further details).
4) In 2005.
5) The quarterly data for the second (fourth) quarter refer to semi-annual averages of the first (second) half of the year, respectively. Since some national data are only available at annual frequency, the semi-annual estimate is partially derived from annual results; therefore, the accuracy of semi-annual data is lower than the accuracy of annual data.
6) Brent Blend (for one-month forward delivery).
7) Refers to prices expressed in euro. Weighted according to the structure of euro area imports in the period 2004-06.
8) 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 the ECB website for details).
9) 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 [1)]
(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 [2)]			
2005	109.0	1.2	8.4	-0.5	3.2	0.7	2.1	2.1
2006	110.0	0.9	2.3	-0.5	3.3	0.5	2.0	2.1
2007	111.7	1.5	1.8	0.5	4.1	0.5	2.4	1.8
2008	115.2	3.2	-0.5	3.6	2.4	3.2	2.9	3.1
2008 Q2	114.7	2.8	-1.6	1.4	2.4	2.4	2.5	4.3
Q3	115.6	3.5	-1.1	4.2	2.7	4.5	3.2	2.5
Q4	117.9	4.6	-0.3	9.8	2.2	5.1	2.3	3.1
2009 Q1	120.0	5.8	1.6	16.5	1.8	6.8	0.2	3.2
Q2	120.2	4.8	1.9	14.8	0.2	5.7	1.4	1.7
					Compensation per employee			
2005	112.3	2.0	2.5	1.9	2.2	1.9	2.4	1.9
2006	114.9	2.3	3.3	3.4	3.5	1.6	2.3	1.7
2007	117.7	2.5	3.6	2.7	2.8	1.9	2.4	2.5
2008	121.4	3.1	2.8	3.0	3.8	2.8	2.5	3.6
2008 Q2	121.1	3.1	2.2	2.7	3.6	2.1	2.3	4.5
Q3	121.9	3.5	3.2	3.1	4.2	4.0	3.0	3.4
Q4	122.5	2.9	2.7	2.7	3.8	2.9	2.0	3.4
2009 Q1	122.5	1.8	3.3	0.4	2.6	2.3	0.5	3.1
Q2	123.0	1.6	3.6	-0.5	3.4	2.5	2.0	1.9
					Labour productivity [3)]			
2005	103.1	0.7	-5.4	2.4	-1.0	1.2	0.2	-0.2
2006	104.5	1.3	1.0	3.9	0.2	1.1	0.3	-0.4
2007	105.5	1.0	1.7	2.2	-1.2	1.4	0.1	0.7
2008	105.4	-0.1	3.3	-0.6	1.3	-0.4	-0.4	0.5
2008 Q2	105.6	0.3	3.9	1.3	1.1	-0.3	-0.2	0.1
Q3	105.5	0.0	4.4	-1.0	1.5	-0.4	-0.2	0.8
Q4	103.9	-1.7	3.0	-6.5	1.5	-2.1	-0.3	0.4
2009 Q1	102.1	-3.7	1.7	-13.8	0.8	-4.2	0.3	-0.1
Q2	102.4	-3.1	1.7	-13.3	3.2	-3.0	0.5	0.3

5. Hourly labour costs [1), 4)]

	Total (s.a. index 2008 = 100)	Total	By component: Wages and salaries	Employers' social contributions	By selected economic activity: Mining, manufacturing and energy	Construction	Services	Memo: indicator of negotiated wages [5)]
% of total [6)]	100.0	100.0	75.2	24.8	32.4	9.0	58.6	
	1	2	3	4	5	6	7	8
2005	92.2	2.2	2.3	2.0	2.1	1.6	2.3	2.1
2006	94.3	2.3	2.4	2.3	3.3	1.4	1.9	2.3
2007	96.7	2.5	2.9	1.5	2.2	2.6	2.7	2.1
2008	99.9	3.4	3.4	3.3	3.9	4.1	3.1	3.2
2008 Q2	99.2	2.5	2.5	2.4	2.5	3.8	2.3	2.9
Q3	100.4	3.6	3.6	3.5	3.1	3.7	3.8	3.4
Q4	101.4	4.2	4.1	4.6	6.0	4.7	3.2	3.6
2009 Q1	102.3	3.6	3.4	4.1	5.6	3.0	2.5	3.2
Q2	103.3	4.0	3.9	4.2	5.3	4.5	3.2	2.8

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) Data refer to Euro 16.
2) Compensation (at current prices) per employee divided by value added (volumes) per person employed.
3) Value added (volumes) per person employed.
4) Hourly labour costs for the whole economy, excluding agriculture, public administration, education, health and services not elsewhere classified. Owing to differences in coverage, the estimates for the components may not be consistent with the total.
5) Experimental data (see the ECB website for further details).
6) In 2008.

5.2 Output and demand

1. GDP and expenditure components [1)]

	GDP								
	Total	Domestic demand					External balance [2)]		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories [3)]	Total	Exports [2)]	Imports [2)]
	1	2	3	4	5	6	7	8	9
	Current prices (EUR billions, seasonally adjusted)								
2005	8,140.1	8,021.0	4,669.2	1,664.4	1,681.1	6.3	119.1	3,114.3	2,995.2
2006	8,557.1	8,460.9	4,872.9	1,733.3	1,831.0	23.7	96.3	3,470.2	3,374.0
2007	9,002.2	8,863.7	5,064.5	1,801.6	1,970.1	27.5	138.5	3,746.0	3,607.5
2008	9,263.2	9,168.4	5,232.7	1,892.2	2,002.0	41.5	94.7	3,880.8	3,786.0
2008 Q2	2,325.0	2,291.9	1,308.4	473.9	507.3	2.3	33.0	992.2	959.2
Q3	2,327.2	2,311.5	1,317.4	474.9	502.8	16.3	15.7	991.2	975.5
Q4	2,297.1	2,284.3	1,306.4	480.6	483.2	14.0	12.8	908.5	895.7
2009 Q1	2,241.9	2,235.4	1,288.9	487.9	455.0	3.5	6.5	803.4	796.9
Q2	2,238.1	2,218.4	1,291.6	493.5	446.5	-13.3	19.7	785.0	765.2
	percentage of GDP								
2008	100.0	99.0	56.5	20.4	21.6	0.4	1.0	-	-
	Chain-linked volumes (prices of the previous year, seasonally adjusted [4)])								
	quarter-on-quarter percentage changes								
2008 Q2	-0.3	-0.6	-0.4	0.8	-1.3	-	-	-0.5	-1.1
Q3	-0.4	0.1	0.0	0.5	-1.5	-	-	-1.0	0.3
Q4	-1.8	-0.7	-0.5	0.6	-3.5	-	-	-7.0	-4.6
2009 Q1	-2.5	-2.0	-0.5	0.6	-5.4	-	-	-9.2	-7.9
Q2	-0.2	-0.7	0.1	0.7	-1.5	-	-	-1.5	-2.9
	annual percentage changes								
2005	1.7	1.9	1.8	1.5	3.2	-	-	5.0	5.7
2006	3.0	2.9	2.1	2.0	5.5	-	-	8.3	8.3
2007	2.8	2.4	1.6	2.2	4.9	-	-	6.1	5.3
2008	0.7	0.6	0.4	2.1	-0.3	-	-	1.2	1.1
2008 Q2	1.5	0.8	0.5	2.1	1.2	-	-	4.0	2.5
Q3	0.4	0.3	0.0	2.2	-0.9	-	-	1.3	1.0
Q4	-1.8	-0.5	-0.7	2.4	-5.5	-	-	-6.6	-3.7
2009 Q1	-4.9	-3.1	-1.4	2.6	-11.2	-	-	-16.8	-12.8
Q2	-4.8	-3.2	-0.9	2.5	-11.4	-	-	-17.7	-14.4
	contributions to quarter-on-quarter percentage changes of GDP in percentage points								
2008 Q2	-0.3	-0.6	-0.2	0.2	-0.3	-0.2	0.2	-	-
Q3	-0.4	0.1	0.0	0.1	-0.3	0.4	-0.5	-	-
Q4	-1.8	-0.7	-0.3	0.1	-0.8	0.2	-1.1	-	-
2009 Q1	-2.5	-2.0	-0.3	0.1	-1.1	-0.6	-0.5	-	-
Q2	-0.2	-0.7	0.0	0.2	-0.3	-0.6	0.5	-	-
	contributions to annual percentage changes of GDP in percentage points								
2005	1.7	1.8	1.1	0.3	0.6	-0.2	-0.1	-	-
2006	3.0	2.9	1.2	0.4	1.1	0.1	0.1	-	-
2007	2.8	2.4	0.9	0.4	1.0	0.0	0.4	-	-
2008	0.7	0.6	0.2	0.4	-0.1	0.1	0.0	-	-
2008 Q2	1.5	0.8	0.3	0.4	0.3	-0.2	0.6	-	-
Q3	0.4	0.3	0.0	0.4	-0.2	0.1	0.2	-	-
Q4	-1.8	-0.5	-0.4	0.5	-1.2	0.6	-1.3	-	-
2009 Q1	-4.9	-3.1	-0.8	0.5	-2.5	-0.4	-1.9	-	-
Q2	-4.8	-3.2	-0.5	0.5	-2.5	-0.7	-1.6	-	-

Sources: Eurostat and ECB calculations.
1) Data refer to Euro 16.
2) Exports and imports cover goods and services and include cross-border intra-euro area trade. They are not fully consistent with Tables 7.1.2 and 7.3.1.
3) Including acquisitions less disposals of valuables.
4) Annual data are not adjusted for the variations in the number of working days.

5.2 Output and demand

2. Value added by economic activity [1]

	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)							
2005	7,295.2	143.7	1,481.3	439.8	1,540.9	2,018.0	1,671.4	844.9
2006	7,643.0	141.7	1,563.6	476.8	1,596.9	2,132.5	1,731.5	914.1
2007	8,043.1	152.3	1,640.1	513.5	1,670.4	2,264.7	1,802.1	959.0
2008	8,316.5	149.1	1,663.4	536.1	1,727.5	2,359.6	1,880.9	946.6
2008 Q2	2,086.5	37.7	424.0	133.9	431.7	589.3	469.9	238.5
Q3	2,088.9	36.5	418.6	135.3	434.4	593.1	471.0	238.3
Q4	2,066.6	35.9	396.6	132.7	429.7	593.6	478.0	230.5
2009 Q1	2,018.4	36.0	360.3	130.9	418.1	588.0	485.0	223.5
Q2	2,016.2	35.4	351.1	130.4	419.5	590.0	489.8	221.9
	percentage of value added							
2008	100.0	1.8	20.0	6.4	20.8	28.4	22.6	-
	Chain-linked volumes (prices of the previous year, seasonally adjusted [2])							
	quarter-on-quarter percentage changes							
2008 Q2	-0.3	-0.1	-1.0	-2.1	-0.5	0.4	0.3	-0.9
Q3	-0.4	-0.1	-1.9	-1.5	-0.3	0.0	0.6	-0.1
Q4	-1.8	0.6	-6.2	-1.6	-1.8	-0.6	0.3	-2.0
2009 Q1	-2.5	-0.7	-8.3	-1.1	-2.9	-0.8	0.1	-2.7
Q2	-0.2	0.2	-1.9	-0.4	0.0	-0.1	0.6	0.3
	annual percentage changes							
2005	1.7	-6.1	1.3	1.6	1.9	2.7	1.3	1.9
2006	3.0	-0.8	3.6	2.9	2.8	4.1	1.4	3.3
2007	3.0	0.2	2.5	2.6	3.4	4.1	1.9	0.9
2008	0.9	1.8	-0.8	-0.9	0.8	1.9	1.7	-1.1
2008 Q2	1.7	1.9	1.7	-0.1	1.4	2.4	1.5	-0.4
Q3	0.7	2.8	-1.2	-1.4	0.4	1.6	1.8	-1.4
Q4	-1.7	2.2	-7.7	-3.8	-1.9	0.4	1.7	-2.5
2009 Q1	-4.9	-0.3	-16.5	-6.1	-5.4	-0.9	1.3	-5.6
Q2	-4.8	-0.1	-17.2	-4.5	-4.8	-1.4	1.6	-4.4
	contributions to quarter-on-quarter percentage changes of value added in percentage points							
2008 Q2	-0.3	0.0	-0.2	-0.1	-0.1	0.1	0.1	-
Q3	-0.4	0.0	-0.4	-0.1	-0.1	0.0	0.1	-
Q4	-1.8	0.0	-1.2	-0.1	-0.4	-0.2	0.1	-
2009 Q1	-2.5	0.0	-1.6	-0.1	-0.6	-0.2	0.0	-
Q2	-0.2	0.0	-0.3	0.0	0.0	0.0	0.1	-
	contributions to annual percentage changes of value added in percentage points							
2005	1.7	-0.1	0.3	0.1	0.4	0.7	0.3	-
2006	3.0	0.0	0.7	0.2	0.6	1.1	0.3	-
2007	3.0	0.0	0.5	0.2	0.7	1.2	0.4	-
2008	0.9	0.0	-0.2	-0.1	0.2	0.5	0.4	-
2008 Q2	1.7	0.0	0.3	0.0	0.3	0.7	0.3	-
Q3	0.7	0.0	-0.2	-0.1	0.1	0.5	0.4	-
Q4	-1.7	0.0	-1.6	-0.2	-0.4	0.1	0.4	-
2009 Q1	-4.9	0.0	-3.4	-0.4	-1.1	-0.3	0.3	-
Q2	-4.8	0.0	-3.5	-0.3	-1.0	-0.4	0.3	-

Sources: Eurostat and ECB calculations.
1) Data refer to Euro 16.
2) Annual data are not adjusted for the variations in the number of working days.

3. Industrial production [1]

	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 [2]	100.0	78.0	78.0	69.4	68.8	28.2	22.1	18.5	2.6	15.9	9.1	22.0
	1	2	3	4	5	6	7	8	9	10	11	12
2006	4.0	104.3	4.2	4.6	4.7	4.9	6.0	2.9	4.4	2.7	0.6	3.0
2007	3.2	108.1	3.7	4.1	4.3	3.7	6.7	2.3	1.3	2.5	-0.9	1.1
2008	-2.4	106.2	-1.7	-1.9	-2.0	-3.4	-0.3	-2.0	-5.6	-1.4	0.2	-4.7
2008 Q3	-2.2	105.5	-1.4	-1.5	-1.7	-2.1	-0.6	-2.2	-7.2	-1.5	-0.4	-5.0
Q4	-8.9	99.0	-9.0	-9.3	-9.5	-13.4	-8.6	-4.8	-11.9	-3.6	-4.4	-8.4
2009 Q1	-17.0	91.6	-18.4	-20.2	-20.6	-25.3	-23.8	-7.5	-20.3	-5.4	-4.4	-10.3
Q2	-16.6	89.2	-18.5	-19.5	-19.9	-24.0	-24.2	-6.1	-21.3	-3.5	-8.7	-7.3
2009 Feb.	-18.0	91.2	-19.3	-21.2	-21.7	-25.8	-25.5	-8.6	-21.9	-6.5	-3.5	-12.5
Mar.	-17.5	90.2	-19.3	-20.4	-20.7	-26.0	-23.2	-7.6	-20.6	-5.4	-10.1	-8.3
Apr.	-18.6	88.8	-21.3	-22.0	-22.6	-27.0	-27.3	-7.6	-21.0	-5.2	-12.5	-5.6
May	-16.0	89.4	-17.6	-18.6	-18.8	-23.1	-23.0	-5.3	-19.5	-2.8	-7.6	-8.5
June	-15.1	89.3	-16.6	-17.8	-18.3	-22.0	-22.3	-5.4	-23.4	-2.5	-5.5	-7.8
July	-15.6	89.0	-15.9	-16.9	-17.6	-19.8	-23.6	-3.9	-20.7	-1.2	-6.3	-10.3
	month-on-month percentage changes (s.a.)											
2009 Feb.	-2.4	-	-2.5	-2.3	-2.4	-2.1	-3.2	-1.7	-3.5	-1.4	-2.1	-1.7
Mar.	-0.8	-	-1.1	-1.0	-0.7	-1.5	0.1	-0.3	-0.5	-0.2	-4.0	0.6
Apr.	-1.2	-	-1.5	-1.0	-1.5	-1.4	-2.9	-0.1	-0.6	0.1	-1.4	0.0
May	0.1	-	0.7	0.3	0.8	0.7	1.0	0.4	-1.6	0.7	1.8	-2.0
June	-0.3	-	-0.2	-0.3	-0.5	-0.2	-0.6	-0.2	-3.2	0.1	2.3	-0.3
July	-1.1	-	-0.3	-0.2	-0.4	0.4	-2.2	0.4	0.0	0.4	-0.7	-1.7

4. Industrial new orders and turnover, retail sales and new passenger car registrations [1]

	Industrial new orders		Industrial turnover		Retail sales (exluding automotive fuel)							New passenger car registrations	
	Manufacturing [3] (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) [4]	Total
										Textiles, clothing, footwear	Household equipment		
% of total [2]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	42.9	57.1	9.9	13.9		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2006	110.9	10.3	108.3	8.0	3.4	102.4	2.5	1.1	3.6	3.1	5.4	978	3.3
2007	120.3	8.7	115.0	6.5	2.8	104.1	1.6	0.1	2.7	3.5	2.4	970	-0.9
2008	113.6	-5.3	116.9	1.9	1.7	103.3	-0.8	-1.7	-0.3	-1.7	-1.9	893	-7.9
2008 Q3	114.7	-1.3	118.3	4.3	2.1	103.1	-1.1	-1.8	-0.6	-1.0	-2.9	889	-8.7
Q4	95.0	-22.4	107.3	-7.5	-0.3	102.4	-1.7	-2.2	-1.4	-3.1	-2.7	827	-18.5
2009 Q1	84.5	-31.7	95.1	-21.6	-2.6	101.8	-2.5	-3.6	-1.8	-0.3	-6.1	834	-12.6
Q2	84.7	-30.4	93.9	-23.2	-2.7	101.5	-1.7	-1.4	-1.9	-2.0	-5.4	936	4.0
2009 Mar.	84.3	-26.3	94.2	-15.8	-2.7	101.7	-2.2	-3.9	-0.9	1.3	-6.3	865	-5.8
Apr.	84.0	-35.1	94.0	-25.9	-1.8	101.9	-1.2	-0.7	-1.8	-0.1	-5.5	898	-3.7
May	83.3	-30.3	94.3	-23.4	-3.5	101.4	-2.4	-2.1	-2.6	-4.4	-5.9	945	5.7
June	86.6	-25.6	93.4	-20.4	-2.7	101.4	-1.6	-1.4	-1.4	-1.4	-4.7	965	10.0
July	88.6	-24.6	95.0	-20.3	-3.0	101.2	-1.5	-1.7	-1.6	0.6	-3.5	945	6.9
Aug.	.	.	.	.	-2.8	101.0	-2.3	-1.3	-3.2	.	.	955	5.9
	month-on-month percentage changes (s.a.)												
2009 Apr.	-	-0.3	-	-0.3	0.1	-	0.2	1.1	-0.3	-0.7	0.2	-	3.8
May	-	-0.8	-	0.3	-0.6	-	-0.5	-0.6	-0.4	-0.5	-0.5	-	5.2
June	-	4.0	-	-0.9	-0.1	-	0.0	-0.2	0.0	0.7	0.1	-	2.2
July	-	2.2	-	1.7	-0.3	-	-0.2	-0.4	-0.2	1.1	0.1	-	-2.1
Aug.	-	.	-	.	0.2	-	-0.2	0.5	-0.6	.	.	-	1.0

Sources: Eurostat, except columns 12 and 13 in Table 4 in Section 5.2 (ECB calculations based on data from the ACEA, European Automobile Manufacturers' Association).
1) Data refer to Euro 16.
2) In 2005.
3) Includes manufacturing industries working mainly on the basis of orders, representing 61.2% of total manufacturing in 2005.
4) 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: Industrial confidence indicator: Total [4]	Order books	Stocks of finished products	Production expectations	Capacity utilisation [3] (percentages)	Consumer confidence indicator: 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
2005	98.2	-7	-16	11	6	81.1	-14	-4	-15	28	-9
2006	106.9	2	0	6	13	83.1	-9	-3	-9	15	-9
2007	108.9	4	5	5	13	84.1	-5	-2	-4	5	-8
2008	91.1	-9	-15	11	-2	81.8	-18	-10	-25	23	-14
2008 Q3	89.9	-10	-15	12	-2	82.2	-19	-12	-28	23	-14
Q4	75.6	-25	-36	18	-22	78.1	-27	-11	-34	49	-14
2009 Q1	65.7	-36	-56	20	-31	72.5	-33	-11	-41	64	-14
Q2	70.2	-33	-62	18	-21	69.9	-28	-9	-34	59	-11
Q3	79.9	-26	-58	12	-9	.	-21	-5	-20	51	-9
2009 Apr.	67.3	-35	-60	20	-25	70.3	-31	-10	-38	63	-11
May	70.2	-33	-61	18	-21	-	-28	-9	-33	58	-13
June	73.2	-32	-63	16	-16	-	-25	-7	-29	55	-9
July	76.0	-30	-61	14	-13	69.5	-23	-6	-23	53	-10
Aug.	80.8	-25	-56	13	-8	-	-22	-5	-21	53	-9
Sep.	82.8	-24	-56	10	-7	-	-19	-4	-15	48	-10

	Construction confidence indicator: Total [4]	Order books	Employment expectations	Retail trade confidence indicator: Total [4]	Present business situation	Volume of stocks	Expected business situation	Services confidence indicator: Total [4]	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
2005	-7	-12	-2	-7	-12	13	4	11	5	10	18
2006	1	-4	6	1	3	14	13	18	13	18	24
2007	0	-8	7	1	4	15	12	19	16	19	23
2008	-14	-20	-7	-7	-6	16	1	2	-5	4	7
2008 Q3	-14	-21	-7	-9	-9	17	-1	1	-7	3	6
Q4	-23	-31	-16	-15	-16	17	-13	-12	-20	-9	-6
2009 Q1	-31	-36	-26	-19	-21	15	-20	-24	-33	-21	-18
Q2	-34	-42	-25	-17	-23	9	-19	-22	-29	-23	-15
Q3	-32	-41	-22	-14	-19	10	-13	-12	-19	-13	-6
2009 Apr.	-34	-41	-26	-20	-26	11	-22	-24	-32	-22	-19
May	-34	-44	-23	-14	-18	8	-17	-23	-29	-25	-14
June	-33	-42	-24	-17	-24	9	-17	-20	-26	-22	-11
July	-33	-41	-25	-13	-16	10	-14	-18	-24	-19	-9
Aug.	-32	-40	-23	-14	-20	10	-12	-11	-16	-10	-5
Sep.	-31	-42	-19	-15	-21	10	-14	-9	-15	-10	-2

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

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

2) The economic sentiment indicator is composed of the industrial, services, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40%, the services confidence indicator a weight of 30%, the consumer confidence indicator a weight of 20% and the two other indicators a weight of 5% each. Values of the economic sentiment indicator above (below) 100 indicate above-average (below-average) economic sentiment, calculated for the period 1990 to 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]
(annual percentage changes, unless otherwise indicated)

1. Employment

	Whole economy		By employment status		By economic activity					
	Millions (s.a.)		Employees	Self-employed	Agriculture, hunting, forestry and fishing	Mining, manufacturing and energy	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business services	Public administration, education, health and other services
% of total [2]	100.0	100.0	85.2	14.8	3.9	17.1	7.5	25.6	15.9	30.0
	1	2	3	4	5	6	7	8	9	10
2005	141.846	1.0	1.0	0.5	-0.7	-1.1	2.7	0.7	2.5	1.5
2006	144.148	1.6	1.8	0.7	-1.8	-0.3	2.7	1.7	3.9	1.8
2007	146.712	1.8	2.0	0.8	-1.5	0.3	3.9	2.0	4.1	1.2
2008	147.821	0.8	0.9	-0.3	-1.4	-0.2	-2.2	1.3	2.2	1.1
2008 Q2	148.164	1.1	1.3	-0.2	-1.8	0.3	-1.4	1.6	2.6	1.4
Q3	147.743	0.5	0.8	-0.9	-1.7	-0.1	-2.7	0.9	1.8	1.0
Q4	147.304	0.0	0.1	-0.8	-1.0	-1.2	-5.0	0.4	0.7	1.4
2009 Q1	146.215	-1.2	-1.0	-2.3	-2.0	-3.0	-7.1	-1.2	-1.2	1.4
Q2	145.526	-1.8	-1.7	-2.2	-1.9	-4.6	-7.6	-1.9	-1.9	1.4
	quarter-on-quarter percentage changes (s.a.)									
2008 Q2	0.089	0.1	0.2	-0.5	-1.1	-0.1	-0.9	0.1	0.0	0.6
Q3	-0.421	-0.3	-0.2	-0.6	-0.6	-0.6	-2.0	-0.2	0.0	0.1
Q4	-0.439	-0.3	-0.3	-0.4	0.3	-1.0	-2.1	-0.4	-0.4	0.6
2009 Q1	-1.089	-0.7	-0.7	-0.9	-0.7	-1.5	-2.1	-0.8	-0.8	0.1
Q2	-0.689	-0.5	-0.5	-0.5	-0.8	-1.5	-1.5	-0.5	-0.6	0.5

2. Unemployment
(seasonally adjusted)

	Total		By age [3]				By gender [4]			
			Adult		Youth		Male		Female	
	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force
% of total [2]	100.0		77.9		22.1		50.4		49.6	
	1	2	3	4	5	6	7	8	9	10
2005	13.717	9.0	10.674	7.9	3.042	17.5	6.916	8.1	6.801	10.0
2006	12.879	8.3	10.054	7.3	2.825	16.4	6.388	7.5	6.491	9.4
2007	11.661	7.5	9.114	6.6	2.546	14.9	5.731	6.7	5.929	8.5
2008	11.892	7.6	9.267	6.6	2.625	15.4	5.998	6.9	5.894	8.3
2008 Q2	11.595	7.4	9.041	6.4	2.553	15.0	5.776	6.7	5.819	8.2
Q3	11.964	7.6	9.314	6.6	2.649	15.6	6.074	7.0	5.889	8.3
Q4	12.656	8.0	9.844	7.0	2.813	16.6	6.549	7.6	6.108	8.6
2009 Q1	13.850	8.8	10.770	7.6	3.080	18.3	7.319	8.5	6.531	9.2
Q2	14.675	9.3	11.465	8.1	3.210	19.2	7.847	9.1	6.827	9.5
2009 Mar.	14.237	9.0	11.069	7.8	3.168	18.8	7.567	8.7	6.670	9.3
Apr.	14.503	9.2	11.309	8.0	3.194	19.0	7.741	8.9	6.762	9.5
May	14.684	9.3	11.463	8.1	3.221	19.2	7.858	9.1	6.826	9.5
June	14.836	9.4	11.623	8.2	3.214	19.4	7.943	9.2	6.893	9.6
July	15.000	9.5	11.779	8.3	3.221	19.6	8.048	9.3	6.952	9.7
Aug.	15.165	9.6	11.933	8.4	3.233	19.7	8.123	9.4	7.042	9.8

Source: Eurostat.
1) Data refer to Euro 16. Data for employment refer to persons and are based on the ESA 95. Data for unemployment refer to persons and follow ILO recommendations.
2) In 2008.
3) Adult: 25 years of age and over; youth: below 25 years of age; rates are expressed as a percentage of the labour force for the relevant age group.
4) Rates are expressed as a percentage of the labour force for the relevant gender.

