Statistics and analyses

Risk Outlook



CONSOB COMMISSIONE NAZIONALE PER LE SOCIETÀ E LA BORSA

6

June 2013

Statistics and analyses

Risk Outlook



The Risk Outlook analyses the current economic situation and the trends in financial markets in order to identify the main risks affecting the achievement of Consob's institutional objectives.

This report is based on data available as of June 2013 obtained from sources considered reliable, but for which the completeness and accuracy cannot be guaranteed.

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This report was prepared by:

Nadia Linciano (coordinator)

Valeria Caivano

Monica Gentile

Claudia Guagliano

Lucia Pierantoni

Paola Soccorso

Eugenia Della Libera

Francesco Fancello looked after the English version of the document.

For information and clarification write to: studi_analisi@consob.it.

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Trends and risks

In the first half of 2013 the financial markets in the main advanced economies outside the Eurozone were characterized by a positive trend which, above all, reflected the effect of the highly expansionary monetary policies conducted by the Fed, the Bank of Japan and the Bank of England, and based almost exclusively on open market operations. In the Eurozone, instead, markets have followed a swinging trend due to the weakness of the economic cycle. The forecasts for 2013 point to roughly half a percentage point reduction in GDP (compared to an increase of more than 1% in the US and Japan, and around 0.5% in the UK). Since the OMT program announcement in the second half of 2012, which was key to warding off the risk of collapse for the euro, the balance sheet of the ECB has not changed significantly. While accommodating for the main Eurozone countries (as shown by the negative real interest rates recorded since 2010), the ECB monetary policy stance might be less expansionary for the countries characterized by (estimated) greater output gaps. Moreover, the strong credit tightening for the private sector in the peripheral countries underlines the difficulties in transmitting monetary policy stimuli.

The uncertain outlook for a recovery, also varying from core to peripheral countries, jeopardizes the initiatives undertaken to restore public finances and makes it arduous to respect the Fiscal Compact Treaty, which requires a reduction in public debt of 5% a year down to 60% of GDP. According to our estimates, given an average primary surplus of 2% in the past ten years, Italy should obtain a primary surplus of around 4.6% of GDP in a baseline scenario with annual growth of 0.7% and real interest rate at 2.8%, while the primary surplus would be 6% of GDP in a negative scenario with interest rates higher by 100 basis points. In the peripheral countries the banks keep showing declining profitability and credit deteriorating at a higher pace than in the core countries.

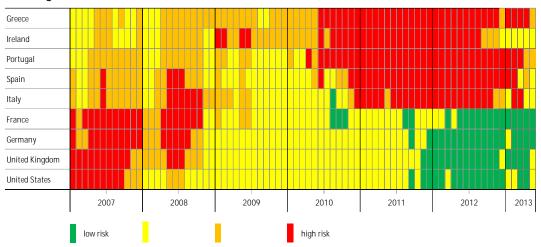
In a low interest rates scenario with uncertainty, the risk is that a further decline in profits might take place; the need to continue banks' capital strengthening might also amplify the deleveraging trend already under way. Moreover, in 2012 the banks' sovereign exposure rose in the countries hardest hit by the crisis, even at an aggregate level (Eurozone banks hold 23% of domestic public debt, UK banks 8% and US banks just 2%).

The contraction in bank lending to peripheral countries companies increases the financial vulnerability of the largest Italian and Spanish listed companies. Weakness factors, also in terms of declining profitability, are more evident in the cyclical sectors, which carry a significant weigh in the European economies. Notwithstanding the financial and corporate sector fragility, especially in the Eurozone, and the uncertainty surrounding the cycle dynamics in all the main advanced economies, the fall in interest rate brought about by expansionary monetary policies has sparked a search for yield and a reduction in bond spreads and risk premia. This trend might lead to a misalignment in financial asset prices relative to fundamental values or determine sudden corrections with possible negative consequences for the orderly functioning of markets.

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Risk dashboards

Sovereign risk indicator



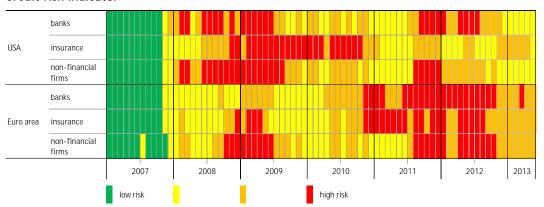
Source: calculations on Thomson Reuters data. The risk in computed on the basis of the historical distribution of 10-year sovereign yields.

Issuance activity indicator by sector



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

Credit risk indicator



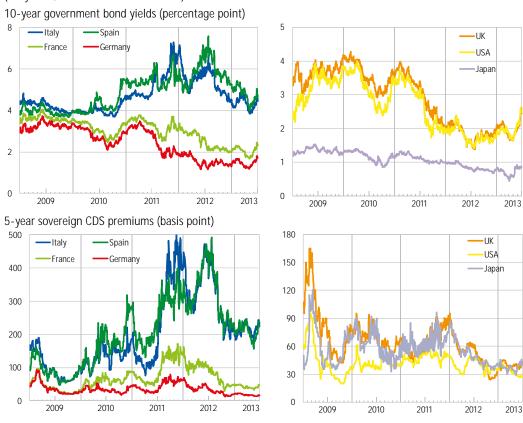
Source: our calculations on Thomson Reuters data. The risk level is computed on the basis of the historical distribution of CDS Thomson Reuters price indexes.

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Macroeconomic background

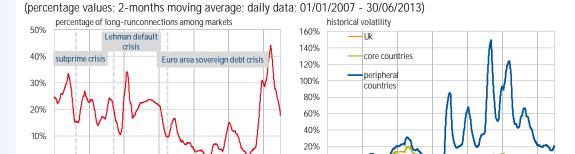
In the first months of 2013, government bond yields for the main advanced economies declined. The same trend was observed in the Eurozone peripheral countries, in a context of gradual reduction in contagion effects and historic volatility for sovereign bond markets. Since May, however, the yield dynamics has reversed due to improving expectations in the US and the anticipation of a quantitative easing tapering by the Fed

Figure 1.1 – Government bond yields and CDS on public debt in the euro area (daily data; 01/01/2009 - 30/06/2013)



Fonte: Thomson Reuters.

Figure 1.2 – Contagion and historical volatility of 10-year sovereign bond spreads for some European countries



2010

2011

2012

0%

2007

2008

2009

For the methodology applied to construct the contagion indicator see M. Gentile and L. Giordano, "Financial contagion during the Lehman default and sovereign debt crisis: an empirical analysis on Euro area bond and equity markets", Consob working paper no. 72, 2012. The left graph reports the percentage of statistically significant long-run relations among sovereign bond spreads; the long-run connections have been detected by applying the bi-variate cointegration test of Johansen (1988) with a rolling window of 1,000 days on the stock return time series. The countries included in the sample are UK, Germany, France, Austria, Netherlands, Finland, Italy, Spain, Greece, Portugal and Ireland. The right graph reports the average value of the annualised historical volatility of sovereign bond spreads which has been estimated by applying a multivariate Garch model. The group of "core" countries include Germany, France, Austria, Holland and Finland, while the group of "peripheral" countries include Italy, Spain, Portugal and Ireland. The sovereign spreads are computed by using US Treasury bond as the benchmark. Calculations are based on Thomson Reuters data.

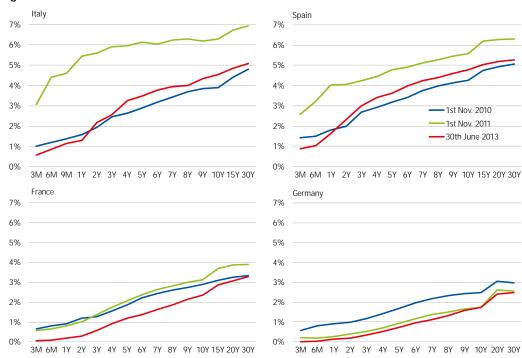
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The yield curves for Eurozone peripheral countries reflect an easing in the perception of sovereign risk, but the spread relative to the German curve remains fairly wide

June 2013

Figure 1.3 - Yield curves



Source: calculations on Thomson Reuters data.

