risk outlook

3

December 2011

CONSOB

Commissione Nazionale per le Società e la Borsa

The risk outlook is published regularly, every six months.
It analyses the current economic situation and the trends characterising the evolution of the financial markets.
The document serves to identify the risk factors in order to achieve Consob's institutional objectives.

This report is based on data available as of November 2011 obtained from sources considered reliable, but for which the completeness and accuracy cannot be guaranteed.

The opinions expressed in the risk outlook are personal to the authors and are in no way binding on Consob.

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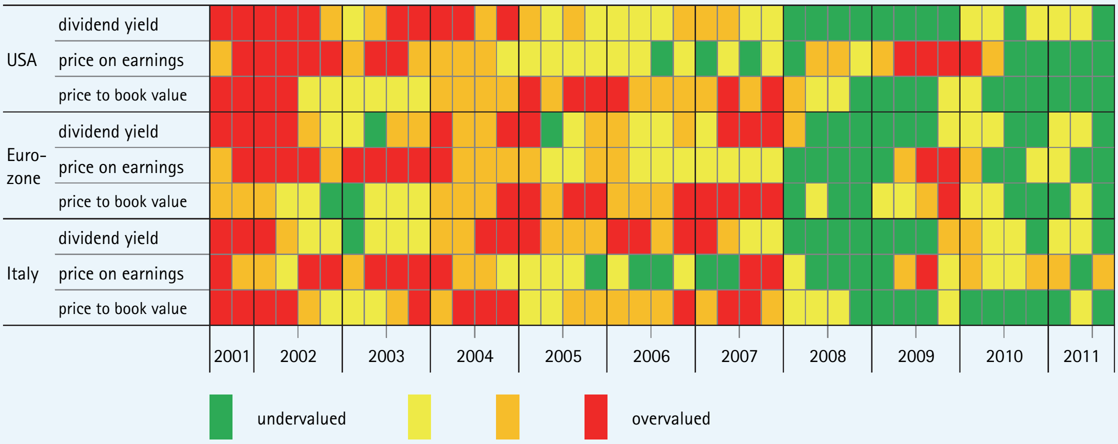
Trends and risks

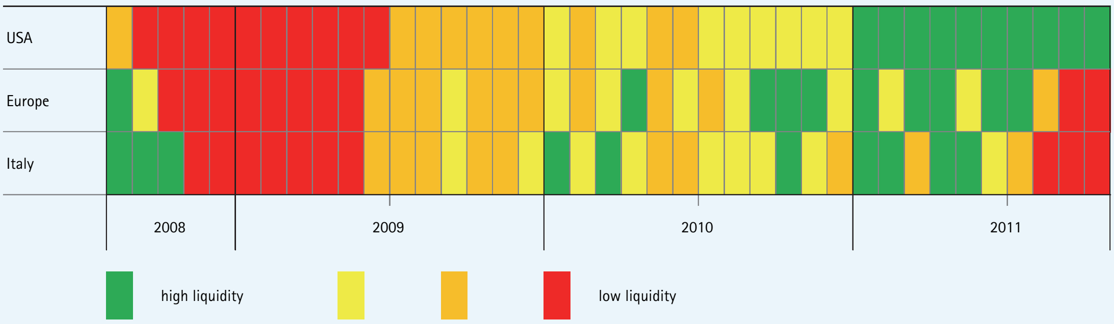
Starting in July, tension on sovereign debt in the Eurozone has increased and growth forecasts for the advanced countries have been lowered. Uncertainty weighs heavy with regard to the definition of crisis resolution measures; and the risk of contagion is also increasing. This is shown by the high levels of inter-dependency among CDS spreads for the economies most exposed to the sovereign debt crisis. The turbulence, in fact, is spreading rapidly from the peripheral countries to Spain, Italy and Belgium and may also affect other countries. In the absence of growth stimulation measures - which should go hand-in-hand with the necessary policies for consolidating the budget already taken by several advanced economies - the risk of a negative spiral between falling production and worsening public finances becomes tangible, with real effects destined to last for a long time. In this context, share prices have fallen sharply, particularly in European countries, while there has been an increase in volatility and a reduction in liquidity on the secondary markets. The credit quality indexes for private issuers show a deterioration of expectations, above all in the financial sector, also by virtue of the growth of the relevance of systemic factors in the evaluation of solvency risk; in the countries most exposed to the sovereign debt crisis, CDS spreads on banking issuers overestimate the risk with respect to models based on fundamentals. During the first 9 months of the year, the profitability of the major European banks has grown and the level of capitalisation has increased, although the rate of growth slowed during the third quarter. The most important non-financial companies of the advanced economies show growth in revenues albeit at reduced rates for those operating in Europe. The reduction in profitability has, however, determined an increase in the ratio between debt and operating profit.

Indicators of equity over/undervaluation



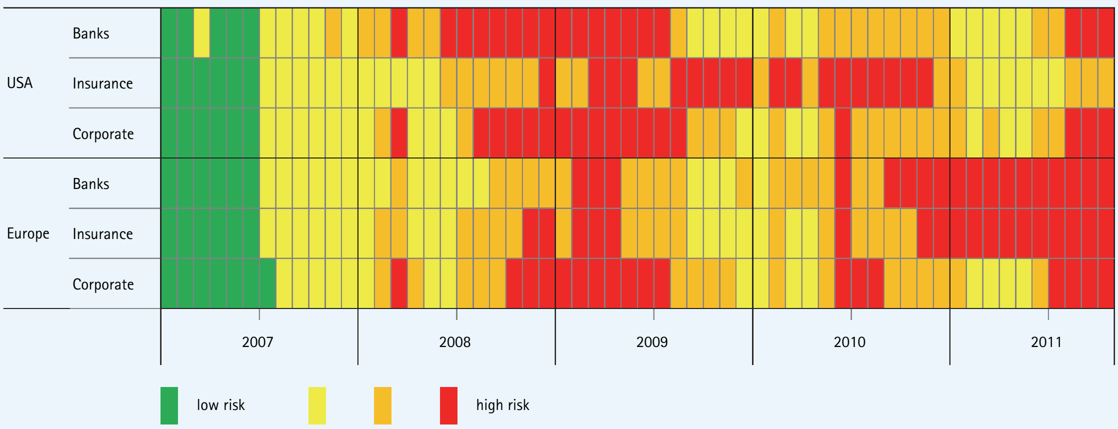
Source: calculations on Thomson Reuters data. The share price over/undervaluation indicators are computed on the basis of the historical distribution of the dividend yield, price on earnings and price to book value variables.

Stock market liquidity indicators



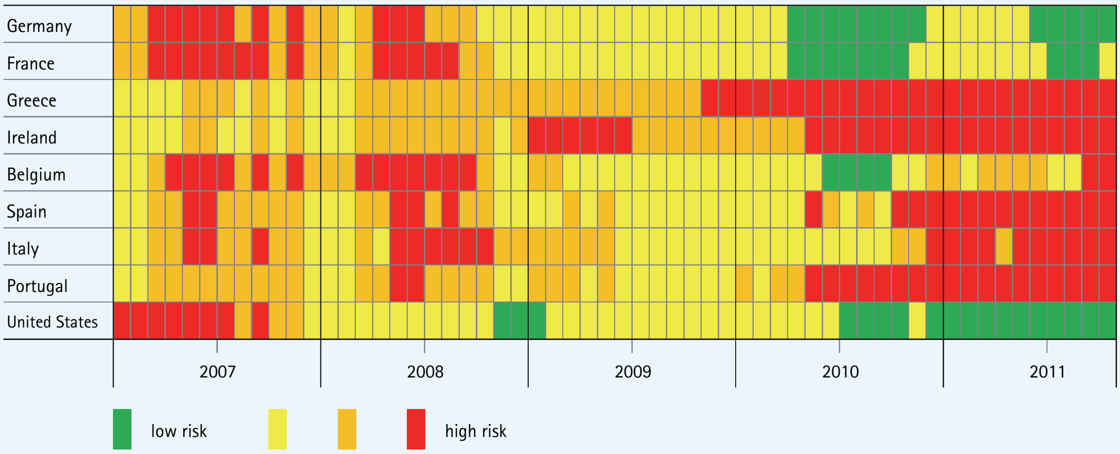
Source: calculations on Thomson Reuters data. The liquidity indicator is computed on the basis of the historical distribution of the relative quoted spread. Securities included on the S&P100, Stoxx Europe 50 and FTSE Mib have been considered.

Credit risk indicator



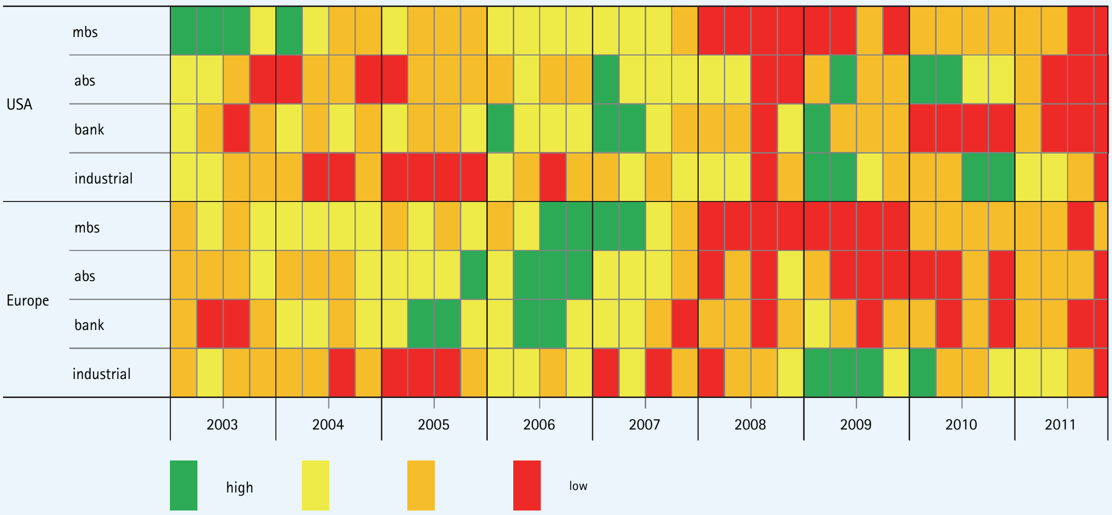
Source: calculations on Thomson Reuters data. The risk level is computed on the basis of the historical distribution of the Thomson Reuters indicators for financial and corporate CDSs.

Sovereign risk indicator



Source: calculations on Thomson Reuters data. The risk level is computed on the basis of the historical distribution of CDSs on government debt.

Indicators of issuance activity by sector



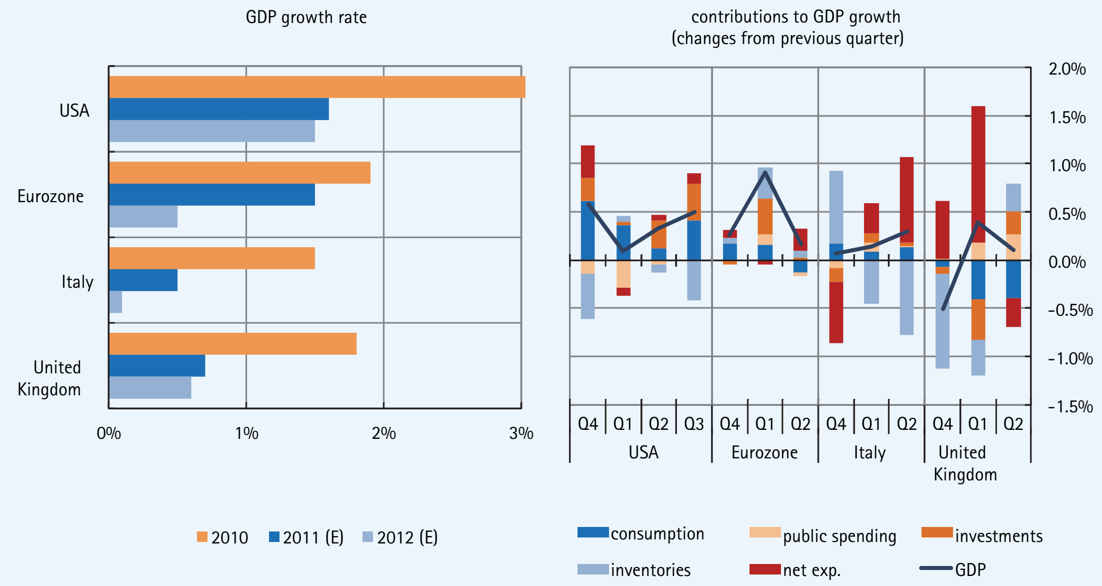
Source: calculations on Dealogic data. The absorption indicator is computed by comparing placings in the period with the historic distribution of placings and it is estimated by correcting for outliers.

Macroeconomic background

Since July, tensions on sovereign debt in the Eurozone have increased and growth forecasts have been lowered

Since July, the contagion phenomenon on the re-pricing of sovereign risk has expanded rapidly from some peripheral countries of the Eurozone to larger countries. This phenomenon and the great turbulence on the financial markets have caused a significant worsening of the climate of confidence and expectations of operators. This has resulted in a radical review of growth forecasts in the advanced economies, which up until June had been, on the whole, positive. The revision of economic prospects has further driven fears as to the sustainability of the public accounts of countries most exposed to sovereign risk, sparking off a negative spiral amidst declining confidence and worsening expectations. According to the latest estimates available, the growth of the Eurozone should come out at 1.5% in 2011 and at 0.5% in 2012; for Italy, a slowdown from 0.5% for this year to 0.1% for 2012 is forecast. Among peripheral Eurozone countries, only Ireland seems to remain positive (approx. +1% from 2011 to 2012), whilst Greece and Portugal are expected to see a further drop in GDP of around 3%. Economic activity is expected to decline in the United Kingdom too, due to a possible drop in exports and continued weakness of domestic demand (penalised by the credit squeeze and rising tax pressure); the phenomenon will also affect the United States due to falling available income and family savings rates. The spread of the sovereign debt crisis from the peripheral countries of the Eurozone to the larger countries and the possible repercussions on the financial system involve the risk that the real effects of the crisis are destined to continue for some time to come. The possible negative spiral of declining production and worsening public accounts also leads in this direction. Such a spiral, in the absence of measures to stimulate growth, may be caused by the very necessary budget consolidation policies, already implemented by several advanced economies.

Figure 1.1 – GDP growth in advanced economies

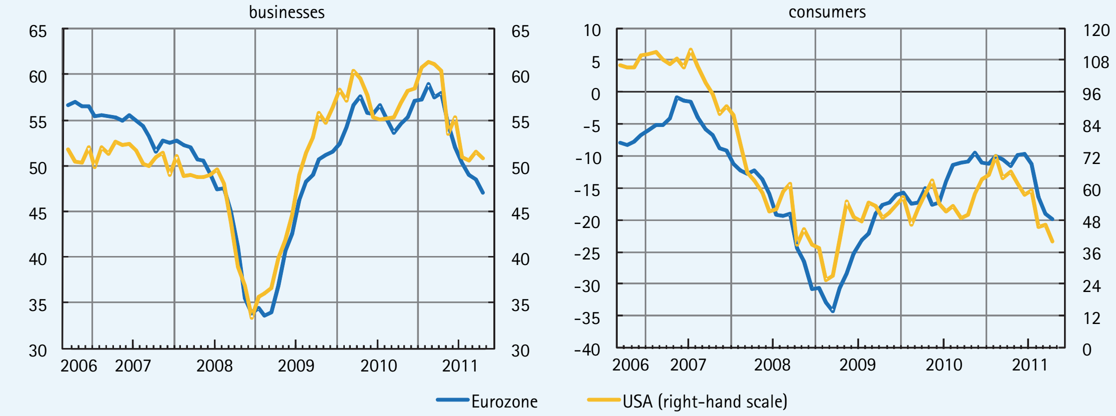


Source: calculations on Thomson Reuters and European Commission data.

Confidence continues to decline amongst businesses and consumers in advanced countries

The risk that the weak economic situation may continue for some time is also signalled by the trend in business and consumer confidence indexes recorded in the United States and the Eurozone. The worsening of the climate of confidence had already begun to show its head during the second quarter of the year, anticipating the uncertainties linked to the evolution of the cycle and the tension on the sovereign debt of peripheral Eurozone countries.

Figure 1.2 – Firms and consumers confidence

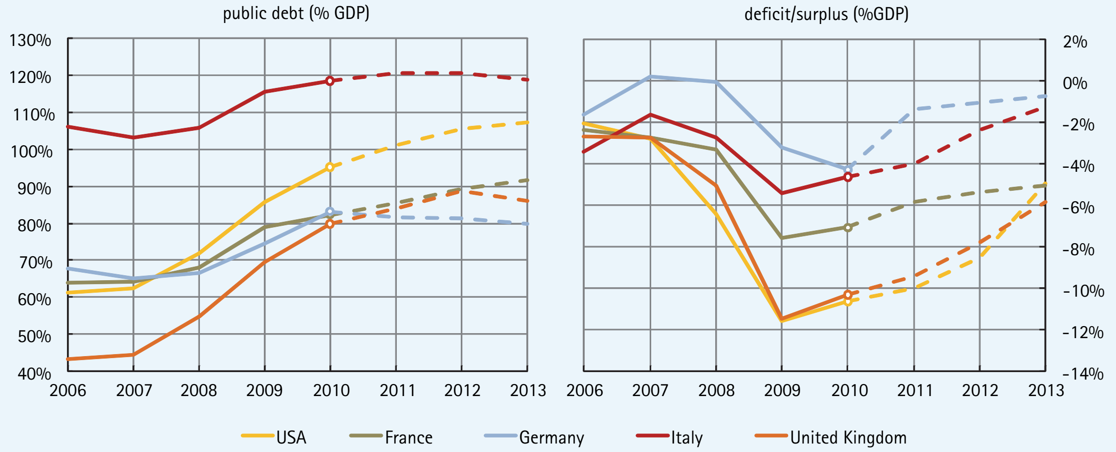


Source: Thomson Reuters, Markit Economics, European Commission and the US Conference Board.