GOVERNMENT FINANCE

6.1 Revenue, expenditure and deficit/surplus [1]
(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue										Capital revenue		Memo: fiscal burden [2]
			Direct taxes	Households	Corporations	Indirect taxes	Received by EU institutions	Social contributions	Employers	Employees	Sales		Capital taxes	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	46.5	46.2	12.6	9.6	3.0	13.9	0.6	15.8	8.2	4.8	2.2	0.3	0.3	42.6
2001	45.7	45.5	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	44.1	11.3	8.7	2.5	13.5	0.3	15.5	8.2	4.5	2.1	0.5	0.4	40.8
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	45.4	45.0	12.1	8.9	3.0	13.9	0.3	15.3	8.1	4.5	2.1	0.3	0.3	41.5
2007	45.5	45.2	12.4	9.1	3.1	13.8	0.3	15.1	8.0	4.4	2.1	0.3	0.3	41.7
2008	44.8	44.6	12.2	9.3	2.7	13.3	0.3	15.3	8.1	4.4	2.1	0.2	0.3	41.0

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure				Memo: primary expenditure [3]
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments	Subsidies	Paid by EU institutions		Investment	Capital transfers	Paid by EU institutions	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	46.6	43.8	10.4	4.8	3.9	24.7	21.6	2.0	0.5	2.8	2.5	1.3	0.0	42.7
2001	47.6	43.7	10.3	4.8	3.8	24.8	21.7	1.9	0.5	3.9	2.5	1.4	0.0	43.8
2002	47.7	43.9	10.4	4.9	3.5	25.1	22.2	1.9	0.5	3.8	2.4	1.4	0.0	44.2
2003	48.1	44.1	10.5	5.0	3.3	25.4	22.5	1.9	0.5	3.9	2.5	1.4	0.1	44.8
2004	47.5	43.6	10.4	5.0	3.1	25.1	22.4	1.8	0.5	3.9	2.5	1.5	0.1	44.4
2005	47.3	43.4	10.4	5.0	3.0	25.0	22.3	1.7	0.5	3.9	2.5	1.4	0.0	44.3
2006	46.7	42.8	10.2	5.0	2.9	24.8	22.0	1.7	0.5	3.8	2.5	1.4	0.0	43.7
2007	46.1	42.3	10.0	5.0	3.0	24.4	21.6	1.6	0.4	3.9	2.5	1.3	0.0	43.1
2008	46.7	42.9	10.1	5.1	3.0	24.8	21.9	1.6	0.4	3.8	2.5	1.3	0.0	43.8

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
2000	-0.1	-0.5	-0.1	0.1	0.5	3.8	19.8	10.4	4.8	4.9	1.8	2.2	8.2	11.6
2001	-1.9	-1.7	-0.4	-0.1	0.3	1.9	19.9	10.3	4.8	5.0	1.8	2.1	8.2	11.7
2002	-2.6	-2.1	-0.5	-0.2	0.2	0.9	20.2	10.4	4.9	5.1	1.8	2.1	8.3	12.0
2003	-3.1	-2.4	-0.5	-0.2	0.0	0.2	20.5	10.5	5.0	5.2	1.9	2.1	8.3	12.2
2004	-3.0	-2.5	-0.4	-0.3	0.2	0.2	20.4	10.4	5.0	5.1	1.9	2.1	8.3	12.1
2005	-2.5	-2.2	-0.3	-0.2	0.2	0.4	20.4	10.4	5.0	5.1	1.9	2.2	8.2	12.3
2006	-1.3	-1.4	-0.1	-0.2	0.4	1.6	20.3	10.2	5.0	5.2	1.9	2.1	8.0	12.2
2007	-0.7	-1.2	0.0	0.0	0.5	2.3	20.0	10.0	5.0	5.2	1.9	2.1	7.9	12.1
2008	-1.9	-2.0	-0.2	-0.1	0.4	1.1	20.4	10.1	5.1	5.2	1.9	2.1	8.1	12.3

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
2005	-2.7	-3.3	1.7	-5.1	1.0	-2.9	-4.3	-2.4	0.0	-2.9	-0.3	-1.6	-6.1	-1.4	-2.8	2.8
2006	0.3	-1.5	3.0	-2.8	2.0	-2.3	-3.3	-1.2	1.4	-2.6	0.6	-1.6	-3.9	-1.3	-3.5	4.0
2007	-0.2	-0.2	0.2	-3.6	2.2	-2.7	-1.5	3.4	3.6	-2.2	0.3	-0.5	-2.6	0.5	-1.9	5.2
2008	-1.2	-0.1	-7.1	-5.0	-3.8	-3.4	-2.7	0.9	2.6	-4.7	1.0	-0.4	-2.6	-0.9	-2.2	4.2

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit/surplus.

1) The data refer to the Euro 16. Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions involving the EU budget are included and consolidated. Transactions among Member States' governments are not consolidated.
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
1999	71.9	2.9	14.4	4.3	50.4	48.7	25.4	13.7	9.7	23.2
2000	69.2	2.7	13.2	3.7	49.6	44.1	22.1	12.4	9.7	25.1
2001	68.2	2.8	12.4	4.0	49.0	42.0	20.6	11.1	10.3	26.2
2002	67.9	2.7	11.8	4.6	48.9	40.1	19.4	10.6	10.0	27.9
2003	69.1	2.1	12.4	5.0	49.6	39.4	19.6	11.1	8.7	29.7
2004	69.4	2.2	11.9	5.0	50.4	37.6	18.5	10.8	8.3	31.8
2005	70.0	2.4	11.8	4.7	51.1	35.5	17.2	11.2	7.1	34.5
2006	68.2	2.4	11.4	4.1	50.3	33.8	17.3	9.4	7.1	34.4
2007	66.0	2.2	10.8	4.2	48.8	32.1	16.6	8.6	6.9	33.9
2008	69.3	2.3	10.8	6.7	49.5	32.2	16.9	8.1	7.1	37.1

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		Up to 1 year	Over 1 year and up to 5 years	Over 5 years	Euro or participating currencies [5]	Other currencies
								Variable interest rate					
	1	2	3	4	5	6	7	8	9	10	11	12	13
1999	71.9	60.4	6.0	5.1	0.4	7.3	64.6	7.0	13.5	27.8	30.6	69.9	2.0
2000	69.2	58.1	5.8	4.9	0.4	6.5	62.7	6.3	13.4	27.8	28.0	67.4	1.8
2001	68.2	57.0	6.0	4.7	0.4	7.0	61.2	5.3	13.7	26.6	27.9	66.6	1.5
2002	67.9	56.6	6.2	4.7	0.4	7.6	60.3	5.2	15.5	25.3	27.2	66.7	1.3
2003	69.1	56.9	6.5	5.0	0.6	7.8	61.2	5.0	14.9	26.0	28.2	68.1	0.9
2004	69.4	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	70.0	57.6	6.7	5.2	0.5	7.9	62.1	4.6	14.8	25.5	29.6	69.0	1.0
2006	68.2	55.8	6.5	5.4	0.5	7.4	60.8	4.3	14.4	24.0	29.8	67.6	0.6
2007	66.0	54.0	6.2	5.2	0.5	7.4	58.5	4.3	14.1	22.5	29.3	65.6	0.4
2008	69.3	57.2	6.6	5.2	0.4	10.2	59.2	4.5	17.5	22.1	29.7	68.8	0.5

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
2005	92.2	67.8	27.5	98.8	43.0	66.4	105.8	69.1	6.1	69.8	51.8	63.7	63.6	27.0	34.2	41.4
2006	87.9	67.6	24.9	95.9	39.6	63.7	106.5	64.6	6.7	63.7	47.4	62.0	64.7	26.7	30.4	39.2
2007	84.0	65.1	25.0	94.8	36.2	63.8	103.5	59.4	6.9	62.1	45.6	59.4	63.5	23.4	29.4	35.1
2008	89.6	65.9	43.2	97.6	39.5	68.0	105.8	49.1	14.7	64.1	58.2	62.5	66.4	22.8	27.6	33.4

Sources: ECB for euro area aggregated data; European Commission for data relating to countries’ debt.
1) The data refer to the Euro 16. Gross general government debt at nominal value and consolidated between sub-sectors of government. Holdings by non-resident governments are not consolidated. Data are partially estimated.
2) Holders resident in the country whose government has issued the debt.
3) Includes residents of euro area countries other than the country whose government has issued the debt.
4) Excludes debt held by general government in the country whose government has issued it.
5) Before 1999, this comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.

6.3 Change in debt [1]
(as a percentage of GDP)

1. Euro area − by source, financial instrument and sector of the holder

	Total	Source of change			Financial instruments				Holders			
		Borrowing requirement [2]	Valuation effects [3]	Other changes in volume [4]	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
2000	1.1	1.1	0.0	-0.1	0.0	-0.5	-0.3	1.9	-2.1	-2.0	-0.6	3.1
2001	1.9	1.9	-0.1	0.1	0.2	-0.3	0.5	1.5	-0.3	-0.5	-0.8	2.2
2002	2.1	2.7	-0.5	-0.1	0.0	-0.2	0.7	1.6	-0.5	-0.5	-0.1	2.6
2003	3.1	3.3	-0.2	0.0	-0.6	0.9	0.6	2.1	0.5	0.7	0.8	2.6
2004	3.1	3.2	-0.1	0.0	0.2	0.1	0.1	2.7	-0.2	-0.3	0.1	3.3
2005	3.0	3.0	0.0	0.0	0.3	0.3	-0.1	2.6	-0.8	-0.6	0.8	3.8
2006	1.5	1.4	0.1	0.0	0.2	0.2	-0.4	1.5	0.0	0.9	-1.2	1.5
2007	1.1	1.1	0.0	0.0	-0.1	-0.1	0.3	1.0	-0.1	0.2	-0.4	1.2
2008	5.3	5.2	0.1	0.0	0.1	0.4	2.6	2.2	1.1	0.8	-0.2	4.2

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				Exchange rate effects		
									Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	1.1	-0.1	1.0	1.0	0.7	0.1	0.2	0.0	-0.4	0.2	0.0	0.1	-0.1	0.1
2001	1.9	-1.9	0.0	-0.5	-0.6	0.1	0.1	-0.1	-0.3	0.1	-0.1	0.0	0.1	0.6
2002	2.1	-2.6	-0.5	0.1	0.1	0.0	0.0	-0.1	-0.4	0.1	-0.5	-0.1	-0.1	0.0
2003	3.1	-3.1	0.0	0.1	0.1	0.0	0.0	0.1	-0.2	0.1	-0.2	-0.1	0.0	0.1
2004	3.1	-3.0	0.2	0.2	0.2	0.0	0.1	0.0	-0.5	0.2	-0.1	0.0	0.0	0.1
2005	3.0	-2.5	0.5	0.6	0.3	0.1	0.1	0.1	-0.3	0.2	0.0	0.0	0.0	-0.1
2006	1.5	-1.3	0.2	0.3	0.3	-0.1	0.3	-0.2	-0.4	0.1	0.1	0.0	0.0	-0.1
2007	1.1	-0.7	0.4	0.5	0.2	0.0	0.3	0.0	-0.3	0.1	0.0	0.0	0.0	-0.1
2008	5.3	-1.9	3.4	3.1	0.8	0.9	0.7	0.8	-0.1	0.7	0.1	0.0	0.0	0.1

Source: ECB.

1) The data refer to the Euro 16 and are partially estimated. Annual change in gross nominal consolidated debt is expressed as a percentage of GDP, i.e. [debt(t) - debt(t-1)] ÷ GDP(t).
2) The borrowing requirement is by definition equal to transactions in debt.
3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
4) Includes, in particular, the impact of the reclassification of units and certain types of debt assumption.
5) Holders resident in the country whose government has issued the debt.
6) Includes residents of euro area countries other than the country whose government has issued the debt.
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: 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 Q1	42.0	41.5	9.8	12.9	15.5	1.7	0.7	0.5	0.2	38.5
Q2	45.8	44.4	11.9	12.8	15.7	2.0	1.4	1.4	1.2	41.5
Q3	42.7	42.2	10.8	12.6	15.5	1.9	0.6	0.5	0.2	39.1
Q4	49.2	48.2	13.1	14.1	16.2	2.9	0.8	1.0	0.3	43.7
2004 Q1	41.4	40.9	9.6	12.9	15.3	1.7	0.6	0.4	0.3	38.1
Q2	44.8	44.0	12.0	12.9	15.3	2.0	1.1	0.8	0.6	40.8
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	41.9	41.4	9.9	13.0	15.2	1.7	0.6	0.5	0.3	38.4
Q2	44.4	43.8	11.7	13.2	15.1	2.0	1.1	0.6	0.3	40.2
Q3	43.4	42.7	11.0	13.0	15.2	1.9	0.7	0.7	0.3	39.5
Q4	49.1	48.3	13.4	14.2	16.1	2.9	0.8	0.8	0.3	43.9
2006 Q1	42.4	42.0	10.2	13.4	15.1	1.6	0.8	0.4	0.3	39.0
Q2	45.5	45.0	12.4	13.5	15.1	1.9	1.3	0.5	0.3	41.2
Q3	43.8	43.2	11.5	13.0	15.2	2.0	0.8	0.5	0.3	39.9
Q4	49.4	48.8	14.0	14.2	15.8	2.9	0.9	0.6	0.3	44.4
2007 Q1	42.2	41.8	10.3	13.5	14.8	1.7	0.8	0.4	0.3	38.8
Q2	45.8	45.4	12.8	13.4	15.0	1.9	1.5	0.4	0.3	41.5
Q3	43.7	43.2	12.0	12.8	14.9	1.9	0.8	0.5	0.3	40.0
Q4	49.7	49.2	14.4	14.2	15.8	3.0	0.9	0.5	0.3	44.7
2008 Q1	42.0	41.7	10.6	12.9	14.8	1.7	0.9	0.3	0.2	38.6
Q2	45.0	44.6	12.8	12.8	15.0	1.8	1.5	0.4	0.3	40.8
Q3	43.0	42.7	11.7	12.4	15.0	1.9	0.8	0.3	0.3	39.5
Q4	48.8	48.3	13.6	13.6	16.2	3.0	1.1	0.5	0.3	43.7
2009 Q1	42.3	42.1	10.6	12.6	15.4	1.8	1.0	0.2	0.2	38.8

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				Investment	Capital transfers		
							Social benefits	Subsidies					
	1	2	3	4	5	6	7	8	9	10	11	12	13
2003 Q1	46.9	43.3	10.3	4.6	3.5	24.9	21.3	1.3	3.5	1.9	1.6	-4.9	-1.3
Q2	47.1	43.6	10.4	4.7	3.4	25.1	21.6	1.3	3.5	2.3	1.2	-1.3	2.1
Q3	47.1	43.4	10.2	4.8	3.3	25.1	21.6	1.3	3.7	2.5	1.2	-4.4	-1.1
Q4	51.1	46.3	11.1	5.6	3.1	26.5	23.0	1.5	4.8	3.3	1.6	-1.9	1.2
2004 Q1	46.4	43.0	10.3	4.7	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	4.7	3.3	24.8	21.5	1.3	3.4	2.3	1.1	-1.8	1.5
Q3	46.0	42.7	9.9	4.8	3.1	24.8	21.4	1.3	3.4	2.4	1.0	-3.3	-0.2
Q4	50.8	45.6	11.0	5.7	2.9	26.1	22.6	1.4	5.2	3.1	2.1	-1.9	1.0
2005 Q1	46.8	43.1	10.2	4.6	3.1	25.1	21.3	1.2	3.7	1.9	1.8	-4.9	-1.8
Q2	46.1	42.7	10.2	4.8	3.2	24.5	21.4	1.1	3.4	2.3	1.1	-1.7	1.5
Q3	45.8	42.3	9.9	4.9	3.0	24.6	21.2	1.2	3.4	2.5	1.0	-2.4	0.6
Q4	50.5	45.7	11.1	5.8	2.7	26.0	22.5	1.3	4.8	3.1	1.7	-1.4	1.3
2006 Q1	45.2	42.1	10.0	4.6	2.9	24.5	21.0	1.2	3.1	1.9	1.2	-2.8	0.1
Q2	45.4	42.2	10.2	4.8	3.1	24.1	21.1	1.1	3.2	2.3	1.0	0.1	3.1
Q3	45.3	41.9	9.8	4.8	2.9	24.4	21.1	1.2	3.4	2.5	1.0	-1.6	1.4
Q4	50.3	45.0	10.7	5.7	2.7	25.9	22.2	1.4	5.3	3.2	2.2	-0.9	1.8
2007 Q1	44.3	41.1	9.8	4.6	2.9	23.8	20.3	1.2	3.2	2.0	1.2	-2.1	0.8
Q2	44.6	41.4	9.9	4.7	3.2	23.6	20.6	1.1	3.2	2.3	0.9	1.2	4.3
Q3	44.9	41.2	9.5	4.8	3.0	23.9	20.7	1.2	3.7	2.5	1.2	-1.3	1.7
Q4	50.2	45.1	10.6	5.7	2.8	26.0	22.2	1.5	5.1	3.3	1.8	-0.5	2.3
2008 Q1	44.5	41.4	9.7	4.6	2.9	24.1	20.4	1.2	3.2	2.0	1.2	-2.5	0.4
Q2	45.1	41.7	10.0	4.8	3.1	23.7	20.6	1.1	3.3	2.3	1.0	-0.1	3.1
Q3	45.2	41.8	9.6	4.9	3.0	24.2	21.0	1.2	3.5	2.5	1.0	-2.2	0.8
Q4	51.6	46.5	11.0	5.9	2.8	26.8	22.9	1.4	5.1	3.3	1.8	-2.8	0.0
2009 Q1	47.9	44.5	10.5	5.0	3.0	26.0	22.2	1.3	3.4	2.1	1.2	-5.6	-2.6

Source: ECB calculations based on Eurostat and national data.

1) The data refer to the Euro 16. Revenue, expenditure and deficit/surplus are based on the ESA 95. Transactions between the EU budget and entities outside the government sector are not included. Otherwise, and except for different data transmission deadlines, the quarterly data are consistent with the annual data. The data are not seasonally adjusted.

2) The fiscal burden comprises taxes and social contributions.

6.5 Quarterly debt and change in debt [1)]
(as a percentage of GDP)

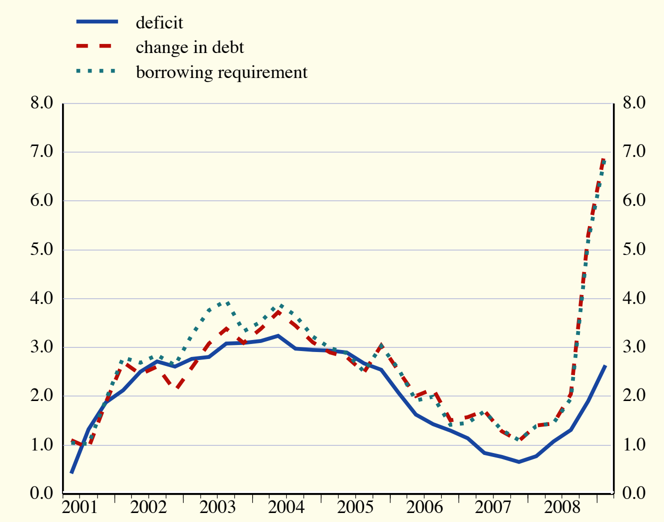
1. Euro area – Maastricht debt by financial instrument [2)]

	Total	Financial instruments			
		Currency and deposits	Loans	Short-term securities	Long-term securities
	1	2	3	4	5
2006 Q2	70.4	2.5	11.6	4.9	51.4
Q3	69.9	2.5	11.6	4.7	51.1
Q4	68.2	2.4	11.4	4.1	50.3
2007 Q1	68.5	2.4	11.4	4.8	49.9
Q2	68.6	2.2	11.2	5.1	50.3
Q3	67.7	2.1	11.0	5.1	49.4
Q4	66.0	2.2	10.8	4.2	48.8
2008 Q1	66.8	2.1	11.0	5.0	48.8
Q2	67.1	2.1	11.0	4.9	49.1
Q3	67.1	2.1	10.8	5.5	48.6
Q4	69.3	2.3	10.8	6.7	49.5
2009 Q1	73.1	2.3	10.9	7.9	52.0

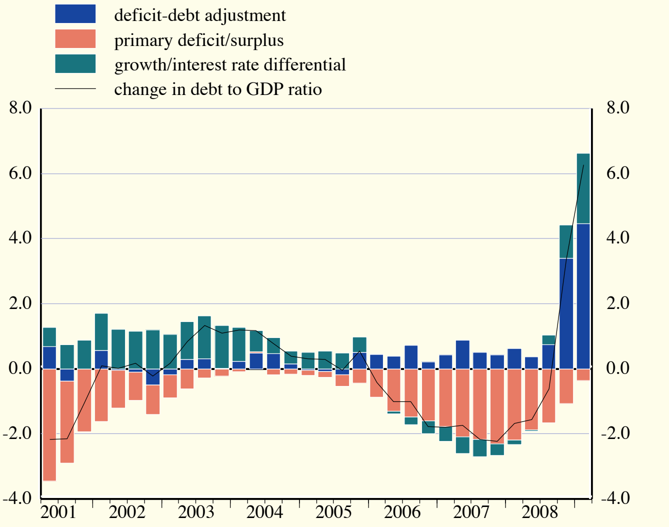
2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-)/ surplus (+)	Deficit-debt adjustment								Memo: Borrowing requirement
			Total	Transactions in main financial assets held by general government					Valuation effects and other changes in volume	Other	
				Total	Currency and deposits	Loans	Securities	Shares and other equity			
	1	2	3	4	5	6	7	8	9	10	11
2006 Q2	3.2	0.1	3.3	3.3	2.6	0.1	0.4	0.1	0.6	-0.6	2.6
Q3	1.2	-1.6	-0.4	-0.9	-0.7	-0.2	0.2	-0.2	0.3	0.3	0.9
Q4	-2.9	-0.9	-3.8	-2.4	-1.5	-0.5	-0.2	-0.2	-0.2	-1.3	-2.8
2007 Q1	4.9	-2.1	2.8	1.9	1.0	0.0	0.7	0.2	-0.2	1.1	5.2
Q2	3.7	1.2	4.9	4.9	4.0	0.0	0.6	0.3	0.2	-0.2	3.5
Q3	-0.5	-1.3	-1.7	-1.7	-2.1	0.1	0.4	-0.1	0.1	-0.1	-0.6
Q4	-3.5	-0.5	-4.0	-2.9	-2.0	-0.1	-0.6	-0.3	-0.1	-0.9	-3.4
2008 Q1	6.0	-2.5	3.5	3.2	2.0	-0.1	0.9	0.4	-0.1	0.4	6.2
Q2	3.7	-0.1	3.6	3.6	2.0	0.2	1.1	0.2	0.1	0.0	3.6
Q3	2.0	-2.2	-0.2	-1.0	-1.6	-0.1	0.1	0.7	0.5	0.3	1.5
Q4	9.3	-2.8	6.5	6.6	0.6	3.4	0.8	1.8	0.0	-0.2	9.3
2009 Q1	13.5	-5.6	8.0	6.9	4.9	1.5	-0.2	0.7	-0.1	1.1	13.6

C29 Deficit, borrowing requirement and change in debt
(four-quarter moving sum as a percentage of GDP)



C30 Maastricht debt
(annual change in the debt to GDP ratio and underlying factors)



Source: ECB calculations based on Eurostat and national data.
1) The data refer to the Euro 16.
2) The stock data in quarter t are expressed as a percentage of the sum of GDP in t and the previous three quarters.