Figure 1.4 – Bond and CDS implied ratings in some euro area countries (monthly data; January 2009 - June 2013)



The official Moody's rating for Italian and Spanish government bonds is still higher than the implicit rating expressed by spreads and CDS quotes

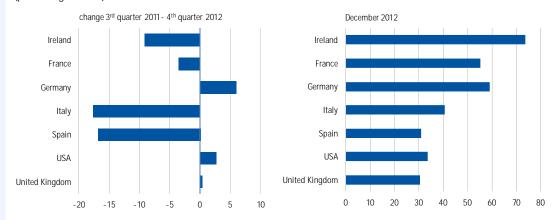
Source: calculations on Moody's data.

-CDS implied rating

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The share of public debt held by non residents has dropped significantly for the countries most exposed to the sovereign debt crisis. In particular, the reduction in the period Sept 2011 -Dec 2012 was around 18% for Italy and Spain

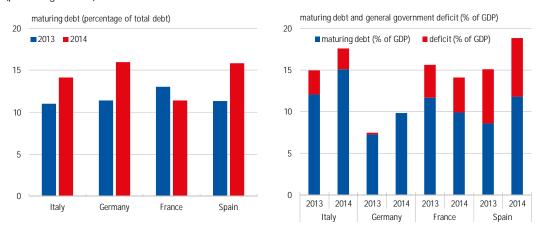
Figure 1.5 – Non-resident holdings of general government debt (percentage values)



Source: calculations on Bruegel database of sovereign bond holdings developed in Merler and Pisani-Ferry (2012; www.bruegel.org).

The necessity of refinancing a large share of public debt before 2014 is still a risk factor for some important countries in the Eurozone. For instance, Italy in the second half of 2013 and 2014 will be facing maturing debt equal to 12% and 15% of GDP respectively, while at the same time having to finance public deficit estimated at 2.9% and 2.5% of GDP

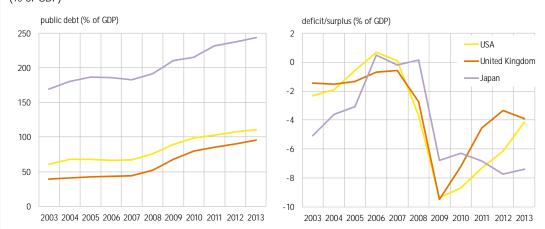
Figure 1.6 – The refinancing needs of general government debt (percentage values)



Source: calculations on Thomson Reuters Eikon and EU commission data

Meanwhile, public finances dynamics in the US, Japan and UK continue to look stable enough

Figure 1.7 – Deficit and public debt in advanced countries (% of GDP)



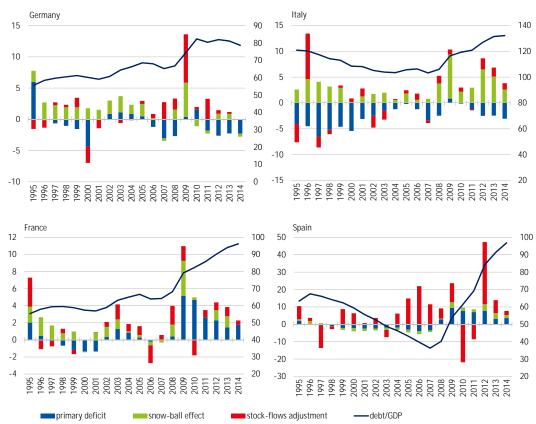
Source: EU Commission.

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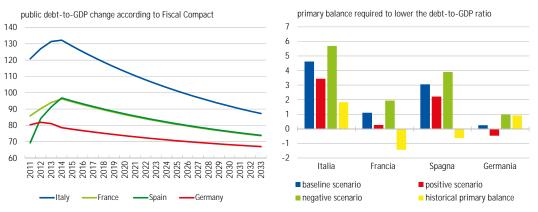
The path of debt-to-GDP ratio and its components differ significantly among Eurozone countries. As for Italy, the gap between the growth ratio and the real interest rate remains a key weakness

Figure 1.8 – General government debt components



Source: EU Commission. Data show public-debt-toGDP components (right scale); the *snow-ball effect* measures the increase in public debt to GDP determined by the difference between interest rate and GDP growth rate; the stock-flow adjustment is the difference between the change in government debt and the government deficit/surplus for a given period.

Figure 1.9 – Primary balance required to lower the debt-to-GDP ratio in order to comply with the Fiscal Compact Treaty in some Euro area countries (% of GDP)



In the baseline scenario interest rates and GDP growth rates are equal to those forecast for 2014 (i.e., GDP growth rate equal to 0.7% for Italy, 1.8% for Germany, 1.1% for France and 0.9% for Spain; and interest rates equal to 2.8% for Italy, 1.3% for Germany, 1.0% for France and 3.1% for Spain). In the positive scenario are equal to those forecast for 2014 and GDP growth rates are equal to those forecast for 2014 increased by 1 percentage point. In the negative scenario interest rates are 100 basis points higher than those forecast for 2014 and GDP growth rates are equal to those forecast for 2014. In all scenarios the inflation rate is equal to that forecast for 2014. The source for all data is the EU Commission. Historical primary balance is the average of cyclically adjusted primary balances from 1999 to 2012.

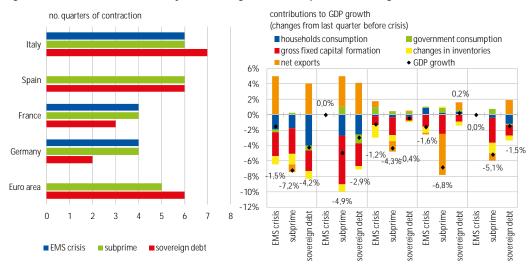
The budget rules introduced by the Fiscal Compact Treaty require further significant adjustments even for the public finances of the main Eurozone countries. According to our estimates, Italy should obtain a primary surplus of around 4.6% of GDP in a baseline scenario with annual growth of 0.7% and real interest rate at 2.8% (EU Commission forecasts)

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Comparing different periods of crisis, it appears that the contraction in economic activity in the Eurozone following the Lehman collapse was more severe than the recession caused so far by the sovereign debt crisis ...

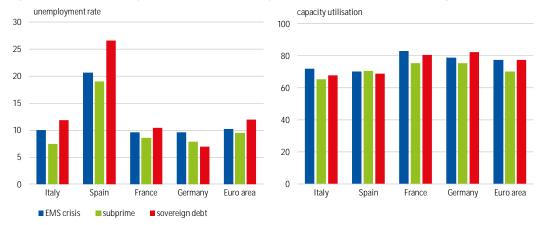
Figure 1.10 - Economic activity and GDP growth. Comparison among crises



The left panel shows, for each period, the number of quarters of GDP contraction. In the right panel GDP variations are calculated referring to the last quarter before the crisis. Spanish data related to the EMS crisis are not available. Calculations on Eurostat and Thomson Reuters data.

... even if the latter crisis has claimed a higher unemployment rate

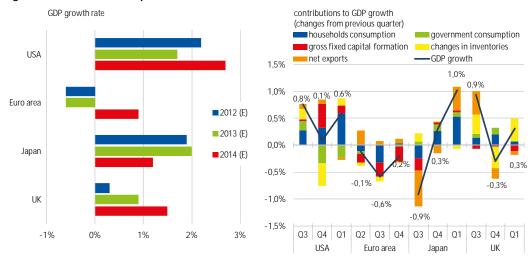
Figure 1.11 - Unemployment rate and capacity utilisation. Comparison among crises



For each country data refer to the last quarter of the crisis. Thomson Reuters data.

In the first quarter of 2013 growth outside the Eurozone continued ...

Figure 1.12 - Economic performance of selected advanced economies

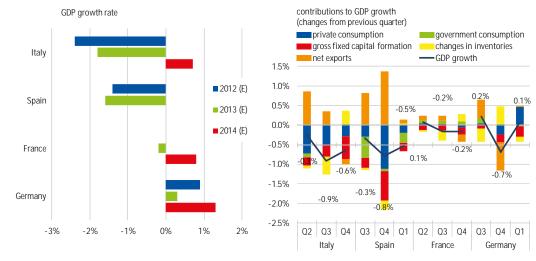


Source: calculations on IMF and Thomson Reuters data.

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... while in the Euro area the economic activity has stagnated ...

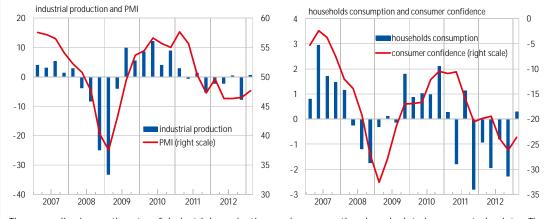
Figure 1.13 - Economic performance of some Eurozone economies



Source: calculations on IMF and Eurostat data.