The debt/GDP ratio is expected to grow moderately in some advanced countries, although the budget consolidation policies already adopted should have positive effects on the deficit/GDP ratio from the end of the year. Uncertainty grows over US tax policy

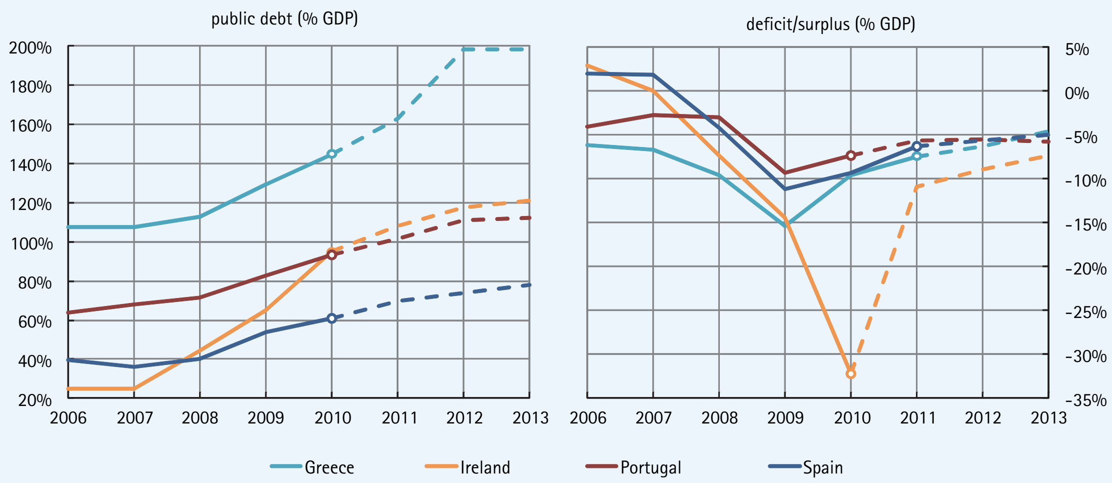
Despite the tax consolidation measures already adopted by many advanced countries, in 2012 the debt/GDP ratio may grow moderately in a great many countries (approximately 198% in Greece, a little less than 121% in Italy, 111% in Portugal and around 118% in Ireland; in 2012 the United States will probably also exceed 100%). This trend, accentuated by slowing economic growth, also reflects the contribution of interest expense, which, owing to rising interest rates in the countries most exposed to the sovereign debt crisis, will increase. It is forecast that the proportion of GDP destined to pay interest will reach 8% in 2012 for Greece; it will exceed 5% for Italy and Portugal and come out at around 3% for the United Kingdom and the United States. Over the next two years, moreover, the public accounts will be in deficit both in the Eurozone and in the United States. Most European countries, however, should see an improvement in their accounting balances thanks to the consolidation policies already in place in response to pressures exerted by the financial markets and worsening growth forecasts. An analysis of changes to the primary deficit, corrected for the cycle, shows in fact that from 2011 the contribution of the cost cutting measures to reducing the deficit will average almost 2 points of GDP in the Eurozone; from 2011 to 2013, the accumulated budgetary measures will be worth more than 8 points of GDP in Greece and almost 4 in Italy and Spain. For the United States, on the other hand, uncertainty is growing with regard to public finance decisions, as it is increasingly evident that conditions are not being met for a political agreement either on corrective measures to tackle the deficit in the short-term or on structural actions needed to make the US federal budget sustainable in the long-term. Whilst for the latter, the probability of an examination subsequent to the electoral deadline of 2012 increases, the deficit cuts could come into force automatically as from 2013, in accordance with the plan defined by the Budget Control Act of last August. Unless Congress manages to come up with alternative measures by 15 January 2012, several extraordinary measures to stimulate the economy are not expected to be renewed, with very restrictive consequences on the tax policy in 2012.

Figure 1.3 – Public deficit and debt in advanced economies



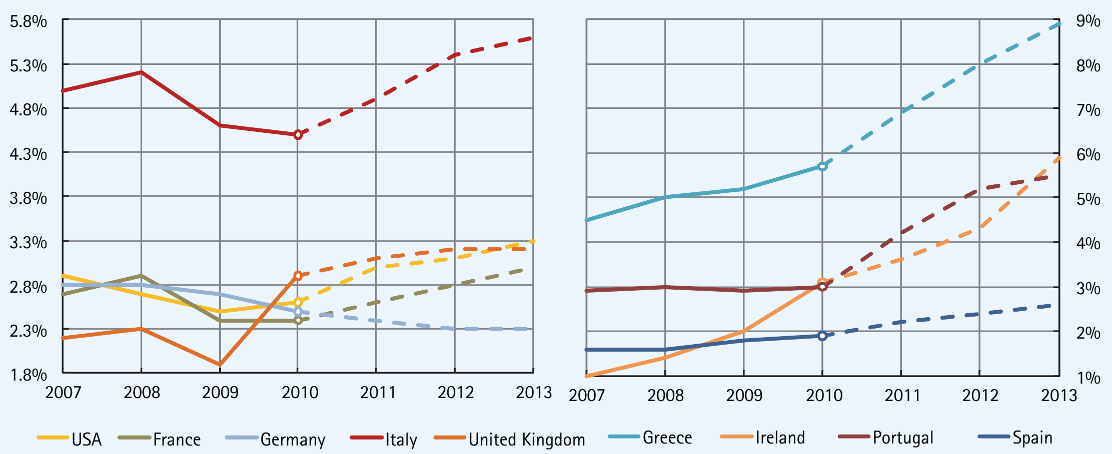
Source: European Commission.

Figure 1.4 – Deficit and public debt in some Eurozone countries



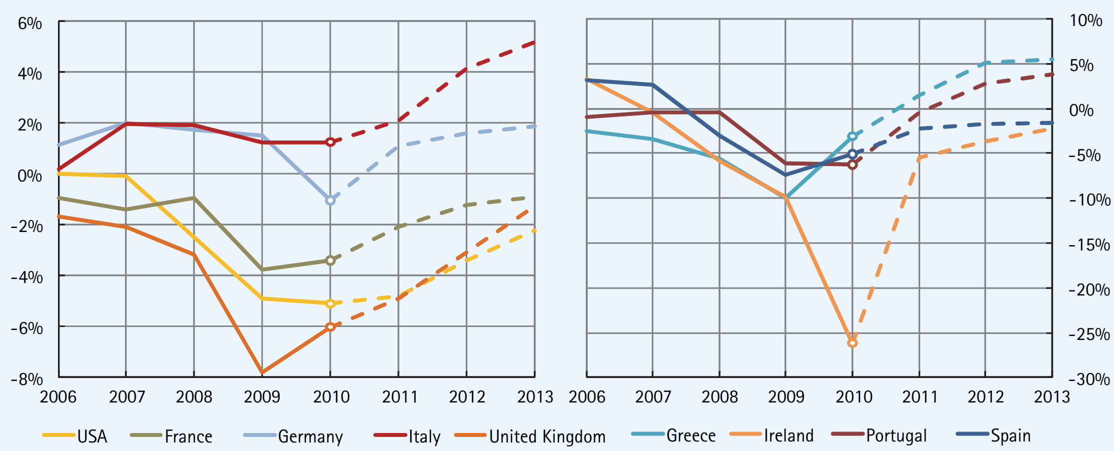
Source: European Commission.

Figure 1.5 – Public debt interest expense
(amounts as % GDP)



Source: European Commission.

Figure 1.6 – Public sector primary surpluses/deficits, cyclically adjusted
(amounts as % GDP)

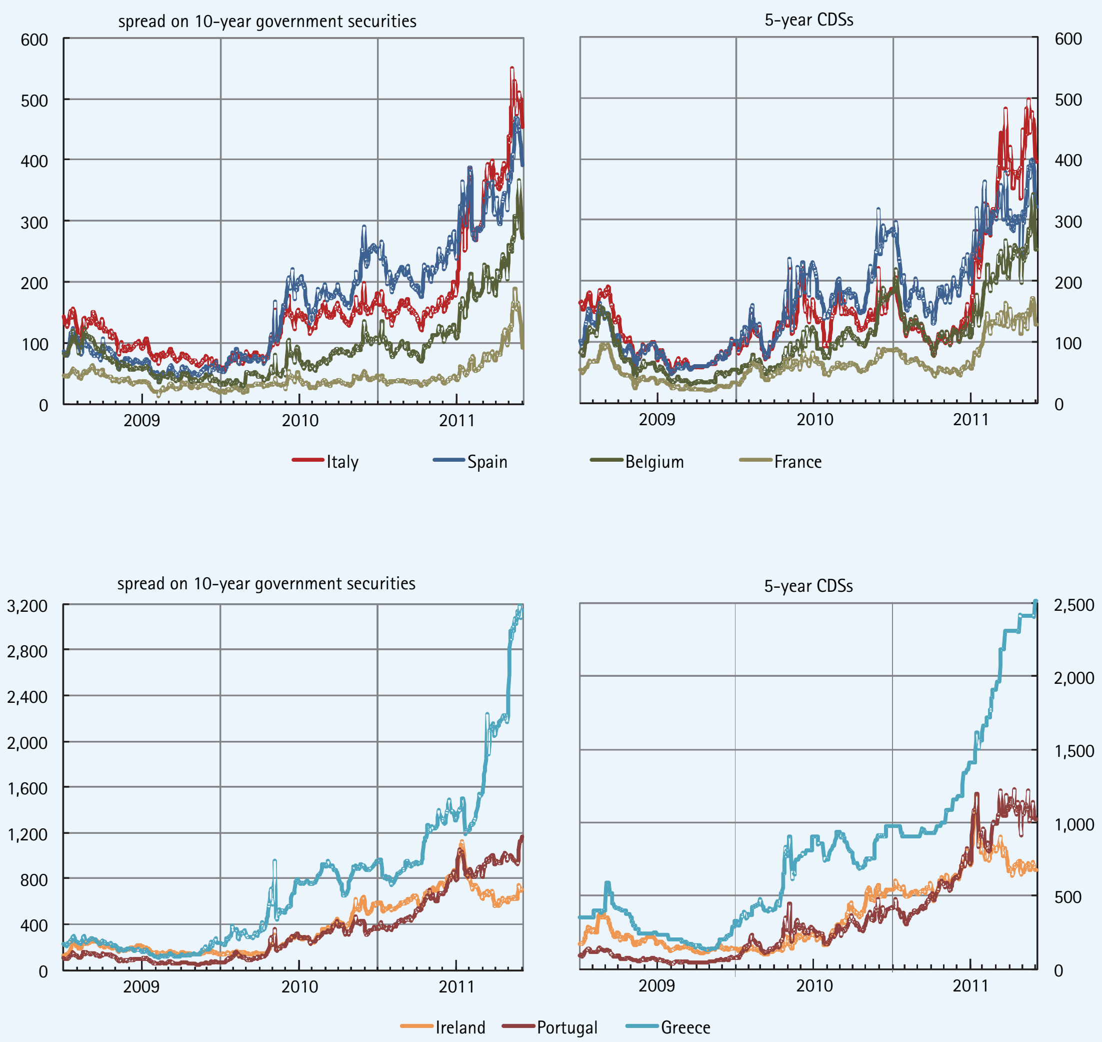


Source: European Commission and IMF.

The perception of sovereign risk for some Eurozone countries has increased during the second half of the year along with growing uncertainty on how the Greek crisis is to be managed. The decisions taken in Europe are not sufficient to reassure the markets

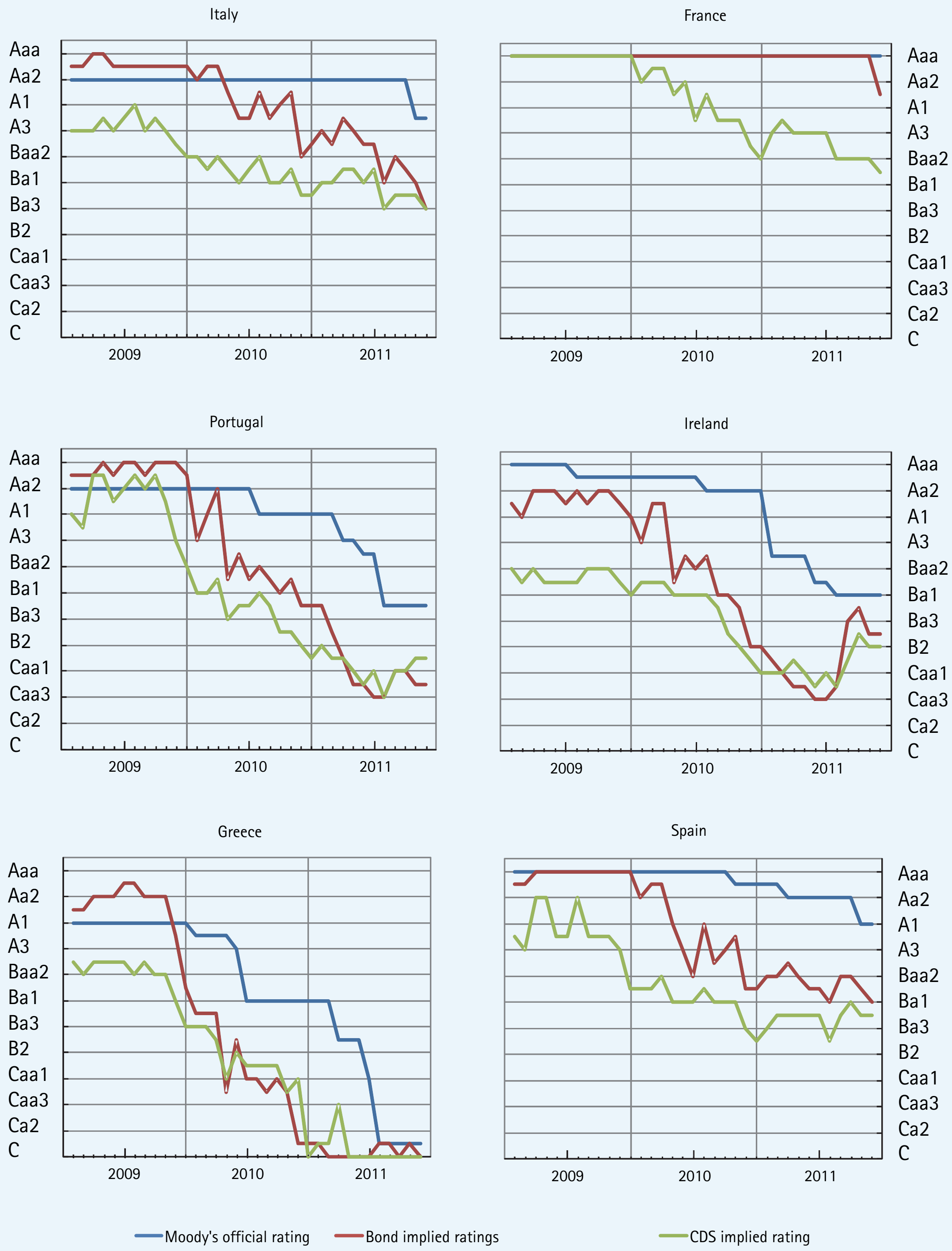
During the second half of the year, uncertainties about how the Greek crisis can be solved have led to a significant increase in the perception of sovereign risk for the other Eurozone countries. In actual fact, the Treasury bonds of Spain, Italy and, since early November, France and Belgium, have seen their spread against the German Bund rise significantly. In the same period, the yield of German securities has recorded a reduction of more than 100 basis points, settling, for ten-year Bunds, at 2%. As tensions have grown on sovereign debt, the European Council has taken initiatives aimed at strengthening the assistance instruments and measures extended to countries in difficulty (in particular, by strengthening the European Financial Stability Facility - EFSF and defining an ordered process for Greek debt rescheduling), in order to stem the contagion. As from 7 August, the ECB has also reactivated the Securities Markets Programme (SMP), purchasing government securities of Eurozone countries on the secondary market, on average equal to approximately 8.2 billion euro per week. These provisions, however, have not sufficed to restore confidence on the markets and sharp rises in spreads have been recorded. More specifically for Italy, which at the beginning of August saw the spread on 10-year BTPs grow from 250 to nearly 400 basis points in just a few days, BTP yields have since continued to rise, exceeding 7% in the second half of November. In this situation, with the exception of Ireland and Greece, there continues to be a significant gap between the official rating and the perception of insolvency risk implicit in the performance of government securities and CDS prices.

Figure 1.7 – Spreads and CDSs on public debt in some Eurozone countries
(difference against German government bonds and CDSs on public debt; basis points)



Source: calculations on Thomson Reuters data.

Figure 1.8 – Bond and CDS implied ratings

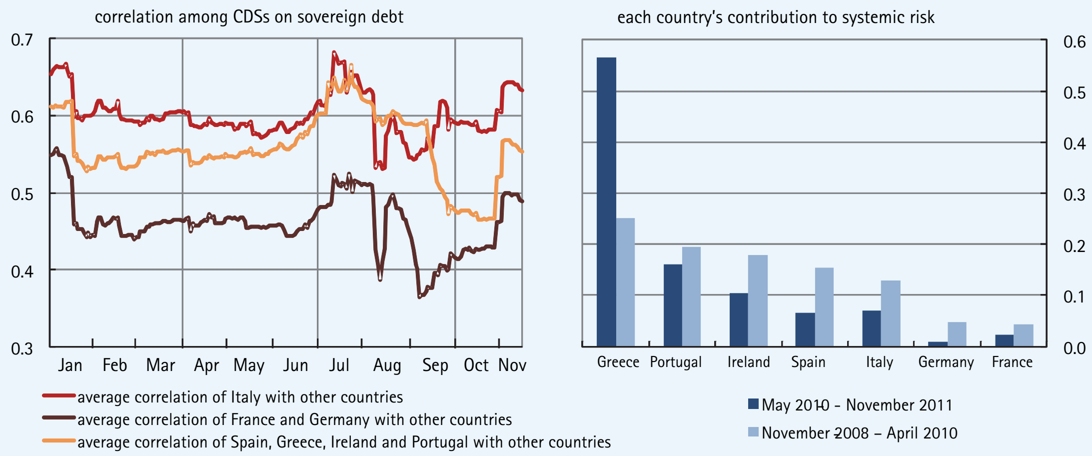


Source: calculations on Moody's data.

Inter-dependency among countries most exposed to the sovereign debt crisis is high and the effect of Greece on systemic risk has increased

The worsening of the sovereign debt crisis has not resulted in any significant change in the levels of correlation for CDSs of Eurozone countries. The average correlation between CDSs on the debt of France and Germany with the other countries is less than that recorded for the countries most exposed to the sovereign debt crisis, meaning that inter-dependency remains higher for countries with greater public finance problems. The contribution of Greece to systemic risk has increased, thereby explaining the trend in CDS spreads of Eurozone countries.

Figure 1.9 – Co-movement of sovereign CDS spreads and each country's contribution to systemic risk
(daily data; 01/01/2011 - 15/11/2011)

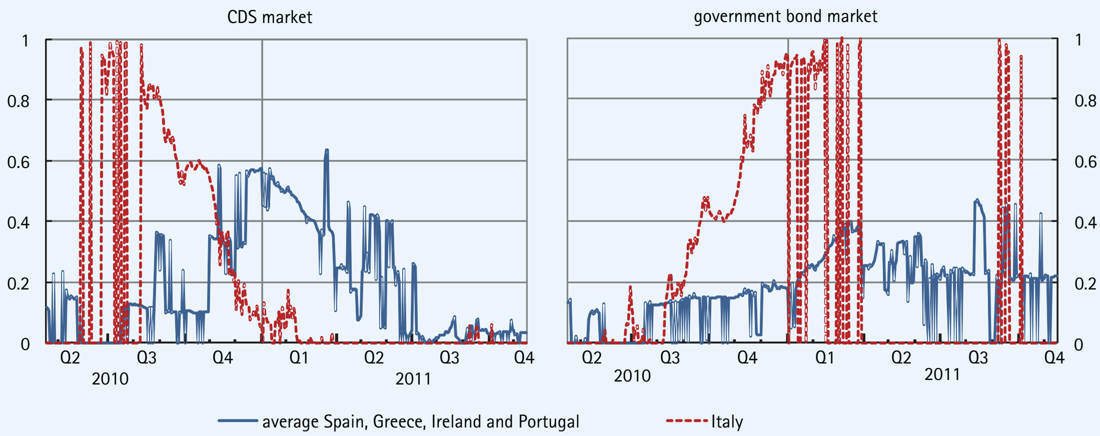


The right side graph represents the factor loadings of the first common factor estimated by applying principal component analysis on changes in sovereign-debt CDS spreads.