7 EXTERNAL TRANSACTIONS AND POSITIONS

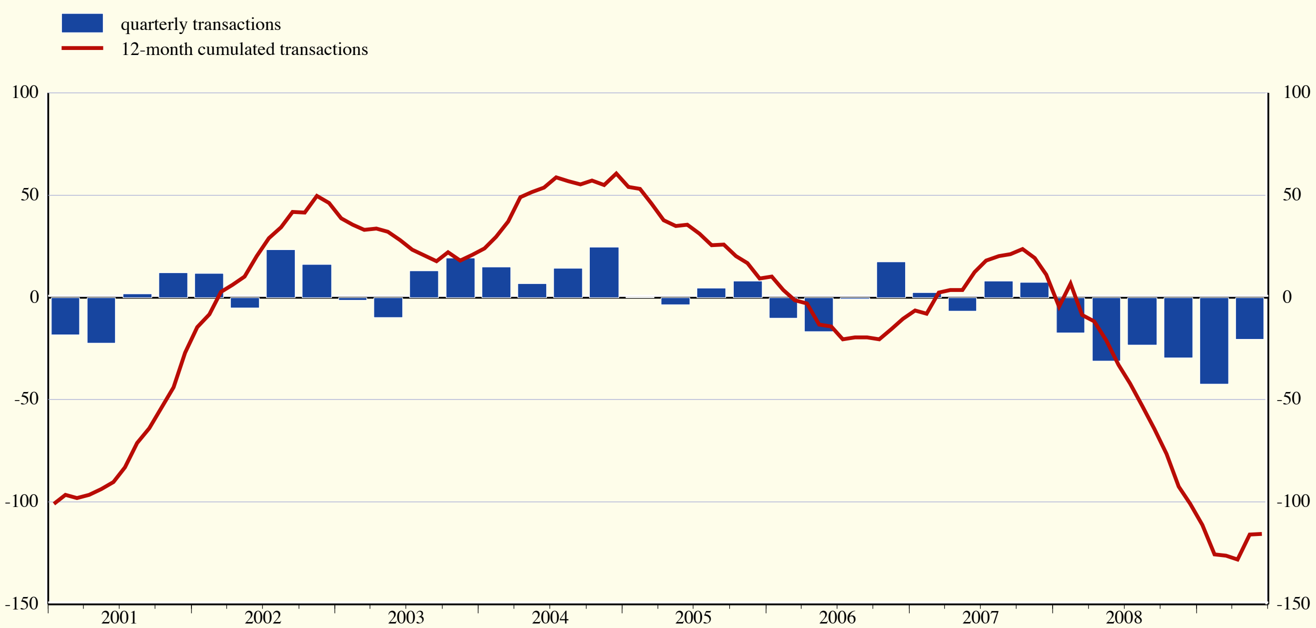
7.1 Summary balance of payments [1]

(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
2006	-10.5	12.3	43.3	13.6	-79.7	9.2	-1.2	141.4	-157.6	293.7	3.3	2.9	-0.9	-140.2
2007	11.1	46.4	49.2	1.4	-85.9	13.7	24.8	41.2	-92.5	159.7	-67.0	46.0	-5.1	-66.0
2008	-101.0	-6.0	42.8	-41.3	-96.4	12.0	-89.0	303.3	-242.3	441.5	-56.7	164.6	-3.9	-214.3
2008 Q2	-31.1	6.1	13.1	-32.0	-18.3	3.1	-28.0	79.7	-53.4	27.3	-8.9	114.8	0.0	-51.7
Q3	-23.1	-9.0	13.4	-3.0	-24.6	1.9	-21.2	61.7	-35.9	121.5	-8.4	-17.2	1.6	-40.4
Q4	-29.5	-0.6	6.2	-9.8	-25.3	1.0	-28.5	126.3	-77.7	204.2	-16.7	17.0	-0.4	-97.9
2009 Q1	-42.4	-10.3	0.8	-2.6	-30.2	1.5	-40.8	147.9	-38.5	179.4	14.3	-13.0	5.7	-107.0
Q2	-20.5	11.2	9.3	-23.5	-17.5	2.5	-18.0	16.7	-8.9	94.0	28.2	-94.1	-2.5	1.3
2008 July	-4.1	0.4	4.3	-0.6	-8.2	0.9	-3.2	48.5	-1.6	29.1	-0.1	23.4	-2.3	-45.3
Aug.	-11.5	-7.1	5.0	-1.1	-8.2	0.5	-10.9	0.4	-11.8	19.3	-8.3	-1.1	2.3	10.6
Sep.	-7.5	-2.3	4.1	-1.2	-8.2	0.5	-7.1	12.8	-22.5	73.1	0.1	-39.5	1.6	-5.7
Oct.	-8.1	3.9	1.5	-2.7	-10.9	-0.1	-8.2	75.0	-12.0	142.6	-3.2	-44.5	-7.9	-66.7
Nov.	-16.0	-4.0	1.4	-4.2	-9.2	1.3	-14.6	15.1	-51.9	53.7	-9.5	23.2	-0.4	-0.5
Dec.	-5.3	-0.5	3.3	-2.9	-5.2	-0.3	-5.6	36.3	-13.9	7.9	-4.0	38.3	7.9	-30.7
2009 Jan.	-28.4	-13.9	0.2	-3.5	-11.2	0.2	-28.3	45.4	-9.4	2.3	7.2	39.9	5.3	-17.2
Feb.	-7.0	0.3	0.5	-1.7	-6.2	0.5	-6.5	34.5	-8.5	81.4	2.9	-42.5	1.2	-28.0
Mar.	-7.0	3.3	0.0	2.6	-12.9	0.9	-6.1	68.0	-20.6	95.7	4.2	-10.4	-0.8	-61.9
Apr.	-9.4	3.9	2.3	-7.2	-8.4	2.0	-7.4	-2.5	-4.5	-9.0	7.7	3.1	0.1	9.9
May	-11.9	2.2	3.6	-11.4	-6.2	0.2	-11.6	26.6	4.8	58.0	10.4	-44.4	-2.3	-15.0
June	0.8	5.1	3.4	-4.9	-2.9	0.3	1.0	-7.4	-9.2	44.9	10.1	-52.8	-0.3	6.4
July	8.8	12.6	4.0	-1.1	-6.6	0.6	9.4	-34.1	5.3	-23.0	6.4	-19.4	-3.5	24.7
	12-month cumulated transactions													
2009 July	-102.5	3.5	29.4	-39.4	-96.0	6.6	-95.9	269.9	-154.2	547.0	24.0	-150.1	3.2	-174.0

C31 B.o.p. current account balance

(EUR billions)



Source: ECB.

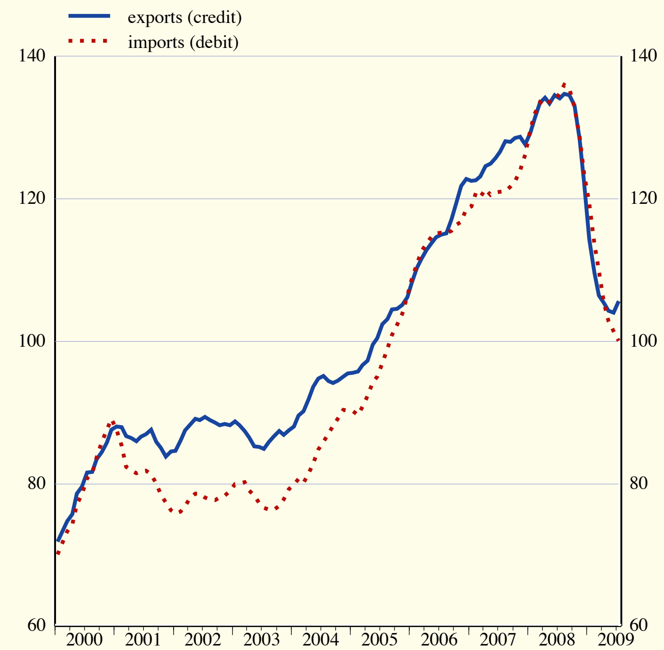
1) The sign convention is explained in the general notes.

7.2 Current and capital accounts
(EUR billions; transactions)

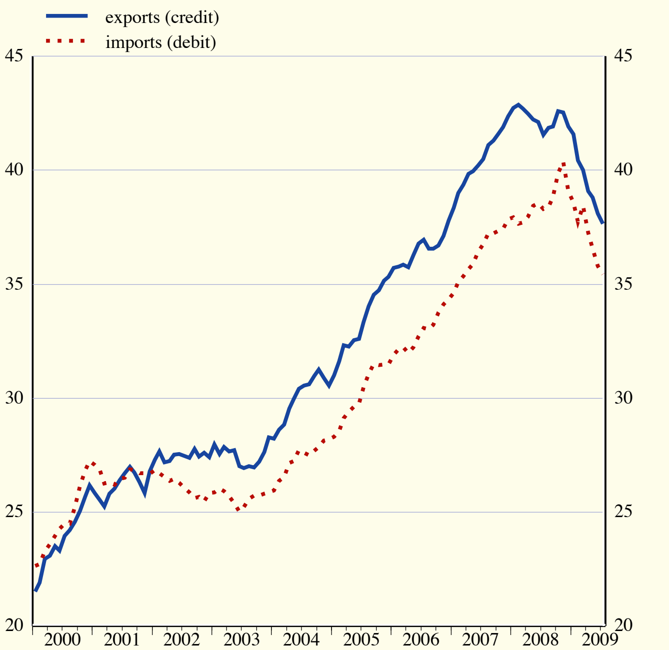
1. Summary current and capital accounts

	Current account													Capital account	
	Total			Goods		Services		Income		Current transfers					
	Credit	Debit	Net	Credit	Debit	Credit	Debit	Credit	Debit	Credit		Debit		Credit	Debit
											Workers remit-tances		Workers remit-tances		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2006	2,423.8	2,434.3	-10.5	1,396.8	1,384.5	440.8	397.5	496.4	482.8	89.8	5.4	169.5	17.4	23.9	14.7
2007	2,686.1	2,675.0	11.1	1,513.7	1,467.3	490.3	441.1	592.3	591.0	89.8	6.4	175.7	20.5	25.9	12.2
2008	2,761.1	2,862.0	-101.0	1,579.5	1,585.5	506.5	463.8	586.0	627.3	89.0	6.7	185.5	21.3	25.7	13.7
2008 Q2	709.2	740.4	-31.1	407.8	401.7	126.1	113.0	153.4	185.3	22.0	1.5	40.3	5.3	7.3	4.1
Q3	696.6	719.8	-23.1	403.1	412.1	136.2	122.8	143.8	146.7	13.5	1.8	38.1	5.4	4.8	2.9
Q4	674.8	704.2	-29.5	378.4	379.0	127.3	121.0	141.7	151.5	27.4	1.8	52.7	5.5	4.7	3.8
2009 Q1	560.0	602.4	-42.4	308.3	318.6	108.9	108.1	117.7	120.3	25.1	1.4	55.4	4.9	4.2	2.6
Q2	563.4	583.9	-20.5	311.0	299.8	113.3	104.0	121.6	145.1	17.5	-	35.0	-	4.8	2.3
2009 May	184.3	196.2	-11.9	99.2	97.1	37.3	33.7	42.0	53.4	5.8	.	12.0	.	0.9	0.7
June	193.3	192.5	0.8	107.6	102.5	39.3	36.0	40.0	44.9	6.3	.	9.2	.	1.1	0.9
July	198.0	189.2	8.8	116.8	104.2	42.3	38.4	34.6	35.7	4.3	.	10.9	.	1.4	0.8
	Seasonally adjusted														
2008 Q2	702.1	718.9	-16.8	403.4	401.6	126.4	115.7	148.4	154.5	23.9	.	47.1	.	.	.
Q3	696.4	719.9	-23.5	403.5	406.4	125.8	116.5	147.8	154.9	19.3	.	42.1	.	.	.
Q4	653.8	697.1	-43.2	366.6	370.4	125.8	117.3	139.0	160.3	22.5	.	49.0	.	.	.
2009 Q1	581.4	625.7	-44.3	319.3	329.7	120.0	115.3	121.6	133.0	20.5	.	47.7	.	.	.
Q2	563.3	573.8	-10.5	312.1	304.2	114.3	107.4	117.9	121.5	19.0	.	40.7	.	.	.
2009 Feb.	194.2	206.9	-12.7	106.9	108.0	39.4	37.8	40.0	45.9	7.9	.	15.1	.	.	.
Mar.	190.1	200.1	-10.0	105.2	106.3	39.2	38.3	39.3	39.1	6.6	.	16.4	.	.	.
Apr.	187.6	193.7	-6.1	104.1	101.7	38.7	35.7	38.6	41.5	6.2	.	14.8	.	.	.
May	190.1	190.2	-0.1	103.5	100.6	38.6	35.6	41.7	39.7	6.4	.	14.3	.	.	.
June	185.6	189.9	-4.3	104.5	102.0	37.1	36.0	37.6	40.3	6.4	.	11.6	.	.	.
July	188.2	181.6	6.6	108.8	97.6	37.3	34.6	35.4	37.1	6.6	.	12.3	.	.	.

C32 B.o.p. goods
(EUR billions, seasonally adjusted; three-month moving average)



C33 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
2006	17.4	9.8	478.9	472.9	182.7	41.4	111.5	36.6	20.6	20.2	39.2	99.1	103.6	91.5	132.9	150.6
2007	18.7	10.2	573.6	580.7	207.0	75.0	130.5	38.6	26.1	24.4	45.5	116.1	117.5	113.2	177.5	196.5
2008	19.1	10.4	566.9	616.8	189.4	61.9	134.5	47.4	29.8	25.5	42.7	124.4	123.7	128.1	181.3	204.3
2008 Q1	4.9	2.0	142.2	141.7	50.1	22.2	31.7	15.9	6.8	6.2	9.7	21.0	30.3	31.4	45.3	51.4
Q2	4.7	2.6	148.7	182.7	52.0	13.3	34.7	4.6	7.5	6.9	14.4	58.5	30.4	31.4	44.4	51.2
Q3	4.6	3.1	139.2	143.6	45.8	18.1	31.9	15.5	7.1	6.1	10.2	23.8	32.0	31.1	44.0	50.7
Q4	4.9	2.7	136.8	148.8	41.5	8.3	36.3	11.4	8.4	6.3	8.4	21.0	31.0	34.1	47.5	51.0
2009 Q1	4.6	2.1	113.1	118.3	38.9	12.9	28.5	17.1	5.2	5.4	7.3	13.5	25.8	33.1	35.8	37.7

3. Geographical breakdown
(cumulated transactions)

2008 Q2 to 2009 Q1	Total	European Union 27 (outside the euro area)						Brazil	Canada	China	India	Japan	Russia	Switzer-land	United States	Other
		Total	Den-mark	Sweden	United Kingdom	Other EU countries	EU insti-tutions									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Credits															
Current account	2,640.6	949.6	57.8	80.4	487.6	267.2	56.5	39.1	34.2	83.1	29.8	54.9	96.1	183.3	383.7	786.8
Goods	1,497.5	509.5	34.7	50.4	217.4	206.9	0.0	21.8	18.0	64.0	22.4	32.3	73.0	90.9	183.2	482.5
Services	498.5	166.8	12.5	13.1	107.1	28.6	5.6	7.5	6.7	14.7	5.6	11.1	13.5	49.3	77.7	145.5
Income	556.6	210.6	9.8	15.4	150.1	28.5	6.7	9.6	8.8	4.0	1.7	11.2	9.2	36.3	115.9	149.3
Investment income	537.8	204.1	9.7	15.2	148.5	27.8	2.9	9.5	8.7	4.0	1.7	11.2	9.1	29.3	114.1	146.0
Current transfers	88.1	62.7	0.8	1.6	12.9	3.2	44.2	0.2	0.7	0.3	0.1	0.4	0.4	6.8	6.9	9.5
Capital account	21.0	17.7	0.1	0.0	1.2	0.2	16.2	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.4	1.1
	Debits															
Current account	2,766.8	870.3	46.6	80.3	419.8	221.2	102.4	-	31.2	-	-	96.7	-	178.2	388.9	-
Goods	1,511.3	412.0	29.7	47.1	164.1	171.1	0.0	26.6	14.0	177.7	20.7	52.7	101.1	79.1	141.9	485.4
Services	465.0	140.6	8.3	11.3	87.7	33.1	0.2	5.6	6.8	11.3	4.6	8.3	9.0	39.6	97.0	142.4
Income	603.9	204.7	7.6	20.7	155.7	12.1	8.6	-	8.6	-	-	35.2	-	53.5	142.0	-
Investment income	593.4	198.6	7.5	20.6	154.2	7.7	8.6	-	8.6	-	-	35.1	-	53.0	141.0	-
Current transfers	186.5	112.9	1.0	1.2	12.4	4.8	93.6	1.5	1.8	2.5	0.7	0.6	0.5	6.0	8.0	52.0
Capital account	13.4	2.5	0.0	0.1	1.2	0.2	1.0	0.2	1.1	0.1	0.2	0.1	0.1	0.6	1.4	7.3
	Net															
Current account	-126.1	79.3	11.3	0.1	67.7	46.1	-45.9	-	3.0	-	-	-41.8	-	5.1	-5.1	-
Goods	-13.8	97.4	5.0	3.3	53.4	35.8	0.0	-4.8	3.9	-113.7	1.7	-20.4	-28.1	11.8	41.3	-2.9
Services	33.5	26.2	4.2	1.8	19.4	-4.5	5.3	1.9	0.0	3.4	1.0	2.8	4.5	9.8	-19.3	3.1
Income	-47.4	5.9	2.3	-5.3	-5.6	16.4	-1.9	-	0.2	-	-	-24.0	-	-17.2	-26.1	-
Investment income	-55.7	5.5	2.2	-5.4	-5.7	20.1	-5.7	-	0.2	-	-	-23.9	-	-23.7	-26.9	-
Current transfers	-98.4	-50.2	-0.2	0.4	0.6	-1.6	-49.4	-1.2	-1.1	-2.2	-0.6	-0.2	-0.1	0.7	-1.1	-42.5
Capital account	7.5	15.2	0.1	-0.1	0.0	0.0	15.2	-0.1	-1.0	-0.1	-0.2	-0.1	0.0	-0.1	0.0	-6.2

Source: ECB.

7.3 Financial account

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

1. Summary financial account

	Total [1]			Total as a % of GDP			Direct investment		Portfolio investment		Net financial derivatives	Other investment		Reserve assets
	Assets	Liabilities	Net	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Outstanding amounts (international investment position)														
2004	8,602.5	9,518.4	-915.9	109.5	121.2	-11.7	2,268.7	2,235.4	3,045.0	4,080.2	-37.4	3,045.2	3,202.9	281.0
2005	10,785.2	11,605.3	-820.2	132.4	142.5	-10.1	2,790.8	2,444.3	3,887.5	5,109.1	-21.4	3,805.8	4,052.0	322.5
2006	12,258.8	13,306.1	-1,047.3	143.3	155.6	-12.2	3,131.7	2,728.7	4,371.5	5,866.5	-20.8	4,448.7	4,711.0	327.7
2007	13,750.6	14,915.4	-1,164.9	152.8	165.8	-12.9	3,526.1	3,091.6	4,653.8	6,340.0	-10.2	5,233.5	5,483.9	347.4
2008 Q4	13,069.7	14,873.5	-1,803.9	141.0	160.5	-19.5	3,742.5	3,223.1	3,723.6	5,985.8	1.2	5,228.2	5,664.6	374.2
2009 Q1	12,776.8	14,762.3	-1,985.5	139.0	160.6	-21.6	3,771.7	3,229.1	3,609.5	6,029.9	-44.8	5,044.7	5,503.3	395.7
Changes to outstanding amounts														
2004	740.8	888.6	-147.8	9.4	11.3	-1.9	99.2	151.2	389.4	494.0	-17.3	295.4	243.4	-25.7
2005	2,182.7	2,086.9	95.7	26.8	25.6	1.2	522.1	209.0	842.5	1,028.9	16.0	760.6	849.1	41.5
2006	1,473.6	1,700.8	-227.1	17.2	19.9	-2.7	340.9	284.3	484.0	757.4	0.6	642.9	659.0	5.2
2007	1,491.8	1,609.3	-117.5	16.6	17.9	-1.3	394.4	362.9	282.3	473.5	10.6	784.7	772.9	19.7
2008 Q4	-859.4	-311.8	-547.6	-36.3	-13.2	-23.1	-34.9	24.4	-557.5	-43.2	-22.0	-248.3	-292.9	3.3
2009 Q1	-292.8	-111.2	-181.6	-13.4	-5.1	-8.3	29.2	6.0	-114.0	44.0	-46.0	-183.6	-161.3	21.6
Transactions														
2005	1,329.2	1,339.4	-10.2	16.3	16.4	-0.1	358.4	152.4	416.2	543.3	17.3	554.9	643.7	-17.7
2006	1,680.0	1,821.4	-141.4	19.6	21.3	-1.7	417.4	259.8	527.6	821.4	-3.3	737.4	740.3	0.9
2007	1,896.7	1,937.9	-41.2	21.1	21.5	-0.5	474.2	381.7	439.5	599.3	67.0	910.9	956.9	5.1
2008	395.2	698.5	-303.3	4.3	7.5	-3.3	348.1	105.8	-20.2	421.4	56.7	6.7	171.4	3.9
2008 Q4	-373.1	-246.8	-126.3	-15.8	-10.4	-5.3	47.6	-30.1	-160.7	43.4	16.7	-277.1	-260.1	0.4
2009 Q1	-246.1	-98.2	-147.9	-11.2	-4.5	-6.7	79.3	40.8	-72.2	107.2	-14.3	-233.2	-246.2	-5.7
Q2	-81.4	-64.7	-16.7	-3.6	-2.9	-0.7	88.9	80.0	10.5	104.5	-28.2	-155.1	-249.2	2.5
2009 Mar.	-122.5	-54.6	-68.0	.	.	.	33.4	12.8	-63.1	32.6	-4.2	-89.6	-100.0	0.8
Apr.	78.7	76.2	2.5	.	.	.	59.2	54.7	-0.6	-9.6	-7.7	28.0	31.1	-0.1
May	-138.5	-111.9	-26.6	.	.	.	14.3	19.0	8.9	66.9	-10.4	-153.5	-197.9	2.3
June	-21.6	-29.0	7.4	.	.	.	15.4	6.2	2.2	47.1	-10.1	-29.5	-82.3	0.3
July	-32.7	-66.8	34.1	.	.	.	11.6	17.0	5.5	-17.5	-6.4	-46.9	-66.3	3.5
Other changes														
2004	-76.9	97.0	-173.9	-1.0	1.2	-2.2	-69.8	61.8	43.6	76.2	-25.8	-11.7	-41.0	-13.3
2005	853.5	747.5	105.9	10.5	9.2	1.3	163.7	56.5	426.3	485.6	-1.4	205.7	205.4	59.2
2006	-206.4	-120.6	-85.7	-2.4	-1.4	-1.0	-76.5	24.5	-43.6	-63.9	3.9	-94.4	-81.3	4.3
2007	-404.9	-328.5	-76.3	-4.5	-3.7	-0.8	-79.7	-18.8	-157.2	-125.8	-56.4	-126.1	-184.0	14.6
Other changes due to exchange rate changes														
2004	-168.8	-96.4	-72.4	-2.1	-1.2	-0.9	-36.0	7.4	-62.3	-50.2	.	-61.2	-53.5	-9.4
2005	369.3	214.4	154.9	4.5	2.6	1.9	86.9	-18.2	136.8	118.1	.	126.9	114.5	18.7
2006	-321.7	-207.9	-113.8	-3.8	-2.4	-1.3	-70.7	11.7	-131.1	-118.0	.	-104.6	-101.5	-15.3
2007	-501.6	-244.1	-257.5	-5.6	-2.7	-2.9	-110.0	27.1	-194.5	-124.1	.	-182.2	-147.1	-14.9
Other changes due to price changes														
2004	102.1	218.6	-116.5	1.3	2.8	-1.5	30.7	25.0	100.3	193.6	-25.8	.	.	-3.1
2005	288.1	327.5	-39.4	3.5	4.0	-0.5	60.7	48.6	186.6	278.9	-1.4	.	.	42.1
2006	297.0	309.5	-12.5	3.5	3.6	-0.1	61.2	39.4	215.7	270.1	3.9	.	.	16.3
2007	156.6	-63.8	220.3	1.7	-0.7	2.4	29.6	12.3	151.7	-76.1	-56.4	.	.	31.6
Other changes due to other adjustments														
2004	-10.3	-25.2	15.0	-0.1	-0.3	0.2	-64.5	29.4	5.6	-67.2	.	49.5	12.5	-0.8
2005	195.5	205.6	-10.2	2.4	2.5	-0.1	16.0	26.1	102.9	88.6	.	78.8	90.9	-2.2
2006	-181.4	-222.3	40.9	-2.1	-2.6	0.5	-67.0	-26.6	-128.2	-216.0	.	10.2	20.3	3.7
2007	-59.5	-20.7	-38.9	-0.7	-0.2	-0.4	0.6	-58.2	-114.3	74.4	.	56.0	-36.8	-1.9
Growth rates of outstanding amounts														
2004	10.3	9.1	-	.	.	.	7.8	4.2	12.8	11.5	.	11.1	9.5	-4.1
2005	14.9	13.7	-	.	.	.	15.2	6.8	13.1	12.8	.	17.6	19.5	-5.8
2006	15.7	15.8	-	.	.	.	15.0	10.6	13.8	16.3	.	19.5	18.4	0.2
2007	15.5	14.5	-	.	.	.	15.2	14.0	10.0	10.1	.	20.5	20.4	1.6
2008 Q4	2.8	4.7	-	.	.	.	10.0	3.4	-0.7	7.0	.	0.1	3.2	1.1
2009 Q1	-3.0	0.1	-	.	.	.	7.2	1.7	-4.0	6.3	.	-9.5	-7.1	-1.9
Q2	-4.2	-1.4	.	.	.	.	8.4	4.5	-6.6	5.3	.	-10.4	-11.4	-1.3

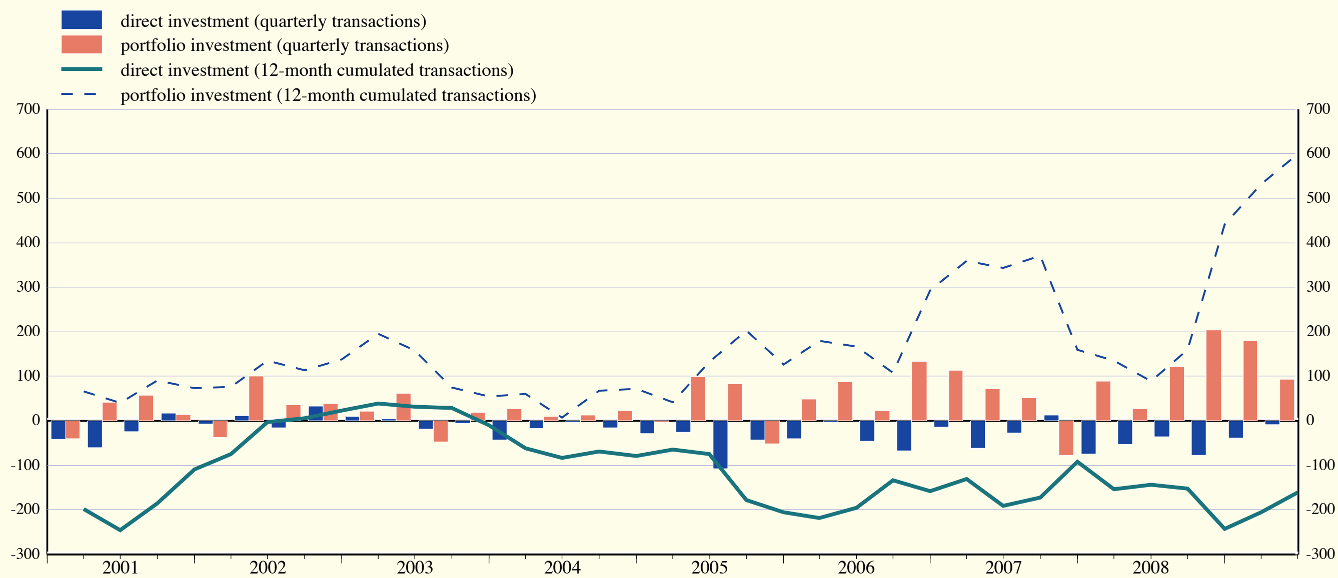
Source: ECB.
1) Net financial derivatives are included in assets.