... even if some indicators point to a slowing down of the recession

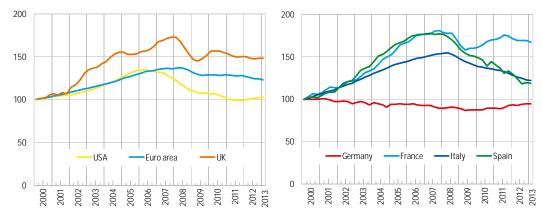
Figure 1.14 – Industrial production, households consumption and firm and consumer confidence levels in the Euro area



The annualised growth rate of industrial production and consumption is calculated on quarterly data. The composite PMI is in index points; the consumer confidence indicator is the arithmetic average of the balances (in percentage points) of the answers to the questions on the financial situation of households, the general economic situation, unemployment expectations (with inverted sign) and savings, all over the next 12 months. Calculations on Thomson Reuters, Markit Economics, Eurostat and European Commission data.

The real estate market has improved in the US, while European house prices have fallen on average

Figure 1.15 – House price in some advanced economies (price to rent ratio; January 2000=100)



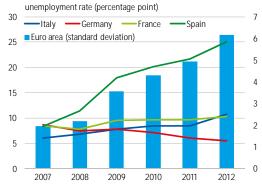
Source: calculations on Thomson Reuters and Bank for International Settlements data.

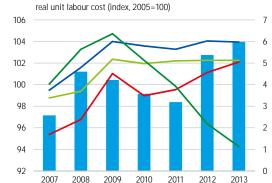
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The unemployment rate has kept rising in the Eurozone, reflecting the prolonged weakness of the economic cycle. The labour cost dynamics remains heterogeneous across countries

Figure 1.16 – Unemployment and labour cost





Source: calculations on Thomson Reuters data

In a scenario of feeble domestic demand and high unemployment, inflation in the Eurozone keeps declining, also thanks to the oil price trend

Figure 1.17 – Euro area inflation and year-on-year change in oil price

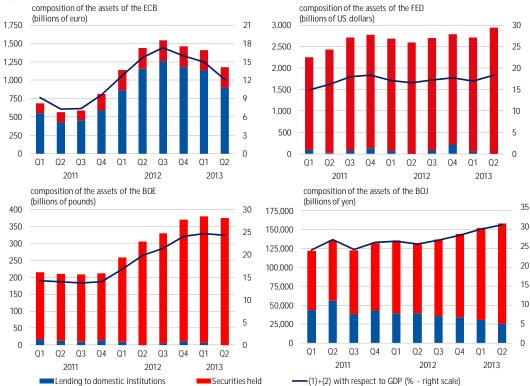




Source: calculations on Thomson Reuters data.

Central Banks' monetary policies have continued to be expansionary, while diverging for the choice of policy instruments and the intensity of stimulus applied

Figure 1.18 - Composition of the assets of the Central Banks



Source: calculations on Central Banks data.

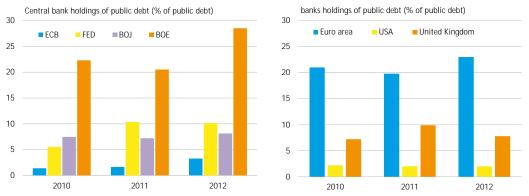
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Given the variety of policy instruments being used, the public debt share held by Central banks and domestic banks varies a lot across the main advanced economies

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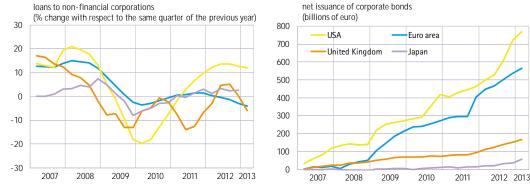
Figure 1.19 - Central bank and private banks holdings of general government debt



Source: Thomson Reuters and Bruegel database of sovereign bond holdings developed in Merler and Pisani-Ferry (2012; www.bruegel.org).

Despite the expansionary monetary policy stance in the Eurozone and the UK, credit access for the private sector has kept shrinking significantly

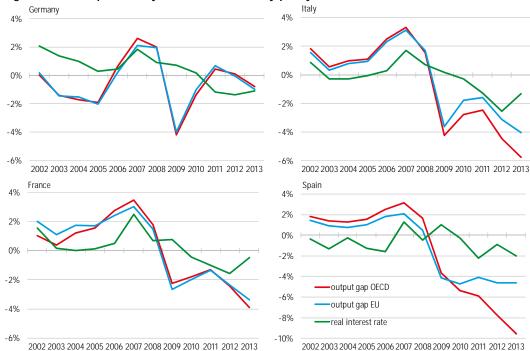
Figure 1.20 – Loans to non-financial corporations and corporate bond issues



Source: calculations on Thomson Reuters, Dealogic and Central banks data.

According to the estimated output gap, the ECB's monetary policy has been in fact restrictive for the EU peripheral countries

Figure 1.21 – Expansionary/restrictive monetary policy



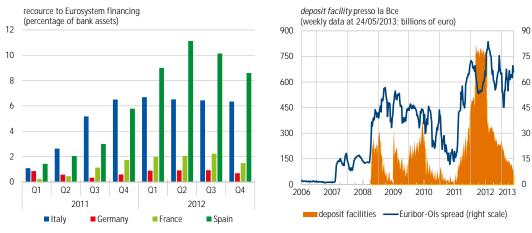
Source: calculations on Thomson Reuters, EU Commission and OECD data. The real interest rate is the difference between the ECB main refinancing rate and the inflation rates in different countries.

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Demand for the ECB refinancing facility is still higher for peripheral rather than core countries banks. However, liquidity deposited at the ECB has declined drastically

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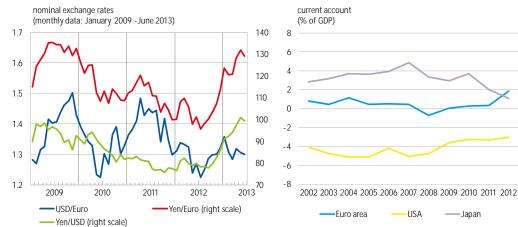
Figure 1.22 – Reliance on Eurosystem by credit institutions of some Euro area countries and ECB deposit facility



Source: the ECB and national central banks data. Spread Euribor-Ois is calculated with respect to Euribor.

Although the announcement of the new measures of monetary policy has determined a strong depreciation of the yen, the Japanese trade balance strongly worsened in 2012

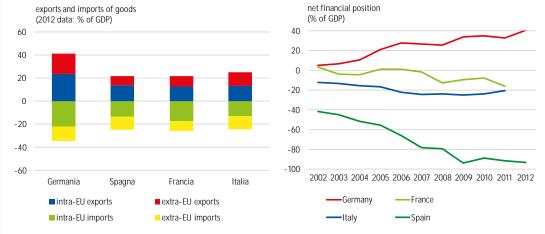
Figure 1.23 – Exchange rates and current accounts in selected advanced areas



Source: Thomson Reuters and EU Commission.

The Eurozone trade surplus reflects very different position across Europe

Figure 1.24 – Geographical composition of trade and net financial position



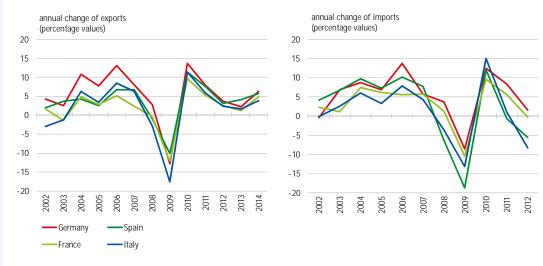
Source: calculations on EU Commission data.

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In the peripheral countries, trade balance improvements are due to a fall in imports

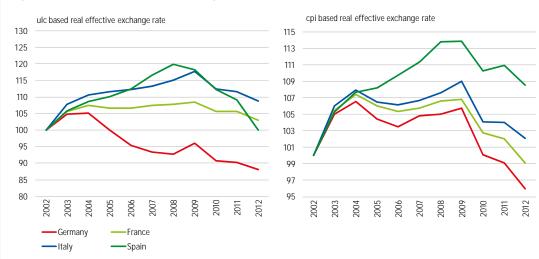
Figure 1.25 - Exports and imports in some Euro area countries



Source: calculations on EU Commission data.