CDS spreads tend to lose their leadership in the price discovery process of sovereign credit risk above all in the peripheral Eurozone countries

As regards the price discovery process on sovereign credit risk, since July, government bonds seem to have incorporated new information more quickly than CDS spreads. Government bond's leading role seems to have been more marked for Italy than, on average, for Portugal, Ireland, Greece and Spain.

Figure 1.10 – Role of the CDS and government bond markets in the price discovery process
(daily data; 16/04/2010 - 15/11/2011)

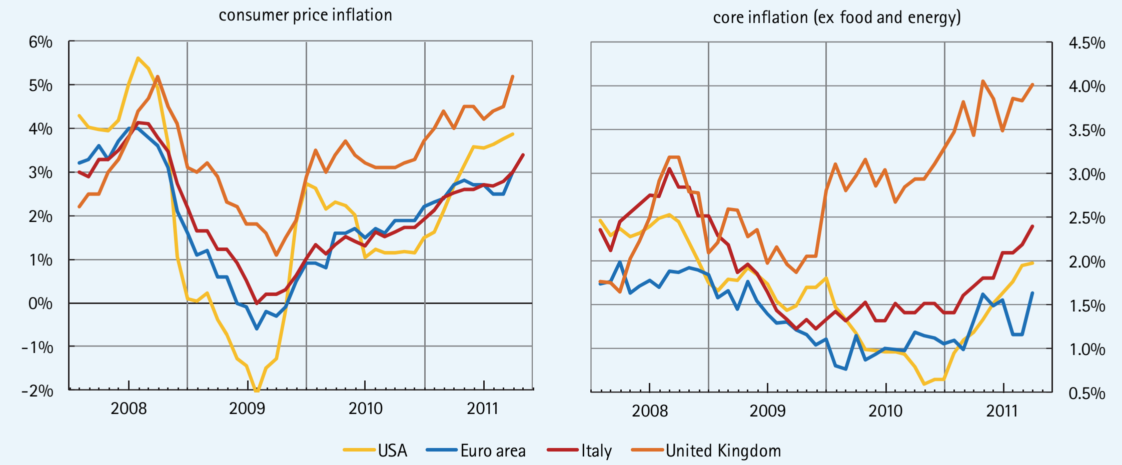


In the graph the Gonzalo Granger statistic is represented, that is an indicator which allows to identify the market with a leading role in the price discovery process. This statistic increases as the strength of the reference market (of CDSs or government bond) grows.

Consumer price inflation remains high but forecasts are for a downward trend

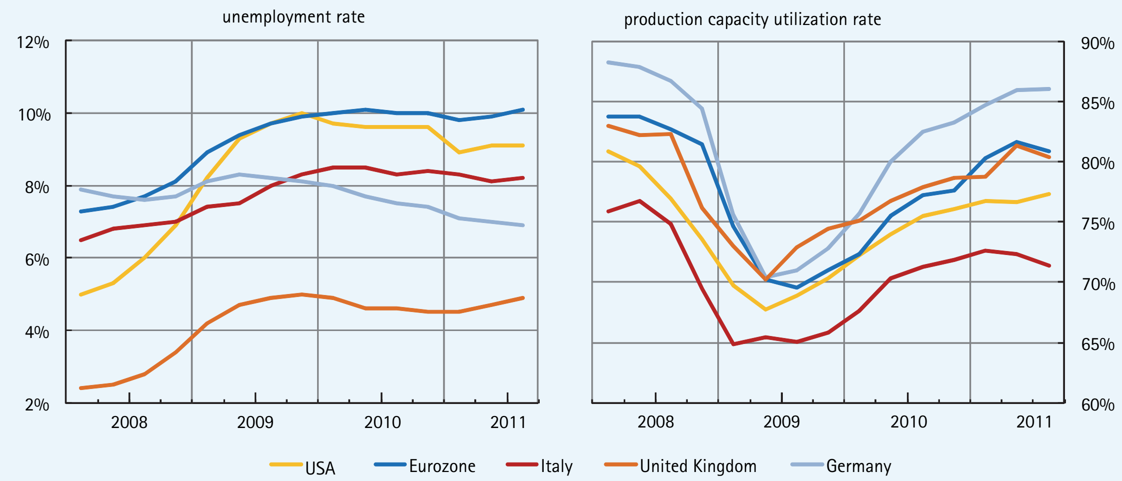
During the first three quarters of the year, consumer price inflation has grown, owing mainly to a rise in raw material prices recorded in 2010 and continuing through to early 2011 and, in some countries, owing to increased indirect taxes. In September, the change in the consumer price index was approximately 3% in the Eurozone, almost 4% in the United States and more than 5% in the United Kingdom. Forecasts for the coming months do, however, suggest a limitation of inflationary pressures with a possible moderation of energy product prices, deceleration of economic activity and continuing modest salary trend. The latter corresponds to unemployment rates that remain high in most advanced countries (approximately 10% in the Eurozone and 9% in the United States).

Figure 1.11 – Inflation
(percentage changes over 12 months)



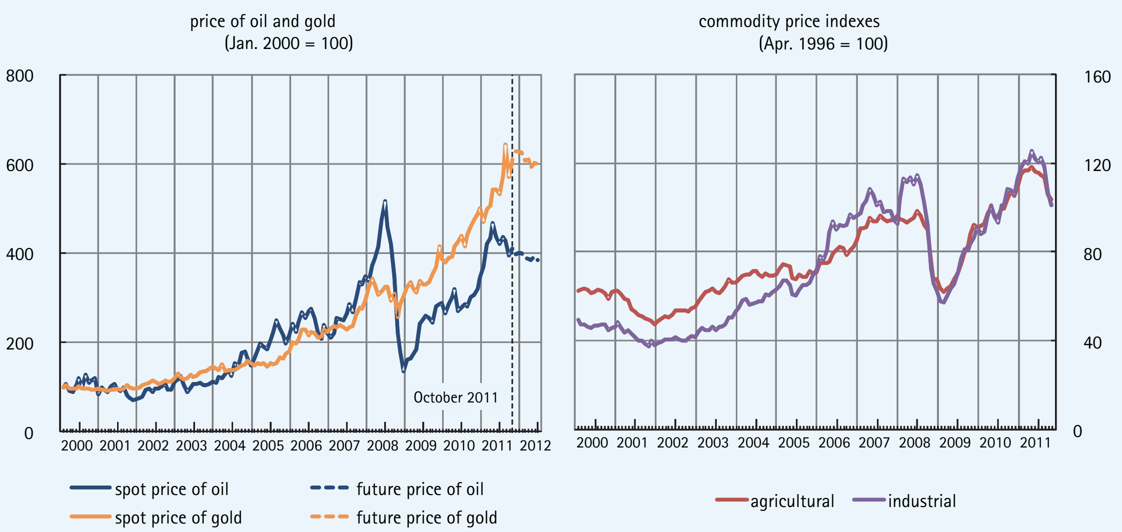
Source: Thomson Reuters.

Figure 1.12 – Unemployment and capacity utilization



Source: Thomson Reuters.

Figure 1.13 – Oil, gold and commodity prices

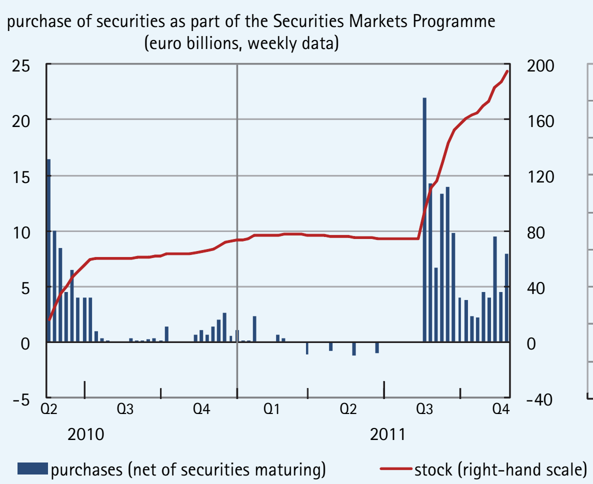


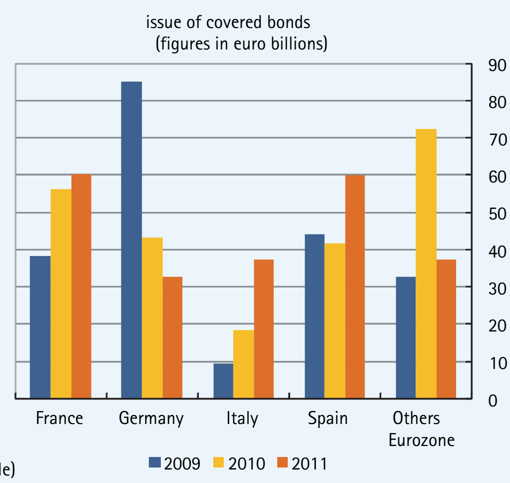
Source: calculations on Thomson Reuters data.

The sovereign debt crisis and uncertainties about economic performance have led the ECB and the FED to maintain a strongly expansive approach

The worsening of the macroeconomic situation has caused the central banks in Europe and the USA to suspend attempts that were being made during the first half of the year to normalise monetary policy stances and strengthen quantitative easing programmes. In November, the ECB reduced interest rates on its main refinancing operations by 25 points, bringing them down to 1.25%. The ECB then reactivated certain unconventional measures in order to improve transmission mechanisms on long-term interest rates and to relieve tensions on short-term deposits for European banks. More specifically, two new long-term refinancing operations were announced, with respective terms of 12 and 13 months with the fixed rate auction mechanism and full award of amounts; this mechanism will also be used for the other refinancing operations, at least until 10 July 2012. Additionally, in November the ECB started up a new covered bond (CBPP2) buying programme on the primary and secondary market for 40 billion euro; this should be completed by the end of 2012. Finally, as already mentioned, on 7 August, the Securities Market Programme was reactivated: since then and up until mid-November, the ECB has purchased public securities for more than 122 billion euro (approximately 2% of the GDP of the Eurozone), taking the total amount of securities held in the portfolio to around 195 billion. Purchases were followed by sterilisation operations in order to reabsorb the liquidity thus offered. The FED also continues to maintain an extremely expansive monetary policy, confirming that rates on federal funds will remain unchanged at least until mid-2013, in view of the reduced use of production capacity, the high levels of unemployment and forecasts for stable inflation. The FED has also declared its willingness to consider quantitative easing measures, based not only on the purchase of Treasury Bonds but also, if necessary, of securities linked to the real estate market. A further intervention, aimed at flattening out the yield curve by a "twisting" operation, takes the form of an increase in the average residual life of public securities held in the portfolio: by the end of the first half of 2012, the FED will purchase bonds with an average residual life of more than six years for 400 billion dollars and will, at the same time, sell securities for an equal amount, with a residual life of less than three years. The Bank of Japan and Bank of England have strengthened their respective asset purchase programs (respectively 5,000 billion yen on a total quantitative easing programme worth 55,000 billion and 75 billion sterling for a securities purchase programme worth 275 billion, equivalent to 19% of GDP); the reference rates of the two countries, moreover, continue to remain at almost record low levels (between 0 and 0.1% in Japan and 0.50% in the United Kingdom).

Figure 1.14 – Purchases of securities under the ECB SMP and covered bond issues in the Eurozone





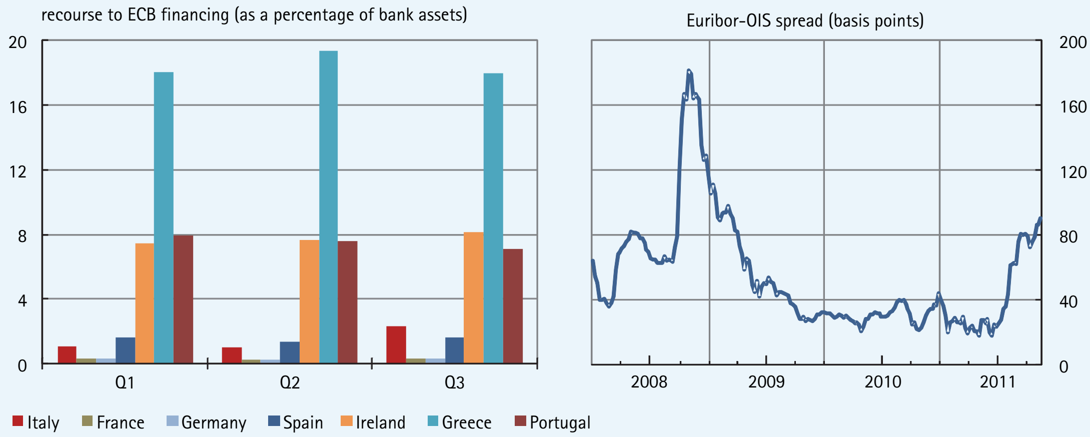
Source: calculations based on ECB and Dealogic data.

Recourse by banks to Eurosystem financing remains high in countries most exposed to the sovereign debt crisis. Tensions on the interbank market have led to growth in collateralised funding

In the third quarter, recourse to Eurosystem financing by banks of the countries most exposed to the sovereign debt crisis remained consistent and recourse to short-term collateralised funding increased due to tensions on the interbank market and the greater difficulties in accessing the bond market (see chapter 3 below). After Greek banks, which in the third quarter obtained financing from the central bank for a total amount of 18% of total assets, Irish and Portuguese credit institutions are the greatest borrowers (8% of assets), followed by Italian banks (a little more than 2%). Interbank market tension is signalled by the increased tendency of European banks to deposit excess liquid funds with the ECB. The increased perception of counterparty risk has determined an increase in the spread between the 3-month Euribor rate and the OIS rate (up by approximately 50 basis points since July), although it has not reached the levels recorded after the Lehman bankruptcy.

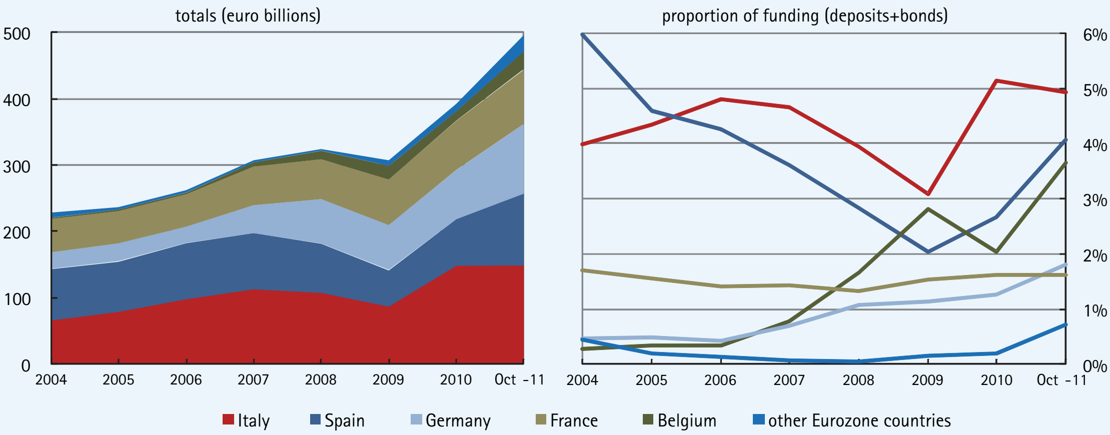
With respect to last May, the swap rate curve of the United States has moved clearly downwards, recording a drop of around one percent for maturity of more than three years. The negative spread remains between the swap rates and yields of government securities for maturities of more than 10 years, owing probably to uncertainty about structural measures capable of making the US government budget sustainable. In the Eurozone, on the other hand, the move of the swap curve only affected the stretch relating to maturities of more than three years, with short-term rates remaining unchanged.

Figure 1.15 – Banks' recourse to Eurosystem and Euribor-OIS spread



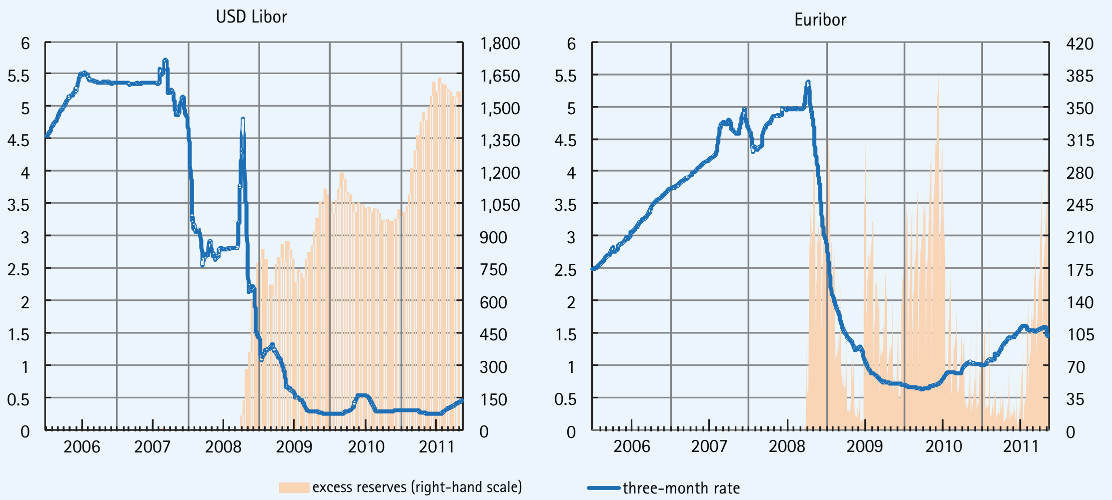
Source: calculations based on ECB Central Banks and Thomson Reuters data.

Figure 1.16 – Collateralized financing with repos of the banks of some European countries



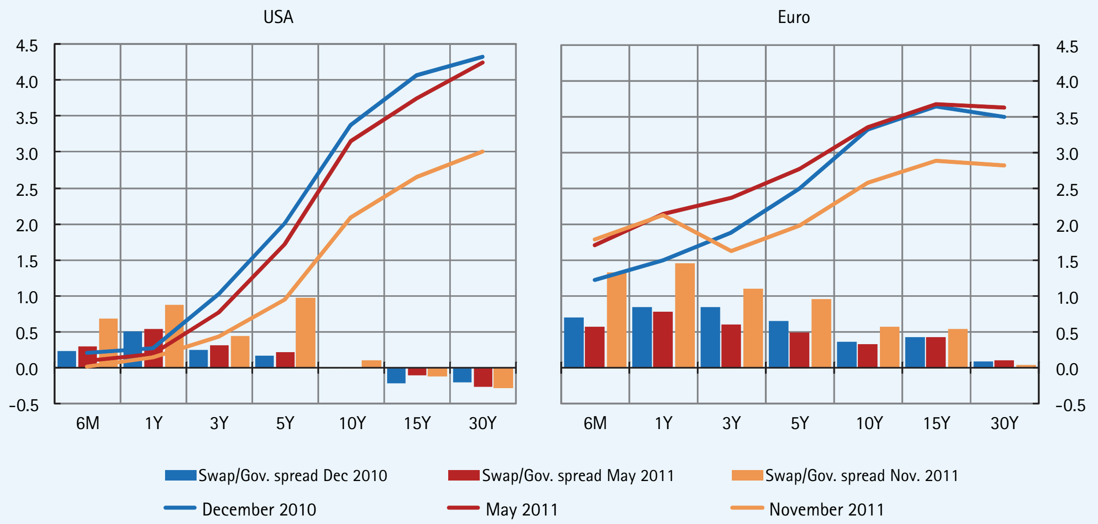
Source: calculations on ECB data.

Figure 1.17 – Three month interest rate and central banks excess reserves
(monetary amounts in billions of local currency)



Source: Thomson Reuters.