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

2. Direct investment

	By resident units abroad							By non-resident units in the euro area						
	Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)			Total	Equity capital and reinvested earnings			Other capital (mostly inter-company loans)		
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	into MFIs	into Non-MFIs	Total	to MFIs	to Non-MFIs
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Oustanding amounts (international investment position)													
2006	3,131.7	2,540.4	217.4	2,323.0	591.3	2.2	589.1	2,728.7	2,091.9	65.5	2,026.4	636.8	9.7	627.1
2007	3,526.1	2,844.3	246.4	2,597.9	681.9	6.3	675.6	3,091.6	2,343.9	69.1	2,274.8	747.7	14.9	732.8
2008 Q4	3,742.5	2,951.6	248.7	2,703.0	790.9	6.1	784.7	3,223.1	2,394.4	75.8	2,318.6	828.7	17.1	811.6
2009 Q1	3,771.7	2,953.9	254.8	2,699.0	817.8	12.0	805.8	3,229.1	2,403.7	77.7	2,325.9	825.5	17.3	808.2
	Transactions													
2007	474.2	355.5	24.6	330.9	118.7	-0.1	118.8	381.7	267.4	5.2	262.2	114.3	1.4	112.9
2008	348.1	227.5	14.0	213.5	120.6	-0.2	120.8	105.8	76.9	-1.3	78.2	28.9	1.5	27.4
2008 Q4	47.6	27.9	5.8	22.1	19.7	-0.3	20.0	-30.1	8.6	0.0	8.6	-38.7	-0.2	-38.6
2009 Q1	79.3	36.2	9.1	27.1	43.1	0.9	42.2	40.8	34.7	1.0	33.7	6.1	0.1	5.9
Q2	88.9	66.2	10.2	55.9	22.7	0.6	22.2	80.0	62.3	0.3	62.0	17.7	1.1	16.5
2009 Mar.	33.4	13.1	4.0	9.0	20.4	-1.2	21.6	12.8	13.9	-1.7	15.7	-1.1	-0.2	-1.0
Apr.	59.2	49.7	6.7	43.0	9.5	1.5	7.9	54.7	47.8	0.3	47.5	6.9	0.1	6.8
May	14.3	7.7	0.7	6.9	6.6	0.1	6.5	19.0	5.0	-0.1	5.1	14.1	0.1	14.0
June	15.4	8.7	2.8	6.0	6.7	-1.1	7.7	6.2	9.6	0.1	9.4	-3.4	0.9	-4.3
July	11.6	2.2	3.0	-0.8	9.4	3.3	6.1	17.0	10.0	0.3	9.8	6.9	0.9	6.1
	Growth rates													
2006	15.0	14.6	20.1	14.1	17.1	-2.9	17.2	10.6	12.3	10.2	12.4	5.5	-1.2	5.6
2007	15.2	14.0	11.1	14.3	20.1	-82.4	20.3	14.0	12.8	8.5	12.9	18.0	9.0	18.2
2008 Q4	10.0	8.1	5.7	8.3	17.8	-4.5	18.0	3.4	3.3	-1.9	3.5	3.9	8.4	3.8
2009 Q1	7.2	5.1	6.0	5.0	15.8	-19.9	16.2	1.7	2.9	-0.7	3.0	-1.8	8.3	-2.0
Q2	8.4	6.8	7.0	6.8	14.5	7.8	14.6	4.5	5.8	2.9	5.9	0.7	9.0	0.6

C34 B.o.p. net direct and portfolio investment
(EUR billions)



Source: ECB.

7.3 Financial account

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

3. Portfolio investment assets

	Total	Equity					Debt instruments									
							Bonds and notes					Money market instruments				
		Total	MFIs		Non-MFIs		Total	MFIs		Non-MFIs		Total	MFIs		Non-MFIs	
				Euro-system		General government			Euro-system		General government			Euro-system		General government
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Outstanding amounts (international investment position)															
2006	4,371.5	1,936.2	127.8	2.8	1,808.4	37.0	2,056.0	875.0	13.0	1,181.0	14.1	379.3	311.6	11.1	67.7	0.2
2007	4,653.8	1,984.7	145.2	2.4	1,839.5	44.6	2,231.5	937.4	15.5	1,294.0	16.9	437.7	350.6	33.9	87.1	0.5
2008 Q4	3,723.6	1,144.8	70.6	3.0	1,074.1	28.0	2,134.3	955.1	19.9	1,179.2	17.0	444.5	376.9	61.6	67.6	1.2
2009 Q1	3,609.5	1,053.7	62.2	2.9	991.4	27.9	2,089.4	913.5	17.1	1,175.9	16.1	466.5	389.1	58.9	77.4	1.7
	Transactions															
2007	439.5	79.5	36.0	-0.4	43.6	5.5	282.5	153.6	3.8	128.9	2.0	77.5	68.5	25.0	9.0	0.3
2008	-20.2	-113.2	-55.4	0.6	-57.8	-0.5	88.6	48.2	10.3	40.4	2.4	4.4	21.8	21.2	-17.4	0.3
2008 Q4	-160.7	-49.9	-4.0	0.4	-45.8	-1.3	-62.1	-16.7	-1.1	-45.4	-0.5	-48.8	-22.1	-5.1	-26.7	0.2
2009 Q1	-72.2	-34.4	-7.9	0.0	-26.6	0.2	-57.4	-40.5	-2.4	-16.9	-1.2	19.7	13.4	-0.5	6.3	0.4
Q2	10.5	5.3	1.2	0.0	4.1	-	8.0	-14.8	3.5	22.8	-	-2.9	-0.4	-6.6	-2.5	-
2009 Mar.	-63.1	-18.4	-5.3	0.0	-13.2	.	-38.9	-32.8	-1.4	-6.1	.	-5.7	-6.6	-0.1	0.9	.
Apr.	-0.6	-2.5	0.1	-0.1	-2.6	.	6.9	-6.6	0.6	13.5	.	-5.1	0.3	1.3	-5.4	.
May	8.9	3.0	1.2	0.0	1.8	.	-0.1	-9.9	-0.2	9.8	.	6.0	2.2	-1.9	3.9	.
June	2.2	4.8	-0.1	0.0	4.9	.	1.3	1.7	3.1	-0.5	.	-3.9	-2.9	-6.1	-1.0	.
July	5.5	3.6	0.9	0.0	2.7	.	6.2	-11.7	0.7	17.9	.	-4.3	1.4	0.8	-5.7	.
	Growth rates															
2006	13.8	9.0	17.5	0.9	8.4	22.1	17.1	24.1	15.8	12.5	9.0	21.3	22.2	220.7	20.4	-27.3
2007	10.0	4.0	29.0	-13.1	2.3	14.4	13.8	17.8	30.1	10.8	14.0	20.8	22.5	225.0	13.0	173.4
2008 Q4	-0.7	-6.6	-37.8	26.0	-3.9	-1.3	4.0	5.1	48.9	3.2	14.6	0.7	6.1	82.5	-22.2	52.8
2009 Q1	-4.0	-7.3	-23.2	19.1	-6.1	0.8	-0.4	-2.3	7.9	1.1	4.3	-10.1	-5.9	51.3	-27.8	74.6
Q2	-6.6	-8.6	-17.6	15.0	-8.0	-	-4.1	-7.5	0.2	-1.5	-	-12.2	-10.2	-21.6	-22.0	-

4. Portfolio investment liabilities

	Total	Equity			Debt instruments							
					Bonds and notes				Money market instruments			
		Total	MFIs	Non-MFIs	Total	MFIs	Non-MFIs		Total	MFIs	Non-MFIs	
								General government				General government
	1	2	3	4	5	6	7	8	9	10	11	12
	Outstanding amounts (international investment position)											
2006	5,866.5	2,910.8	657.6	2,253.2	2,656.9	953.8	1,705.5	1,019.2	298.8	125.7	173.2	138.0
2007	6,340.0	3,103.1	754.7	2,348.3	2,917.3	1,128.0	1,789.3	1,113.4	319.6	153.4	166.1	142.5
2008 Q4	5,985.8	2,135.2	574.2	1,561.0	3,255.2	1,148.8	2,106.4	1,374.1	595.4	172.4	423.0	355.9
2009 Q1	6,029.9	2,065.0	593.5	1,471.5	3,337.3	1,139.0	2,198.3	1,437.6	627.6	169.8	457.9	405.3
	Transactions											
2007	599.3	127.6	76.7	50.6	433.0	229.7	203.4	148.6	38.6	41.1	-2.6	8.1
2008	421.4	-73.5	94.8	-168.6	274.7	42.3	232.6	205.5	220.2	-6.3	226.4	199.2
2008 Q4	43.4	-42.4	19.2	-61.9	-20.0	-44.8	24.7	40.8	105.8	-10.5	116.3	109.1
2009 Q1	107.2	-10.9	4.3	-15.3	82.1	-13.7	95.8	65.4	36.0	1.2	34.8	51.1
Q2	104.5	-5.2	-11.7	6.5	95.7	33.0	62.6	-	14.0	-12.2	26.1	-
2009 Mar.	32.6	24.3	.	.	15.2	.	.	.	-6.9	.	.	.
Apr.	-9.6	-21.9	.	.	-15.4	.	.	.	27.7	.	.	.
May	66.9	11.5	.	.	55.9	.	.	.	-0.5	.	.	.
June	47.1	5.3	.	.	55.1	.	.	.	-13.2	.	.	.
July	-17.5	22.5	.	.	-60.4	.	.	.	20.4	.	.	.
	Growth rates											
2006	16.3	12.1	17.5	10.6	22.9	25.9	21.2	15.2	1.5	21.5	-10.0	-11.2
2007	10.1	4.4	11.4	2.3	16.3	24.3	11.9	14.6	12.7	33.7	-0.2	6.6
2008 Q4	7.0	-3.2	13.0	-8.7	9.6	3.8	13.1	18.9	65.6	-3.5	135.5	144.6
2009 Q1	6.3	-5.6	3.8	-9.1	9.6	0.9	14.6	17.6	65.3	-5.9	133.9	135.0
Q2	5.3	-5.2	-0.6	-7.1	7.0	-1.4	11.9	-	58.7	-14.2	122.8	-

Source: ECB.

7.3 Financial account

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

5. Other investment assets

	Total	Eurosystem: Total	Eurosystem: Loans/currency and deposits	Eurosystem: Other assets	MFIs (excluding Eurosystem): Total	MFIs (excluding Eurosystem): Loans/currency and deposits	MFIs (excluding Eurosystem): Other assets	General government	General government: Trade credits	General government: Loans/currency and deposits	General government: Loans/currency and deposits: Currency and deposits	Other sectors	Other sectors: Trade credits	Other sectors: Loans/currency and deposits	Other sectors: Loans/currency and deposits: Currency and deposits
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Outstanding amounts (international investment position)														
2006	4,448.7	14.1	12.7	1.4	2,937.6	2,874.9	62.8	120.0	14.2	58.2	15.4	1,377.1	187.9	1,062.1	395.6
2007	5,233.5	39.1	37.7	1.4	3,342.5	3,271.4	71.1	107.1	12.7	48.1	13.5	1,744.8	191.1	1,387.7	441.7
2008 Q4	5,228.2	28.8	27.7	1.0	3,273.9	3,214.9	59.0	101.2	12.0	41.2	7.2	1,824.3	189.2	1,409.7	443.7
2009 Q1	5,044.7	21.7	21.4	0.3	3,093.8	3,037.2	56.6	106.7	12.0	45.4	14.5	1,822.5	176.9	1,416.2	446.2
	Transactions														
2007	910.9	22.0	22.0	0.0	548.3	541.0	7.3	-7.6	-1.4	-7.2	-2.0	348.3	13.7	292.7	38.7
2008	6.7	-9.0	-9.0	0.0	-44.7	-60.0	15.3	-6.6	-1.1	-6.7	-5.9	67.0	9.3	-1.2	-44.8
2008 Q4	-277.1	-6.9	-7.0	0.0	-240.9	-250.8	10.0	0.0	-0.3	1.0	-1.9	-29.3	-9.5	-19.0	-3.7
2009 Q1	-233.2	-8.2	-8.2	0.0	-222.1	-220.3	-1.8	6.5	0.0	5.8	9.1	-9.4	-8.6	-1.1	-1.7
Q2	-155.1	7.0	-	-	-81.8	-	-	-4.3	-	-	-5.3	-75.9	-	-	-23.5
2009 Mar.	-89.6	-2.2	.	.	-90.0	.	.	0.8	.	.	0.8	1.9	.	.	4.0
Apr.	28.0	1.6	.	.	39.6	.	.	-9.9	.	.	-10.2	-3.4	.	.	-7.3
May	-153.5	0.0	.	.	-64.6	.	.	3.8	.	.	3.7	-92.8	.	.	-21.2
June	-29.5	5.3	.	.	-56.9	.	.	1.8	.	.	1.2	20.3	.	.	4.9
July	-46.9	-2.2	.	.	-37.2	.	.	-4.5	.	.	-4.4	-3.1	.	.	-7.5
	Growth rates														
2006	19.5	-37.6	-40.0	1.6	21.1	21.3	10.7	-5.5	-26.1	-4.3	24.5	20.0	3.4	24.5	8.5
2007	20.5	157.3	173.8	-1.7	18.8	18.9	11.5	-6.4	-9.7	-12.4	-13.1	25.2	7.4	27.3	9.8
2008 Q4	0.1	-26.4	-27.1	5.0	-1.3	-1.8	21.7	-6.2	-8.6	-14.1	-45.7	3.8	4.8	-0.1	-10.6
2009 Q1	-9.5	-57.3	-58.7	6.0	-13.6	-14.1	11.2	4.6	-6.4	9.0	35.9	-0.9	-2.9	-3.1	-14.2
Q2	-10.4	-28.7	-	-	-13.4	-	-	-5.5	-	-	-42.6	-4.6	-	-	-6.9

6. Other investment liabilities

	Total	Eurosystem: Total	Eurosystem: Loans/currency and deposits	Eurosystem: Other liabilities	MFIs (excluding Eurosystem): Total	MFIs (excluding Eurosystem): Loans/currency and deposits	MFIs (excluding Eurosystem): Other liabilities	General government: Total	General government: Trade credits	General government: Loans	General government: Other liabilities	Other sectors: Total	Other sectors: Trade credits	Other sectors: Loans	Other sectors: Other liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Outstanding amounts (international investment position)														
2006	4,711.0	116.3	116.1	0.2	3,484.8	3,430.4	54.5	51.6	0.0	47.5	4.1	1,058.2	146.8	819.6	91.7
2007	5,483.9	201.7	201.4	0.2	3,938.7	3,871.7	67.0	51.8	0.0	46.6	5.2	1,291.7	158.4	1,024.1	109.3
2008 Q4	5,664.6	481.5	481.2	0.3	3,762.9	3,704.2	58.6	61.7	0.0	57.7	3.9	1,358.6	166.4	1,076.7	115.5
2009 Q1	5,503.3	404.0	400.9	3.2	3,708.6	3,650.0	58.6	58.6	0.0	55.2	3.4	1,332.1	161.0	1,057.1	114.0
	Transactions														
2007	956.9	91.4	91.4	0.0	635.2	630.4	4.8	-0.9	0.0	-1.8	0.9	231.3	9.9	224.4	-3.0
2008	171.4	280.0	280.0	0.1	-181.4	-192.3	10.9	9.5	0.0	10.9	-1.4	63.2	6.3	57.5	-0.5
2008 Q4	-260.1	110.6	110.7	-0.1	-411.7	-418.0	6.3	9.0	0.0	8.6	0.4	32.0	-3.9	29.0	6.8
2009 Q1	-246.2	-81.5	-84.4	2.9	-112.1	-110.8	-1.3	-2.1	0.0	-0.9	-1.2	-50.5	-8.8	-37.1	-4.7
Q2	-249.2	-89.3	-	-	-81.4	-	-	-3.0	-	-	-	-75.4	-	-	-
2009 Mar.	-100.0	5.6	.	.	-114.2	.	.	1.1	.	.	.	7.5	.	.	.
Apr.	31.1	-28.9	.	.	37.8	.	.	-0.6	.	.	.	22.8	.	.	.
May	-197.9	-20.2	.	.	-66.7	.	.	0.1	.	.	.	-111.2	.	.	.
June	-82.3	-40.2	.	.	-52.5	.	.	-2.6	.	.	.	13.0	.	.	.
July	-66.3	-15.7	.	.	-30.8	.	.	-0.2	.	.	.	-19.7	.	.	.
	Growth rates														
2006	18.4	22.4	22.4	5.7	16.1	16.1	13.3	3.6	-24.1	4.2	-3.2	27.3	9.8	31.9	17.6
2007	20.4	79.2	79.4	-6.9	18.3	18.5	8.8	-1.6	29.1	-3.6	18.0	21.4	6.7	27.4	-1.5
2008 Q4	3.2	140.9	141.1	20.8	-4.6	-4.9	16.1	18.3	-4.8	23.5	-28.3	4.9	4.0	5.6	-0.8
2009 Q1	-7.1	82.4	81.3	709.6	-13.6	-14.0	9.2	15.5	0.9	17.9	-19.4	-2.3	-3.5	-1.6	-7.5
Q2	-11.4	19.0	-	-	-15.0	-	-	12.2	-	-	-	-6.9	-	-	-

Source: ECB.

7.3 Financial account

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

7. Reserve assets

	Reserve assets														Memo	
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange								Other claims	Other foreign currency assets	Predetermined short-term net drains on foreign currency
		In EUR billions	In fine troy ounces (millions)			Total	Currency and deposits		Securities				Financial derivatives			
							With monetary authorities and the BIS	With banks	Total	Equity	Bonds and notes	Money market instruments				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Outstanding amounts (international investment position)															
2005	320.1	163.4	375.861	4.3	10.6	141.7	12.6	21.4	107.9	0.6	69.4	38.0	-0.2	0.0	25.6	-17.9
2006	325.8	176.3	365.213	4.6	5.2	139.7	6.3	22.5	110.7	0.5	79.3	30.8	0.3	0.0	24.6	-21.5
2007	347.4	201.0	353.688	4.6	3.6	138.2	7.2	22.0	108.5	0.4	87.8	20.3	0.5	0.0	44.3	-38.5
2008 Q3	370.9	216.8	350.634	4.6	4.0	145.4	11.6	18.1	117.8	0.5	100.0	17.2	-2.1	0.0	187.3	-185.3
Q4	374.2	217.0	349.190	4.7	7.3	145.1	7.6	8.0	129.5	0.6	111.0	17.9	0.0	0.1	262.8	-245.7
2009 Q1	395.7	240.4	349.059	4.8	8.4	142.1	8.4	3.7	129.9	0.6	108.2	21.1	0.1	0.1	155.4	-141.4
2009 June	381.5	229.8	347.546	4.2	11.3	136.1	9.5	6.5	119.9	-	-	-	0.2	0.1	77.6	-65.6
July	386.5	230.8	347.531	4.2	11.5	139.2	9.2	9.7	120.1	-	-	-	0.2	0.8	67.6	-59.5
Aug.	428.0	232.7	347.515	45.2	11.6	138.1	11.2	7.9	119.0	-	-	-	0.1	0.4	62.7	-55.0
	Transactions															
2006	0.9	-4.2	-	0.5	-5.2	9.8	-6.1	2.4	13.6	0.0	19.3	-5.7	0.0	0.0	-	-
2007	5.1	-3.2	-	0.3	-0.9	8.8	1.0	1.6	6.2	0.0	14.5	-8.3	0.0	0.0	-	-
2008	3.9	-2.1	-	-0.1	3.7	2.3	4.9	-15.7	11.8	0.1	15.8	-4.1	1.3	0.1	-	-
2008 Q4	0.4	-0.9	-	0.0	3.2	-2.0	0.5	-10.7	7.1	0.0	6.2	0.9	1.1	0.1	-	-
2009 Q1	-5.7	-0.9	-	0.0	0.9	-5.7	2.2	-4.9	-3.7	0.0	-6.6	2.9	0.6	0.0	-	-
Q2	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Growth rates															
2005	-5.8	-2.8	-	4.4	-44.7	-3.8	-2.0	-23.7	1.6	2.2	6.9	-7.9	20.5	-	-	-
2006	0.2	-2.4	-	11.6	-48.8	7.2	-48.4	10.6	13.1	0.0	28.4	-15.3	-73.2	-	-	-
2007	1.6	-1.7	-	7.3	-18.2	6.3	15.0	6.2	5.7	1.1	18.5	-27.5	-59.1	-	-	-
2008 Q4	1.1	-1.0	-	-2.6	104.7	1.7	66.0	-69.0	10.8	27.7	18.0	-20.7	-26.2	-	-	-
2009 Q1	-1.9	-1.1	-	4.6	131.3	-6.3	139.6	-90.4	6.7	2.6	3.8	24.9	1,001.7	-	-	-
Q2	-1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Source: ECB.