In the last ten years, Germany's competitiveness has improved thanks to a positive trend in prices and labour costs per unit of product

Figure 1.26 - Real effective exchange rates



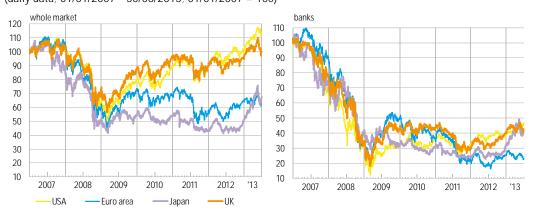
Source: calculations on OECD data.

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Markets

Equity indexes in the US and Japan have risen mainly because of highly expansionary monetary policies ...

Figure 2.1 – Advanced countries stock indexes (daily data; 01/01/2007 - 30/06/2013; 01/01/2007 = 100)

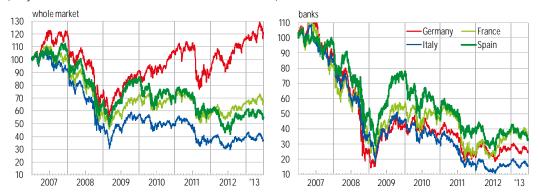


Source: Thomson Reuters Datastream. In the left graph, the represented indexes are the S&P500 for USA, the Topix for Japan, the FTSE100 for UK, Euro Stoxx 50 for the Euro area. In the right graph national FTSE bank indexes are reported.

... while the Eurozone has been negatively affected by weak recovery expectations ...

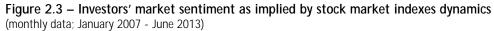
Figure 2.2 – Euro area stock indexes

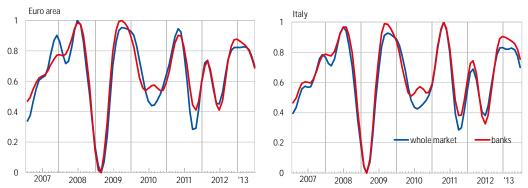
(daily data; 01/01/2007 - 30/06/2013; 01/01/2007 = 100)



Source: Thomson Reuters Datastream. In the left graph the represented stock indexes are Dax30 for Germany, Cac40 for France, Ibex35 for Spain, FTSE Mib for Italy. In the right graph, national FTSE banks indexes are reported.

... as tracked by the economic sentiment indicator (implicit in equity indexes trends). Indeed this indicator improved in the second half of 2012 but has fallen again since



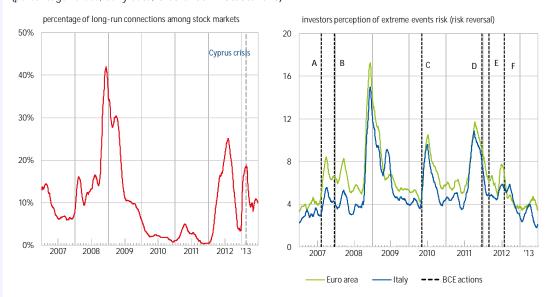


The market sentiment indicator has been estimated by separating the long-run stock return component from the short-run (more erratic and volatile) one. The cyclical component of each time series was normalized by scaling the indicator between zero (low expected growth) and one (high expected growth). The indicator was computed by applying the Christiano Fitzgerald filter. The indexes taken into consideration were the FTSE Mib and the FTSE Mib Banks for Italy and the Euro Stoxx 50 and the Euro Stoxx 50 Banks for the Euro area. Calculations are based on Thomson Reuters data.

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Contagion phenomena have stabilized over the first half of 2013

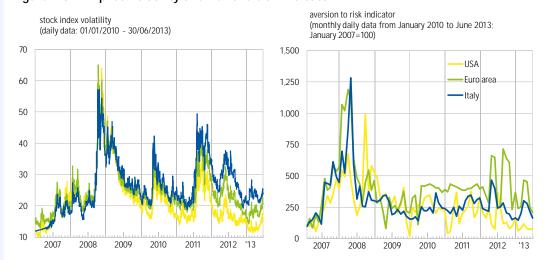
Figure 2.4 – Financial contagion and investors perception of extreme events risk (percentage values; daily data; 01/01/2007 - 30/06/2013)



For the methodology applied to construct the contagion indicator see M. Gentile and L. Giordano, "Financial contagion during Lehman default and sovereign debt crisis: an empirical analysis on Euro area bond and equity markets", Consob working paper no. 72, 2012; the analysis has been done on the daily return time series (MSCI indexes) of Uk, Germany, France, Italy, Spain, Greece, Portugal, Ireland, Netherlands, Austria and Finland. In the right graph, the indicator of risk reversal is reported, which is defined as the difference between the implied volatility of the put out of the money options and the implied volatility of the call out of the money options with the same maturity (2 months) and characterized by the same risk premium sensitivity to the variations of the underlying asset price (delta equal to 25). The increase of this indicator signals an higher perception of the risk of extreme negative returns; for the Euro area the sample includes options on the Euro Stoxx 50 index, for Italy the sample includes options on the FTSE Mib index. The unconventional policy measures adopted by ECB and reported in the figure are: a) injection of liquidity (09/08/2007); B) swap agreement with Fed to inject liquidity in Us dollar in exchange of guarantees in euro (12/12/2007); c) Securities Market Programme (09/05/2010); D) long-term refinancing operations (LTRO) (20/12/2011); E) LTRO (28/02/2012); F) OMT announcement programme (26/07/2012). Calculations are based on Thomson Reuters Datastream and Bloomberg data.

Volatility and risk aversion overall look stable as well ...

Figure 2.5 - Implied volatility and risk aversion indicator

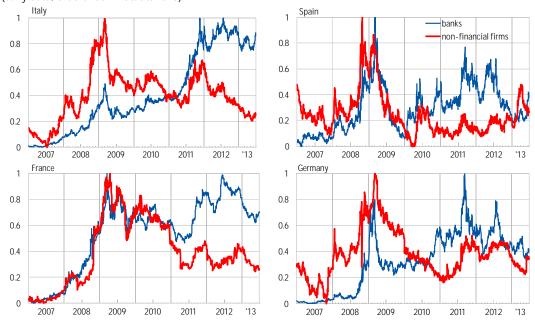


The risk aversion indicator has been estimated by comparing the historical distribution of stock returns with the distribution implied by stock index option prices (for the methodology see Shimko, 1993); call and put options on S&P500 (USA), Euro Stoxx 50 (Euro area) and FTSE Mib (Italy) have been taken into consideration. Calculations are based on Thomson Reuters Datastream data.

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Figure 2.6 – Indicator of herding behavior on stock markets

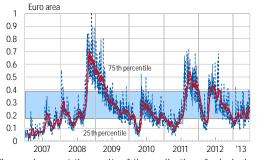
(daily data; 01/01/2007 - 30/06/2013)

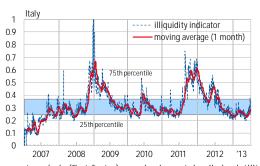


The indicator of herding behavior has been computed as the inverse of the cross-section standard deviation of stock market prices of the main blue chips following the approach of Chang, E., Cheng, J. and Khorana, A. (2000). A less relevant dispersion (and, as a consequence, a higher level of the indicator) signals that the investors adopt more frequently investment strategies similar or imitative and, so, that the herding behavior phenomenon is more intense. The financial sample includes shares belonging to FTSE all share bank (Italy), Datastream Banks (Spain), Cac Banks (France), Dax Banks (Germany). For the non-financial sector, stocks included in national Datastream non-financial total markets indexes have been taken into consideration. Calculations are based on Thomson Reuters data.

... and stock market liquidity remains abundant

Figure 2.7 – Indicator of stock market illiquidity (daily data; 01/01/2007 - 30/06/2013)

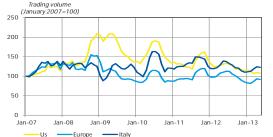


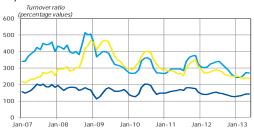


The graphs report the results of the application of principal component analysis (first factor) on price impact, implied volatility, bid-ask spread e range indicator time series. The indicator ranges from 0 (= high liquidity) to 1 (= low liquidity). The indicators have been applied on the stocks included in the Euro Stoxx 50, for the Euro area, and in the FTSE Mib for Italy. Calculations are based on Thomson Reuters Datastream data.