Figure 1.18 – Yield curves
(monthly data; January 2006 - November 2011)

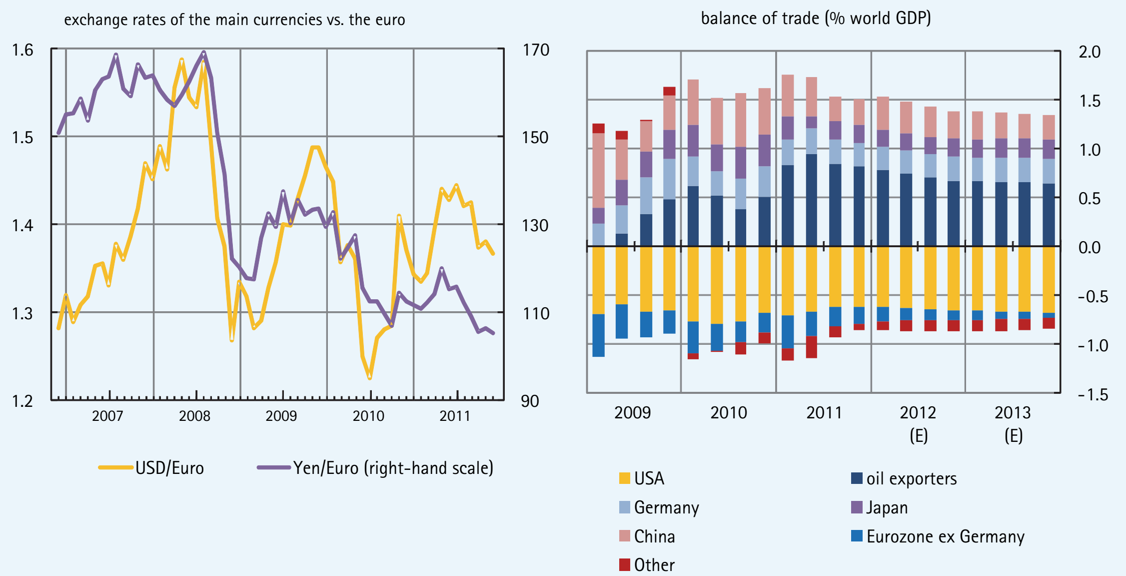


Source: calculations on Bloomberg data.

Depreciation of the euro mainly reflects uncertainties about the evolution of the sovereign debt crisis

From early July to mid-November, in a context of great volatility, the euro exchange rate depreciated by 5.5% against the dollar, by almost 10% against the yen and by 2.7% against sterling. This depreciation above all reflects the worsening of the sovereign debt crisis and uncertainty about the concrete measures to be adopted in order to guarantee stability in the Eurozone. As regards current account items worldwide, it is forecast that the structural imbalances, which remained stable in 2011, will decline only slightly over the next two years. In actual fact, the external deficit of the United States is expected to increase by just 0.5% of global GDP, whilst the Eurozone (including Germany) is expected to record a small surplus. China's current account items are expected to record values below previous peaks, coming out at around 3% of GDP. The possibility that the surplus of oil producing countries will grow remains high, owing both to the possibility that energy product prices will remain high and to the modest contribution to reducing the surplus that may come in the short-term from the forecast growth of imports.

Figure 1.19 – USD/euro exchange rate and current account imbalances



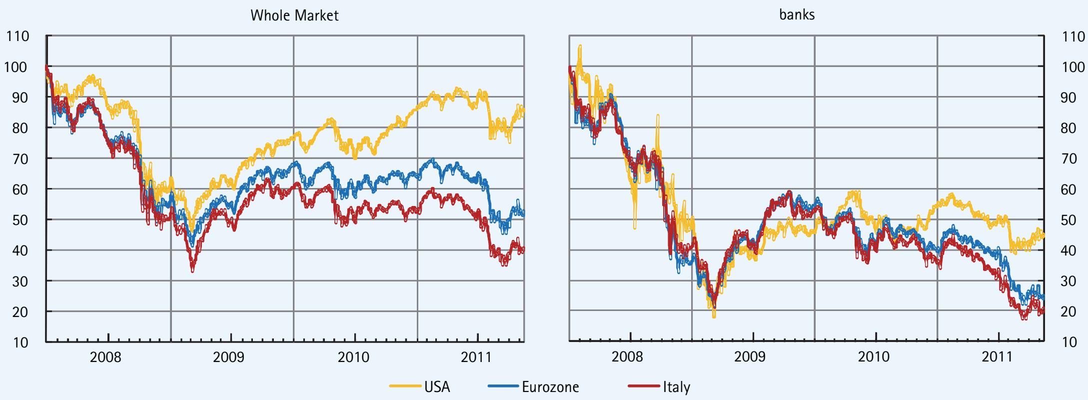
Source: calculations based on Thomson Reuters and OECD data.

Equity market

Share prices in the Eurozone have decreased significantly, owing above all to the drop in bank stocks. Liquidity has fallen on secondary markets

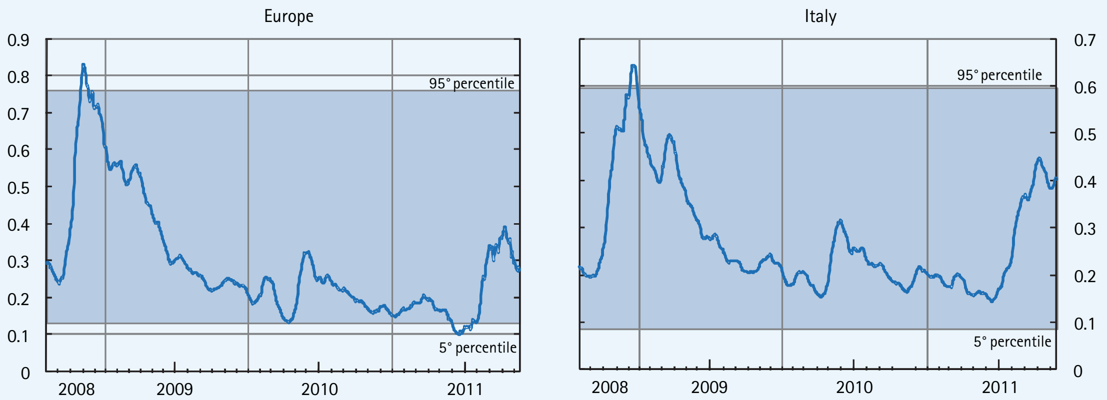
The intensification of the sovereign debt crisis in the Eurozone, the significant worsening of growth expectations and the increased aversion to risk by operators have had major negative effects on the stock markets of European countries, leading to increased volatility and a significant reduction of liquidity. In the United States, the S&P500 dropped around 5% from the end of June to mid-November, whilst in the Eurozone, the DJEuroStoxx dropped by 21%, more than in mid-2010 at the onset of the Greek sovereign crisis. The Italian market has shown a 24% drop in the period considered, associated with increasing volatility and worsening liquidity, more markedly than in the rest of Europe. The trends of general market indexes were above all affected by the decline of banking share prices, which dropped by an average of 11% in the USA and around 40% in the Eurozone and in Italy; the banks' vulnerability to sovereign risk is due to the depreciation of the public securities held in the portfolio and to the worsening of funding conditions on the market (see Chapter 4). Since July 2011, Eurozone equity indexes have shown a growing level of correlation, therefore signalling a greater role played by systemic components in the price formation process.. The correlation between Greece and other countries of the Eurozone has, however, sharply declined reaching lower levels respect to the average ones observed in the sub-group of peripheral countries alone (Portugal and Ireland).

Figure 2.1 – Equity indexes
(daily data; 01/01/2008 - 15/11/2011; 01/01/2008 = 100)



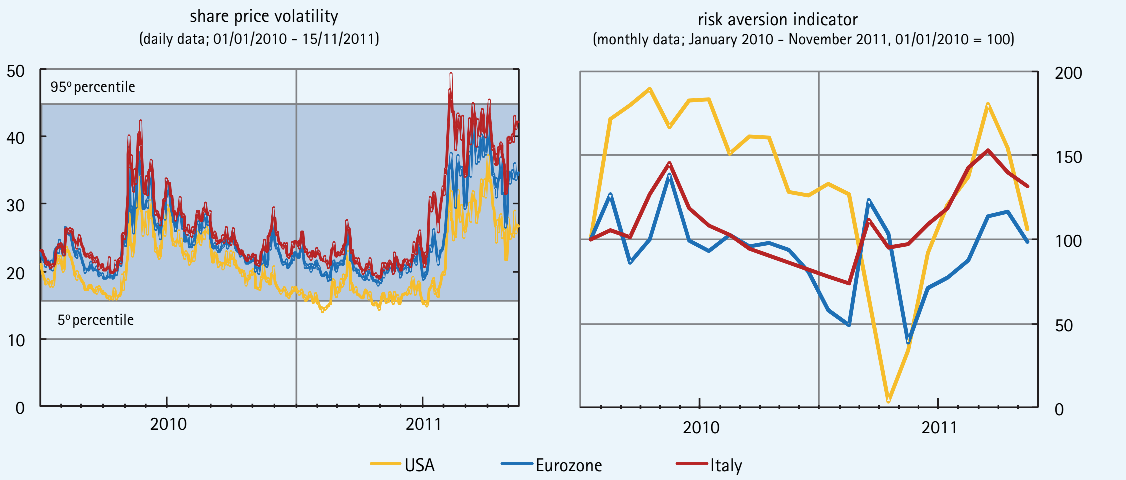
Source: Thomson Reuters.

Figure 2.2 – Equity market liquidity indicator
(daily data; 01/08/2008 - 15/11/2011)



The data show the results of the analyses in main components (first factor) applied to the time series of the Ahimud price impact index, the implied volatility, the bid-ask spread indicator and the range indicator. The indicator ranges from 0 (=high liquidity) to 1 (= low liquidity). Percentiles have been estimated applying non-parametric methods to estimate probability distribution (average mobile rolling analysis over one month).

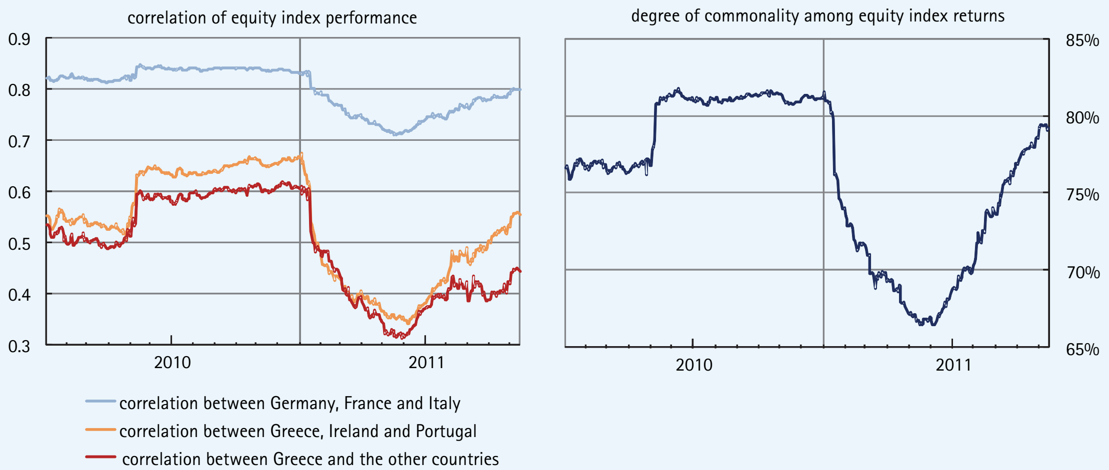
Figure 2.3 – Implied volatility of equity indexes



The risk aversion indicator is estimated by comparing the historic distribution of share performance with the implicit distribution in option prices on equity indexes; the mobile average over 3 months is shown. The percentiles stated in the figure to the left are calculated by applying non-parametric methods to estimate probability distribution.

Figure 2.4 – Co-movement of equity indexes of the main Eurozone countries

(daily data; 01/01/2010 - 15/11/2011)

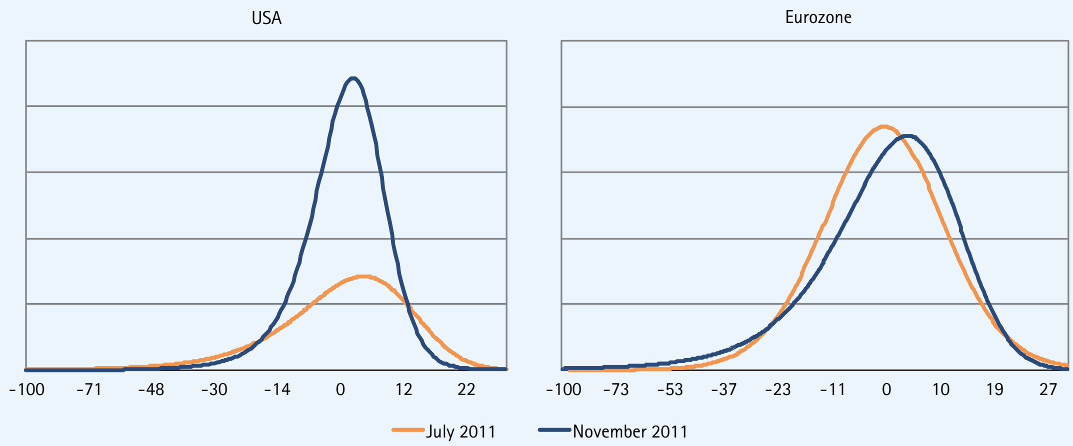


Degree of commonality among equity index returns is computed as the return's variance explained by the first common factor (principal component analysis applied with a rolling window of 6 months).

The downward trend in share prices has resulted in a decrease in the price/book (P/B) value which is more evident in the banking sector.

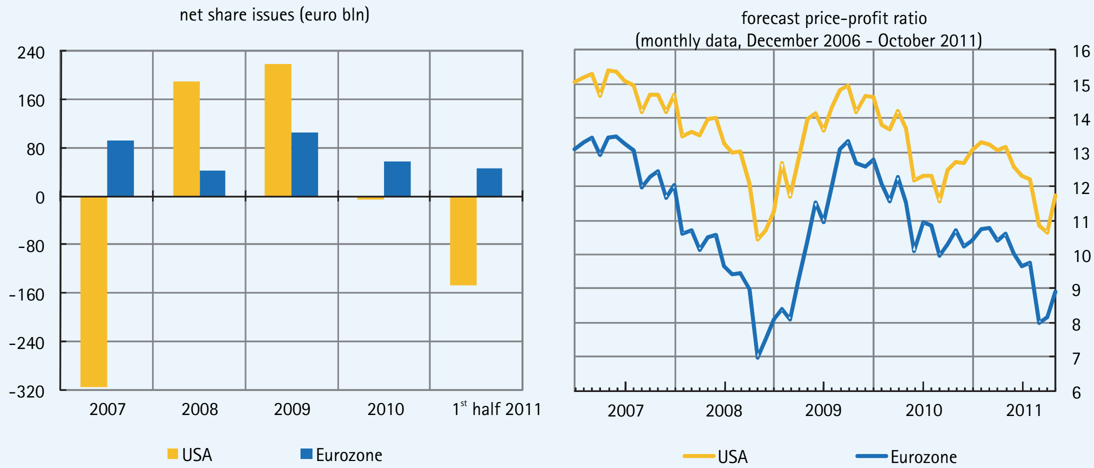
At the end of November, expectations for the Eurozone suffered higher negative share performance probabilities than in July; expectations for the performance of US shares instead showed less dispersion. The ratio of prices and profits forecast, after dropping in 2011, recorded a slight rise in October against a drop in forecast profits which more than offset the effect of the drop in prices. The decline in share prices has led to a decrease in the price/book (P/B) ratio, both for the corporate sector and the banking sector, albeit not evenly between sectors and geographic areas. More specifically, in the Eurozone and in the USA, non-financial listed companies maintained a P/B ratio that averaged out as above the unit, against a turnover growth rate in line with that of 2010 for the USA and down for Europe; banks showed a more marked drop in the P/B ratio, which fell below the unit for almost all European banks and for approximately 50% of American banks. The profitability of listed banks (ROE) shows signs of improvement in the USA, whilst European banks suffered more from the turbulence of the financial markets.

Figure 2.5 – Expected probability distribution of 3 months equity return



Forecasts are based on the estimated implicit probability distribution in index option prices.

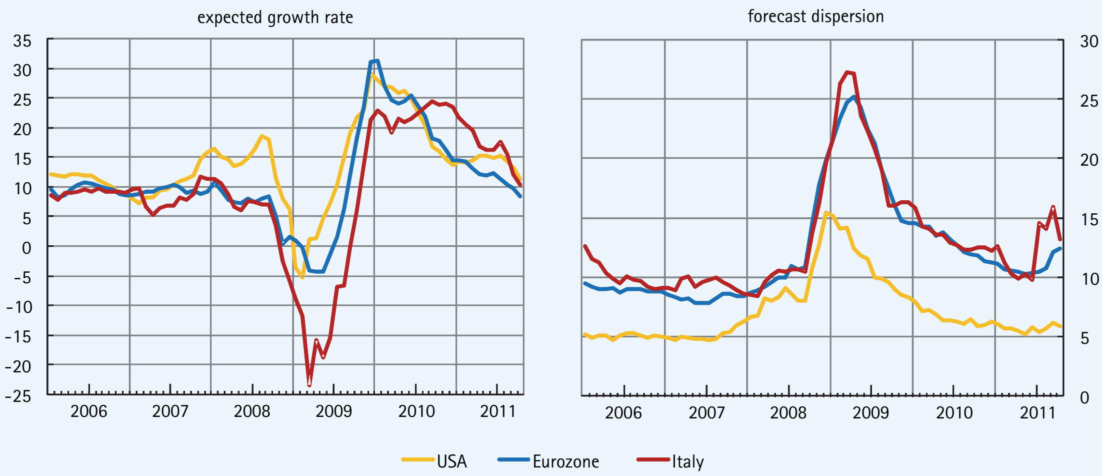
Figure 2.6 – Net equity issues and price/earnings ratio



Source: FED, ECB and Thomson Reuters and calculations on IBES data for companies included on the S&P500 (USA), Dow Jones Euro Stoxx (Eurozone) and on the FTSE Mib (Italy).