7.3 Financial account
(EUR billions; outstanding amounts at end of period, transactions during period)

8. Geographical breakdown

	Total	European Union 27 (outside the euro area)						Canada	China	Japan	Switzer-land	United States	Offshore financial centres	Internat. organisa-tions	Other countries
		Total	Denmark	Sweden	United Kingdom	Other EU countries	EU institutions								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2007	Outstanding amounts (international investment position)														
Direct investment	434.6	-97.4	-4.0	-32.9	-277.8	217.6	-0.3	23.7	27.0	-11.0	112.6	-67.4	-37.4	-0.2	484.6
Abroad	3,526.1	1,285.8	37.1	82.5	916.2	249.9	0.0	91.6	30.7	69.1	350.1	684.4	391.6	0.0	622.8
Equity/reinvested earnings	2,844.3	1,012.7	32.3	55.2	710.0	215.2	0.0	67.8	24.1	57.8	292.5	525.9	366.1	0.0	497.4
Other capital	681.9	273.1	4.9	27.3	206.2	34.7	0.0	23.8	6.6	11.4	57.6	158.6	25.5	0.0	125.3
In the euro area	3,091.6	1,383.2	41.2	115.4	1,194.0	32.3	0.3	67.9	3.7	80.1	237.4	751.9	429.0	0.3	138.2
Equity/reinvested earnings	2,343.9	1,127.8	33.6	93.7	988.2	12.1	0.2	56.6	0.9	65.7	181.6	552.6	267.8	0.1	90.8
Other capital	747.7	255.4	7.6	21.7	205.8	20.2	0.1	11.3	2.7	14.4	55.9	199.3	161.2	0.2	47.4
Portfolio investment assets	4,653.8	1,371.3	68.2	139.3	995.5	97.8	70.6	82.5	42.0	241.9	132.4	1,493.5	630.2	26.8	633.3
Equity	1,984.7	415.3	11.4	45.9	335.4	22.1	0.5	20.3	39.5	141.7	115.7	635.1	285.3	1.0	331.0
Debt instruments	2,669.2	956.0	56.8	93.4	660.1	75.6	70.1	62.3	2.5	100.2	16.6	858.4	344.9	25.9	302.4
Bonds and notes	2,231.5	781.0	52.7	78.2	505.6	75.0	69.4	58.6	2.2	63.5	12.9	713.3	303.1	24.8	272.0
Money market instruments	437.7	174.9	4.0	15.1	154.5	0.6	0.7	3.6	0.3	36.7	3.8	145.1	41.8	1.1	30.4
Other investment	-250.4	-163.9	-155.4	-8.8	122.2	43.5	-165.5	-66.0	-45.3	-31.5	-54.9	-71.1	-91.2	-23.8	297.4
Assets	5,233.5	2,571.9	104.5	72.3	2,242.6	141.7	10.8	23.5	35.0	81.3	266.2	840.1	516.8	57.5	841.1
General government	107.1	21.6	0.8	0.1	10.3	1.2	9.2	0.0	1.8	0.2	0.1	3.1	1.4	38.3	40.7
MFIs	3,381.6	1,916.2	86.7	52.1	1,663.5	113.0	0.8	15.0	15.3	45.0	157.5	411.6	353.5	18.7	448.8
Other sectors	1,744.8	634.1	16.9	20.1	568.8	27.5	0.9	8.5	17.9	36.1	108.6	425.4	162.0	0.5	351.6
Liabilities	5,483.9	2,735.8	259.8	81.0	2,120.5	98.1	176.4	89.5	80.3	112.8	321.1	911.2	608.1	81.3	543.7
General government	51.8	28.9	0.0	0.3	2.4	0.0	26.2	0.0	0.0	0.5	0.8	6.3	0.3	11.9	3.0
MFIs	4,140.4	2,142.4	249.6	58.4	1,660.0	72.6	101.9	81.5	62.2	89.0	247.6	525.1	523.7	66.8	402.1
Other sectors	1,291.7	564.5	10.2	22.4	458.0	25.6	48.3	8.0	18.1	23.3	72.7	379.8	84.1	2.6	138.7
2008 Q2 to 2009 Q1	Cumulated transactions														
Direct investment	205.6	86.5	-0.4	7.1	54.4	25.4	0.0	-7.4	3.1	-1.2	-34.7	91.9	18.2	0.0	49.4
Abroad	260.6	82.1	1.7	19.3	40.2	20.9	0.0	2.3	3.3	3.8	-20.2	98.1	35.5	0.0	55.7
Equity/reinvested earnings	146.2	33.7	0.9	7.9	11.7	13.1	0.0	4.4	4.1	3.5	-18.5	63.7	18.0	0.0	37.3
Other capital	114.4	48.4	0.8	11.4	28.4	7.8	0.0	-2.1	-0.7	0.3	-1.7	34.3	17.5	0.0	18.5
In the euro area	55.0	-4.5	2.1	12.2	-14.3	-4.5	0.0	9.7	0.3	5.0	14.6	6.2	17.3	0.0	6.3
Equity/reinvested earnings	69.1	-8.6	0.1	6.8	-17.5	2.0	0.0	7.8	0.2	2.8	7.7	23.2	22.8	0.0	13.1
Other capital	-14.1	4.1	2.0	5.4	3.2	-6.5	0.0	1.9	0.0	2.2	6.9	-17.0	-5.5	0.0	-6.8
Portfolio investment assets	-159.3	30.2	7.2	-3.1	24.4	-2.8	4.6	13.0	-1.3	-16.0	-0.4	-86.9	-77.4	2.7	-23.4
Equity	-103.2	-16.6	0.9	-4.1	-12.8	-0.5	0.1	9.0	-1.1	-13.8	2.3	-37.4	-28.6	0.0	-17.0
Debt instruments	-56.1	46.8	6.3	1.0	37.2	-2.3	4.5	4.0	-0.2	-2.2	-2.6	-49.5	-48.8	2.7	-6.4
Bonds and notes	-5.8	61.8	3.4	4.2	54.5	-3.5	3.3	3.6	-0.1	-13.1	0.4	-20.2	-53.1	3.1	11.8
Money market instruments	-50.2	-15.0	3.0	-3.2	-17.3	1.2	1.3	0.5	-0.1	10.9	-3.1	-29.3	4.3	-0.3	-18.2
Other investment	-101.6	-240.2	-12.6	-5.8	-265.0	59.3	-16.1	-5.1	-9.3	44.5	19.7	-123.2	118.6	12.2	81.0
Assets	-521.8	-325.7	-23.6	-13.6	-341.1	52.7	-0.1	1.4	-9.3	-17.5	-51.7	-134.5	8.1	-9.4	16.8
General government	4.7	4.5	-1.3	-0.2	6.1	-0.5	0.4	0.0	0.0	0.0	0.0	0.1	0.0	1.2	-1.2
MFIs	-510.4	-294.6	-18.5	-11.4	-313.6	49.2	-0.4	0.2	-10.6	-8.0	-48.9	-94.9	-16.0	-10.5	-27.0
Other sectors	-16.1	-35.6	-3.8	-2.0	-33.6	3.9	-0.2	1.2	1.3	-9.5	-2.8	-39.7	24.1	0.0	45.0
Liabilities	-420.1	-85.5	-11.0	-7.7	-76.1	-6.6	16.0	6.5	-0.1	-62.0	-71.4	-11.4	-110.5	-21.6	-64.1
General government	7.9	2.8	0.0	-0.1	1.5	0.0	1.4	0.0	0.0	-0.1	0.0	0.1	0.1	5.0	0.1
MFIs	-397.1	-88.4	-11.1	-6.8	-73.8	-4.4	7.6	5.2	0.1	-59.7	-69.2	45.9	-121.4	-26.4	-83.2
Other sectors	-30.9	0.1	0.1	-0.9	-3.8	-2.3	7.0	1.3	-0.2	-2.2	-2.2	-57.3	10.8	-0.2	19.0

Source: ECB.

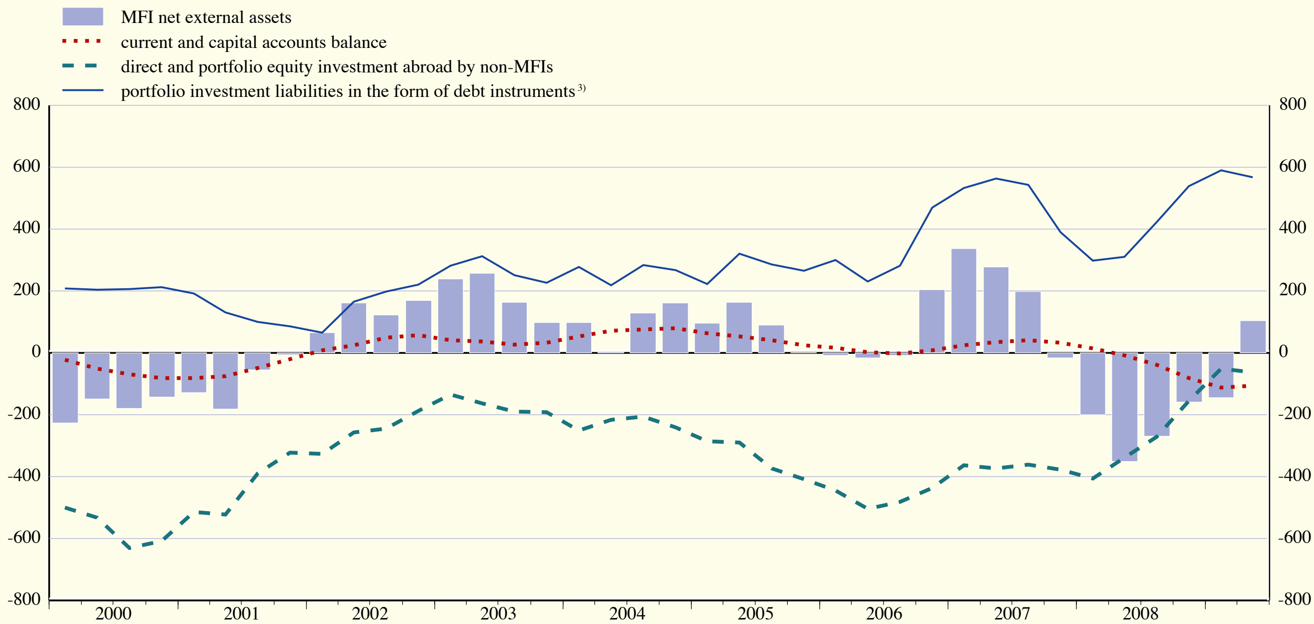
7.4 Monetary presentation of the balance of payments [1]

(EUR billions; transactions)

	B.o.p. items balancing transactions in the external counterpart of M3											Memo: Transactions in the external counterpart of M3
	Current and capital accounts balance	Direct investment		Portfolio investment			Other investment		Financial derivatives	Errors and omissions	Total of columns 1 to 10	
		By resident units abroad (non-MFIs)	By non-resident units in the euro area	Assets	Liabilities		Assets	Liabilities				
				Non-MFIs	Equity [2]	Debt instruments [3]	Non-MFIs	Non-MFIs				
	1	2	3	4	5	6	7	8	9	10	11	12
2006	7.9	-390.3	264.2	-282.3	237.5	468.9	-225.0	225.8	3.6	-138.5	171.9	204.9
2007	32.4	-451.4	379.2	-182.4	81.9	389.5	-340.9	230.4	-67.3	-64.8	6.6	-16.6
2008	-81.9	-334.8	103.6	35.2	-124.0	538.7	-61.2	73.3	-56.6	-213.8	-121.6	-158.8
2008 Q2	-25.8	-39.2	-9.4	-85.4	-33.9	151.7	0.7	-14.2	-8.8	-52.8	-117.2	-147.7
Q3	-19.5	-97.0	52.1	22.8	-69.6	170.0	-21.8	2.9	-8.5	-41.6	-10.2	3.0
Q4	-26.8	-42.3	-30.7	117.9	-39.4	143.4	28.8	41.3	-16.5	-95.6	80.2	75.9
2009 Q1	-40.8	-69.3	40.6	37.2	-7.8	123.5	2.9	-52.6	14.3	-107.0	-59.1	-75.9
Q2	-18.0	-78.1	78.9	-24.4	-7.4	129.5	80.2	-78.4	28.2	1.3	111.7	100.9
2008 July	-2.5	-38.0	22.9	7.1	-8.2	30.2	-1.7	14.1	-0.1	-44.4	-20.5	-9.3
Aug.	-10.6	-21.5	11.1	-2.2	-17.0	33.3	4.8	-9.1	-8.4	9.5	-10.1	-8.3
Sep.	-6.4	-37.4	18.1	17.9	-44.5	106.6	-25.0	-2.2	0.0	-6.8	20.4	20.6
Oct.	-7.6	-8.0	-2.0	75.6	-58.0	92.0	-17.3	41.2	-3.2	-67.4	45.2	55.8
Nov.	-14.2	-28.3	-21.0	12.9	3.0	60.7	3.0	19.2	-9.6	0.8	26.4	10.9
Dec.	-4.9	-6.0	-7.7	29.4	15.7	-9.3	43.1	-19.0	-3.7	-29.0	8.6	9.2
2009 Jan.	-28.3	-19.2	15.3	-13.9	-50.4	54.8	-6.7	-44.1	7.2	-17.2	-102.4	-111.0
Feb.	-6.5	-19.4	12.4	32.8	-0.2	57.5	12.3	-17.1	2.9	-28.0	46.7	45.9
Mar.	-6.1	-30.7	13.0	18.4	42.7	11.1	-2.7	8.6	4.2	-61.9	-3.4	-10.8
Apr.	-7.4	-51.0	54.6	-5.5	-29.1	27.6	13.3	22.2	7.7	9.9	42.4	34.7
May	-11.6	-13.5	19.0	-15.5	20.0	52.7	89.0	-111.1	10.4	-15.0	24.4	31.7
June	1.0	-13.7	5.3	-3.4	1.7	49.2	-22.0	10.4	10.1	6.4	44.9	34.5
July	9.4	-5.3	16.1	-14.9	22.3	-36.3	7.6	-19.8	6.4	24.7	10.1	13.3
	12-month cumulated transactions											
2009 July	-93.2	-254.1	134.1	131.4	-93.8	500.0	99.3	-120.8	24.0	-173.9	153.2	126.5

C35 Main b.o.p. transactions underlying the developments in MFI net external assets [1]

(EUR billions; 12-month cumulated transactions)



Source: ECB.
1) Data refer to the changing composition of the euro area. For further information, see the General notes.
2) Excluding money market fund shares/units.
3) Excluding debt securities with a maturity of up to two years issued by euro area MFIs.

7.5 Trade in goods

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:	Total				Memo:	
	Exports	Imports		Intermediate	Capital	Consumption	Manufactures		Intermediate	Capital	Consumption	Manufactures	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Values (EUR billions; annual percentage changes for columns 1 and 2)												
2007	11.0	8.4	1,508.0	738.7	326.4	401.3	1,282.6	1,491.8	914.3	234.4	323.2	1,019.9	227.5
2008	3.8	7.9	1,563.2	764.7	334.9	410.9	1,304.1	1,600.0	1,012.8	230.5	331.3	1,018.6	288.6
2008 Q3	5.7	13.0	398.7	197.0	84.3	103.0	329.2	413.4	269.1	58.8	83.6	257.4	85.5
Q4	-4.9	-2.0	366.9	174.0	81.4	95.5	303.9	375.1	229.1	56.0	81.7	241.3	55.2
2009 Q1	-21.3	-20.8	311.0	146.9	65.4	86.3	258.7	320.6	181.2	49.4	78.7	213.3	35.6
Q2	-23.7	-26.7	308.8	149.5	63.6	84.6	254.3	304.6	169.7	47.3	75.8	201.1	41.3
2009 Feb.	-23.4	-21.6	103.4	48.9	22.3	28.6	85.5	105.8	59.4	16.5	26.2	69.9	11.2
Mar.	-15.3	-18.2	104.7	50.3	22.0	28.8	88.1	106.2	59.4	16.8	26.2	71.2	12.6
Apr.	-26.4	-27.2	103.7	50.6	21.3	28.4	86.5	103.3	57.4	16.2	25.5	68.2	13.0
May	-23.0	-27.1	102.0	49.0	21.2	27.9	84.6	100.6	55.7	15.6	25.0	67.1	13.7
June	-21.5	-25.9	103.0	49.9	21.1	28.3	83.2	100.7	56.6	15.5	25.3	65.8	14.7
July	-19.3	-29.8	107.2	.	.	.	.	100.4	.	.	.	.	.
	Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)												
2007	8.6	6.8	144.5	141.3	153.1	144.6	142.1	129.1	123.2	143.3	141.5	134.8	107.7
2008	1.5	-0.1	146.3	140.8	156.6	146.5	143.0	128.3	121.4	142.2	142.3	133.1	106.6
2008 Q3	2.6	1.4	147.9	142.7	158.0	146.0	144.0	127.1	120.3	147.2	143.2	134.0	106.6
Q4	-7.5	-5.2	136.4	127.0	150.0	136.2	131.1	122.3	114.6	134.1	136.6	122.3	106.7
2009 Q1	-21.2	-14.9	117.6	110.7	119.8	124.4	111.9	113.2	104.3	117.4	130.9	109.5	99.3
Q2	-22.6	-19.1	118.0	114.5	117.6	122.1	111.7	108.3	97.4	113.3	129.7	105.7	97.2
2009 Feb.	-23.6	-15.6	116.5	110.0	122.7	121.7	110.4	112.4	103.1	118.2	130.4	107.9	94.4
Mar.	-15.2	-11.8	119.2	114.5	120.8	124.6	114.6	112.2	102.4	118.5	130.8	109.5	101.3
Apr.	-25.6	-20.6	119.1	115.8	118.7	124.1	114.0	110.9	99.8	116.2	131.7	107.3	99.8
May	-22.2	-19.7	117.3	112.9	117.5	120.5	111.5	107.6	96.5	112.0	127.7	105.6	98.1
June	-20.0	-16.9	117.6	114.8	116.5	121.8	109.5	106.5	96.0	111.7	129.7	104.2	93.7
July	.	.	.	.	.	.	.	.	.	.	.	.	.

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: Manufacturing	Total (index 2005 = 100)	Total					Memo: Manufacturing
			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
2007	101.8	0.4	2.7	-0.5	0.9	1.8	0.4	105.9	0.1	2.3	-3.5	0.5	1.6	-0.3
2008	103.5	1.6	1.5	-0.4	2.4	25.2	1.5	112.7	6.5	0.2	-3.4	2.4	28.2	0.8
2008 Q4	102.7	0.7	2.6	1.3	2.7	-16.0	0.6	106.9	-1.7	0.9	-1.5	3.8	-8.5	0.1
2009 Q1	101.2	-1.3	-1.1	1.3	1.4	-32.3	-1.4	101.4	-8.4	-4.1	-0.3	2.7	-28.0	-2.4
Q2	100.9	-2.8	-3.9	1.5	0.9	-36.4	-2.7	101.4	-12.4	-6.5	0.1	1.4	-35.3	-4.2
2009 Mar.	100.9	-1.8	-2.0	1.5	1.3	-35.1	-1.8	101.1	-9.2	-5.0	0.3	2.7	-29.8	-2.8
Apr.	100.8	-2.1	-2.9	1.8	1.1	-36.0	-2.1	100.5	-10.7	-5.5	0.5	2.3	-33.7	-3.2
May	100.8	-3.0	-3.9	1.4	0.9	-37.8	-2.9	101.1	-13.1	-6.8	0.1	1.3	-37.2	-4.5
June	101.1	-3.3	-4.9	1.4	0.8	-35.4	-3.2	102.7	-13.2	-7.3	-0.2	0.6	-35.0	-5.0
July	100.7	-4.0	-5.8	1.3	0.5	-39.1	-3.8	101.5	-15.0	-8.1	-0.5	0.7	-39.2	-5.4
Aug.	101.1	-3.6	-6.2	0.8	0.8	-30.5	-3.5	103.1	-12.4	-7.7	-1.1	-0.4	-32.5	-4.9

Source: Eurostat.

1) Product groups according to the classification by Broad Economic Categories. Unlike the product groups shown in Table 2, intermediate and consumption product groups include agricultural and energy products.

2) Product groups according to the classification of Main Industrial Groupings. Unlike the product groups shown in Table 1, intermediate and consumer goods do not include energy products, and agricultural goods are not covered. Manufacturing has a different composition compared with the data shown in columns 7 and 12 of Table 1. Data shown are price indices which follow the pure price change for a basket of products and are not simple ratios of the value and volume data shown in Table 1, which are affected by changes in the composition and quality of traded goods. These indices differ from the GDP deflators for imports and exports (shown in Table 3 in Section 5.1) mainly because the latter include all goods and services and cover cross-border trade within the euro area.

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	European Union 27 (outside the euro area)				Russia	Switzer-land	Turkey	United States	Asia			Africa	Latin America	Other countries
		Denmark	Sweden	United Kingdom	Other EU countries						China	Japan			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Exports (f.o.b.)														
2007	1,508.0	34.1	55.7	230.9	216.3	67.9	82.3	41.5	195.9	295.9	60.6	34.3	87.6	61.9	138.1
2008	1,563.2	35.1	54.2	221.7	231.4	78.5	86.5	42.9	187.1	308.0	65.7	33.7	100.4	68.3	149.2
2008 Q1	398.6	8.9	14.0	57.3	58.8	19.7	21.4	12.4	49.7	79.1	17.2	8.9	24.0	16.2	37.1
Q2	399.0	9.1	14.5	58.2	60.0	20.3	22.2	11.4	47.4	77.9	16.8	8.6	24.9	16.7	36.4
Q3	398.7	9.1	14.1	56.5	60.4	20.8	21.8	10.8	46.4	76.6	16.0	8.2	26.7	17.9	37.9
Q4	366.9	8.0	11.6	49.7	52.2	17.7	21.2	8.4	43.6	74.4	15.7	8.1	24.8	17.5	37.8
2009 Q1	311.0	7.3	10.0	42.3	43.6	12.6	20.0	7.7	39.7	65.0	15.4	7.1	23.4	12.8	26.6
Q2	308.8	6.4	9.6	42.3	42.0	12.2	19.2	8.3	37.5	70.4	16.7	7.0	22.7	12.2	26.0
2009 Feb.	103.4	2.3	3.3	13.9	14.1	4.3	6.7	2.5	12.9	22.1	5.2	2.4	7.9	4.3	8.9
Mar.	104.7	2.4	3.4	14.2	14.7	4.2	6.5	2.7	13.8	22.6	5.6	2.2	7.8	4.2	8.3
Apr.	103.7	2.3	3.2	14.2	14.3	4.2	6.4	2.7	12.6	23.2	5.6	2.4	7.6	4.2	8.8
May	102.0	2.2	3.1	13.8	13.9	3.8	6.3	2.8	12.5	23.3	5.6	2.2	7.5	4.1	8.7
June	103.0	2.0	3.3	14.3	13.8	4.2	6.5	2.8	12.4	23.9	5.5	2.4	7.6	3.9	8.4
July	107.2	.	.	.	.	4.2	6.5	3.0	12.6	24.6	5.7	2.6	7.7	5.1	.
	% share of total exports														
2008	100.0	2.2	3.5	14.2	14.8	5.0	5.5	2.7	12.0	19.7	4.2	2.2	6.4	4.4	9.6
	Imports (c.i.f.)														
2007	1,491.8	28.8	52.2	169.6	169.6	102.2	67.2	32.4	131.7	455.6	172.7	59.1	113.4	75.2	94.0
2008	1,600.0	30.3	52.4	165.6	185.7	119.1	69.6	32.3	137.4	478.2	184.1	57.0	139.7	81.7	107.8
2008 Q1	403.5	7.3	13.7	43.8	46.4	30.0	16.8	8.6	34.6	121.3	44.6	14.8	34.7	20.3	25.9
Q2	407.9	7.8	13.6	42.6	47.6	30.9	17.5	8.5	33.7	120.1	45.0	14.6	36.9	20.3	28.2
Q3	413.4	8.0	13.4	42.2	48.0	33.7	17.9	8.1	35.4	123.4	47.9	14.1	37.5	21.3	24.6
Q4	375.1	7.2	11.6	37.0	43.7	24.6	17.4	7.1	33.7	113.4	46.5	13.5	30.6	19.8	29.1
2009 Q1	320.6	6.8	9.3	31.7	39.1	17.7	16.7	6.6	33.1	98.8	42.1	11.4	23.9	14.9	21.9
Q2	304.6	6.2	8.8	29.9	38.2	18.1	16.1	6.3	28.3	92.5	39.7	10.2	23.0	14.3	23.1
2009 Feb.	105.8	2.2	3.1	10.5	12.8	5.3	5.6	2.2	11.0	32.1	13.7	3.6	8.2	4.9	7.8
Mar.	106.2	2.3	3.1	10.4	13.5	6.1	5.5	2.3	11.8	32.6	13.8	3.6	7.5	5.1	6.0
Apr.	103.3	2.1	2.9	10.0	12.9	5.8	5.5	2.0	9.4	31.6	13.8	3.4	7.9	4.8	8.3
May	100.6	2.1	2.9	10.0	12.7	5.9	5.3	2.1	9.8	30.5	13.0	3.4	7.3	4.7	7.3
June	100.7	2.0	3.0	9.9	12.6	6.4	5.2	2.1	9.1	30.3	12.9	3.4	7.8	4.8	7.5
July	100.4	.	.	.	.	6.7	5.3	2.2	9.0	29.9	12.5	3.3	7.5	4.9	.
	% share of total imports														
2008	100.0	1.9	3.3	10.3	11.6	7.4	4.4	2.0	8.6	29.9	11.5	3.6	8.7	5.1	6.8
	Balance														
2007	16.2	5.4	3.5	61.3	46.8	-34.3	15.1	9.0	64.2	-159.8	-112.1	-24.8	-25.8	-13.3	44.1
2008	-36.7	4.7	1.8	56.0	45.7	-40.6	16.9	10.6	49.7	-170.1	-118.4	-23.2	-39.3	-13.4	41.4
2008 Q1	-4.9	1.5	0.3	13.5	12.3	-10.2	4.6	3.8	15.0	-42.2	-27.5	-5.9	-10.7	-4.1	11.3
Q2	-8.9	1.3	0.8	15.5	12.4	-10.6	4.6	2.8	13.7	-42.2	-28.2	-6.0	-12.1	-3.6	8.2
Q3	-14.7	1.1	0.7	14.2	12.4	-12.9	3.9	2.6	11.0	-46.8	-31.9	-5.9	-10.8	-3.3	13.2
Q4	-8.2	0.8	0.0	12.7	8.6	-6.9	3.7	1.3	10.0	-39.0	-30.8	-5.4	-5.8	-2.3	8.7
2009 Q1	-9.6	0.5	0.6	10.6	4.5	-5.1	3.3	1.1	6.6	-33.8	-26.7	-4.4	-0.5	-2.2	4.8
Q2	4.2	0.2	0.8	12.4	3.8	-5.9	3.2	2.1	9.2	-22.1	-23.0	-3.2	-0.4	-2.1	2.9
2009 Feb.	-2.4	0.0	0.2	3.5	1.4	-1.0	1.1	0.3	1.9	-10.1	-8.5	-1.1	-0.4	-0.6	1.1
Mar.	-1.5	0.1	0.3	3.8	1.2	-1.9	1.0	0.4	2.0	-10.0	-8.2	-1.3	0.2	-0.8	2.3
Apr.	0.4	0.2	0.3	4.2	1.4	-1.6	0.9	0.7	3.3	-8.4	-8.2	-1.1	-0.3	-0.6	0.5
May	1.5	0.1	0.2	3.7	1.2	-2.0	1.0	0.7	2.7	-7.2	-7.4	-1.1	0.2	-0.5	1.5
June	2.3	0.0	0.3	4.5	1.2	-2.2	1.2	0.6	3.3	-6.4	-7.4	-1.0	-0.3	-0.9	1.0
July	6.8	.	.	.	.	-2.5	1.3	0.9	3.6	-5.3	-6.8	-0.7	0.2	0.2	.

Source: Eurostat.