Figure 2.8 – Trading volume and turnover ratio

(monthly data; January 2007 - June 2013; January 2007=100)





The trading volume has been adjusted to take into consideration stock price increase. The indicator of turnover is the ratio between monthly average trading volume and monthly average of market value. The sample is composed of stocks included for USA in the S&P500, for Euro area in the Euro Stoxx 50, for Italy in the FTSE Mib. Calculations on Thomson Reuters Datastream.

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In the Eurozone priceearnings ratios are still below the long run average, despite positive earnings growth expectations

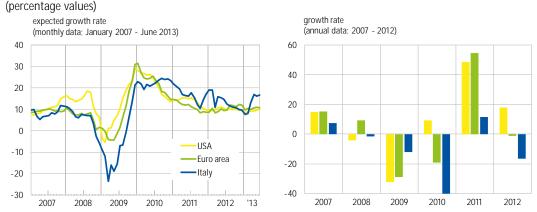
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Figure 2.9 – Price-to-earnings and risk premium in Euro area stock markets



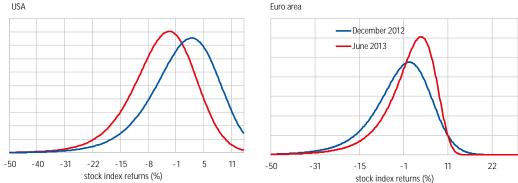
The indicator of price on earnings adjusted for the business cycle is computed by taking into consideration the ratio between the stock indexes and the 5 years average of the earnings per share. The risk premium has been computed as the difference between the earnings per share and the risk-free interest rate (approximated with the 5 year interest rate swap). The long-term averages are computed by referring to January 2002 - June 2013. Calculations are based on Thomson Reuters Datastream and Thomson Reuters IBES data for the firms included in the S&P500 (USA), in the Euro Stoxx 50 (Euro area), in the FTSE Mib (Italy).

Figure 2.10 – Growth rate of earnings per share for the main listed firms



Weighted average of the growth rate of the earnings of the firms included in the S&P500 (USA), in the Euro Stoxx 50 (Euro area) and in the FTSE Mib (Italy). On the right graph, we report the annual growth rate of the earnings before goodwill. Calculations are based on Thomson Reuters IBES data.

Figure 2.11 – Probability density function of stock returns on a three month forecast horizon

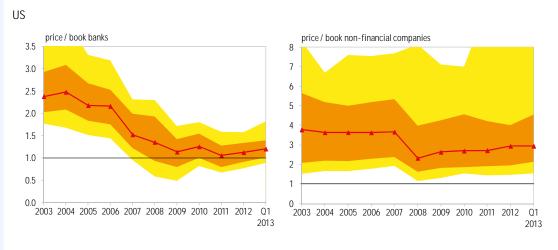


In the graphs we report the probability distribution of the stock return on a three months horizon implied by stock indexes (S&P500 for USA and Euro Stoxx 50 for Euro area) options prices estimated by following Shimiko (1993). Calculations are based on Thomson Reuters data.

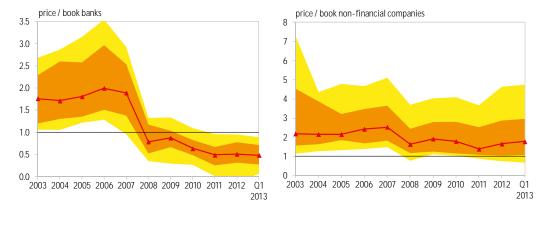
- 1. Macroeconomic background
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In the Eurozone, price-to-book ratios remain on a very low level for the banking sector, whereas they are higher than one for the corporate sector

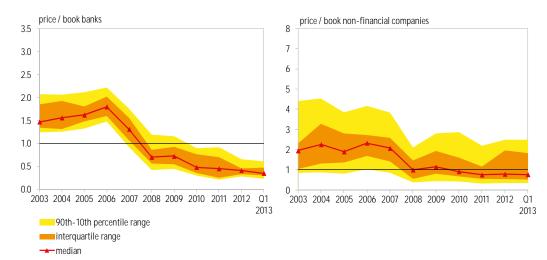
Figure 2.12 - Multipliers for listed companies in the advanced countries



EURO AREA - EX ITALIA







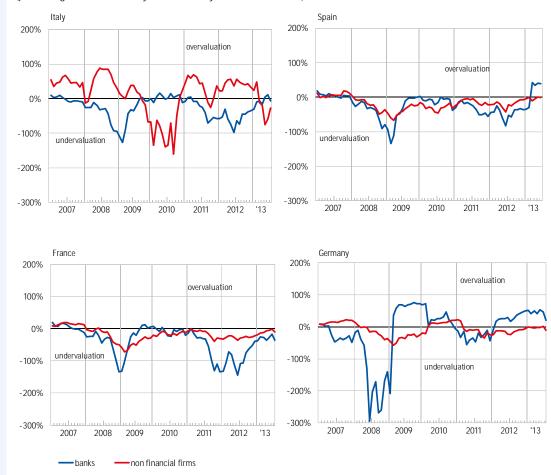
The data refer to banks included in the S&P1500 Bank index for the USA, in the Euro Stoxx 50 Bank index for the Euro area (except for Italian firms) and to all Italian listed banks, and to the non-financial firms included in the S&P 100 index for the USA, in the Dow Jones Euro Stoxx 50 index for the Euro area (except for the Italian firms) and to the main Italian listed groups. The figures for the third quarter of 2013 are partly estimated. Calculations are based on Worldscope data.

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In contrast with the picture given by the multipliers, the dividend discount model signals that theoretical and market values have realigned in the main Eurozone countries

Figure 2.13 – Difference between stock indexes observed values and estimates on the basis of the dividend discount model

(percentage values; monthly data; January 2007 - June 2013)



In the graph we represent the percentage difference between stock indexes observed value and estimates based on the dividend discount model (Shiller, 2002; Campbell and Shiller, 1988; De Bondt, 2008). The long-run fundamental relation of the model has been estimated by applying a co-integration VECM model on the time series of stock indexes, earnings per share, risk-free interest rate and equity risk premium. Earnings per share correspond to balance sheet items; the equity risk-premium has been approximated with the difference between the earning yield (computed as the inverse of the P/E ratio) and the risk-free interest rate (5-year interest rate swap). Calculations are based on Thomson Reuters Datastream and IBES data.

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Non-financial companies

In the main European economies, the profitability of non-financial companies is still significantly lower than in the period before the 2008 crisis

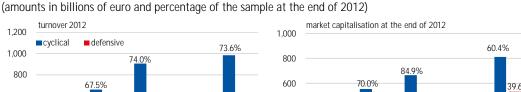
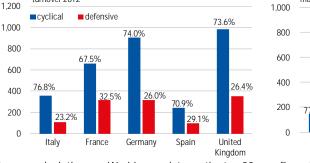
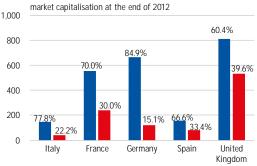


Figure 3.1 - Size of major non-financial listed companies by cyclical and defensive sectors

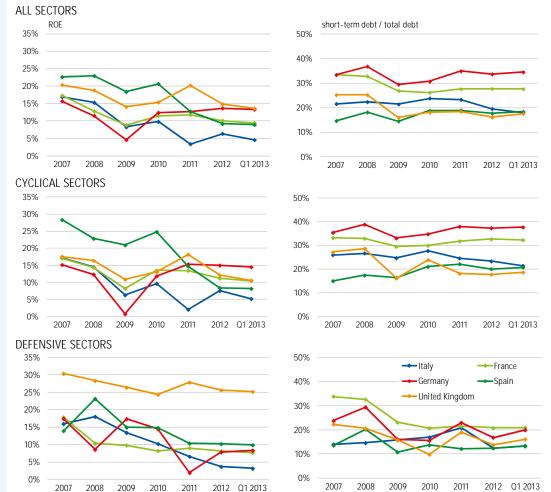




Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of May 2013 for France, Germany, Spain and the UK, and on major Italian listed groups. Cyclical sectors include: basic materials, energy, chemicals, aerospace, automobiles and components, personal and household products, media, distribution, travel and leisure, telecommunications, transport, construction, industrial machinery; belong to these sectors 23 listed companies in France, 22 in Germany, 22 in Spain, 17 in the UK and 19 in Italy. Defensive sectors include: food (and drinks), tobacco, pharmaceuticals, health, utilities; belong to these sectors 7 companies listed in France, 8 in Germany, 8 in Spain, 13 in the UK and 6 in Italy.