Figure 2.7 – Analysts' expectation on earnings

(percentage figures; monthly data; January 2006 - October 2011)

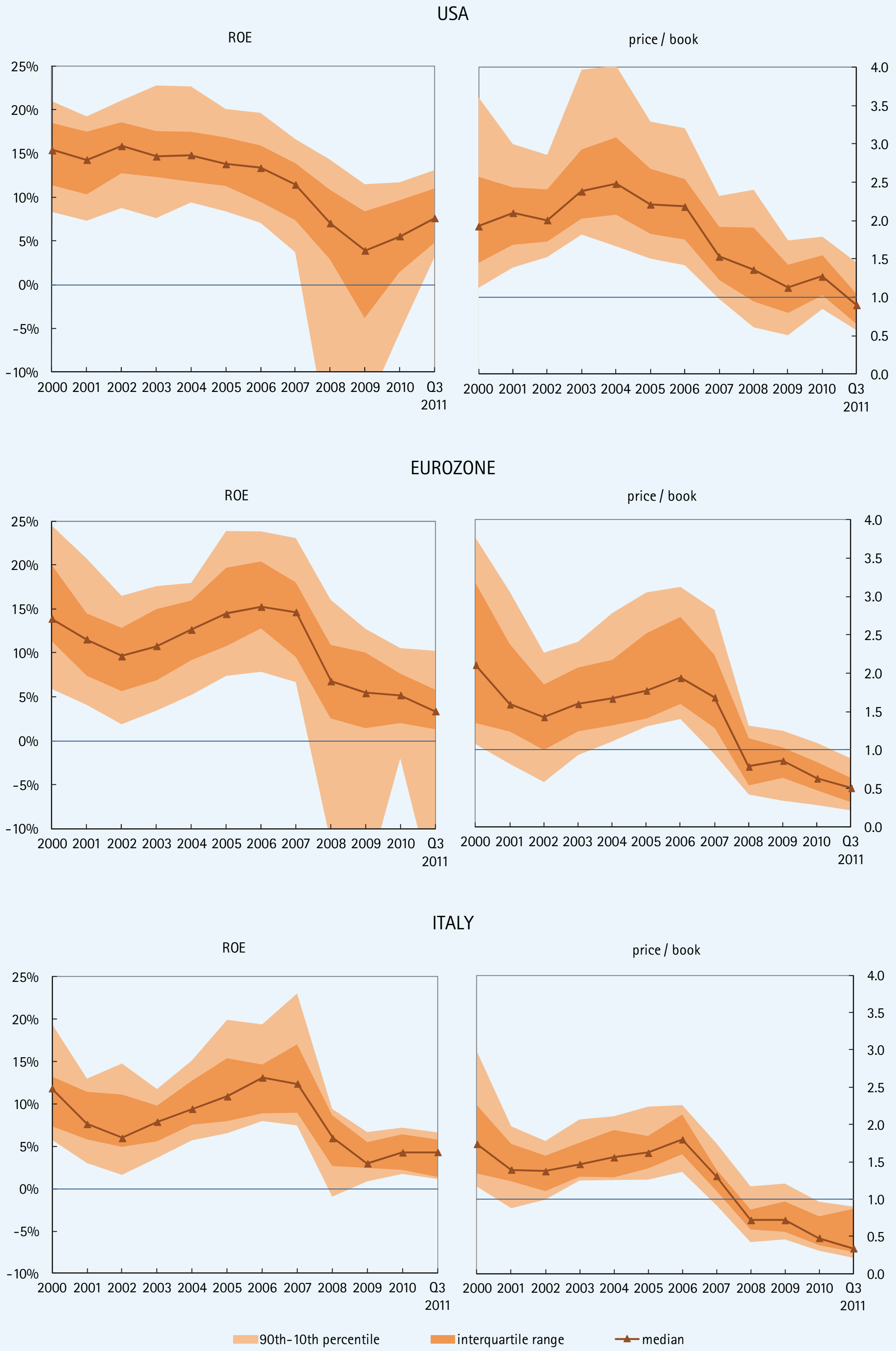


Source: calculations on Thomson Reuters-IBES data. Weighted average of profit growth rates of companies included on the S&P500 (USA), Dow Jones Euro Stoxx (Eurozone) and on the FTSE Mib (Italy).

Figure 2.8 – Profitability and stock exchange multipliers of major non-financial listed companies

Source: calculations based on Worldscope data on companies in the S&P 100 index (USA), Dow Jones Euro Stoxx 50 index (Eurozone) and on major Italian listed groups. The annual change in turnover is calculated with respect to the restated figure for the previous year.

Figure 2.9 – Profitability and stock exchange multipliers of listed banks



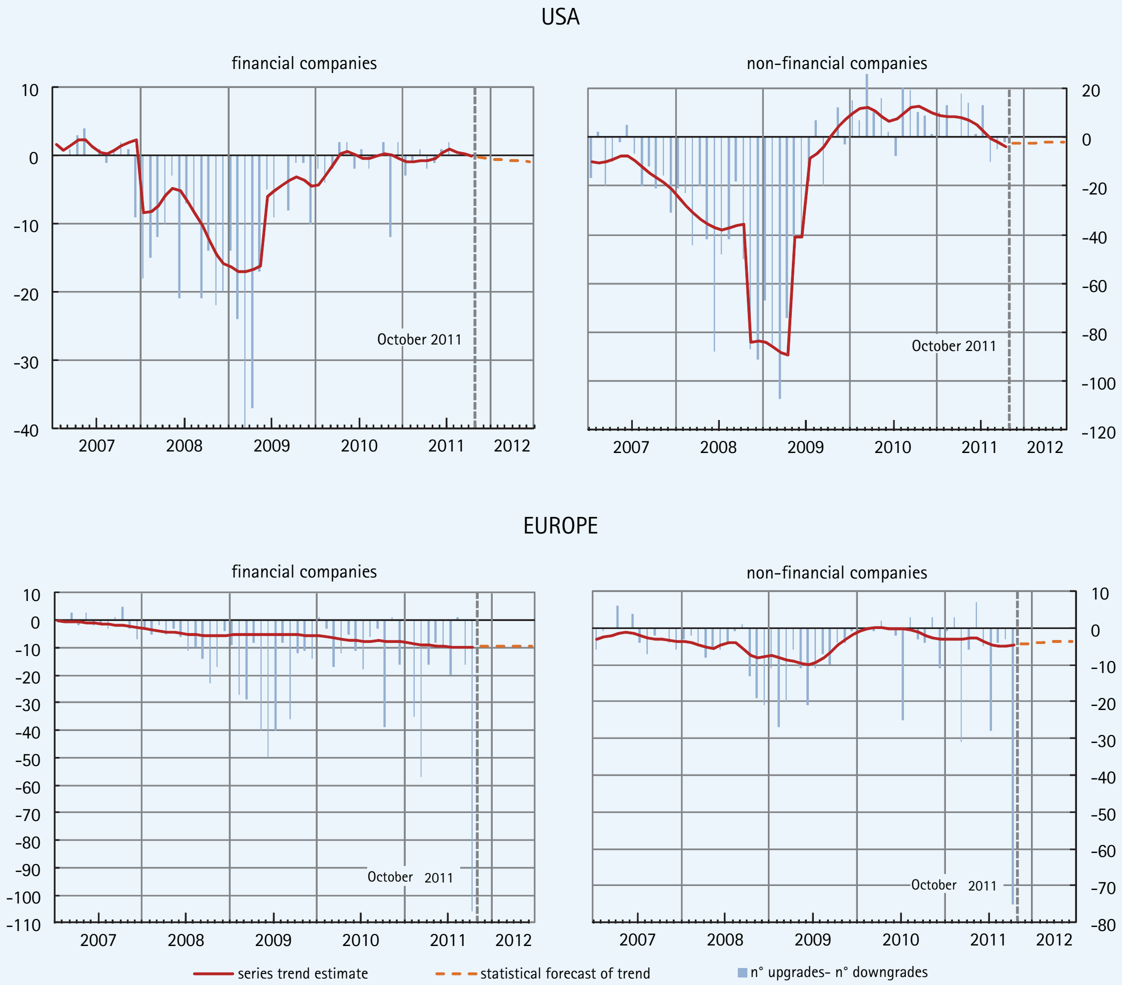
Source: calculations on Worldscope data for banks included in the S&P 1500 Bank index (USA), Dow Jones Euro Stoxx Bank (Eurozone) and on listed Italian banks.

Credit quality

The sovereign debt crisis and uncertainty about evolution of the outlook have resulted in increased downgrading for European businesses during 2011. The situation instead remains more stable in the USA

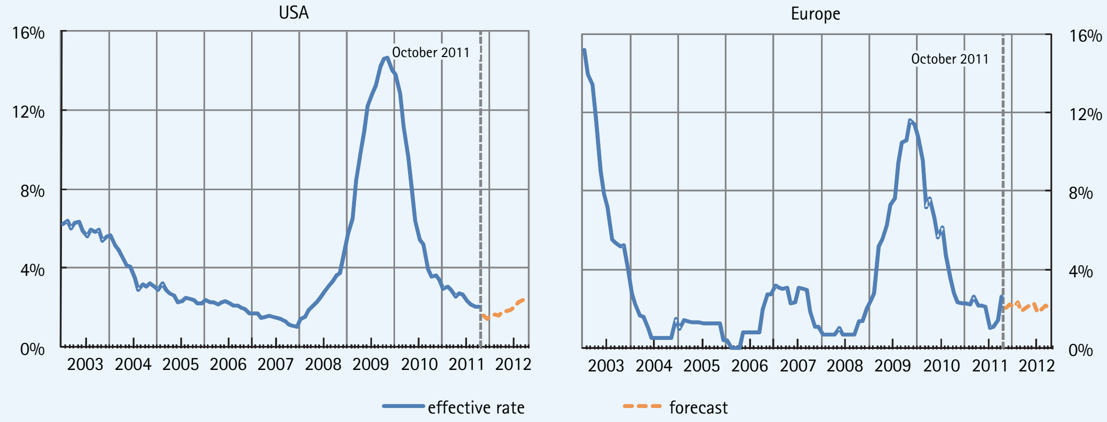
The worsening of expectations concerning the sovereign debt crisis in the Eurozone have led to a significant worsening in credit quality for private European issuers starting in third quarter 2011. October recorded a major acceleration in the European issuer downgrading process: Moody's made a total of 109 downgrades of financial companies (as compared with 5 in the USA) and 85 downgrades of non-financial companies (as compared with 35 in the USA). In the USA, the situation has instead remained more stable and the drift rating (difference between upgrade and downgrade) has remained close to zero, although a significant increase in the insolvency rate is forecast for issuers with speculative ratings. Signs of a worsening in credit quality in Europe are also seen in the structured products sector, where since the start of the year a trend has been seen with a rise in the difference between the number of downgrades and upgrades; in the USA, on the other hand, the downgrade flow on structured products has shown a downward trend. On an aggregate level, considering, therefore all the major issuers rated by Moody's regardless of sector and geographical area, the probability of a worsening in creditworthiness tends to settle at higher values than the probability of an upgrade for almost all rating bands.

Figure 3.1 – Upgrades/downgrades differential for corporate issuers
(monthly data; January 2007 - October 2011)



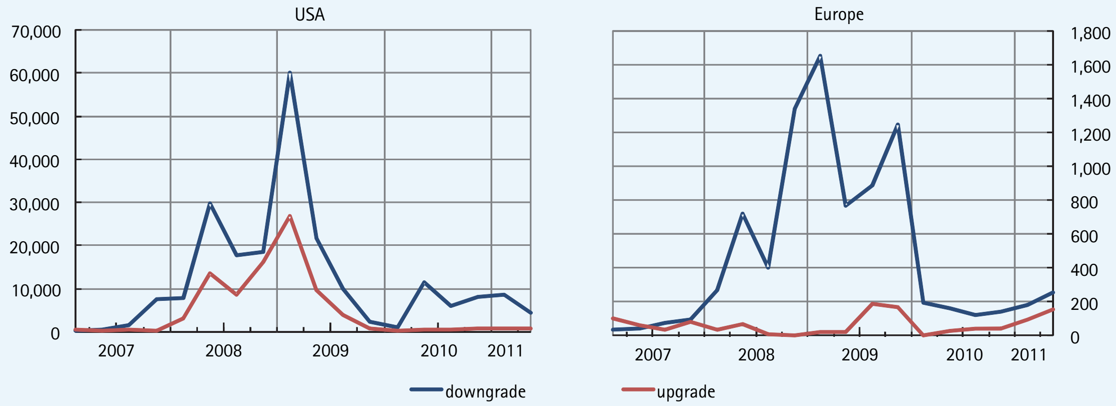
Source: calculations on Moody's data. The trend (effective figure and forecast) has been estimated using non-parametric time series analysis methods.

Figure 3.2 – Default rate of speculative issuers



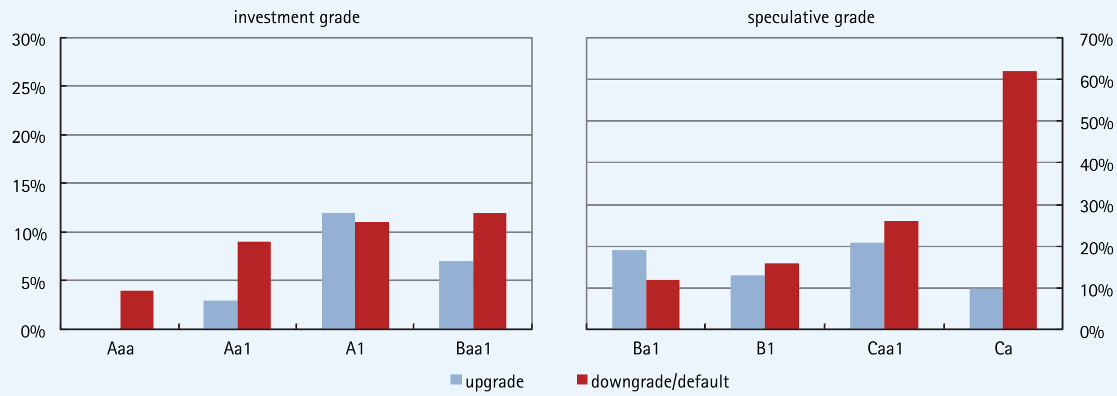
Source: Moody's.

Figure 3.3 – Upgrades/downgrades differential for structured products
(quarterly data, QI 2007 - QII 2011)



Source: Moody's.

Figure 3.4 – Rating revision probability
(estimate at 15/11/2011)

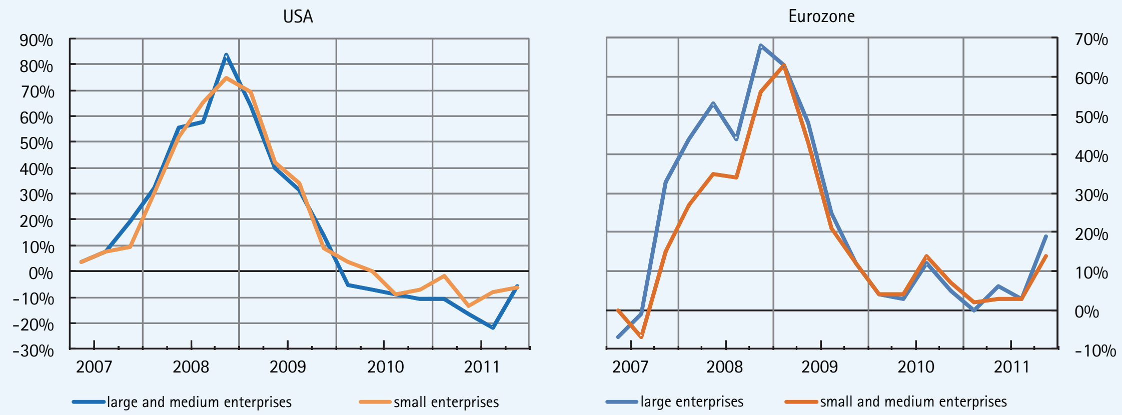


Source: calculations on Moody's data. The horizontal axis shows the original rating. The sample examined includes all companies rated by Moody's.

Signs of tightening of credit standards on loans to non-financial corporations in the Eurozone are intensifying

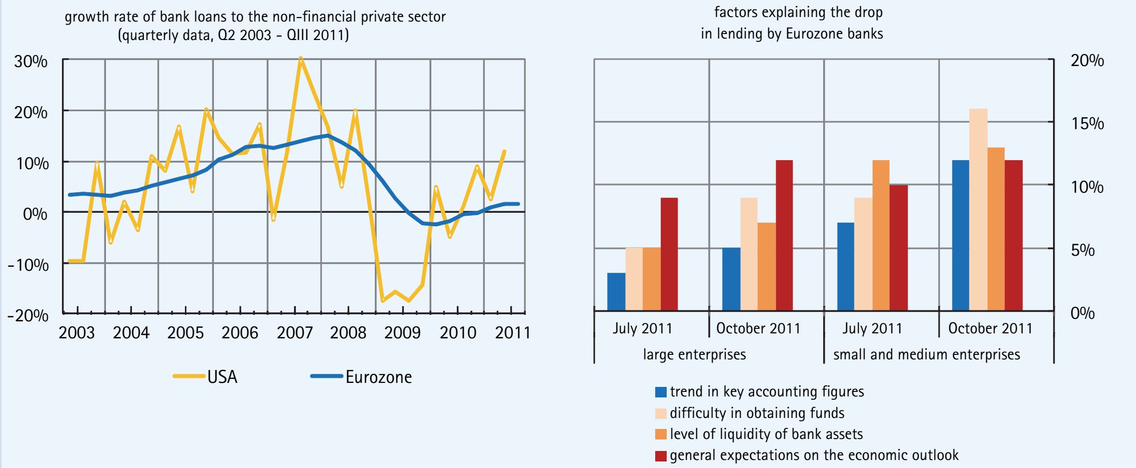
In Europe, signs of tightening of credit standards on loans to non-financial corporations have increased, as had already been seen at the start of the year. The ECB survey indicates that this trend is mainly due to greater difficulties in banks' funding and a worsening of expectations for the economic outlook, which are reflected in the assessment of the fundamental figures of business borrowers. The growth rate of loans to the non-financial private sector remains positive, however, despite being low and declining slightly. This is also due to a contraction in loan from the corporate sector due to the higher interest rates fixed by the banks in view of their higher cost of funding. In the USA, on the other hand, loan growth continues at a high rate with no sign of harshening credit standards.

Figure 3.5 – Bank lending indicators
(monthly data; April 2007 - October 2011)



Source: FED and ECB. Percentage of banks signalling tightening of credit standards, net of the percentage of banks signalling some relaxation.

Figure 3.6 – Bank lending and factors affecting credit restrictions on non-financial corporations



Source: calculations on FED and ECB data.

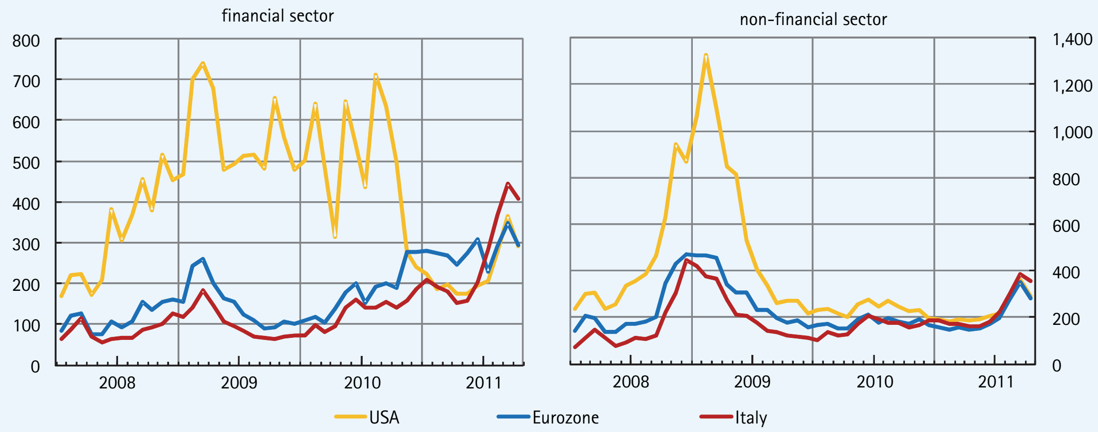
Compared with rating actions, CDS prices show a perception of credit quality which is more similar in the USA and Europe

Despite the differences emerging in rating actions between Europe and the USA, credit quality indicators based on CDS prices are more in line with the credit risk market valuations of the two geographical areas as from the second half of 2011. Indeed, since July the average CDS spreads of US financial companies have increased, coming into line with those of European financial issuers. Rising CDS prices of Italian financial institutions have instead exceeded the European average by around 100 basis points as from the third quarter. CDS spreads of non-financial companies have grown significantly in all geographical areas, particularly from the second half of the year onwards (by approximately 100 basis points from June for US and European issuers and by almost 200 basis points for Italian issuers).