EXCHANGE RATES

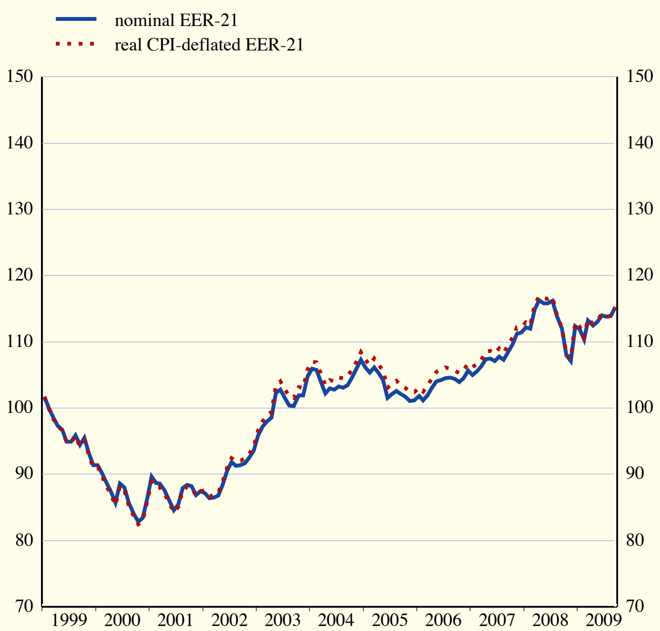
8.1 Effective exchange rates [1]

(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
2006	103.7	105.0	103.3	102.4	105.2	100.7	110.1	103.8
2007	107.9	109.0	107.2	105.8	109.7	103.8	114.3	107.2
2008	113.0	113.6	110.3	110.4	116.8	109.2	120.0	111.1
2008 Q3	114.1	114.4	110.6	111.5	118.3	110.0	120.8	111.6
Q4	109.1	109.6	105.8	106.7	115.4	105.7	116.7	107.7
2009 Q1	111.9	112.2	107.2	109.3	121.5	109.3	120.1	110.4
Q2	113.2	113.4	107.8	110.4	127.6	110.1	121.1	111.2
Q3	114.3	114.3	108.8	.	.	.	122.4	112.1
2008 Sep.	112.0	112.1	108.4	-	-	-	118.7	109.4
Oct.	107.9	108.2	104.7	-	-	-	115.4	106.4
Nov.	107.1	107.5	103.8	-	-	-	114.5	105.6
Dec.	112.4	112.9	108.7	-	-	-	120.3	111.0
2009 Jan.	111.9	112.3	107.5	-	-	-	119.9	110.4
Feb.	110.4	110.7	105.7	-	-	-	118.6	109.1
Mar.	113.3	113.4	108.1	-	-	-	121.6	111.7
Apr.	112.5	112.8	107.2	-	-	-	120.5	110.6
May	113.0	113.2	107.7	-	-	-	120.9	110.9
June	114.0	114.3	108.5	-	-	-	122.0	112.0
July	113.8	113.8	108.2	-	-	-	121.9	111.6
Aug.	113.9	113.9	108.4	-	-	-	122.0	111.7
Sep.	115.2	115.3	109.8	-	-	-	123.5	113.0
	% change versus previous month							
2009 Sep.	1.2	1.2	1.3	-	-	-	1.2	1.1
	% change versus previous year							
2009 Sep.	2.9	2.8	1.2	-	-	-	4.1	3.3

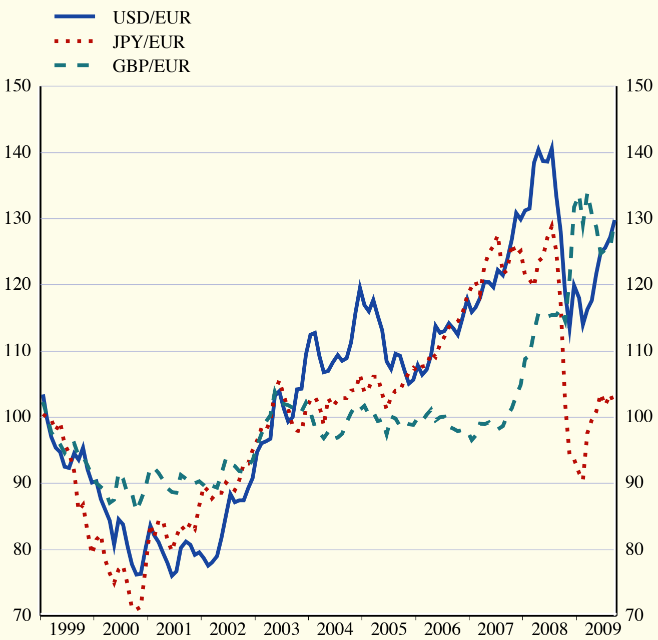
C36 Effective exchange rates

(monthly averages; index 1999 Q1=100)



C37 Bilateral exchange rates

(monthly averages; index 1999 Q1=100)



Source: ECB.

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

8.2 Bilateral exchange rates

(period averages; units of national currency per euro)

	Danish krone	Swedish krona	Pound sterling	US dollar	Japanese yen	Swiss franc	South Korean won	Hong Kong dollar	Singapore dollar	Canadian dollar	Norwegian krone	Australian dollar
	1	2	3	4	5	6	7	8	9	10	11	12
2006	7.4591	9.2544	0.68173	1.2556	146.02	1.5729	1,198.58	9.7545	1.9941	1.4237	8.0472	1.6668
2007	7.4506	9.2501	0.68434	1.3705	161.25	1.6427	1,272.99	10.6912	2.0636	1.4678	8.0165	1.6348
2008	7.4560	9.6152	0.79628	1.4708	152.45	1.5874	1,606.09	11.4541	2.0762	1.5594	8.2237	1.7416
2009 Q1	7.4514	10.9410	0.90878	1.3029	122.04	1.4977	1,847.59	10.1016	1.9709	1.6223	8.9472	1.9648
Q2	7.4471	10.7806	0.87883	1.3632	132.59	1.5138	1,747.10	10.5657	2.0050	1.5883	8.8431	1.7917
Q3	7.4442	10.4241	0.87161	1.4303	133.82	1.5195	1,772.14	11.0854	2.0570	1.5704	8.7397	1.7169
2009 Mar.	7.4509	11.1767	0.91966	1.3050	127.65	1.5083	1,894.48	10.1138	1.9949	1.6470	8.8388	1.9594
Apr.	7.4491	10.8796	0.89756	1.3190	130.25	1.5147	1,760.14	10.2229	1.9823	1.6188	8.7867	1.8504
May	7.4468	10.5820	0.88445	1.3650	131.85	1.5118	1,710.18	10.5807	1.9939	1.5712	8.7943	1.7831
June	7.4457	10.8713	0.85670	1.4016	135.39	1.5148	1,768.80	10.8638	2.0357	1.5761	8.9388	1.7463
July	7.4458	10.8262	0.86092	1.4088	133.09	1.5202	1,778.43	10.9182	2.0421	1.5824	8.9494	1.7504
Aug.	7.4440	10.2210	0.86265	1.4268	135.31	1.5236	1,768.99	11.0587	2.0577	1.5522	8.6602	1.7081
Sep.	7.4428	10.1976	0.89135	1.4562	133.14	1.5148	1,768.58	11.2858	2.0720	1.5752	8.5964	1.6903
	% change versus previous month											
2009 Sep.	0.0	-0.2	3.3	2.1	-1.6	-0.6	0.0	2.1	0.7	1.5	-0.7	-1.0
	% change versus previous year											
2009 Sep.	-0.2	6.6	11.5	1.3	-13.1	-5.0	8.5	0.9	0.8	3.6	5.4	-3.6

	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
2006	28.342	15.6466	0.6962	3.4528	264.26	3.8959	1.9558	3.5258	7.3247	1.8090
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 Q1	27.601	15.6466	0.7061	3.4528	294.19	4.4988	1.9558	4.2682	7.4116	2.1635
Q2	26.679	15.6466	0.7065	3.4528	285.71	4.4523	1.9558	4.1963	7.3528	2.1410
Q3	25.597	15.6466	0.7019	3.4528	271.35	4.1978	1.9558	4.2263	7.3232	2.1444
2009 Mar.	27.231	15.6466	0.7083	3.4528	304.14	4.6210	1.9558	4.2828	7.4430	2.2340
Apr.	26.774	15.6466	0.7093	3.4528	295.26	4.4326	1.9558	4.2041	7.4172	2.1277
May	26.731	15.6466	0.7092	3.4528	281.93	4.4103	1.9558	4.1700	7.3515	2.1251
June	26.545	15.6466	0.7015	3.4528	280.46	4.5084	1.9558	4.2131	7.2954	2.1675
July	25.793	15.6466	0.7006	3.4528	272.06	4.2965	1.9558	4.2184	7.3307	2.1378
Aug.	25.646	15.6466	0.7013	3.4528	270.05	4.1311	1.9558	4.2183	7.3287	2.1236
Sep.	25.346	15.6466	0.7039	3.4528	271.84	4.1584	1.9558	4.2420	7.3102	2.1711
	% change versus previous month									
2009 Sep.	-1.2	0.0	0.4	0.0	0.7	0.7	0.0	0.6	-0.3	2.2
	% change versus previous year									
2009 Sep.	3.5	0.0	-0.3	0.0	12.9	23.2	0.0	17.0	2.6	21.7

	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
2006	2.7333	10.0096	87.76	56.8435	11,512.37	4.6044	13.6936	1.9373	64.379	34.1117	8.5312	47.594
2007	2.6594	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 Q1	3.0168	8.9066	-	64.7948	15,174.96	4.7259	18.7267	2.4498	62.133	44.4165	12.9740	46.038
Q2	2.8245	9.3107	-	66.3982	14,334.53	4.8340	18.1648	2.2565	65.097	43.7716	11.5242	47.294
Q3	2.6699	9.7702	-	69.1909	14,285.93	5.0333	18.9695	2.1232	68.815	44.7703	11.1618	48.575
2009 Mar.	3.0198	8.9210	-	66.8026	15,477.84	4.7949	19.1278	2.4527	63.105	45.1451	12.9870	46.667
Apr.	2.9197	9.0110	-	66.0471	14,552.65	4.7562	17.7645	2.3123	63.462	44.2135	11.8784	46.741
May	2.8232	9.3157	-	66.1762	14,137.45	4.8057	17.9969	2.2663	64.600	43.5678	11.4475	47.241
June	2.7391	9.5786	-	66.9191	14,315.40	4.9305	18.6813	2.1967	67.036	43.5553	11.2718	47.844
July	2.7221	9.6246	-	68.2333	14,241.51	4.9963	18.8143	2.1873	67.724	44.3881	11.2007	47.969
Aug.	2.6314	9.7485	-	68.9570	14,270.78	5.0185	18.5571	2.1097	68.803	45.1972	11.3415	48.543
Sep.	2.6520	9.9431	-	70.4154	14,346.84	5.0862	19.5255	2.0691	69.967	44.7624	10.9495	49.239
	% change versus previous month											
2009 Sep.	0.8	2.0	-	2.1	0.5	1.3	5.2	-1.9	1.7	-1.0	-3.5	1.4
	% change versus previous year											
2009 Sep.	3.1	1.2	-	7.6	6.8	2.8	27.8	-2.8	4.3	23.1	-5.5	-0.1

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						
2007	7.6	3.0	1.7	6.7	10.1	5.8	7.9	2.6	4.9	1.7	2.3
2008	12.0	6.3	3.6	10.6	15.3	11.1	6.0	4.2	7.9	3.3	3.6
2008 Q4	9.0	4.4	3.0	8.7	11.9	9.4	4.2	3.6	6.9	2.7	3.9
2009 Q1	5.1	1.5	1.7	3.7	9.0	8.4	2.7	3.6	6.8	2.1	3.0
Q2	3.1	1.0	1.1	0.2	4.4	4.9	3.6	4.3	6.1	1.7	2.1
2009 Apr.	3.8	1.3	1.1	0.9	5.9	5.9	3.2	4.3	6.5	1.8	2.3
May	3.0	0.9	1.1	0.3	4.4	4.9	3.8	4.2	5.9	1.7	2.2
June	2.6	0.8	0.9	-0.5	3.1	3.9	3.7	4.2	5.9	1.6	1.8
July	1.0	-0.1	0.7	-0.4	2.1	2.6	4.9	4.5	5.0	1.8	1.8
Aug.	1.3	0.0	0.7	-0.7	1.5	2.2	5.0	4.3	4.9	1.9	1.6
					General government deficit (-)/surplus (+) as a % of GDP						
2006	3.0	-2.6	5.2	2.9	-0.5	-0.4	-9.2	-3.9	-2.2	2.5	-2.7
2007	0.1	-0.6	4.5	2.7	-0.4	-1.0	-4.9	-1.9	-2.5	3.8	-2.7
2008	1.5	-1.5	3.6	-3.0	-4.0	-3.2	-3.4	-3.9	-5.4	2.5	-5.5
					General government gross debt as a % of GDP						
2006	22.7	29.6	31.3	4.3	10.7	18.0	65.6	47.7	12.4	45.9	43.4
2007	18.2	28.9	26.8	3.5	9.0	17.0	65.8	44.9	12.7	40.5	44.2
2008	14.1	29.8	33.3	4.8	19.5	15.6	73.0	47.1	13.6	38.0	52.0
					Long-term government bond yield as a % per annum, period average						
2009 Mar.	7.73	5.16	3.44	-	11.32	14.50	11.65	6.22	9.38	2.94	3.00
Apr.	7.24	5.25	3.50	-	11.15	14.50	10.63	6.19	9.77	3.18	3.16
May	7.08	5.06	3.62	-	11.09	14.50	10.01	6.31	8.32	3.57	3.41
June	7.30	5.45	3.76	-	12.75	14.50	10.15	6.34	11.26	3.62	3.53
July	7.56	5.41	3.74	-	12.75	14.50	8.81	6.19	11.46	3.37	3.55
Aug.	7.77	5.09	3.60	-	12.81	14.50	8.40	6.08	11.46	3.45	3.45
					3-month interest rate as a % per annum, period average						
2009 Mar.	6.58	2.49	3.28	7.11	12.08	7.11	-	4.30	14.49	1.16	1.83
Apr.	6.05	2.50	2.94	6.51	12.43	6.94	9.56	4.20	13.61	1.00	1.53
May	5.98	2.30	2.67	6.27	13.41	6.81	11.30	4.52	11.23	0.95	1.36
June	5.94	2.17	2.35	6.20	21.25	8.14	-	4.60	10.22	0.97	1.24
July	5.69	2.09	2.06	6.16	16.94	8.41	9.99	4.26	9.21	0.67	1.00
Aug.	5.30	1.92	1.94	5.85	13.06	7.98	9.02	4.16	9.06	0.62	0.78
					Real GDP						
2007	6.2	6.1	1.6	7.2	10.0	8.9	1.2	6.8	6.2	2.6	2.6
2008	6.0	2.7	-1.2	-3.6	-4.6	3.0	0.6	4.9	7.1	-0.2	0.7
2008 Q4	3.5	0.5	-3.7	-9.2	-10.7	-1.3	-2.2	2.6	2.9	-5.1	-1.8
2009 Q1	-3.5	-4.5	-3.6	-15.0	-18.5	-11.6	-5.6	1.7	-6.2	-6.5	-4.9
Q2	-4.9	-5.5	-7.0	-16.1	-17.3	-20.4	-7.3	1.4	-8.7	-6.1	-5.5
					Current and capital accounts balance as a % of GDP						
2007	-27.2	-2.6	0.7	-16.8	-20.6	-12.8	-6.1	-3.6	-12.9	8.7	-2.5
2008	-24.6	-2.2	2.6	-8.4	-11.1	-10.1	-6.0	-3.9	-11.8	6.1	-1.4
2008 Q4	-30.9	-5.2	2.8	-3.5	-6.5	-3.4	-6.1	-4.6	-8.3	5.3	-1.9
2009 Q1	-17.2	4.5	0.5	0.8	4.3	4.7	0.1	2.6	-4.1	7.6	-1.0
Q2	-12.2	-2.7	3.7	6.3	17.0	2.4	4.5	-0.2	-5.6	8.6	-2.8
					Unit labour costs						
2007	14.2	2.9	4.2	17.3	27.3	10.3	5.4	2.6	.	4.7	3.0
2008	16.2	5.0	7.1	14.1	23.0	10.6	4.5	6.5	.	2.6	2.5
2008 Q4	17.5	5.2	9.1	12.2	18.5	9.3	-	12.2	-	6.0	1.8
2009 Q1	16.1	5.8	6.2	10.0	3.6	10.0	-	5.6	-	8.4	2.9
Q2	14.2	4.9	9.9	3.4	-3.2	11.2	-	.	-	7.4	.
					Standardised unemployment rate as a % of labour force (s.a.)						
2007	6.9	5.3	3.8	4.6	6.0	4.3	7.4	9.6	6.4	6.1	5.3
2008	5.6	4.4	3.4	5.6	7.5	5.9	7.8	7.2	5.8	6.2	5.6
2008 Q4	5.2	4.5	3.8	7.7	10.3	8.1	8.1	6.9	5.9	6.8	6.3
2009 Q1	6.0	5.5	4.8	11.0	13.2	11.0	9.2	7.7	6.2	7.5	7.0
Q2	6.3	6.3	5.9	13.3	16.4	13.7	9.7	8.0	6.4	8.5	7.7
2009 Apr.	6.2	6.1	5.7	-	15.5	13.7	9.7	8.0	6.4	8.2	7.5
May	6.3	6.3	5.9	-	16.5	13.7	9.7	8.0	6.4	8.5	7.7
June	6.4	6.5	6.1	-	17.1	13.7	9.6	8.0	6.4	8.8	7.8
July	6.8	6.7	6.0	-	17.6	16.7	9.5	8.0	.	9.1	.
Aug.	7.1	6.9	5.9	-	18.3	.	9.6	8.0	.	9.4	.

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

9.2 In the United States and Japan

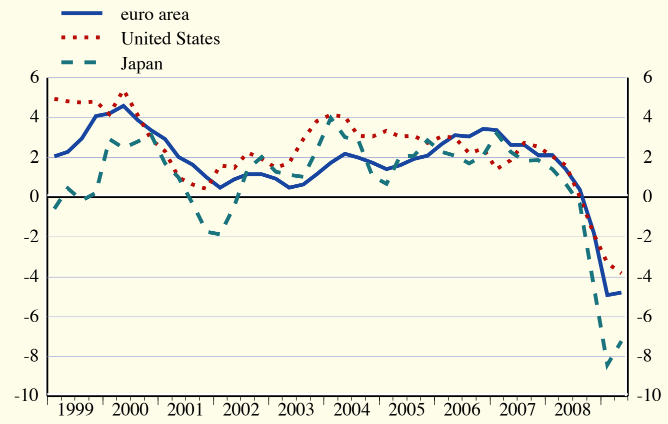
(annual percentage changes, unless otherwise indicated)

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						
2005	3.4	2.3	3.1	4.2	5.1	4.2	3.57	5.05	1.2441	-3.3	48.2
2006	3.2	2.8	2.7	2.7	4.6	5.0	5.20	5.26	1.2556	-2.2	47.7
2007	2.9	2.3	2.1	1.6	4.6	5.8	5.30	4.81	1.3705	-2.8	48.3
2008	3.8	1.0	0.4	-3.1	5.8	6.9	2.93	2.70	1.4708	-6.5	56.0
2008 Q3	5.3	1.8	0.0	-3.9	6.1	6.1	2.91	4.61	1.5050	-6.4	52.0
Q4	1.6	1.7	-1.9	-8.7	6.9	8.3	2.77	2.70	1.3180	-8.1	56.0
2009 Q1	0.0	-0.1	-3.3	-13.9	8.1	9.5	1.24	2.96	1.3029	-9.8	59.7
Q2	-1.2	-1.2	-3.8	-14.6	9.3	8.7	0.84	3.95	1.3632	.	.
Q3	.	.	.	.	9.6	.	0.41	3.61	1.4303	.	.
2009 May	-1.3	-	-	-14.8	9.4	8.8	0.82	3.82	1.3650	-	-
June	-1.4	-	-	-14.9	9.5	9.0	0.62	3.95	1.4016	-	-
July	-2.1	-	-	-13.4	9.4	8.1	0.52	3.90	1.4088	-	-
Aug.	-1.5	-	-	-12.1	9.7	7.8	0.42	3.77	1.4268	-	-
Sep.	.	-	-	.	9.8	.	0.30	3.61	1.4562	-	-
					Japan						
2005	-0.3	-2.1	1.9	1.4	4.4	1.8	0.06	1.66	136.85	-6.7	163.2
2006	0.2	-0.5	2.0	4.5	4.1	1.0	0.30	1.85	146.02	-1.6	160.0
2007	0.1	-1.1	2.3	2.8	3.8	1.6	0.79	1.70	161.25	-2.5	156.1
2008	1.4	1.7	-0.7	-3.4	4.0	2.1	0.93	1.21	152.45	.	.
2008 Q3	2.2	1.3	-0.3	-1.4	4.0	2.2	0.90	1.72	161.83	.	.
Q4	1.0	4.3	-4.5	-14.6	4.0	1.8	0.96	1.21	126.71	.	.
2009 Q1	-0.1	4.9	-8.4	-34.6	4.5	2.1	0.67	1.33	122.04	.	.
Q2	-1.0	.	-7.2	-27.9	5.2	2.6	0.53	1.41	132.59	.	.
Q3	.	.	.	.	.	.	0.40	1.45	133.82	.	.
2009 May	-1.1	-	-	-29.6	5.2	2.7	0.53	1.43	131.85	-	-
June	-1.8	-	-	-23.6	5.4	2.5	0.49	1.41	135.39	-	-
July	-2.2	-	-	-22.7	5.7	2.7	0.43	1.51	133.09	-	-
Aug.	-2.2	-	-	-18.7	.	2.8	0.40	1.44	135.31	-	-
Sep.	.	-	-	.	.	.	0.36	1.45	133.14	-	-

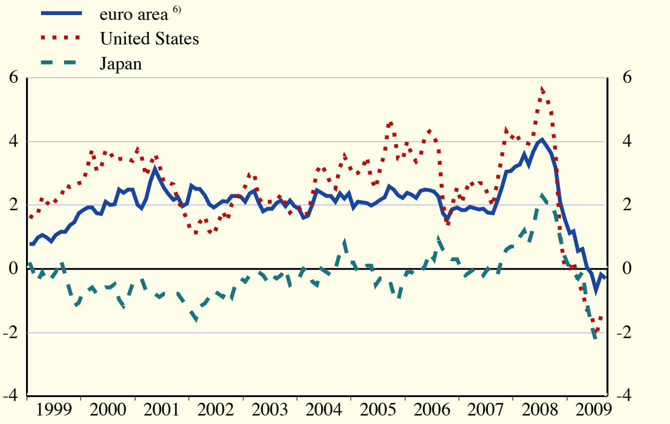
C38 Real gross domestic product

(annual percentage changes; quarterly)



C39 Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5 (United States), 6, 9 and 10); OECD (column 2 (Japan)); Eurostat (column 5 (Japan), euro area chart data); Reuters (columns 7 and 8); ECB calculations (column 11).

1) Seasonally adjusted. The data for the United States refer to the private non-agricultural business sector.
2) Average-of-period values; M2 for US, M2+CDs for Japan.
3) Percentages per annum. For further information on 3-month interbank deposit rate, see Section 4.6.
4) For more information, see Section 8.2.
5) Gross consolidated general government debt (end of period).
6) Data refer to the changing composition of the euro area. For further information, see the General notes.

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TECHNICAL NOTES

RELATING TO THE EURO AREA OVERVIEW

CALCULATION OF GROWTH RATES FOR MONETARY DEVELOPMENTS

The average growth rate for the quarter ending in month t is calculated as:

$$\text{a)} \quad \left(\frac{0.5I_t + \sum_{i=1}^{2} I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^{2} I_{t-i-12} + 0.5I_{t-15}} - 1\right) \times 100$$

where I_t is the index of 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:

$$\text{b)} \quad \left(\frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1\right) \times 100$$

RELATING TO SECTIONS 2.1 TO 2.6

CALCULATION OF TRANSACTIONS

Monthly transactions are calculated from monthly differences in outstanding amounts adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

If L_t represents the outstanding amount at the end of month t, C_t^M the reclassification adjustment in month t, E_t^M the exchange rate adjustment and V_t^M the other revaluation adjustments, the transactions F_t^M in month t are defined as:

$$\text{c)} \quad F_t^M = (L_t - L_{t-1}) - C_t^M - E_t^M - V_t^M$$

Similarly, the quarterly transactions F_t^Q for the quarter ending in month t are defined as:

$$\text{d)} \quad F_t^Q = (L_t - L_{t-3}) - C_t^Q - E_t^Q - V_t^Q$$

where L_{t-3} is the amount outstanding at the end of month t-3 (the end of the previous quarter) and, for example, C_t^Q is the reclassification adjustment in the quarter ending in month t.

For those quarterly series for which monthly observations are now available (see below), the quarterly transactions can be derived as the sum of the three monthly transactions in the quarter.

CALCULATION OF GROWTH RATES FOR MONTHLY SERIES

Growth rates may be calculated from transactions or from the index of adjusted outstanding amounts. If F_t^M and L_t are defined as above, the index I_t of adjusted outstanding amounts in month t is defined as:

$$\text{e)} \quad I_t = I_{t-1} \times \left(1 + \frac{F_t^M}{L_{t-1}}\right)$$

The base of the index (of the non-seasonally adjusted series) is currently set as December 2006 = 100. Time series of the index of adjusted outstanding amounts are available on the ECB's website (www.ecb.europa.eu) under the "Money, banking and financial markets" sub-section of the "Statistics" section.

The annual growth rate a_t for month t – i.e. the change in the 12 months ending in month t – may be calculated using either of the following two formulae:

$$\text{f)} \quad a_t = \left[\prod_{i=0}^{11}\left(1 + F_{t-i}^M / L_{t-1-i}\right) - 1\right] \times 100$$

$$\text{g)} \quad a_t = \left(I_t / I_{t-12} - 1\right) \times 100$$

Unless otherwise indicated, the annual growth rates refer to the end of the indicated period. For example, the annual percentage change for the year 2002 is calculated in g) by dividing the index of December 2002 by the index of December 2001.