The gap is larger for companies operating in cyclical sectors, which represent a big part of the European economy

Figure 3.2 – Profitability and financial structure of major non-financial listed companies



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of May 2013 for France, Germany, Spain and the UK, and on major Italian listed groups. The figures for the first quarter of 2013 are annualised and partly estimated.

- 1. Macroeconomic background
- 2. Markets

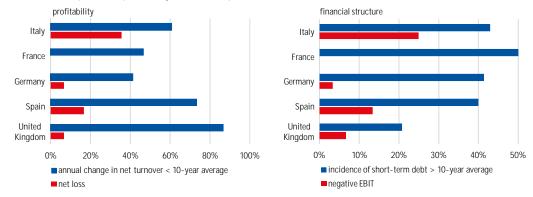
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Within the European scenario, Italian companies are among the most vulnerable in terms of earnings stability and debt sustainability

Figure 3.3 – Weight of the largest non-financial listed companies with low profitability and high short-term debt in major European countries

(number of companies in percentage of the sample at the end of 2012)

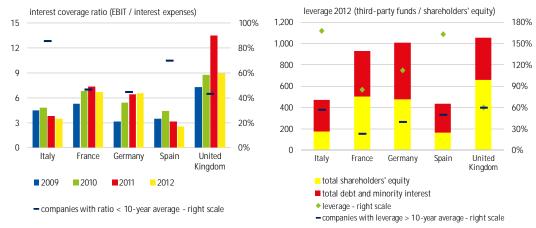


Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of May 2013 for France, Germany, Spain and the UK, and on major Italian listed groups.

Italian companies are characterized by high leverage and low interest expenses coverage ratio ...

Figure 3.4 – Interest expenses coverage and leverage of the largest non-financial listed companies in major European countries

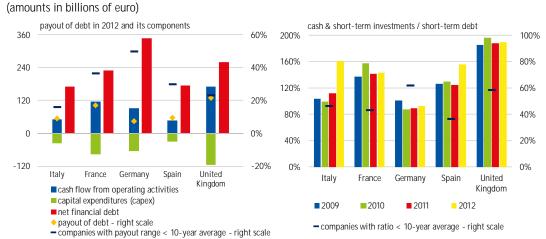
(amounts in billions of euro)



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of May 2013 for France, Germany, Spain and the UK, and on major Italian listed groups.

... but liquidity conditions are in line with those of the European competitors

Figure 3.5 – Payout of debt and coverage of short-term debt of the largest non-financial listed companies in major European countries



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of May 2013 for France, Germany, Spain and the UK, and on major Italian listed groups.

- 1. Macroeconomic background
- 2. Markets

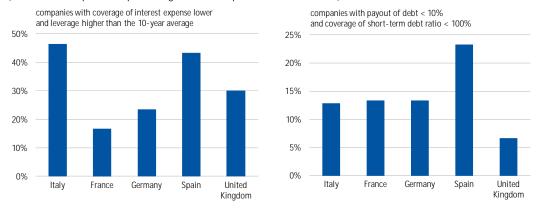
3. Non-financial companies

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Low profitability combined with imbalances in financing sources determines a greater vulnerability for Italian and Spanish companies ...

Figure 3.6 – Vulnerability of the largest non-financial listed companies in major European countries

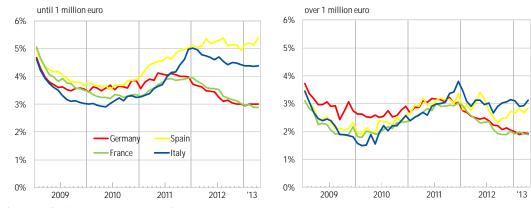
(number of companies in percentage of the sample at the end of 2012)



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of May 2013 for France, Germany, Spain and the UK, and on major Italian listed groups.

... which have to sustain higher bank costs of bank loans

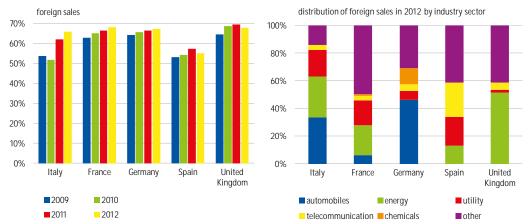
Figure 3.7 – Banking interest rates on euro loans to non-financial companies (monthly data; January 2009 - April 2013)



Source: ECB; interest rates on new loans

Foreign sales by Italian companies have risen in line with those of the main European companies

Figure 3.8 – Level of internationalization of the largest non-financial listed companies in major European countries



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of May 2013 for France, Germany, Spain and the UK, and on major Italian listed groups. The other item includes: basic materials, aerospace, personal and household products, media, transport, construction, industrial machinery, distribution, travel and leisure, food and tobacco.

- 1. Macroeconomic background
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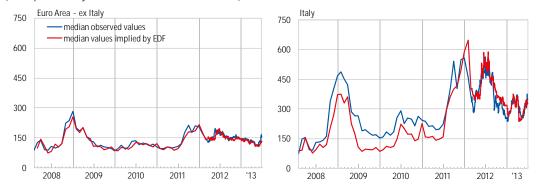
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The greater vulnerability of the Italian non-financial companies relative to their European counterparts is also reflected in higher CDS prices and default probabilities

Figure 3.9 - Prices of 5-year CDS observed and implied by the expected default frequencies

(basis point; daily data; 31/01/2008 - 30/06/2013)

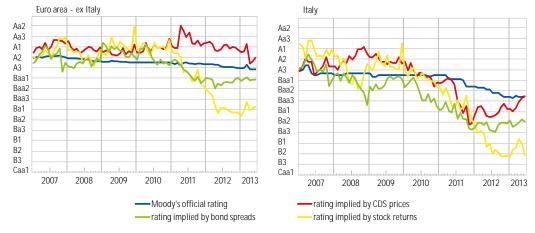


Source: calculations on Thomson Reuters Datastream and KMV - Credit Edge data. The sample includes 68 listed firms in the Euro area, which belong to Thomson Reuters corporate CDS indexes and under Moody's rating and of 7 Italian non-financial listed firms (Cir, Fiat, Edison, Enel, Eni, Finmeccanica, Telecom Italia).

The perceived credit risk (implicit in bond prices) has slightly improved for Italian non-financial companies

Figure 3.10 – Rating implied by financial instruments prices

(monthly data; January 2007 - June 2013)



Source: calculations on Moody's Implied Rating data. We report the average values, referring to corporate firms included in the Euro Stoxx 50 index for the Euro Area (excluded non-financial Italian firms) and the Italian nonfinancial companies included in the FTSE Mib.

Corporate bond yields have clearly risen but spreads have remained stable

Figure 3.11 – Corporate bond yields

(percentage values; daily data; 01/06/2010 - 30/06/2013)



Source: Thomson Reuters Eikon. Data refer to Markit Iboxx indeces.

- 1. Macroeconomic background
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Non-financial companies

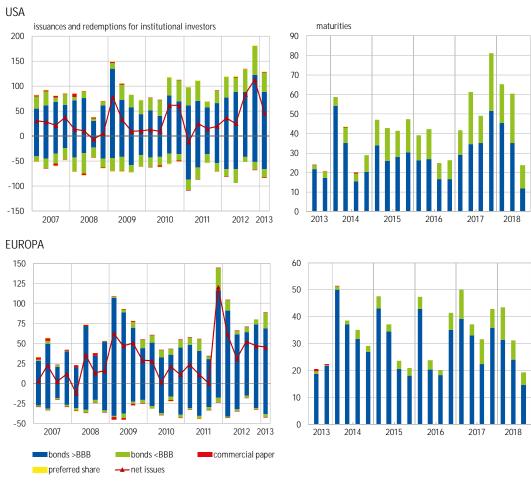
4. Banks

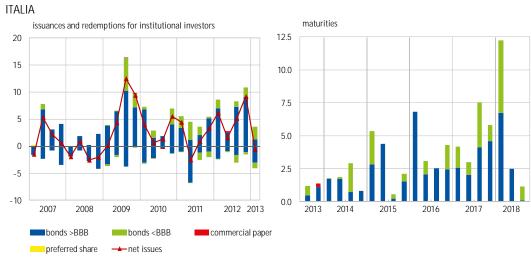
Corporate issuance activity in bond markets has maintained a good pace recently

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Figure 3.12 - Corporate bonds issues and maturities (quarterly data in billions of euro)



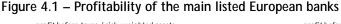


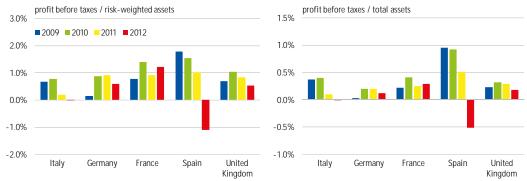
Source: calculations on Dealogic data. European issuance data refer to companies with registered office in Italy, France, Germany, Spain, the Netherlands and the UK and their subsidiaries (even those established in other countries).