The clearest signs of worsening credit quality can be seen with reference to issuers with speculative ratings, for whom bond spreads have grown by an average of around 500 and 1,000 basis points depending on the rating class.

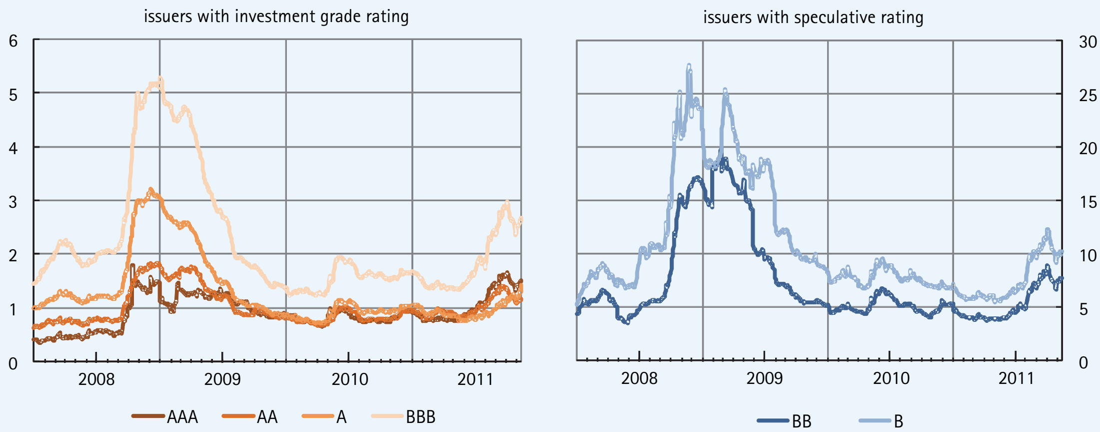
By using credit risk indicators referring to all listed companies and based on theoretical models that also incorporate accounting and market data (EDF - Expected Default Frequency), credit quality in the corporate sector is proved to be lower in the USA than in Europe (owing mainly to the greater proportion of small companies listed), whilst the gap in the financial sector, which had increased after the explosion of the sub-prime mortgage crisis, is gradually closing.

Figure 3.7 – Average prices of credit default swaps of listed issuers
(5-year CDSs; amounts in basis points; monthly data; January 2008 - October 2011)



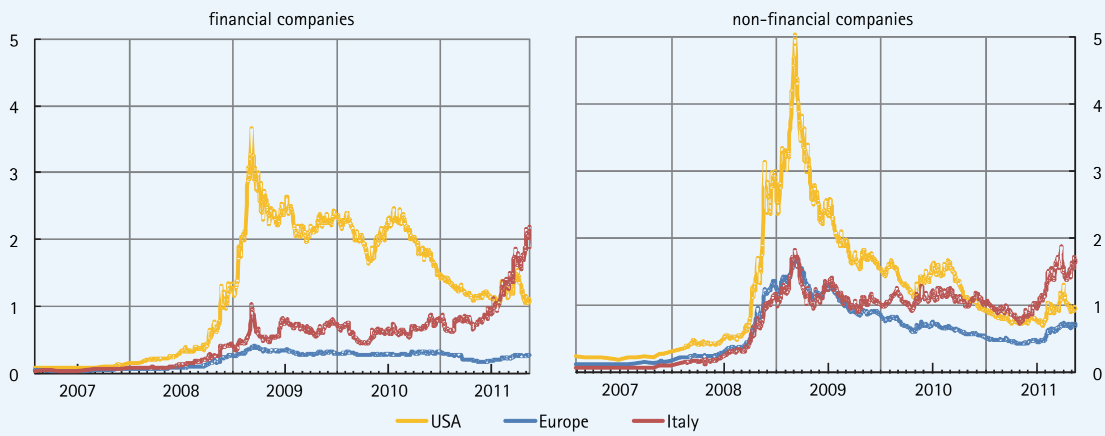
Source: calculations on Thomson Reuters data.

Figure 3.8 – Euro bonds spreads for non-financial companies
(percentages; daily data; 01/01/2008 - 15/11/2011)



Source: calculations based on Merril Lynch and Thomson Reuters. The spread is measured compared to returns on German government bonds.

Figure 3.9 – Median values of Expected Default Frequency (EDF) for listed companies
(daily data; 31/01/2007 - 15/11/2011; percentage values)



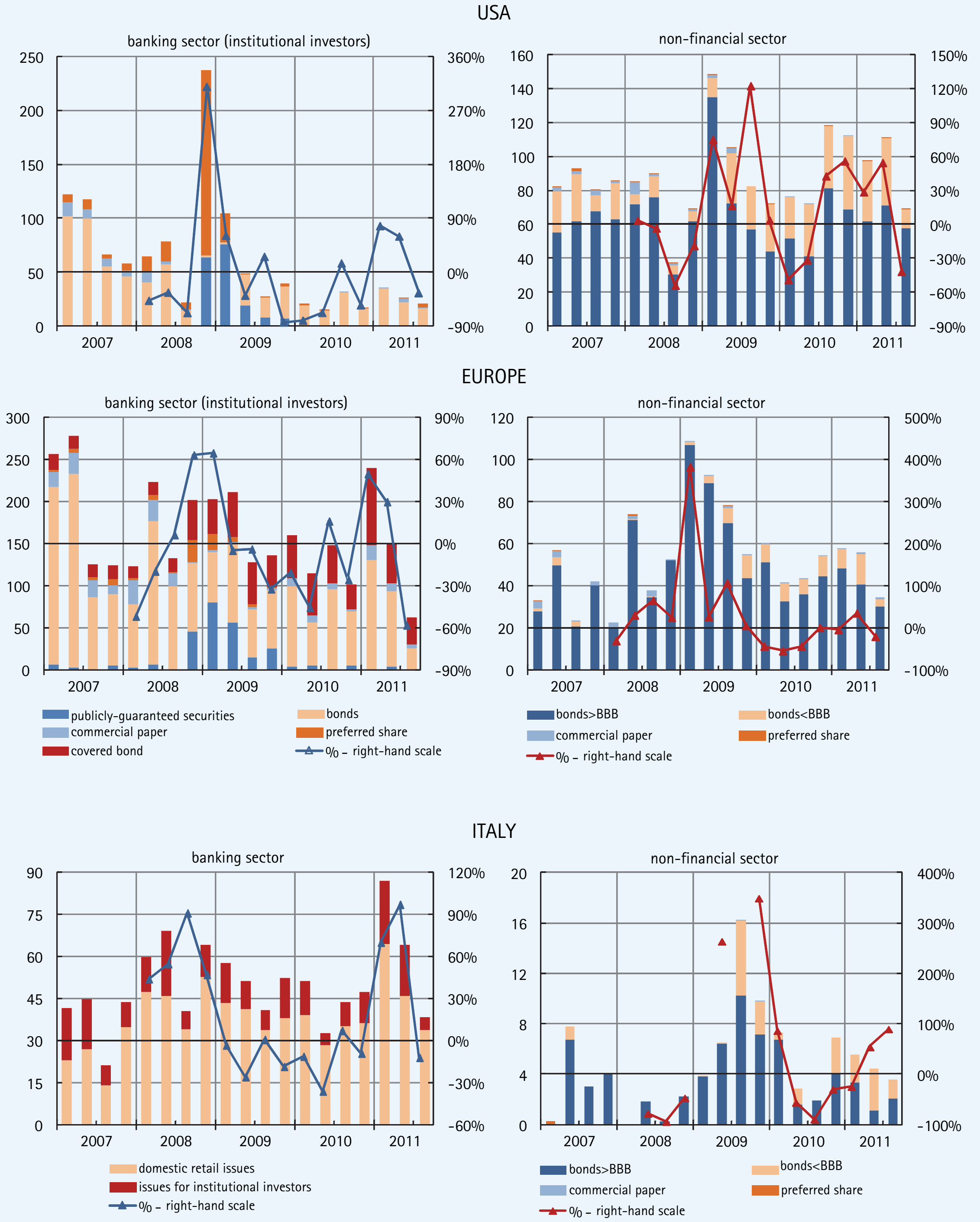
Source: calculations based on Credit Edge data.

Bond funding of European banks has slowed significantly in the third quarter of the year

In the third quarter of 2011, bond funding of European banks placed with institutional investors suddenly slowed as the perception of the industry's credit quality by investors worsened; this trend has led to an increase in short-term collateralised funding (repos) and a continued high level of refinancing operations with the ECB (see chapter 1). In the USA too, bond funding of banks has remained stagnant, whilst corporate funding recorded a sharp drop in the third quarter. New signs have been seen that the US securitisation market is slowing; it is now almost exclusively driven by agency operations, whilst in Europe this market sector remains basically at a standstill.

Figure 3.10 – Bond issues

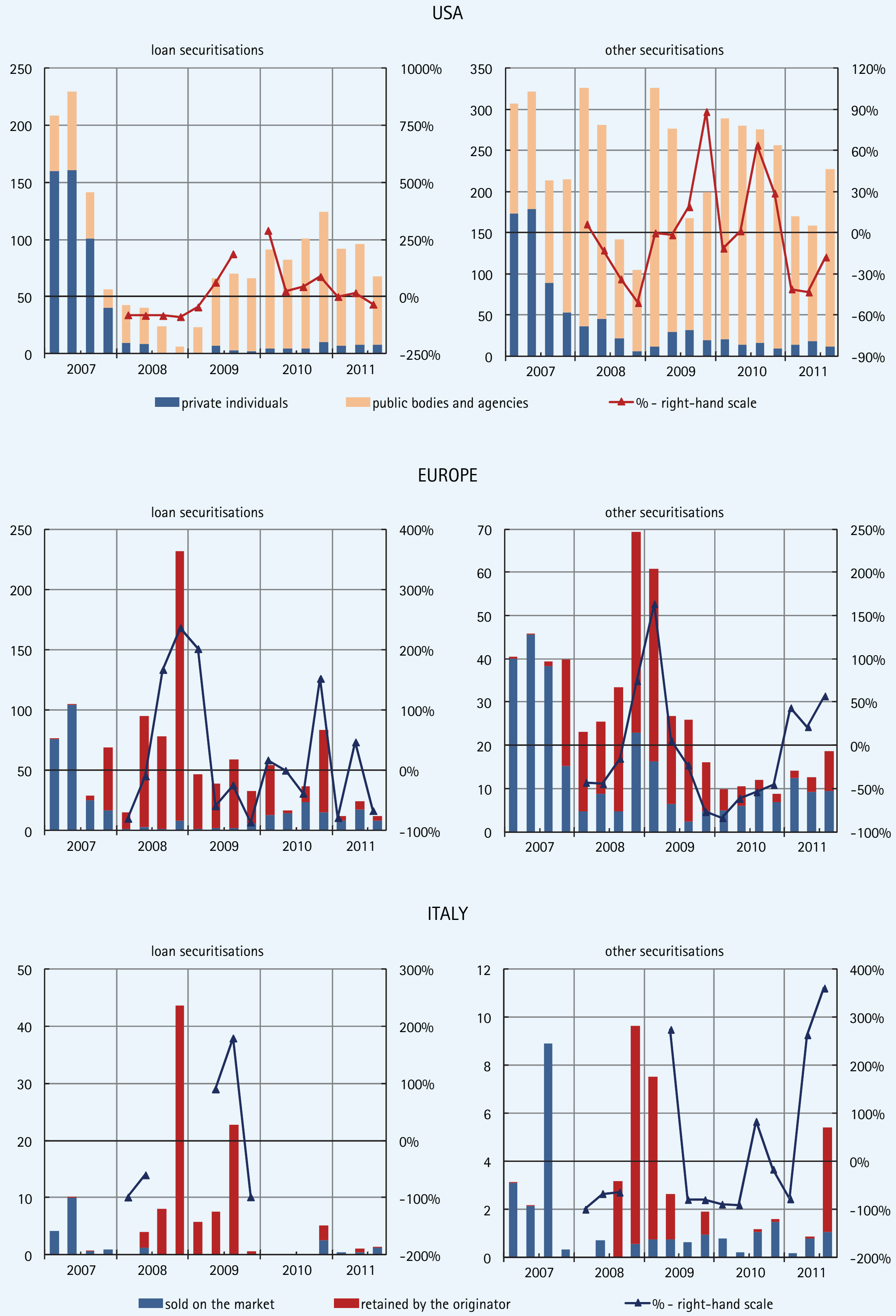
(quarterly data in euro billions; % change with respect to the same quarter of the previous year)



Source: calculations on Dealogic, Consob and Kler's data. The data for Europe refer to placings of companies with registered office in Italy, France, Germany, Spain, the Netherlands and the UK and their subsidiaries (even if with secondary headquarters in other countries).

Figure 3.11 – Securitisation issues

(quarterly data in euro billions; % change with respect to the same quarter of the previous year)

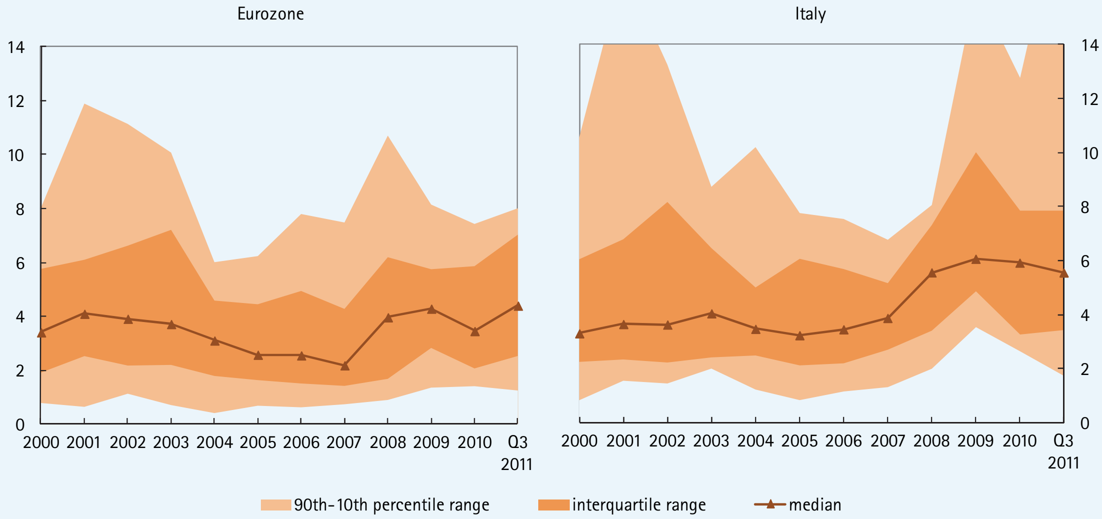


Source: calculations on Dealogic data. European data refer to asset-backed securities of companies with headquarters in Italy, France, Germany, Spain, Holland and the UK or their subsidiaries.

Financial leverage of major European listed companies is increasing, while the level of bank capitalisation is rising

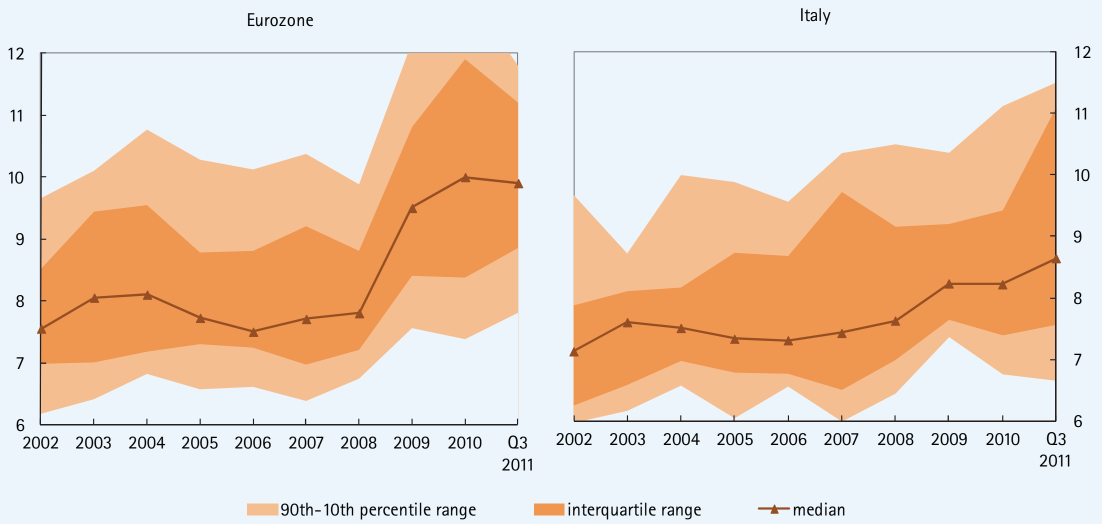
The accounting data for the third quarter of 2011 show growth in the average indebtedness of major European non-financial listed companies in ratio to profitability; the financial debt/EBIT ratio has therefore stayed at a figure of more than 4, mainly due to the decrease in margins. Debt levels of Italian corporates have dropped slightly but remain higher than those recorded for major European companies: the average debt/EBIT ratio in September 2011 was just less than 6. In the banking sector, the Tier 1 capital of major European listed banks remained on average basically stable with respect to the values of end 2010, although it did grow significantly during the first 9 months of the year for banks with a lower level of capitalisation. Listed Italian banks significantly increased their Tier 1 capital but continue to have average levels of capitalisation below those of the major European banks (see also chapter 4 below).

Figure 3.12 – Leverage of major non-financial listed companies (financial debts/EBIT)



Source: calculations on Worldscope data on companies in the Dow Jones Euro Stoxx 50 index (Eurozone) and on major Italian listed groups. The ratio of financial debt/EBIT is only calculated for companies with positive EBIT. Income statement figures for the third quarter of 2011 have been annualised.

Figure 3.13 – Listed banks Tier 1



Source: calculations on Worldscope data for banks included in the Dow Jones Euro Stoxx Bank index (Europe) and for listed Italian banks.