Growth rates for intra-annual periods may be derived by adapting formula g). For example, the month-on-month growth rate a_t^M may be calculated as:

$$h) \quad a_t^M = \left({}^{I_t}\!/_{I_{t-1}} - 1 \right) \times 100$$

Finally, the three-month moving average (centred) for the annual growth rate of M3 is obtained as $(a_{t+1} + a_t + a_{t-1})/3$, where a_t is defined as in f) or g) above.

CALCULATION OF GROWTH RATES FOR QUARTERLY SERIES

If F_t^Q and L_{t-3} are defined as above, the index I_t of adjusted outstanding amounts for the quarter ending in month t is defined as:

$$i) \quad I_t = I_{t-3} \times \left(1 + \frac{F_t^Q}{L_{t-3}} \right)$$

The annual growth rate in the four quarters ending in month t, i.e. a_t, may be calculated using formula g).

SEASONAL ADJUSTMENT OF THE EURO AREA MONETARY STATISTICS [1]

The approach used relies on a multiplicative decomposition through X-12-ARIMA.[2] The seasonal adjustment may include a day-of-the-week adjustment, and for some series is carried out indirectly by means of a linear combination of components. In particular, this is the case for M3, derived by aggregating the seasonally adjusted series for M1, M2 less M1, and M3 less M2.

The seasonal adjustment procedures are first applied to the index of adjusted outstanding amounts.[3] The resulting estimates of the seasonal factors are then applied to the levels and to the adjustments arising from reclassifications and revaluations, in turn yielding seasonally adjusted transactions. Seasonal (and trading day) factors are revised at annual intervals or as required.

RELATING TO SECTIONS 3.1 TO 3.5

EQUALITY OF USES AND RESOURCES

In Table 3.1 the data conform to a basic accounting identity. As regards non-financial transactions, total uses equal total resources for each transaction category. Likewise in the financial account, this accounting identity is also reflected, i.e. for each financial instrument category, total transactions in financial assets equal total transactions in liabilities. In the other changes in assets account and the financial balance sheets, total financial assets equal total liabilities for each financial instrument category, with the exception of monetary gold and special drawing rights, which are by definition not a liability of any sector.

CALCULATION OF BALANCING ITEMS

The balancing items at the end of each account in Tables 3.1 and 3.2 are computed as follows:

The trade balance equals imports minus exports of goods and services vis-à-vis the euro area rest of the world.

1 For details, see “Seasonal adjustment of monetary aggregates and HICP for the euro area”, ECB (August 2000) and the “Statistics” section of the ECB’s website (www.ecb.europa.eu), under the “Money, banking and financial markets” sub-section.

2 For details, see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B. C. (1998), “New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program”, Journal of Business and Economic Statistics, 16, 2, pp.127-152, or “X-12-ARIMA Reference Manual”, Time Series Staff, Bureau of the Census, Washington, D.C.
For internal purposes, the model-based approach of TRAMO-SEATS is also used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), “Programs TRAMO and SEATS: Instructions for the User”, Banco de España, Working Paper No. 9628, Madrid.

3 It follows that for the seasonally adjusted series, the level of the index for the base period, i.e. December 2001, generally differs from 100, reflecting the seasonality of that month.

Net operating surplus and mixed income is defined for resident sectors only and is calculated as gross value added (gross domestic product at market prices for the euro area) minus compensation of employees (uses) minus other taxes less subsidies on production (uses) minus consumption of fixed capital (uses).

Net national income is defined for resident sectors only and is computed as net operating surplus and mixed income plus compensation of employees (resources) plus taxes less subsidies on production (resources) plus net property income (resources minus uses).

Net disposable income is also only defined for resident sectors and equals net national income plus net current taxes on income and wealth (resources minus uses) plus net social contributions (resources minus uses) plus net social benefits other than social transfers in kind (resources minus uses) plus net other current transfers (resources minus uses).

Net saving is defined for resident sectors and is calculated as net disposable income plus the net adjustment for the change in net equity of households in pension funds reserves (resources minus uses) minus final consumption expenditure (uses). For the rest of the world, current external account is compiled as the trade balance plus all net income (resources minus uses).

Net lending/net borrowing is computed from the capital account as net saving plus net capital transfers (resources minus uses) minus gross capital formation (uses) minus acquisitions less disposals of non-produced non-financial assets (uses) plus consumption of fixed capital (resources). It can also be calculated in the financial account as total transactions in financial assets minus total transactions in liabilities (also known as changes in netfinancial worth (wealth) due to transactions). For the household and non-financial corporation sectors, there is a statistical discrepancy between these balancing items computed from the capital account and the financial account, respectively.

Changes in net worth (wealth) are calculated as changes in net worth (wealth) due to savings and capital transfers plus other changes in net financial worth (wealth). It currently excludes other changes in non-financial assets due to unavailability of data.

Net financial worth (wealth) is calculated as total financial assets minus total liabilities, whereas changes in net financial worth (wealth) are equal to the sum of changes in net financial worth (wealth) due to transactions (lending/ net borrowing from the financial account) and other changes in net financial worth (wealth).

Finally, changes in net financial worth (wealth) due to transactions are computed as total transactions in financial assets minus total transactions in liabilities and other changes in net financial worth (wealth) are calculated as total other changes in financial assets minus total other changes in liabilities.

RELATING TO SECTION 4.3 AND 4.4

CALCULATION OF GROWTH RATES FOR DEBT SECURITIES AND QUOTED SHARES

Growth rates are calculated on the basis of financial transactions and therefore exclude reclassifications, revaluations, exchange rate variations and any other changes which do not arise from transactions. They may be calculated from transactions or from the index of notional stocks. If N_t^M represents the transactions (net issues) in month t and L_t the level outstanding at the end of the month t, the index I_t of notional stocks in month t is defined as:

j) $$I_t = I_{t-1} \times \left(1 + \frac{N_t}{L_{t-1}}\right)$$

As a base, the index is set equal to 100 on December 2001. The growth rate a_t for month t corresponding to the change in the 12 months ending in month t, may be calculated using either of the following two formulae:

k) $$a_t = \left[\prod_{i=0}^{11} \left(1 + \frac{N^M_{t-i}}{L_{t-1-i}} \right) - 1 \right] \times 100$$

l) $$a_t = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

The method used to calculate the growth rates for securities other than shares is the same as that used for the monetary aggregates, the only difference being that an "N" is used rather than an "F". The reason for this is to distinguish between the different ways of obtaining "net issues" for securities issues statistics and the equivalent "transactions" calculated used for the monetary aggregates.

The average growth rate for the quarter ending in month t is calculated as:

m) $$\left(\frac{0.5I_t + \sum_{i=1}^{2} I_{t-i} + 0.5I_{t-3}}{0.5I_{t-12} + \sum_{i=1}^{2} I_{t-i-12} + 0.5I_{t-15}} - 1 \right) \times 100$$

where I_t is the index of notional stocks as at month t. Likewise, for the year ending in month t, the average growth rate is calculated as:

n) $$\left(\frac{0.5I_t + \sum_{i=1}^{11} I_{t-i} + 0.5I_{t-12}}{0.5I_{t-12} + \sum_{i=1}^{11} I_{t-i-12} + 0.5I_{t-24}} - 1 \right) \times 100$$

The calculation formula used for Section 4.3 is also used for Section 4.4 and is likewise based on that used for the monetary aggregates. Section 4.4 is based on market values and the basis for the calculation are financial transactions, which exclude reclassifications, revaluations or any other changes that do not arise from transactions. Exchange rate variations are not included as all quoted shares covered are denominated in euro.

SEASONAL ADJUSTMENT OF SECURITIES ISSUES STATISTICS [4]

The approach used relies on a multiplicative decomposition through X-12-ARIMA. The seasonal adjustment for the securities issues total is carried out indirectly by means of a linear combination of sector and maturity component breakdowns.

The seasonal adjustment procedures are applied to the index of notional stocks. The resulting estimates of the seasonal factors are then applied to the outstanding amounts, from which seasonally adjusted net issues are derived. Seasonal factors are revised at annual intervals or as required.

Similar as depicted in formula k) and l), the growth rate a_t for month t corresponding to the change in the 6 months ending in month t, may be calculated using either of the following two formulae:

o) $$a_t = \left[\prod_{i=0}^{5} \left(1 + \frac{N^M_{t-i}}{L_{t-1-i}} \right) - 1 \right] \times 100$$

p) $$a_t = \left(\frac{I_t}{I_{t-6}} - 1 \right) \times 100$$

RELATING TO TABLE 1 IN SECTION 5.1

SEASONAL ADJUSTMENT OF THE HICP [4]

The approach used relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S78). The seasonal adjustment of the overall HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy, and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

4 For details, see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000) and the "Statistics" section of the ECB's website (www.ecb.europa.eu), under the "Money, banking and financial markets" sub-section.

RELATING TO TABLE 2 IN SECTION 7.1

SEASONAL ADJUSTMENT OF THE BALANCE OF PAYMENTS CURRENT ACCOUNT

The approach relies on multiplicative decomposition through X-12-ARIMA (see footnote 2 on page S78). The raw data for goods, services and income are pre-adjusted to take a working-day effect into account. The working-day adjustment in goods and services is corrected for national public holidays. The seasonal adjustment for these items is carried out using these pre-adjusted series. The seasonal adjustment of the total current account is carried out by aggregating the seasonally adjusted euro area series for goods, services, income and current transfers. Seasonal (and trading day) factors are revised at semi-annual intervals or as required.

RELATING TO SECTION 7.3

CALCULATION OF GROWTH RATES FOR THE QUARTERLY AND ANNUAL SERIES

The annual growth rate for quarter t is calculated on the basis of quarterly transactions (F_t) and positions (L_t), as follows:

$$a_t = \left(\prod_{i=t-3}^{t} \left(1 + \frac{F_i}{L_{i-1}} \right) - 1 \right) \times 100$$

The growth rate for the annual series is equal to the growth rate in the last quarter of the year.

GENERAL NOTES

The "Euro area statistics" section of the Monthly Bulletin focuses on statistics for the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in the "Statistics" section of the ECB's website (www.ecb.europa.eu). This allows user-friendly access to data via the ECB's Statistical Data Warehouse (http://sdw.ecb.europa.eu/), which includes search and download facilities. Further services available under the "Data services" sub-section include the subscription to different datasets and a repository of compressed Comma Separated Value (CSV) files. For further information, please contact us at: statistics@ecb.europa.eu.

In general, the cut-off date for the statistics included in the Monthly Bulletin is the day preceding the first meeting in the month of the ECB's Governing Council. For this issue, the cut-off date was 7 October 2009.

Unless otherwise indicated, all data series covering observations for 2009 relate to the Euro 16 (the euro area including Slovakia) for the whole time series. For interest rates, monetary statistics and the HICP (and, for consistency reasons, the components and counterparts of M3 and the components of the HICP), the statistical series refer to the changing composition of the euro area. Where applicable, this is indicated in the tables by means of a footnote. In such cases, where underlying data are available, absolute and percentage changes for the respective year of entry into the euro area of Greece (2001), Slovenia (2007), Cyprus (2008), Malta (2008) and Slovakia (2009), calculated from bases covering the year prior to the year of entry, use a series in which the impact of these countries' joining the euro area is taken into account. Historical data referring to the euro area before the entry of Slovakia are available on the ECB's website at http://www.ecb.europa.eu/stats/services/downloads/html/index.en.html.

The statistical series referring to the changing composition of the euro area are based on the euro area composition at the time to which the statistics relate. Thus, data prior to 2001 refer to the Euro 11, i.e. the following 11 EU Member States: Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal and Finland. Data from 2001 to 2006 refer to the Euro 12, i.e. the Euro 11 plus Greece. Data for 2007 refer to the Euro 13, i.e. the Euro 12 plus Slovenia. Data for 2008 refer to the Euro 15, i.e. the Euro 13 plus Cyprus and Malta, and data as of 2009 refer to the Euro 16, i.e. the Euro 15 plus Slovakia.

Given that the composition of the European currency unit (ECU) does not coincide with the former currencies of the countries that have adopted the single currency, pre-1999 amounts originally expressed in the participating currencies and converted into ECU at current ECU exchange rates are affected by movements in the currencies of EU Member States that have not adopted the euro. To avoid this effect on the monetary statistics, the pre-1999 data in Sections 2.1 to 2.8 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless otherwise indicated, price and cost statistics before 1999 are based on data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used where appropriate.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

The group "Other EU Member States" comprises Bulgaria, the Czech Republic, Denmark, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Sweden and the United Kingdom.

In most cases, the terminology used within the tables follows international standards, such as those contained in the European System of Accounts 1995 (ESA 95) and the IMF Balance of Payments Manual. Transactions refer to voluntary exchanges (measured directly or derived), while flows also encompass changes in outstanding amounts owing to price and exchange rate changes, write-offs, and other changes.

In the tables, the term "up to (x) years" means "up to and including (x) years".

OVERVIEW

Developments in key indicators for the euro area are summarised in an overview table.

MONETARY POLICY STATISTICS

Section 1.4 shows statistics on minimum reserve and liquidity factors. Maintenance periods for minimum reserve requirements start every month on the settlement day of the main refinancing operation (MRO) following the Governing Council meeting at which the monthly assessment of the monetary policy stance is scheduled, and end on the day preceding the corresponding settlement day in the following month. Annual and quarterly observations refer to averages of 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. The liabilities vis-à-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks (NCBs) are excluded from the reserve base. When a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. The percentage for calculating the reserve base was 10% until November 1999 and 30% thereafter.

Table 2 in Section 1.4 contains average data for completed maintenance periods. The amount of the reserve requirement of each individual credit institution is first calculated by applying the reserve ratio for the corresponding categories of liabilities to the eligible liabilities, using the balance sheet data from the end of each calendar month. Subsequently, each credit institution deducts from this figure a lump-sum allowance of €100,000. The resulting required reserves are then aggregated at the euro area level (column 1). The current account holdings (column 2) are the aggregate average daily current account holdings of credit institutions, including those that serve the fulfilment of reserve requirements. The excess reserves (column 3) are the average current account holdings over the maintenance period in excess of the required reserves. The deficiencies (column 4) are defined as the average shortfalls of current account holdings from required reserves over the maintenance period, computed on the basis of those credit institutions that have not fulfilled their reserve requirement. The interest rate on minimum reserves (column 5) is equal to the average, over the maintenance period, of the ECB's rate (weighted according to the number of calendar days) on the Eurosystem's MROs (see Section 1.3).

Table 3 in Section 1.4 shows the banking system's liquidity position, which is defined as the current account holdings in euro of credit institutions in the euro area with the Eurosystem. All amounts are derived from the consolidated financial statement of the Eurosystem. The other liquidity-absorbing operations (column 7) exclude the issuance of debt certificates initiated by NCBs in Stage Two of EMU. The net other factors (column 10) represent the netted remaining items in the consolidated financial statement of the Eurosystem. The credit institutions' current accounts (column 11) are equal to the difference between the sum of liquidity-providing factors (columns 1 to 5) and the sum of liquidity-absorbing factors (columns 6 to 10). The base money (column 12) is calculated as the sum of the deposit facility (column 6), the banknotes in circulation (column 8) and the credit institutions' current account holdings (column 11).

MONEY, BANKING AND INVESTMENT FUNDS

Section 2.1 shows the aggregated balance sheet of the monetary financial institution (MFI) sector, i.e. the sum of the harmonised balance sheets of all MFIs resident in the euro area. MFIs are central banks, credit institutions as defined under Community law, money market funds and other institutions whose business it is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credits and/or make investments in securities. A complete list of MFIs is published on the ECB's website.

Section 2.2 shows the consolidated balance sheet of the MFI sector, which is obtained by netting the aggregated balance sheet positions between MFIs in the euro area. Due to limited heterogeneity in recording practices, the sum of the inter-MFI positions is not necessarily zero; the balance is shown in column 10 of the liabilities side of Section 2.2. Section 2.3 sets out the euro area monetary aggregates and counterparts. These are derived from the consolidated MFI balance sheet, and include positions of non-MFIs resident in the euro area held with MFIs resident in the euro area; they also take account of some monetary assets/liabilities of central government. Statistics on monetary aggregates and counterparts are adjusted for seasonal and trading-day effects. The external liabilities item of Sections 2.1 and 2.2 shows the holdings by non-euro area residents of (i) shares/units issued by money market funds located in the euro area and (ii) debt securities issued with a maturity of up to two years by MFIs located in the euro area. In Section 2.3, however, these holdings are excluded from the monetary aggregates and contribute to the item "net external assets".

Section 2.4 provides an analysis by sector, type and original maturity of loans granted by MFIs other than the Eurosystem (the banking system) resident in the euro area. Section 2.5 shows an analysis, by sector and instrument, of deposits held with the euro area banking system. Section 2.6 shows the securities held by the euro area banking system, by type of issuer.

Sections 2.2 to 2.6 include transactions, which are derived as differences in outstanding amounts adjusted for reclassifications, revaluations, exchange rate variations and any other changes that do not arise from transactions. Section 2.7 shows selected revaluations that are used in the derivation of transactions. Sections 2.2 to 2.6 also provide growth rates in terms of annual percentage changes based on the transactions. Section 2.8 shows a quarterly currency breakdown of selected MFI balance sheet items.

Details of the sector definitions are set out in the "Monetary Financial Institutions and Markets Statistics Sector Manual – Guidance for the statistical classification of customers. Third Edition" (ECB, March 2007). The "Guidance Notes to the Regulation ECB/2001/13 on the MFI Balance Sheet Statistics" (ECB, November 2002) explains practices that NCBs are recommended to follow. Since 1 January 1999, the statistical information has been collected and compiled on the basis of Regulation ECB/1998/16 of 1 December 1998 concerning the consolidated balance sheet of the Monetary Financial Institutions sector[1], as last amended by Regulation ECB/2003/10[2].

In line with this Regulation, the balance sheet item "money market paper" has been merged with the item "debt securities" on both the assets and liabilities side of the MFI balance sheet.

Section 2.9 shows end-of-quarter outstanding amounts for the balance sheet of the euro area investment funds (other than money market funds). The balance sheet is aggregated and therefore includes, among the liabilities, holdings by investment funds of shares/units issued by other investment funds. Total assets/liabilities are also broken down by investment policy (equity funds, bond funds, mixed funds, real estate funds and other funds) and by type of investor (general public funds and special investors' funds). Section 2.10 shows the aggregated balance sheet for each investment fund sector, as identified by investment policy and type of investor.

1 OJ L 356, 30.12.1998, p. 7.
2 OJ L 250, 2.10.2003, p. 19.

EURO AREA ACCOUNTS

Section 3.1 shows quarterly integrated euro area accounts data, which provide comprehensive information on the economic activities of households (including non-profit institutions serving households), non-financial corporations, financial corporations and general government, as well as on the interaction between these sectors and both the euro area and the rest of the world. The non-seasonally adjusted data on current prices are displayed for the last available quarter, following a simplified sequence of accounts in accordance with the methodological framework of the European System of Accounts 1995 (ESA 95).

In short, the sequence of accounts (transactions) comprises: (1) the generation of income account, which shows how the production activity translates into various categories of income; (2) the allocation of primary income account, which records receipts and expenses relating to various forms of property income (for the economy as a whole, the balancing item of the primary income account is the national income); (3) the secondary distribution of income account, which shows how the national income of an institutional sector changes because of current transfers; (4) the use of income account, which shows how disposable income is spent on consumption or saved; (5) the capital account, which shows how savings and net capital transfers are spent in the acquisition of non-financial assets (the balancing item of the capital account is net lending/ net borrowing); and (6) the financial account, which records the net acquisitions of financial assets and the net incurrence of liabilities. As each non-financial transaction is mirrored by a financial transaction, the balancing item of the financial account conceptually also equals net lending/net borrowing as calculated from the capital account.

In addition, opening and closing financial balance sheets are presented, which provide a picture of the financial wealth of each individual sector at a given point in time. Finally, other changes in financial assets and liabilities (e.g. those resulting from the impact of changes in asset prices) are also shown.

The sector coverage of the financial account and of the financial balance sheets is more detailed for the financial corporations sector, showing a breakdown into MFIs, other financial intermediaries (including financial auxiliaries), and insurance corporations and pension funds.

Section 3.2 shows four-quarter cumulated flows (transactions) for the so-called non-financial accounts of the euro area (i.e. accounts (1) to (5) above) also following the simplified sequence of accounts.

Section 3.3 shows four-quarter cumulated flows (transactions and other changes) for households' income, expenditure and accumulation accounts, and outstanding amounts for the financial balance sheet accounts, following a more analytical presentation. Sector-specific transactions and balancing items are arranged so as to more easily depict financing and investment decisions of households, whilst respecting the account identities as presented in Sections 3.1 and 3.2.

Section 3.4 displays four-quarter cumulated flows (transactions) for non-financial corporations' income and accumulation accounts, and outstanding amounts for the financial balance sheet accounts, following a more analytical presentation.

Section 3.5 shows four-quarter cumulated financial flows (transactions and other changes) and outstanding amounts for the financial balance sheets of insurance corporations and pension funds.

FINANCIAL MARKETS

The series on financial market statistics for the euro area cover the EU Member States that had adopted the euro at the time to which the statistics relate (changing composition), with the exception of statistics on securities issues (Tables 4.1 to 4.4), which relate to the Euro 16 (i.e. the Euro 15 plus Slovakia) for the whole time series (fixed composition).

Statistics on securities other than shares and quoted shares (Sections 4.1 to 4.4) are produced by the ECB using data from the ESCB and the BIS. Section 4.5 presents MFI interest rates on euro-denominated deposits and loans by euro area residents. Statistics on money market interest rates, long-term government bond yields and stock market indices (Sections 4.6 to 4.8) are produced by the ECB using data from wire services.

Statistics on securities issues cover securities other than shares (debt securities), which are presented in Sections 4.1, 4.2 and 4.3, and quoted shares, which are presented in Section 4.4. Debt securities are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in exceptional cases two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as "long-term". Long-term debt securities issued by euro area residents are broken down further into fixed and variable rate issues. Fixed rate issues consist of issues where the coupon rate does not change during the life of the issues. Variable rate issues include all issues where the coupon is periodically re-fixed by reference to an independent interest rate or index. The statistics on debt securities are estimated to cover approximately 95% of total issues by euro area residents. The euro-denominated securities indicated in Sections 4.1, 4.2 and 4.3 also include items expressed in national denominations of the euro.

Section 4.1 shows securities other than shares, by original maturity, residency of the issuer and currency. The section presents outstanding amounts, gross issues and net issues of securities other than shares denominated in euro and securities other than shares issued by euro area residents in euro and in all currencies for total and long-term debt securities. Net issues differ from the changes in outstanding amounts owing to valuation changes, reclassifications and other adjustments. This section also presents seasonally adjusted statistics, including annualised six-month seasonally adjusted growth rates for total and long-term debt securities. The latter are calculated from the seasonally adjusted index of notional stocks, from which the seasonal effects have been removed. See the Technical notes for details.

Section 4.2 contains a sectoral breakdown of outstanding amounts, gross issues and net issues for issuers resident in the euro area in line with the ESA 95. The ECB is included in the Eurosystem.

The total outstanding amounts for total and long-term debt securities in column 1 of Table 1 in Section 4.2 corresponds to the data on outstanding amounts for total and long-term debt securities issued by euro area residents in column 7 of Section 4.1. The outstanding amounts for total and long-term debt securities issued by MFIs in column 2 of Table 1 in Section 4.2 are broadly comparable with data for debt securities issued, as shown on the liabilities side of the aggregated MFI balance sheet in column 8 of Table 2 in Section 2.1. The total net issues for total debt securities in column 1 of Table 2 in Section 4.2 correspond to the data on total net issues by euro area residents in column 9 of Section 4.1. The residual difference between long-term debt securities and total fixed and variable rate long-term debt securities in Table 1 in Section 4.2 consists of zero coupon bonds and revaluation effects.

Section 4.3 shows non-seasonally and seasonally adjusted growth rates for debt securities issued by euro area residents (broken down by maturity, type of instrument, sector of the issuer and currency), which are based on financial transactions that occur when an institutional unit incurs or redeems liabilities. The growth rates therefore exclude reclassifications, revaluations, exchange rate variations and any other changes that do not arise from transactions. The seasonally adjusted growth rates have been annualised for presentational purposes. See the Technical notes for details.

Section 4.4, columns 1, 4, 6 and 8, show the outstanding amounts of quoted shares issued by euro area residents broken down by issuing sector. The monthly data for quoted shares issued by non-financial corporations correspond to the quarterly series shown in Section 3.4 (financial balance sheet, quoted shares).

Section 4.4, columns 3, 5, 7 and 9, show annual growth rates for quoted shares issued by euro area residents (broken down by the sector of the issuer), which are based on financial transactions that occur when an issuer issues or redeems shares for cash excluding investments in the issuers' own shares. The calculation of annual growth rates excludes reclassifications, revaluations and any other changes that do not arise from transactions.

Section 4.5 presents statistics on all the interest rates that MFIs resident in the euro area apply to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area. Euro area MFI interest rates are calculated as a weighted average (by corresponding business volume) of the euro area countries' interest rates for each category.

MFI interest rate statistics are broken down by type of business coverage, sector, instrument category and maturity, period of notice or initial period of interest rate fixation. The new MFI interest rate statistics replace the ten transitional statistical series on euro area retail interest rates that have been published in the Monthly Bulletin since January 1999.