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Banks

In 2012 the profitability of the largest listed European banks has fallen. Italian banks are still less profitable than their main German, French and English competitors

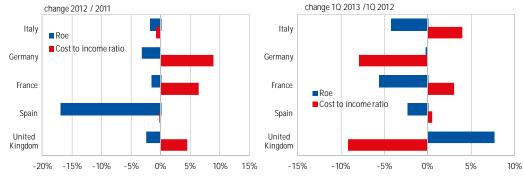




Source: calculations on data from consolidated annual reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin, Société Générale, Credit Agricole, BNP Paribas, Natixis, Credit Industriel et Commercial, BBVA, Santander, Bankia since 2011, Caixa Bank, Banco Popular, Banco de Sabadell, Barclays, HSBC, Lloyds and Royal Bank of Scotland). The profit before taxes is calculated excluding goodwill impairment.

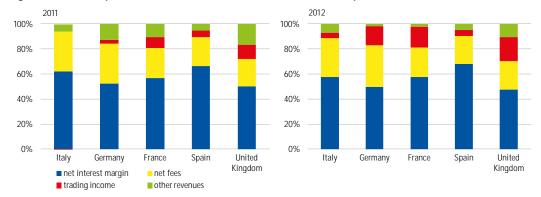
The return on capital for the largest Italian banking groups appears to be in steep decline, mainly due to the increase in impairments of non performing loans

Figure 4.2 – Profitability and operational efficiency of the main listed European banks



Source: calculations on data from consolidated annual and interim reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin, Société Générale, Credit Agricole, BNP Paribas, Natixis, Credit Industriel et Commercial, BBVA, Santander, Bankia since 2011, Caixa Bank, Banco Popular, Banco de Sabadell, Barclays, HSBC, Lloyds and Royal Bank of Scotland). ROE is calculated on total equity at the end of period. The figures as at 31 March are annualised and partly estimated.

Figure 4.3 – Composition of revenues of the main listed European banks



Source: calculations on data from consolidated annual reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin, Société Générale, Credit Agricole, BNP Paribas, Natixis, Credit Industriel et Commercial, BBVA, Santander, Bankia since 2011, Caixa Bank, Banco Popular, Banco de Sabadell, Barclays, HSBC, Lloyds and Royal Bank of Scotland).

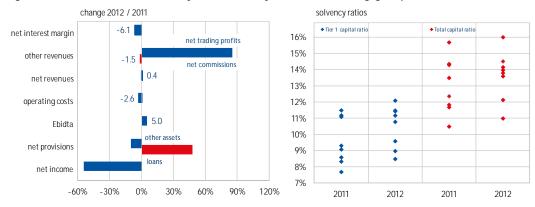
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Figure 4.4 – Income and solvency ratios of major Italian banking groups



Source: calculations on data from consolidated annual reports. Data refer to the 8 largest banking groups by total assets.

Tier 1 ratios have improved for almost all European banks ...

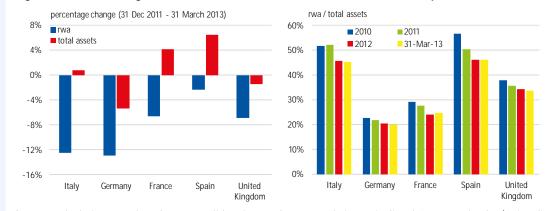
Figure 4.5 - Capital adequacy and leverage of the main listed European banks



Source: calculations on data from consolidated annual and interim reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin, Société Générale, Credit Agricole, BNP Paribas, Natixis, Credit Industriel et Commercial, BBVA, Santander, Bankia since 2011, Caixa Bank, Banco Popular, Banco de Sabadell, Barclays, HSBC, Lloyds and Royal Bank of Scotland). The figures as at 31 March are partly estimated.

... mainly because of the reduction in riskweighted assets

Figure 4.6 – Risk-weighted assets and total assets of the main listed European banks



Source: calculations on data from consolidated annual reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin, Société Générale, Credit Agricole, BNP Paribas, Natixis, Credit Industriel et Commercial, BBVA, Santander, Bankia since 2011, Caixa Bank, Banco Popular, Banco de Sabadell, Barclays, HSBC, Lloyds and Royal Bank of Scotland). The figures as at 31 March are partly estimated.

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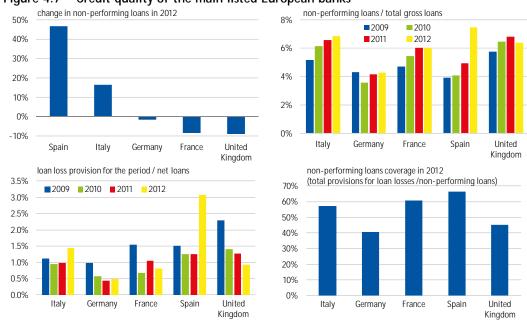
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Banks

Credit quality keeps deteriorating in Italy and Spain. In particular, non performing loans in Italy have increased by roughly 16% year on year, with their coverage ratio being slightly below 60%

Figure 4.7 – Credit quality of the main listed European banks

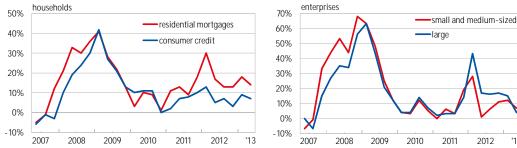


Source: calculations on data from consolidated annual reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin, Société Générale, Credit Agricole, BNP Paribas, Natixis, Credit Industriel et Commercial, BBVA, Santander, Bankia since 2011, Caixa Bank, Banco Popular, Banco de Sabadell, Barclays, HSBC, Lloyds and Royal Bank of Scotland). The increase in non-performing loans of Spanish banks compared to 2011 reflects also the consolidation of Banca Civica by Caixa Bank in 2012. The figures are partly estimated.

Bank credit conditions look still restrictive across the Eurozone, although some signs of loosening have surfaced in the first quarter of 2013

Figure 4.8 – Credit standard indicators for bank loans in the Euro area

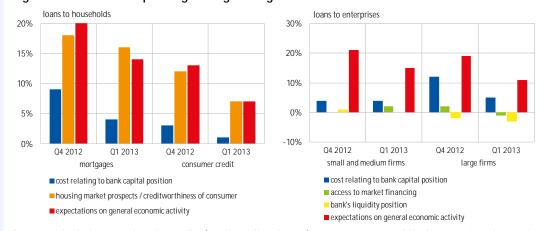
(quarterly data; 1Q 2007 - 1Q 2012)



Source: ECB. Net percentage of banks reporting a tightening in credit standards.

The tightening in credit standards was mainly due to negative expectations on general economic activity

Figure 4.9 – Factors explaining the tightening in credit standards in the Euro area



Source: calculations on data from ECB (Bank Lending Survey). Net percentage of banks reporting that a given factor contributed to a tightening in credit standards.

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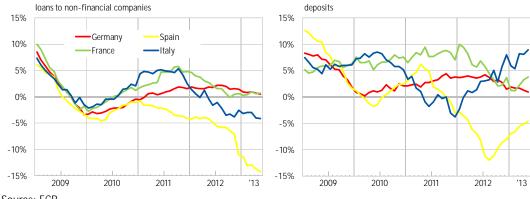
Banks

Credit restrictions for companies are still worsening in the Eurozone peripheral countries

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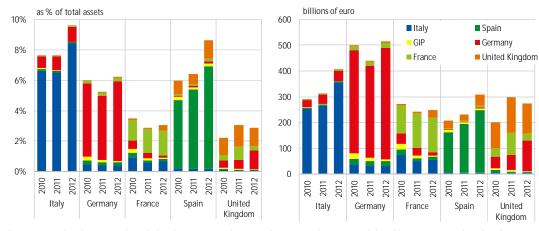
Figure 4.10 - Annual growth rate of loans to non-financial companies and of deposits (monthly data; January 2009 - May 2013)



Source: ECB.