The increase in the prices of CDSs of major Italian banks is partly due to the greater weight of systemic factors in determining the risk premium and tends to overestimate probability of default with respect to indicators based on accounting data

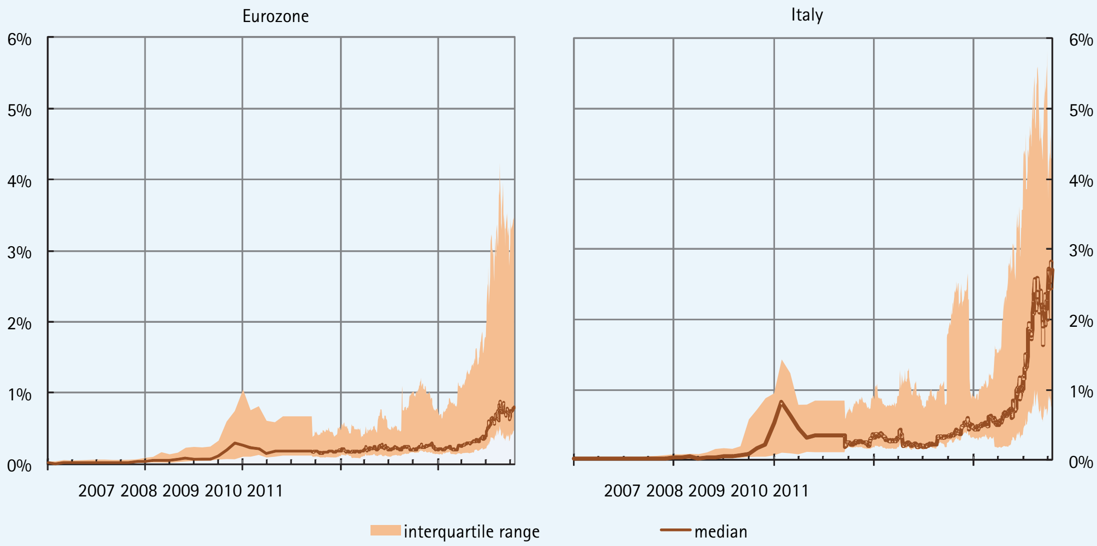
Since the start of the year, the top 6 Italian banks have shown an expected default frequency (EDF) (based on theoretical models that also incorporate accounting data as well as market data) significantly higher than the average for main European banking groups; similar evidence stems from ratings implicit in share prices, CDSs and bond spreads. The implicit rating based on share prices for Italian banks, as for European banks, began to fall below that based on the trend of CDSs already towards the end of 2010, showing a greater reactivity of the stock market in incorporating the signs of worsening credit quality. For Italian banks, the implicit rating in bond spreads and the implicit rating in CDS prices have gradually come into line, whilst for European banks the implicit rating in CDSs remains far below the implicit rating in bond spreads. The results of statistical models analysing the trend of CDS prices of banks show that, starting in mid-2011, the probability has increased that a shock relating to an individual bank should be transmitted to the rest of the system (systemic risk), both for Italian and European banks.

Since July, CDS spreads have began to significantly overestimate the credit risk of Italian banks with respect to the EDF (Expected Default Frequency), as had been occurring for Spanish banks since 2010, whilst for German banks the opposite was seen (implicit probability of default in CDSs lower than EDFs); for French banks CDSs and EDFs tend to provide indications on probability of default that are basically in line.

In general, the significance of factors linked to the fundamental figures of individual issuers (idiosyncratic risk) has declined in the process by which investor expectations are formed on credit risk. The significance of systemic factors traceable to repercussions of the deteriorating macroeconomic outlook and the sovereign debt crisis has instead increased. Statistical analyses thus show that the systemic risk level has had an increasingly significant effect on determining the prices of banks' CDSs since July 2011 and that this phenomenon has been more marked for Italian banks.

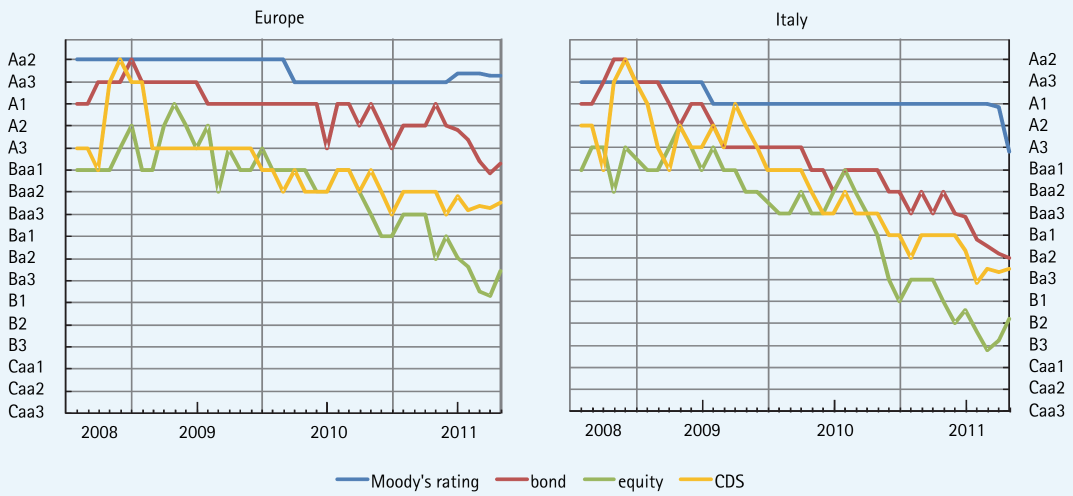
Figure 3.14 – Expected Default Frequency (EDF) for major banking groups

(daily data; 31/01/2007 - 15/11/2011; percentages)



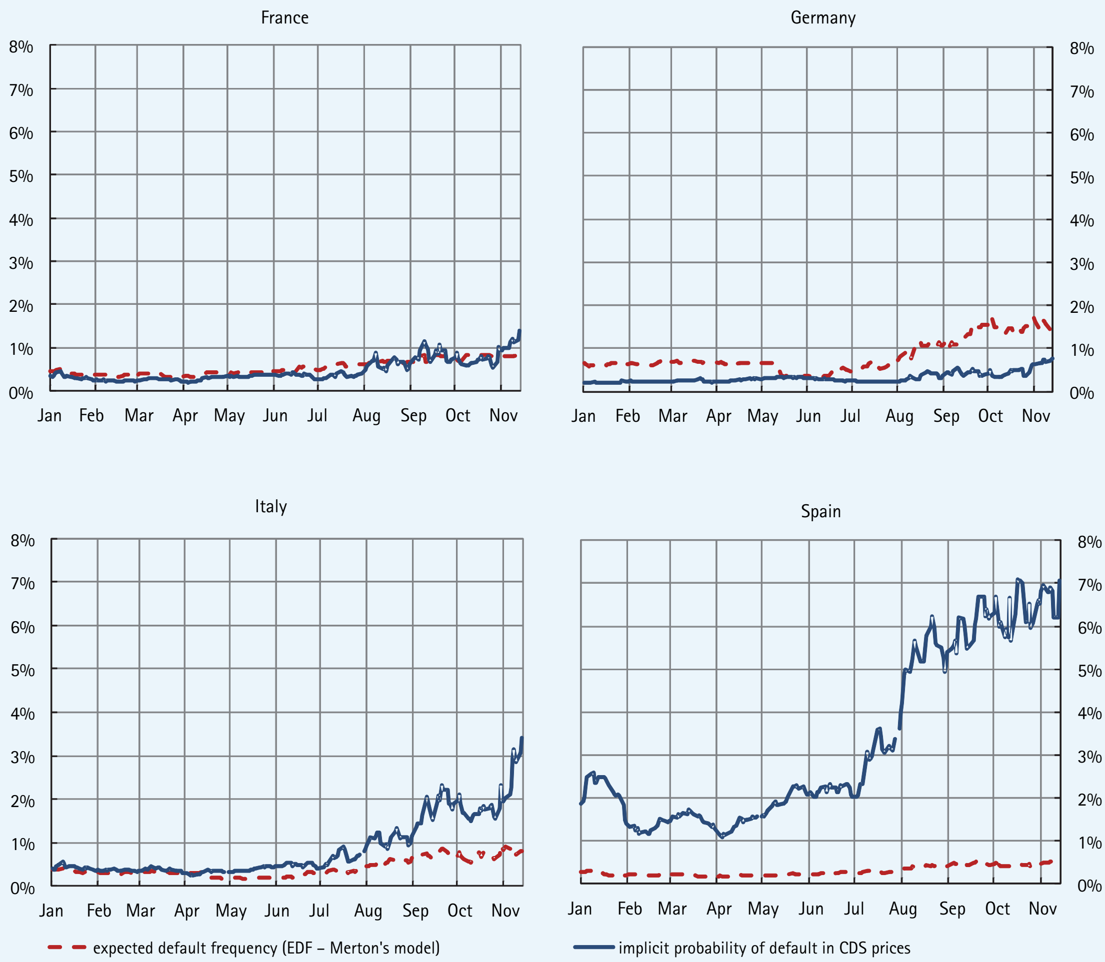
Source: calculations based on Credit Edge data. Data on banks included in the Dow Jones Euro Stoxx 50 index for the Eurozone (excluding Italian banks) and on the top 6 Italian banking groups.

Figure 3.15 – Financial instruments implied ratings



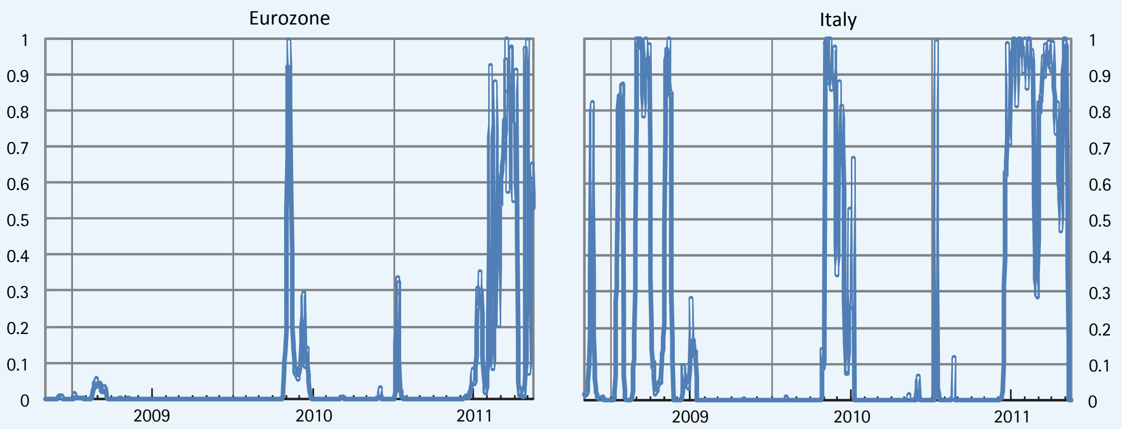
Source: calculations based on average data on banks included in the Dow Jones Euro Stoxx 50 index for the Eurozone (excluding Italian banks) and to the top 6 Italian banking groups.

Figure 3.16 – Merton's model and CDS implied probabilities of default for bank issuers
(median values; daily data; 01/01/2011 - 15/11/2011)



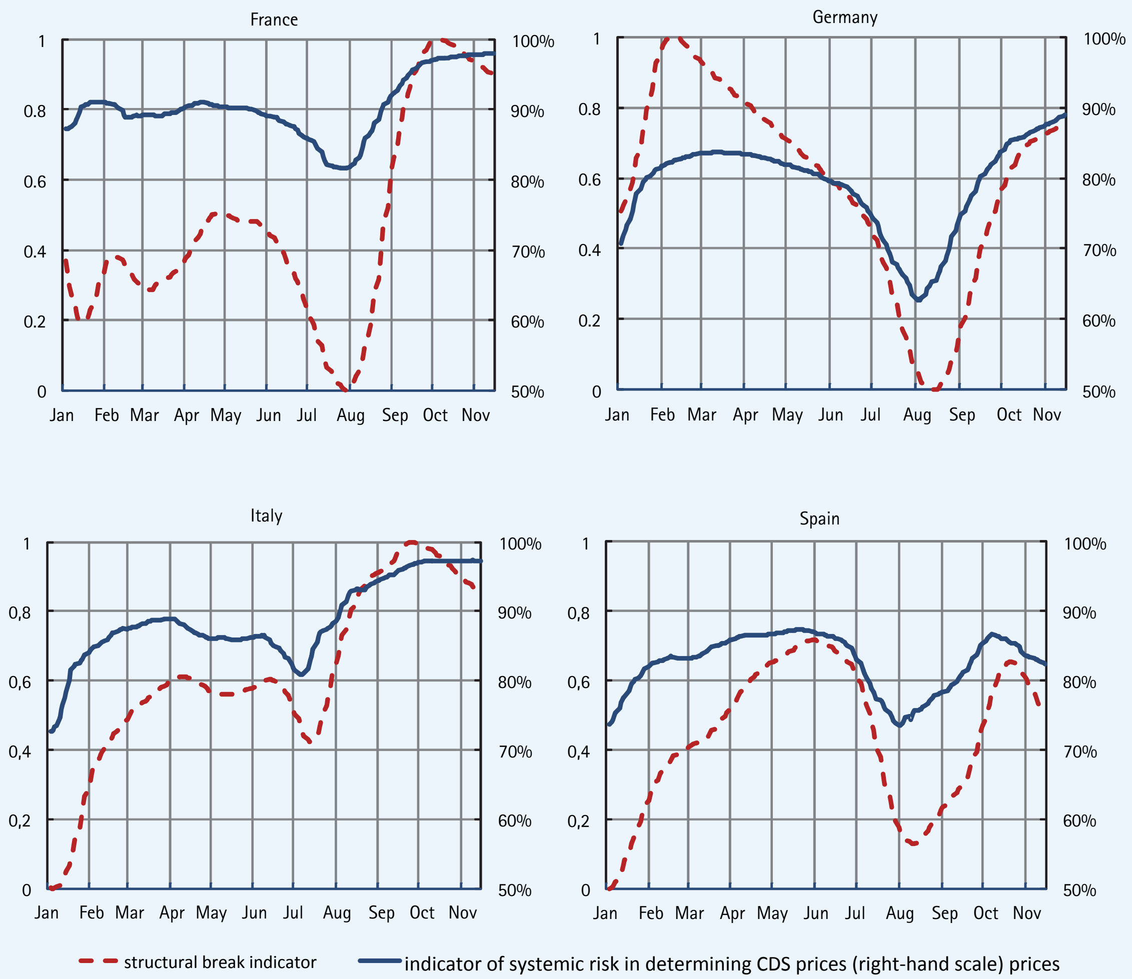
Source: calculations based on Moody's Credit Edge data.

Figure 3.17 – Probability of bank joint distress
(daily data; 01/11/2008 - 15/11/2011)



Probabilities are estimated by applying the Markov switching regime model to the series of daily variations of of 5-year CDS spreads.

Figure 3.18 – Impact of systemic factors on bank's CDS spreads
(daily data; 01/01/2011 - 15/11/2011)



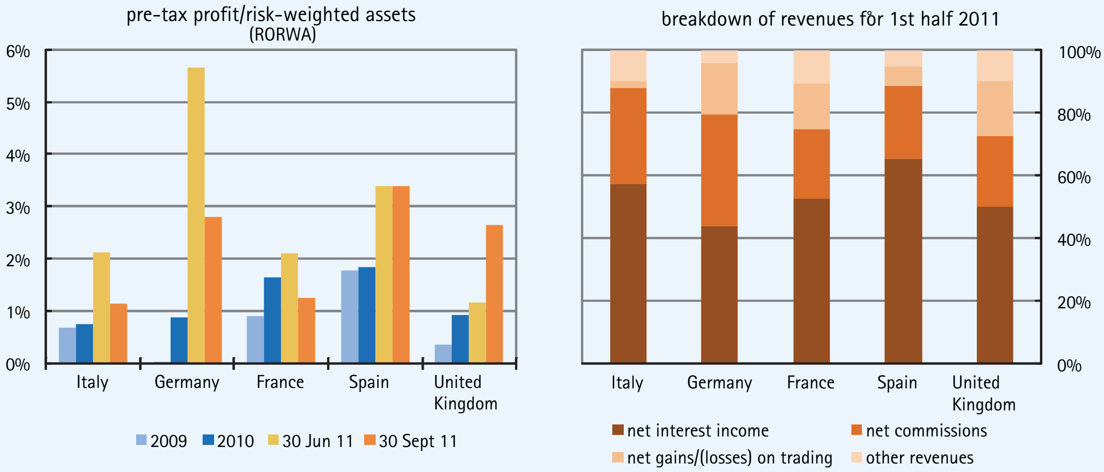
The relevance of systemic risk in determining CDS spreads has been calculated as the variance explained by the first common factor estimated by applying principal component analysis on CDS spreads (rolling window of 6 months). The structural break indicator is estimated by comparing the trend of the systemic risk indicator with its historical values (Longstaff and Rajan, 2006).

Banks and asset management

Profitability of major European banks slowed during the third quarter of the year owing to worsening sovereign debt tensions of the Eurozone; profitability is, however, up on 2010

During the first 9 months of 2011, the average profitability of major European banks remained at a level on average above that of 2010, but slowed for Eurozone banks during the third quarter of the year, due to worsening tensions on sovereign debt. The major Italian, French and German banks, which during the first six months of the year had enjoyed a significant increase in profitability on risk-weighted assets, in the third quarter of the year saw this result drop back. Major Italian banks continue to record lower profitability (of risk-weighted assets) than the average recorded by major European banks, particularly compared with Germany and Spain, but in line with that of French banks; the major German banks in particular are now showing good performance after two years of very limited margins. Italian and Spanish banks maintain the highest proportion out of total income of net interest income and net commissions (which tend to be the most stable components of net banking income) as compared with the banks of the other major European countries.

Figure 4.1 – Profitability and breakdown of revenues of the major European banks



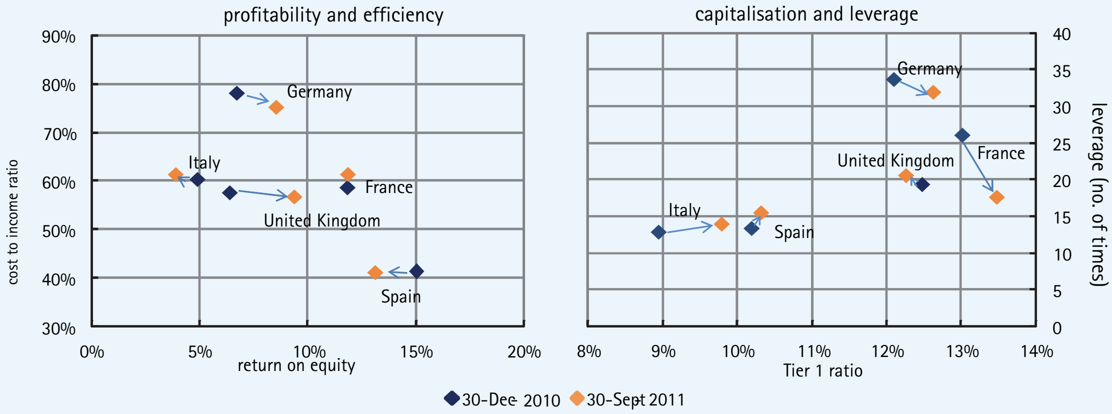
Source: consolidated interim management reports of the major European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Société Générale, Credit Agricole S.A., BNP Paribas, Banco Bilbao Vizcaya Argentaria, Santander, Banco Popular, Banco Espanol de Crédito, Barclays, HSBC, Lloyds and Royal Bank of Scotland). Annualised data.

In 2011, the level of capitalisation of major European banks increased, but the proportion of non-performing positions also grew

Average ROE (stripped of extraordinary items) for major banks during the first 9 months of the year increased in Germany, whilst it remained stable in Italy and France. The average capitalisation level increased in all major European countries; in the first 9 months of 2011, the average Tier 1 capital of Italian banks grew significantly, reaching levels close to 10%, just below those of major Spanish banks; major French, English and German banks instead averaged a Tier 1 capital of more than 12%.