Section 4.6 presents money market interest rates for the euro area, the United States and Japan. For the euro area, a broad spectrum of money market interest rates is covered, ranging from interest rates on overnight deposits to those on twelve-month deposits. Before January 1999, synthetic euro area interest rates were calculated on the basis of national rates weighted by GDP. With the exception of the overnight rate to December 1998, monthly, quarterly and yearly values are period averages. Overnight deposits are represented by interbank deposit bid rates up to December 1998. From January 1999, column 1 of Section 4.6 shows the euro overnight index average (EONIA). These are end-of-period rates up to December 1998 and period averages thereafter. From January 1999, interest rates on one-, three-, six- and twelve-month deposits are euro interbank offered rates (EURIBOR); until December 1998, London interbank offered rates (LIBOR) where available. For the United States and Japan, interest rates on three-month deposits are represented by LIBOR.

Table 4.7 shows end-of-period rates estimated from nominal spot yield curves based on AAA-rated euro-denominated bonds issued by euro area central governments. The yield curves are estimated using the Svensson model[3]. Spreads between the ten-year rates and the three-month and two-year rates are also released. Additional yield curves (daily releases, including charts and tables) and the corresponding methodological information are available at http://www.ecb.europa.eu/stats/money/yc/html/index.en.html. Daily data may also be downloaded.

Section 4.8 shows stock market indices for the euro area, the United States and Japan.

PRICES, OUTPUT, DEMAND AND LABOUR MARKETS

Most of the data described in this section are produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. Statistics on hourly labour costs, GDP and expenditure components, value added by economic activity, industrial production, retail sales and passenger

3 Svensson, L. E., "Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994", Centre for Economic Policy Research, Discussion Paper No 1051, 1994.

car registrations are adjusted for the variations in the number of working days.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 1 in Section 5.1) is available from 1995 onwards. It is based on national HICPs, which follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the classification of individual consumption by purpose (Coicop/HICP). The HICP covers monetary expenditure by households on final consumption in the economic territory of the euro area. The table includes seasonally adjusted HICP data and experimental HICP-based estimates of administered prices, which are compiled by the ECB.

Industrial producer prices (Table 2 in Section 5.1), industrial production, industrial new orders, industrial turnover and retail sales (Section 5.2) are covered by Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics.[4] 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,[5] has been applied in the production of short-term statistics. The breakdown by end-use of products 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[6].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 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 on compilation of the ECB commodity price indices, refer to Box 1 in the December 2008 issue of the Monthly Bulletin.

The labour cost indices (Table 5 in Section 5.1) measure the changes in labour costs per hour worked in industry (including construction) and market services. Their methodology is laid down in Regulation (EC) No 450/2003 of the European Parliament and of the Council of 27 February 2003 concerning the labour cost index[7] and in the implementing Commission Regulation (EC) No 1216/2003 of 7 July 2003.[8] 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 results of the ESA 95 quarterly national accounts.

4 OJ L 162, 5.6.1998, p. 1.
5 OJL L 393, 30.12.2006, p. 1
6 OJ L 155, 15.6.2007, p. 3.
7 OJ L 69, 13.3.2003, p. 1.
8 OJ L 169, 8.7.2003, p. 37.

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 series for the euro area excludes Cyprus and Malta.

Qualitative business and consumer survey data (Table 5 in Section 5.2) draw on the European Commission Business and Consumer Surveys.

Unemployment rates (Table 2 in Section 5.3) conform to International Labour Organization (ILO) guidelines. They refer to persons actively seeking work as a share of the labour force, using harmonised criteria and definitions. The labour force estimates underlying the 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[9] amending the ESA 95. Section 6.2 shows details of general government gross consolidated debt at nominal value in line with the Treaty provisions on the excessive deficit procedure. Sections 6.1 and 6.2 include summary data for the individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. The deficits/surpluses presented for the individual euro area countries correspond to excessive deficit procedure B.9, as defined by Commission Regulation (EC) No 351/2002 of 25 February 2002 amending Council Regulation (EC) No 3605/93 as regards references to the ESA 95. Section 6.3 presents changes in general government debt. The difference between the change in the government debt and the government deficit – the deficit-debt adjustment – is mainly explained by government transactions in financial assets and by foreign exchange valuation effects. Section 6.4 presents quarterly figures on general government revenue and expenditure on the basis of definitions laid down in Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002 on quarterly non-financial accounts for general government[10]. Section 6.5 presents quarterly figures on gross consolidated government debt, the deficit-debt adjustment and the government borrowing requirement. These figures are compiled using data provided by the Member States under Regulations (EC) No 501/2004 and No 222/2004 and data provided by the NCBs.

EXTERNAL TRANSACTIONS AND POSITIONS

The concepts and definitions used in balance of payments (b.o.p.) and international investment position (i.i.p.) statistics (Sections 7.1 to 7.4) are generally in line with the IMF Balance of Payments Manual (fifth edition, October 1993), the ECB Guideline of 16 July 2004 on the statistical reporting requirements of the ECB

9 OJ L 172, 12.7.2000, p. 3.
10 OJ L 179, 9.7.2002, p. 1.

(ECB/2004/15)[11] and the amending ECB Guideline of 31 May 2007 (ECB/2007/3)[12]. Additional references about the methodologies and sources used in the euro area b.o.p. and i.i.p. statistics can be found in the ECB publication entitled "European Union balance of payments/international investment position statistical methods" (May 2007), and in the following Task Force reports: "Portfolio investment collection systems" (June 2002), "Portfolio investment income" (August 2003) and "Foreign direct investment" (March 2004), all of which can be downloaded from the ECB's website. In addition, the report by the ECB/European Commission (Eurostat) Task Force on Quality of balance of payments and international investment position statistics (June 2004) is available on the website of the Committee on Monetary, Financial and Balance of Payments Statistics (www.cmfb.org). The annual quality report on the euro area b.o.p./i.i.p., which is based on the Task Force's recommendations, is available on the ECB's website.

The tables in Sections 7.1 and 7.4 follow the sign convention in the IMF Balance of Payments Manual, i.e. surpluses in the current account and in the capital account have a plus sign, while in the financial account a plus sign denotes an increase in liabilities or a decrease in assets. In the tables in Section 7.2, both credit and debit transactions are presented with a plus sign. Furthermore, starting with the February 2008 issue of the Monthly Bulletin, the tables in Section 7.3 have been restructured in order to allow the data on balance of payments, the international investment position and related growth rates to be presented together; in the new tables, transactions in assets and liabilities that correspond to increases in positions are shown with a plus sign.

The euro area b.o.p. is compiled by the ECB. Recent monthly figures should be regarded as provisional. Data are revised when figures for the following month and/or the detailed quarterly b.o.p. are published. Earlier data are revised periodically, or as a result of methodological changes in the compilation of the source data.

In Section 7.2, Table 1 also contains seasonally adjusted data for the current account. Where appropriate, the adjustment also covers working-day, leap-year and/or Easter effects. Table 3 in Section 7.2 and Table 8 in Section 7.3 present a breakdown of the euro area b.o.p. and i.i.p. vis-à-vis main partner countries individually or as a group, distinguishing between EU Member States outside the euro area and countries or areas outside the European Union. The breakdown also shows transactions and positions vis-à-vis EU institutions (which, apart from the ECB, are treated statistically as outside the euro area, regardless of their physical location) and, for some purposes, also offshore centres and international organisations. The breakdown does not cover transactions or positions in portfolio investment liabilities, financial derivatives and international reserves. In addition, separate data are not provided for investment income payable to Brazil, mainland China, India and Russia. The geographical breakdown is described in the article entitled "Euro area balance of payments and international investment position vis-à-vis main counterparts" in the February 2005 issue of the Monthly Bulletin.

The data on the euro area b.o.p. financial account and i.i.p. in Section 7.3 are based on transactions and positions vis-à-vis non-residents of the euro area, considering the euro area as a single economic entity (see also Box 9 in the December 2002 issue of the Monthly Bulletin, Box 5 in the January 2007 issue of the Monthly Bulletin and Box 6 in the January 2008 issue of the Monthly Bulletin). The i.i.p. is valued at current market prices, with the exception of direct investment, where book values are used for unquoted shares, and other investments (e.g. loans and deposits). The quarterly i.i.p. is compiled on the basis of the same methodological framework as the annual i.i.p. As some data sources are not available on a quarterly basis (or are available with a delay), the quarterly i.i.p. is partly estimated on the basis of financial transactions, asset prices and foreign exchange developments.

11 OJ L 354, 30.11.2004, p. 34.
12 OJ L 159, 20.6.2007, p. 48.

Table 1 in Section 7.3 summarises the i.i.p. and financial transactions in the euro area b.o.p. The breakdown of the change in the annual i.i.p. is obtained by applying a statistical model to the i.i.p. changes other than transactions with information from the geographical breakdown and currency composition of assets and liabilities, as well as price indices for different financial assets. In this table, Columns 5 and 6 refer to direct investment by resident units abroad and direct investment by non-resident units in the euro area.

In Table 5 in Section 7.3, the breakdown into "loans" and "currency and deposits" is based on the sector of the non-resident counterpart, i.e. assets vis-à-vis non-resident banks are classified as deposits, whereas assets vis-à-vis other non-resident sectors are classified as loans. This breakdown follows the distinction made in other statistics, such as the MFI consolidated balance sheet, and conforms to the IMF Balance of Payments Manual.

The outstanding amounts of the Eurosystem's international reserves and related assets and liabilities are shown in Section 7.3, Table 7. These figures are not fully comparable with those of the Eurosystem's weekly financial statement owing to differences in coverage and valuation. The data in Table 7 are in line with the recommendations for the template on international reserves and foreign currency liquidity. Changes in the gold holdings of the Eurosystem (column 3) are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999, which was updated on 8 March 2004. More information on the statistical treatment of the Eurosystem's international reserves can be found in a publication entitled "Statistical treatment of the Eurosystem's international reserves" (October 2000), which can be downloaded from the ECB's website. The website also contains more comprehensive data in accordance with the template on international reserves and foreign currency liquidity.

Section 7.4 contains a monetary presentation of the euro area balance of payments, in which the balance of payments transactions mirror the transactions in the external counterpart to M3. In portfolio investment liabilities (Columns 5 and 6), the transactions include sales and purchases of equity and debt securities issued by MFIs in the euro area, excluding shares of money market funds and debt securities with a maturity of up to two years. A methodological note on the monetary presentation of the euro area balance of payments is available in the "Statistics" section of the ECB's website. See also Box 1 in the June 2003 issue of the Monthly Bulletin.

Section 7.5 shows data on euro area external trade in goods. The source is Eurostat. Value data and volume indices are seasonally and working day-adjusted. The breakdown by product group in columns 4 to 6 and 9 to 11 of Table 1 in Section 7.5 is in line with the classification by Broad Economic Categories and corresponds to the basic classes of goods in the System of National Accounts. Manufactured goods (columns 7 and 12) and oil (column 13) are in line with the SITC Rev. 4 definition. The geographical breakdown (Table 3 in Section 7.5) shows main trading partners individually or in regional groups. China excludes Hong Kong. On account of differences in definitions, classification, coverage and time of recording, external trade data, in particular for imports, are not fully comparable with the goods item in the b.o.p. statistics (Sections 7.1 and 7.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported in external trade data.

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 sectors of the importers except households, governments and non-profit institutions. It reflects the cost, insurance and freight (c.i.f.) price excluding import duties and taxes, and refers to the actual transactions in euro recorded at the point when ownership of the goods is being 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 (f.o.b.) price expressed in euro and calculated at the euro area frontiers, including any indirect taxes except VAT and other deductible taxes. Industrial import prices and industrial producer export prices are available by Main Industrial Groupings (MIGs) as defined by Commission Regulation (EC) No 656/2007 of 14 June 2007. For more details, refer to Box 11 in the December 2008 issue of the Monthly Bulletin.

EXCHANGE RATES

Section 8.1 shows nominal and real effective exchange rate (EER) indices for the euro, calculated by the ECB on the basis of weighted averages of bilateral exchange rates of the euro against the currencies of the euro area's trading partners. A positive change denotes an appreciation of the euro. Weights are based on trade in manufactured goods with the trading partners in the periods 1995-1997 and 1999-2001, and are calculated to account for third-market effects. The EER indices result from the linking at the beginning of 1999 of the indices based on 1995-1997 weights to those based on 1999-2001 weights. The EER-21 group of trading partners is composed of the 11 non-euro area EU Member States plus Australia, Canada, China, Hong Kong, Japan, Norway, Singapore, South Korea, Switzerland and the United States. The EER-41 group includes the EER-21 and the following countries: Algeria, Argentina, Brazil, Chile, Croatia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Russia, South Africa, Taiwan, Thailand, Turkey and Venezuela. Real EERs are calculated using consumer price indices, producer price indices, gross domestic product deflators, unit labour costs in manufacturing and unit labour costs in the total economy.

For more detailed information on the calculation of the EERs, see Box 8 entitled "The effective exchange rates of the euro following the recent euro area and EU enlargements" in the March 2007 issue of the Monthly Bulletin and the ECB's Occasional Paper No 2 ("The effective exchange rates of the euro" by Luca Buldorini, Stelios Makrydakis and Christian Thimann, February 2002), which can be downloaded from the ECB's website.

The bilateral rates shown in Section 8.2 are monthly averages of those published daily as reference rates for these currencies. The reference rate of the Indian rupee vis-à-vis the euro has been inserted for the first time in column 26. However data prior to 1 January 2009 are to be considered as indicative rates

DEVELOPMENTS OUTSIDE THE EURO AREA

Statistics on other EU Member States (Section 9.1) follow the same principles as those for data relating to the euro area. The data for the United States and Japan contained in Section 9.2 are obtained from national sources.

ANNEXES

CHRONOLOGY OF MONETARY POLICY MEASURES OF THE EUROSYSTEM[1]

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 AND 8 OCTOBER 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.

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This list is designed to inform readers about selected documents published by the European Central Bank since January 2008. 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 July and September 2009. 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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GLOSSARY

This glossary contains selected items that are frequently used in the Monthly Bulletin. A more comprehensive and detailed glossary can be found on the ECB's website (www.ecb.europa.eu/home/glossary/html/index.en.html).

Autonomous liquidity factors: liquidity factors that do not normally stem from the use of monetary policy instruments. Such factors are, for example, banknotes in circulation, government deposits with the central bank and the net foreign assets of the central bank.

Balance of payments (b.o.p.): a statistical statement that summarises, for a specific period of time, the economic transactions of an economy with the rest of the world.

Bank lending survey (BLS): a quarterly survey on lending policies that has been conducted by the Eurosystem since January 2003. It addresses qualitative questions on developments in credit standards, terms and conditions of loans and loan demand for both enterprises and households to a predefined sample group of banks in the euro area.

Borrowing requirement (general government): net incurrence of debt by the general government.

Capital account: a b.o.p. account that covers all capital transfers and acquisitions/disposals of non-produced, non-financial assets between residents and non-residents.

Capital accounts: part of the system of national (or euro area) accounts consisting of the change in net worth that is due to net saving, net capital transfers and net acquisitions of non-financial assets.

Central parity (or central rate): the exchange rate of each ERM II member currency vis-à-vis the euro, around which the ERM II fluctuation margins are defined.

Compensation per employee or per hour worked: the total remuneration, in cash or in kind, that is payable by employers to employees, i.e. gross wages and salaries, as well as bonuses, overtime payments and employers' social security contributions, divided by the total number of employees or by the total number of employees' hours worked.

Consolidated balance sheet of the MFI sector: a balance sheet obtained by netting out inter-MFI positions (e.g. inter-MFI loans and deposits) in the aggregated MFI balance sheet. It provides statistical information on the MFI sector's assets and liabilities vis-à-vis residents of the euro area not belonging to this sector (i.e. the general government and other euro area residents) and vis-à-vis non-euro area residents. It is the main statistical source for the calculation of monetary aggregates, and it provides the basis for the regular analysis of the counterparts of M3.

Current account: a b.o.p. account that covers all transactions in goods and services, income and current transfers between residents and non-residents.

Debt (financial accounts): loans, deposit liabilities, debt securities issued and pension fund reserves of non-financial corporations (resulting from employers' direct pension commitments on behalf of their employees), valued at market value at the end of the period.

Debt (general government): the gross debt (deposits, loans and debt securities excluding financial derivatives) at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.

Debt security: a promise on the part of the issuer (i.e. the borrower) to make one or more payment(s) to the holder (the lender) on a specified future date or dates. Such securities usually carry a specific rate of interest (the coupon) and/or are sold at a discount to the amount that will be repaid at maturity. Debt securities issued with an original maturity of more than one year are classified as long-term.

Debt-to-GDP ratio (general government): the ratio of general government debt to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit.

Deficit (general government): the general government's net borrowing, i.e. the difference between total government revenue and total government expenditure.

Deficit-debt adjustment (general government): the difference between the general government deficit and the change in general government debt.

Deficit ratio (general government): the ratio of the general government deficit to GDP at current market prices. It is the subject of one of the fiscal criteria laid down in Article 104(2) of the Treaty establishing the European Community to define the existence of an excessive deficit. It is also referred to as the budget deficit ratio or the fiscal deficit ratio.

Deflation: a decline in the general price level, e.g. in the consumer price index.

Deposit facility: a standing facility of the Eurosystem which counterparties may use to make overnight deposits, remunerated at a pre-specified interest rate, at an NCB.

Direct investment: cross-border investment for the purpose of obtaining a lasting interest in an enterprise resident in another economy (assumed, in practice, for ownership of at least 10% of the ordinary shares or voting power). Included are equity capital, reinvested earnings and other capital associated with inter-company operations. The direct investment account records net transactions/positions in assets abroad by euro area residents (as "direct investment abroad") and net transactions/positions in euro area assets by non-residents (as "direct investment in the euro area").

Effective exchange rates (EERs) of the euro (nominal/real): weighted averages of bilateral euro exchange rates against the currencies of the euro area's main trading partners. The nominal EER indices for the euro are calculated against two groups of trading partners: the EER-21 (comprising the 11 non-euro area EU Member States and 10 trading partners outside the EU) and the EER-41 (composed of the EER-21 and 20 additional countries). The weights used reflect the share of each partner country in euro area trade and account for competition in third markets. Real EERs are nominal EERs deflated by a weighted average of foreign, relative to domestic, prices or costs. They are thus measures of price and cost competitiveness.

EONIA (euro overnight index average): a measure of the effective interest rate prevailing in the euro interbank overnight market. It is calculated as a weighted average of the interest rates on unsecured overnight lending transactions denominated in euro, as reported by a panel of contributing banks.

Equities: securities representing ownership of a stake in a corporation. They comprise shares traded on stock exchanges (quoted shares), unquoted shares and other forms of equity. Equities usually produce income in the form of dividends.

ERM II (exchange rate mechanism II): the exchange rate arrangement that provides the framework for exchange rate policy cooperation between the euro area countries and the EU Member States not participating in Stage Three of EMU.

EURIBOR (euro interbank offered rate): the rate at which a prime bank is willing to lend funds in euro to another prime bank, computed daily for interbank deposits with different maturities of up to 12 months.

Euro area: the area formed by those EU Member States in which the euro has been adopted as the single currency in accordance with the Treaty establishing the European Community.

European Commission surveys: harmonised surveys of business and/or consumer sentiment conducted on behalf of the European Commission in each of the EU Member States. Such questionnaire-based surveys are addressed to managers in the manufacturing, construction, retail and services industries, as well as to consumers. From each monthly survey, composite indicators are calculated that summarise the replies to a number of different questions in a single indicator (confidence indicators).

Eurosystem: the central banking system made up of the ECB and the NCBs of those EU Member States that have already adopted the euro.

Eurozone Purchasing Managers' Surveys: surveys of business conditions in manufacturing and in services industries conducted for a number of countries in the euro area and used to compile indices. The Eurozone Manufacturing Purchasing Managers' Index (PMI) is a weighted indicator calculated from indices of output, new orders, employment, suppliers' delivery times and stocks of purchases. The services sector survey asks questions on business activity, expectations of future business activity, the amount of business outstanding, incoming new business, employment, input prices and prices charged. The Eurozone Composite Index is calculated by combining the results from the manufacturing and services sector surveys.

External trade in goods: exports and imports of goods with countries outside the euro area, measured in terms of value and as indices of volume and unit value. External trade statistics are not comparable with the exports and imports recorded in the national accounts, as the latter include both intra-euro area and extra-euro area transactions, and also combine goods and services. Nor are they fully comparable with the goods item in b.o.p. statistics. Besides methodological adjustments, the main difference is that imports in external trade statistics are recorded including insurance and freight services, whereas they are recorded free on board in the goods item in the b.o.p. statistics.

Financial account: a b.o.p. account that covers transactions between residents and non-residents in direct investment, portfolio investment, other investment, financial derivatives and reserve assets.

Financial accounts: part of the system of national (or euro area) accounts showing the financial positions (stocks or balance sheets), financial transactions and other changes of the different institutional sectors of an economy by type of financial asset.

Fixed rate tender: a tender procedure in which the interest rate is specified in advance by the central bank and in which participating counterparties bid the amount of money they wish to transact at the fixed interest rate.

General government: a sector defined in the ESA 95 as comprising resident entities that are engaged primarily in the production of non-market goods and services intended for individual and collective consumption and/or in the redistribution of national income and wealth. Included are central, regional and local government authorities as well as social security funds. Excluded are government-owned entities that conduct commercial operations, such as public enterprises.

Gross domestic product (GDP): the value of an economy's total output of goods and services less intermediate consumption, plus net taxes on products and imports. GDP can be broken down by output, expenditure or income components. The main expenditure aggregates that make up GDP are household final consumption, government final consumption, gross fixed capital formation, changes in inventories, and imports and exports of goods and services (including intra-euro area trade).

Harmonised Index of Consumer Prices (HICP): a measure of the development of consumer prices that is compiled by Eurostat and harmonised for all EU Member States.

Hourly labour cost index: a measure of labour costs, including gross wages and salaries (in cash and in kind, including bonuses) and other labour costs (employers' social contributions plus employment-related taxes paid by the employer minus subsidies received by the employer), per hour actually worked (including overtime).

Implied volatility: the expected volatility (i.e. standard deviation) in the rates of change of the price of an asset (e.g. a share or a bond). It can be derived from the asset's price, maturity date and exercise price of its options, as well as from a riskless rate of return, using an option pricing model such as the Black-Scholes model.

Index of negotiated wages: a measure of the direct outcome of collective bargaining in terms of basic pay (i.e. excluding bonuses) at the euro area level. It refers to the implied average change in monthly wages and salaries.

Industrial producer prices: factory-gate prices (transportation costs are not included) of all products sold by industry excluding construction on the domestic markets of the euro area countries, excluding imports.

Industrial production: the gross value added created by industry at constant prices.

Inflation: an increase in the general price level, e.g. in the consumer price index.

Inflation-indexed government bonds: debt securities issued by the general government, the coupon payments and principal of which are linked to a specific consumer price index.

International investment position (i.i.p.): the value and composition of an economy's outstanding net financial claims on (or financial liabilities to) the rest of the world.

International reserves: external assets readily available to and controlled by monetary authorities for directly financing or regulating the magnitude of payments imbalances through intervention in exchange markets. The international reserves of the euro area comprise non-euro denominated claims on non-euro area residents, gold, special drawing rights (SDRs) and the reserve positions in the IMF which are held by the Eurosystem.

Investment funds (except money market funds): financial institutions that pool capital raised from the public and invest it in financial and non-financial assets. See also **MFIs**.

Job vacancies: a collective term covering newly created jobs, unoccupied jobs or jobs about to become vacant in the near future, for which the employer has recently taken active steps to find a suitable candidate.

Key ECB interest rates: the interest rates, set by the Governing Council, which reflect the monetary policy stance of the ECB. They are the rates at the main refinancing operations, on the marginal lending facility and on the deposit facility.

Labour force: the sum total of persons in employment and the number of unemployed.

Labour productivity: the output that can be produced with a given input of labour. It can be measured in several ways, but is commonly measured as GDP (volume) divided by either total employment or total hours worked.

Longer-term refinancing operation: a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a monthly standard tender and normally have a maturity of three months.

M1: a narrow monetary aggregate that comprises currency in circulation plus overnight deposits held with MFIs and central government (e.g. at the post office or treasury).

M2: an intermediate monetary aggregate that comprises M1 plus deposits redeemable at a period of notice of up to and including three months (i.e. short-term savings deposits) and deposits with an agreed maturity of up to and including two years (i.e. short-term time deposits) held with MFIs and central government.

M3: a broad monetary aggregate that comprises M2 plus marketable instruments, in particular repurchase agreements, money market fund shares and units, and debt securities with a maturity of up to and including two years issued by MFIs.

Main refinancing operation: a regular open market operation executed by the Eurosystem in the form of reverse transactions. Such operations are carried out through a weekly standard tender and normally have a maturity of one week.

Marginal lending facility: a standing facility of the Eurosystem which counterparties may use to receive overnight credit from an NCB at a pre-specified interest rate against eligible assets.

MFI credit to euro area residents: MFI loans granted to non-MFI euro area residents (including general government and the private sector) and MFI holdings of securities (shares, other equity and debt securities) issued by non-MFI euro area residents.

MFI interest rates: the interest rates that are applied by resident credit institutions and other MFIs, excluding central banks and money market funds, to euro-denominated deposits and loans vis-à-vis households and non-financial corporations resident in the euro area.

MFI longer-term financial liabilities: deposits with an agreed maturity of over two years, deposits redeemable at a period of notice of over three months, debt securities issued by euro area MFIs with an original maturity of more than two years and the capital and reserves of the euro area MFI sector.

MFI net external assets: the external assets of the euro area MFI sector (such as gold, foreign currency banknotes and coins, securities issued by non-euro area residents and loans granted to non-euro area residents) minus the external liabilities of the euro area MFI sector (such as non-euro area residents' deposits and repurchase agreements, as well as their holdings of money market fund shares/units and debt securities issued by MFIs with a maturity of up to and including two years).

MFIs (monetary financial institutions): financial institutions which together form the 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.

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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