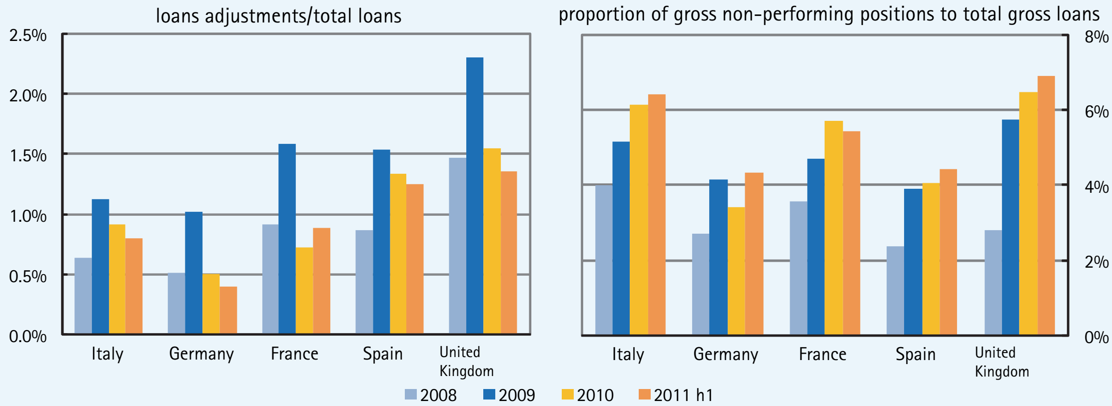
The ratio of non-performing positions to total loans is up for all major European banks. For Italian banks, the average proportion of non-performing positions out of gross receivables at the end of QIII 2011 exceeded 6%, one of the highest figures in Europe after that of the English banks. The flow of impairment losses on loans of Italian banks is instead down on the previous two years and lower than that recorded by Spanish and English banks.

Figure 4.2 – Change in profitability and capitalisation for major European banks in the first nine months of 2011



Source: consolidated interim management reports of major European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Société Générale, Credit Agricole S.A., BNP Paribas, Banco Bilbao Vizcaya Argentaria, Santander, Banco Popular, Banco Espanol de Crédito, Barclays, HSBC, Lloyds and Royal Bank of Scotland). Annualised pre-tax ROE stripped of extraordinary items and calculated on shareholders' equity at period end.

Figure 4.3 – Credit quality of major European banks

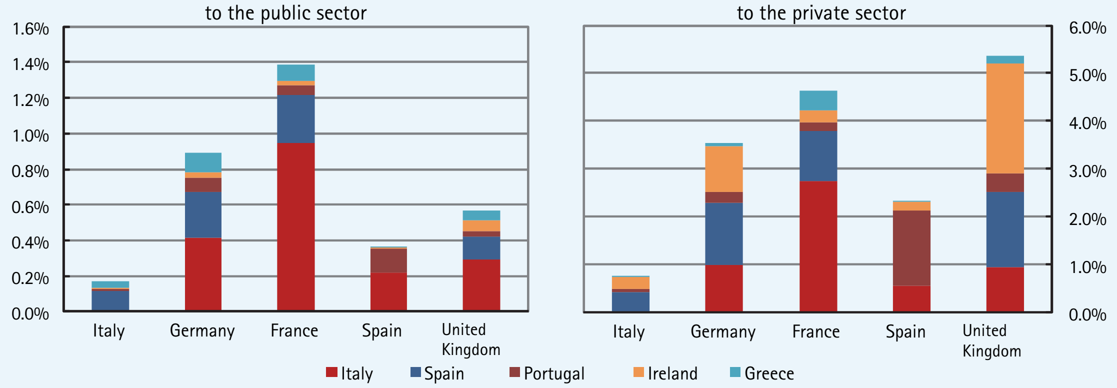


Source: consolidated interim reports of major European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Société Générale, Credit Agricole S.A., BNP Paribas, Banco Bilbao Vizcaya Argentaria, Santander, Banco Popular, Banco Espanol de Crédito, Barclays, HSBC, Lloyds and Royal Bank of Scotland). Annualised data.

French and German banks are the most exposed towards the public sector of Eurozone countries with the greatest imbalances in public accounts

As of 30 June 2011, total exposure of Italian banks towards European countries with the greatest imbalances in public accounts was extremely limited (approximately 1% of total assets). Excluding exposure towards domestic public debt, Italian banks (and to a lesser degree Spanish banks) engage little in cross-border operations compared with German, French and English banks. In terms of total assets, the exposure of these banks towards the public sector of European countries with the greatest imbalances in public accounts comes to 1.4% for France, 0.9% for Germany and approximately 0.6% for the United Kingdom; exposure towards the private sector is instead far more significant (3.5% for Germany, 4.6% for France and more than 5% for the United Kingdom), owing also to a significant operational presence through subsidiaries operating in these countries. Exposure towards the Greek public sector is more significant for German and French banks, although modest overall in terms of total assets, whilst exposure towards Italian and Spanish public debt is significant for all major European countries. As a whole, English banks are most exposed with regards to Ireland and Spain, French banks towards Italy and Spain, German banks towards Spain and Ireland and Spanish banks towards Portugal and Italy. Considering both the public and the private sector, French banks are those with the highest overall exposure towards countries with significant imbalances in public accounts (approximately 6% of total assets), whilst the overall exposure of Italian banks towards these countries (excluding that on the Italian public debt) is the lowest.

Figure 4.4 – Bank exposure towards certain Eurozone countries
(data at 30 June 2011, figures as a percentage of total assets)

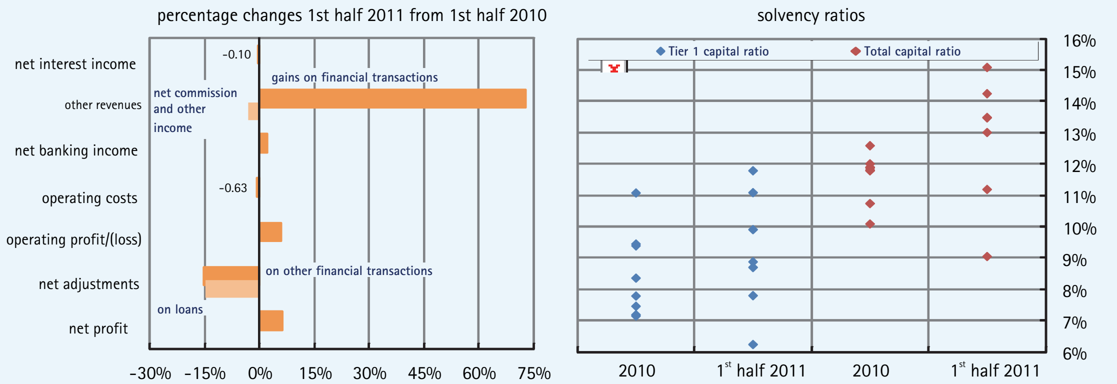


Source: Bank for International Settlements. Data refer to the entire banking system of Italy, Germany, France and Spain. Exposure towards the country of origin is excluded.

During the first half of 2011, the profitability and capitalisation of Italian banks increased. Bond funding from institutional investors dropped during the third quarter, whilst funding from retail customers remained stable

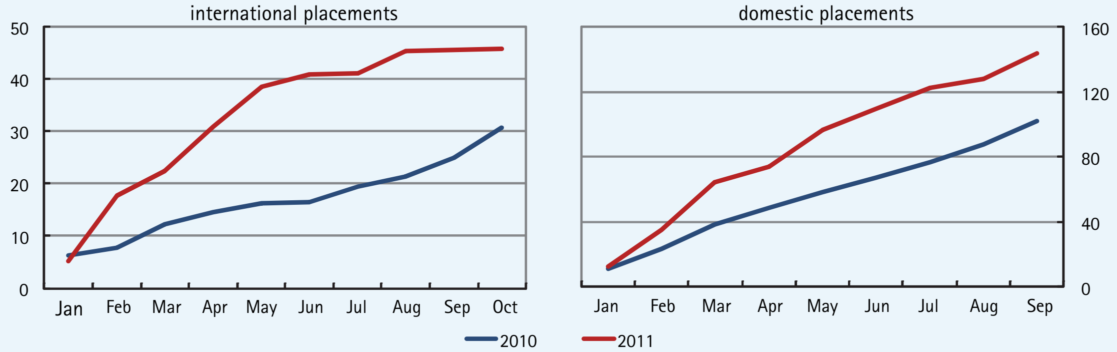
During the first half of the year, the accounts of major Italian banking groups showed a slight increase in net banking income owing mainly to growth in gains on financial transactions, whilst net interest income and commissions slowed slightly; growth in operating profit and a reduction in value adjustments determined 7% growth in net profits. In the first half of the year, Tier 1 and total capital ratio grew for almost all major banking groups. Bond funding was to a large extent concentrated in the first half of the year, particularly funding from institutional investors; placings with retail customers instead showed growth over 2010 and a more stable trend also during the third quarter of 2011.

Figure 4.5 – Income statement and solvency ratios of major Italian banking groups



Source: calculations based on consolidated financial statements. Data on the top 8 banking groups in terms of total assets.

Figure 4.6 – Italian banks bond issues
(cumulated amounts in billions of euro)

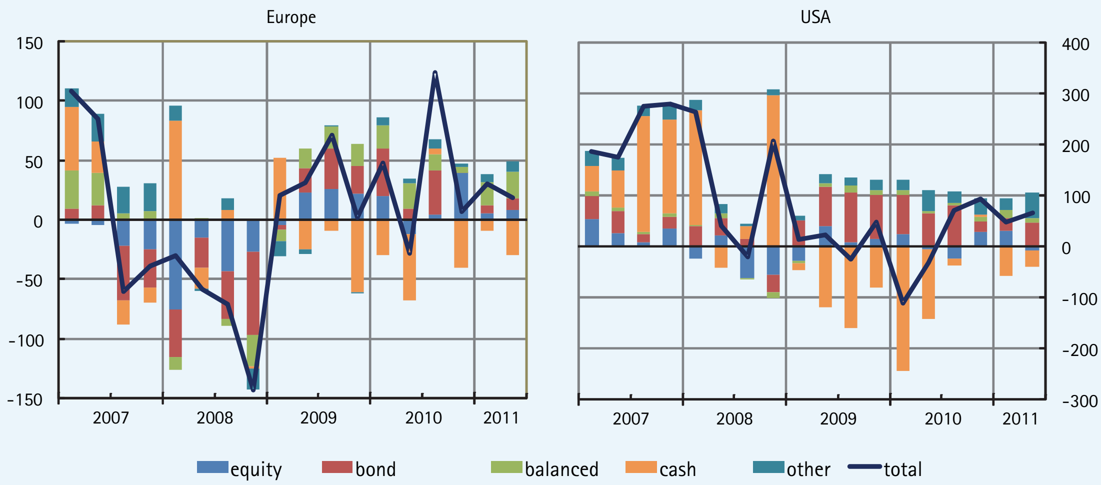


Source: calculations based on Consob, Kler's and Dealogic data.

Mutual fund inflows in the first half of 2011 were high both in Europe and in the USA

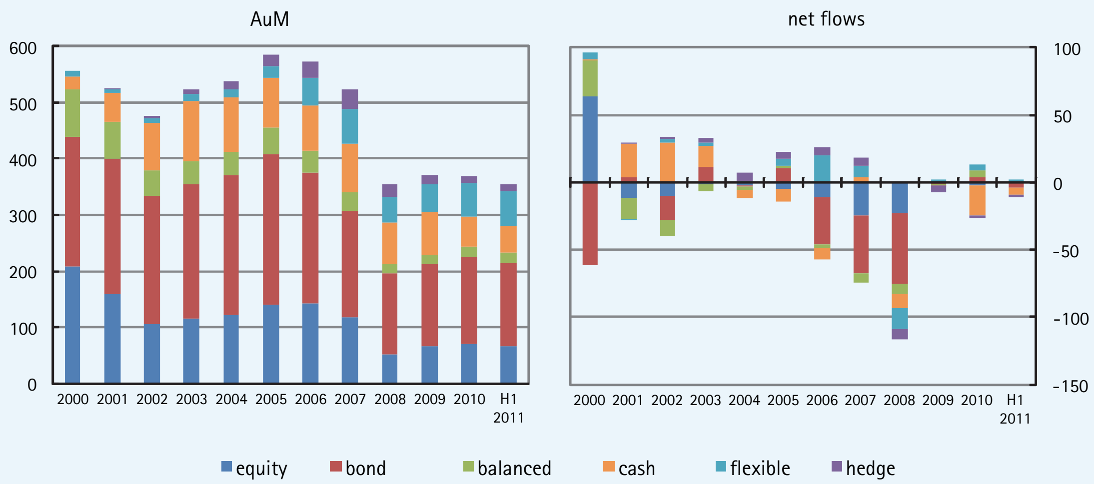
In the first 6 months of 2011, mutual fund inflows were positive both in Europe and in the USA. In Europe, the market was driven by inflows into balanced funds, whilst in the USA, the greatest contribution was made by bond funds. In Italy, net flows into mutual funds were negative owing to redemptions from cash funds, but outflows were more limited compared with the trend seen in 2010.

Figure 4.7 – Net flows of Ucits
(in billions of euro)



Source: EFAMA and ICI.

Figure 4.8 – Assets under management and net flows of Ucits managed by Italian intermediaries
(amounts in billions of euro)

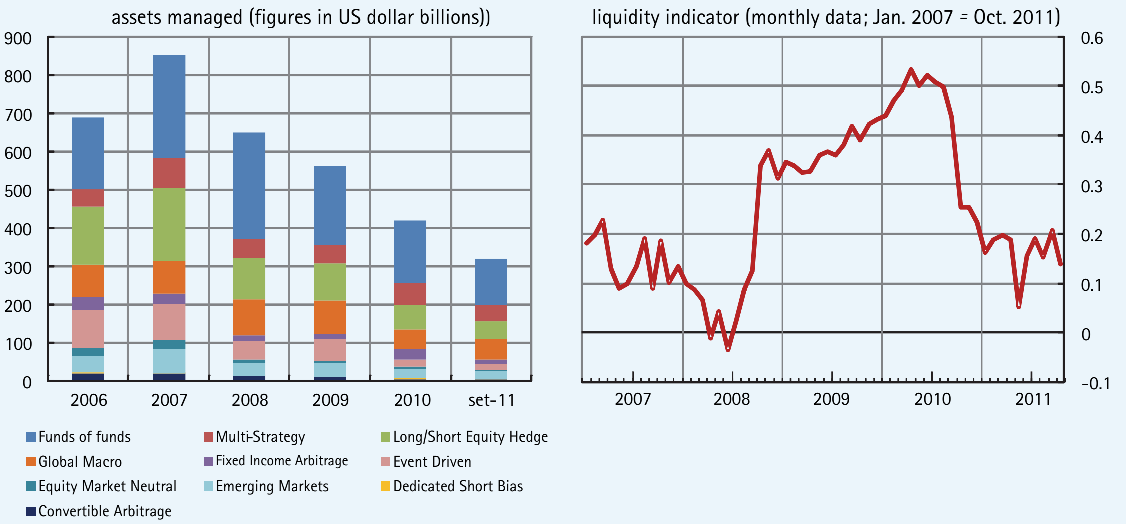


Source: Assogestioni.

In the first 9 months of 2011, the assets of speculative funds dropped by around 1/4 owing to redemptions and a reduction in asset values. Liquidity and market risks have increased

In 2011, a significant drop was recorded in the value of the assets managed by speculative funds, due to both a fall in the value of some assets and the flow of redemptions by institutional investors suffering tensions connected with the worsening of sovereign debt crisis. Liquidity risk for investors has grown significantly since the start of the year with respect to the period 2009-2010. Starting in the second half of 2011, a generalised drop in the yield of funds has been recorded and market risk has increased. The correlation between yields of speculative funds - which measures how investment strategies affect systemic risk on financial markets - despite increasing, has settled at lower levels than those recorded in 2010.

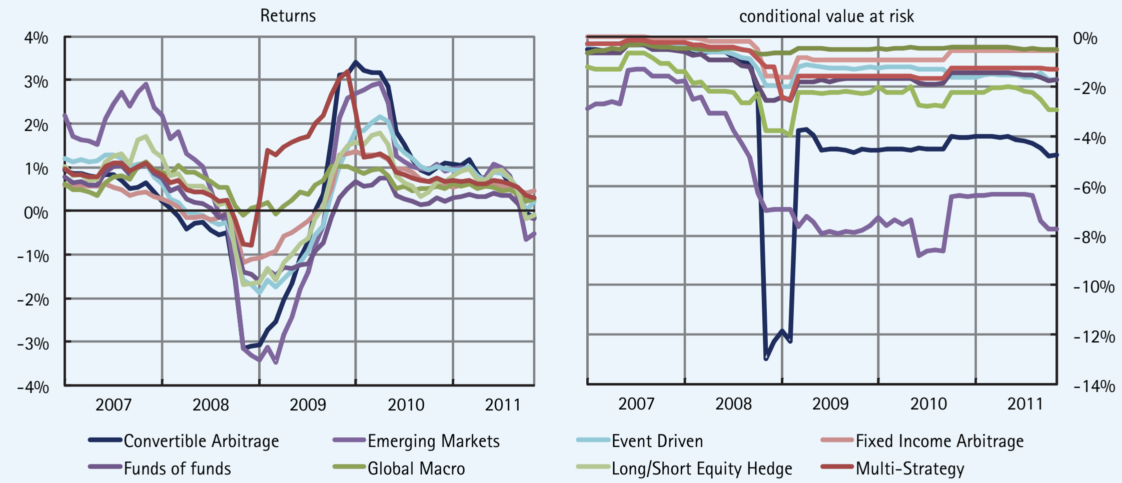
Figure 4.9 – Assets managed and liquidity level of speculative funds



Source: calculations on HedgeWorld data. The liquidity indicator is computed as the average of investment strategy' s return autocorrelation (Getmansky, Lo and Makarov, 2004).

Figure 4.10 – Performance and risk of speculative funds

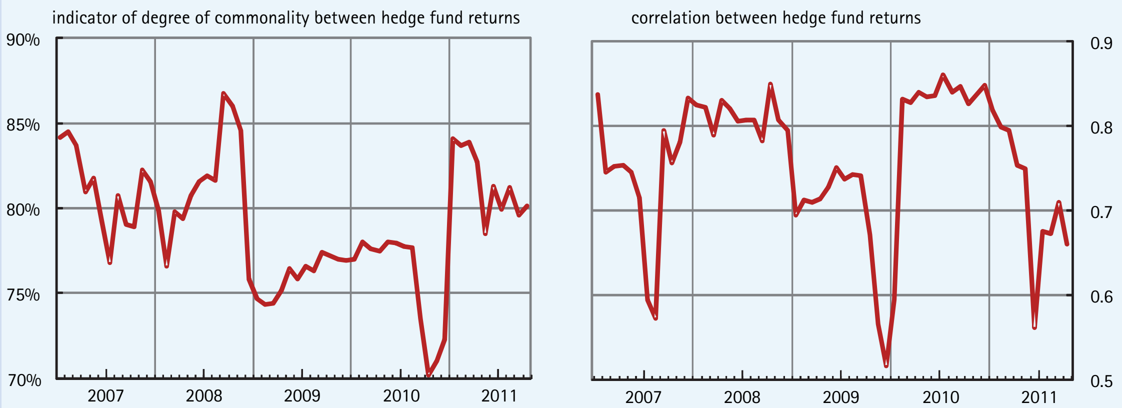
(monthly data; January 2007 - October 2011)



Source: calculations on HedgeWorld data.

Figure 4.11 – Degree of commonality among hedge fund strategies

(monthly data; January 2007 - October 2011)



Source: calculations on HedgeWorld data. The systemic risk level is estimated as the variance expressed by the first common factor obtained by applying principal component analysis.