Domestic sovereign debt exposure appears to be already relevant and increasing for Italian, German and Spanish banks

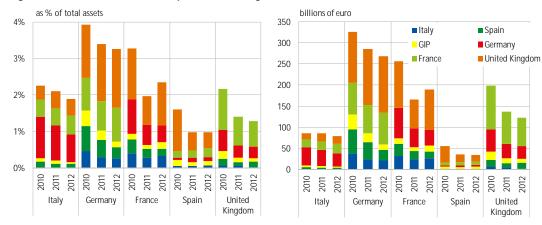
Figure 4.11 – Exposures of main European banks to domestic sovereign debt of some countries of Euro area



Source: Bank of International Settlements and Bruegel. Data refer to total banking system of Italy, Germany, France, Spain and the United Kingdom. The exposures to the country of origin are taken from Bruegel database of sovereign bond holdings, by Merler and Pisani-Ferry (2012) and do not include loans.

Cross-border exposure among main Eurozone banks has declined

Figure 4.12 – Cross-border exposures among main Euro area banks



Source: Bank of International Settlements. Data refer to total banking system of Italy, Germany, France, Spain and the United Kingdom and do not include exposures to the country of origin.

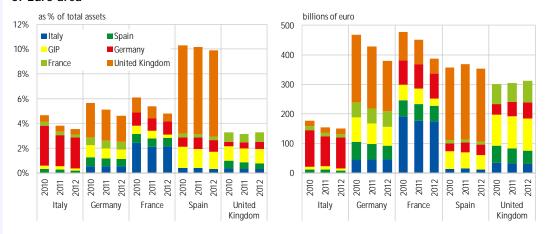
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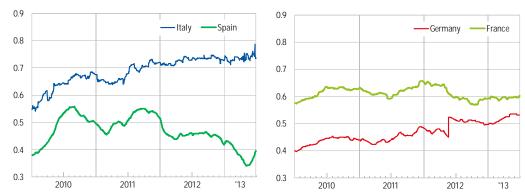
Figure 4.13 - Foreign exposures of main European banks to private sector of some countries of Euro area



Source: Bank of International Settlements. Data refer to total banking system of Italy, Germany, France, Spain and the United Kingdom and do not include exposures to the country of origin.

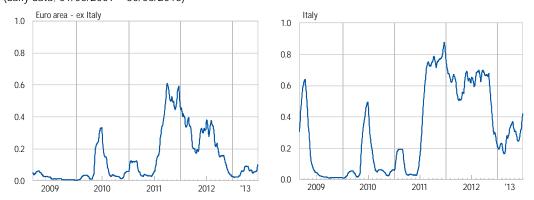
The correlation between bank CDS and sovereign CDS quotes is still high for Italian banks

Figure 4.14 – Dynamic correlation between sovereign CDS spreads and bank CDS spreads (daily data; six month moving average; 01/04/2009 - 30/06/2013)



Dynamic correlation has been estimated following Engle (2002). Calculations are based on Thomson Reuters Datastream data.

Figure 4.15 – Indicator of joint probability of default implied by CDS prices (daily data; 01/03/2009 - 30/06/2013)



Italian bank sample includes Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca; for the Euro Area the following banks are taken into consideration Deutsche Bank, Commerzbank, Deutsche Posbank Berlin, Societé Generale, Credit Agricole, BNP Paribas, Natixis, BBVA, Santander, Caixa Bank, Banco Espanol de Credito, Banco de Sabadell, Barclays, HSBC, LLoyds e Royal Bank of Scotland. Probabilities have been estimated by applying Markov switching regime model on daily variations of 5-year credit default swap prices. The indicator has been normalised between zero (= low probability of default) and one (=high probability of default). Calculations are based on Thomson Reuters Datstream data.

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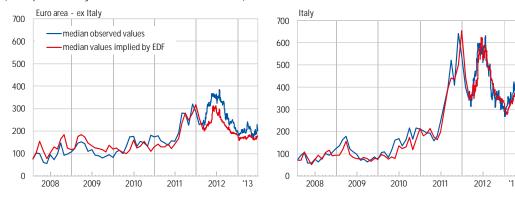
4. Banks

The perceived credit risk for the main Eurozone banks, as pictured by CDS spreads, has decreased compared to the most acute phases of the sovereign debt crisis ...

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Figure 4.16 – Average 5-year CDS prices observed and implied by expected frequence of default (EDF) for the main listed banks

(basis points; daily data; 31/01/2008 - 30/06/2013)

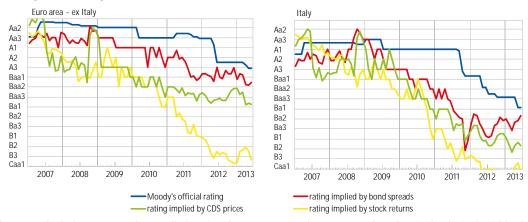


Source: calculations on Thomson Reuters Datastream and KMV - Credit Edge data. Italian bank sample includes Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca; for the Euro area, the banks taken into consieration are the following: Deutsche Bank, Commerzbank, Deutsche Posbank Berlin, Societé Generale, Credit Agricole, BNP Paribas, Natixis, BBVA, Santander, Caixa Bank, Banco Espanol de Credito, Banco de Sabadell, Barclays, HSBC, LLoyds e Royal Bank of Scotland.

... as well as the perception of risk for European banks as reflected in bond prices slightly improved as well

Figure 4.17 – Rating implied by financial instruments prices

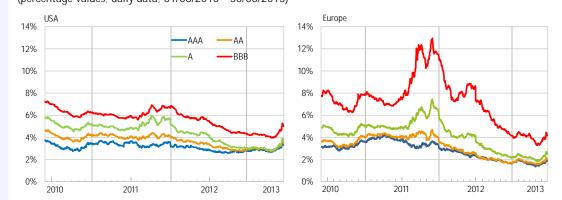
(monthly data; January 2007 - June 2013)



Source: calculations on Moody's Implied Rating data. We report the average values for the banks included in the Euro Stoxx 50 (except for Italian banks) and for the principal Italian listed banks with Moody's rating (Banca Popolare di Milano, Intesa, Mps, Unicredit, Ubi, Banco Popolare).

In secondary markets bank bond yields have been rising during the last few months ...

Figure 4.18 – Bank bonds yields (percentage values; daily data; 01/06/2010 - 30/06/2013)



Source: Thomson Reuters Eikon. Data refer to Markit Iboxx indeces.

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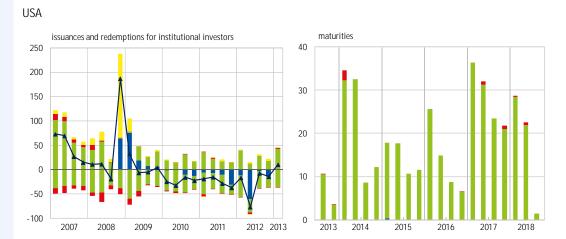
Banks

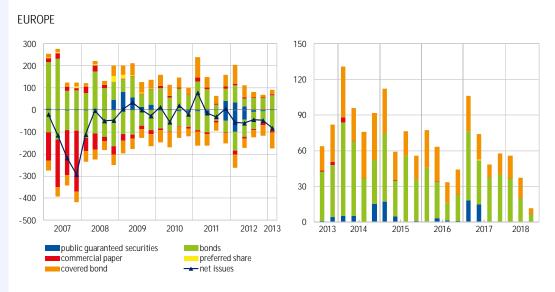
... while the primary market looks still stagnant

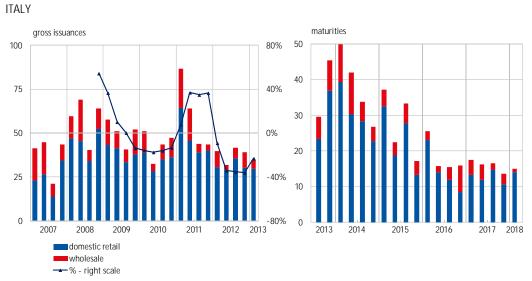
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Figure 4.19 - Bank bonds issues and maturities (quarterly data in billions of euro)







Source: calculations on Dealogic data. European issuance data refer to companies with registered office in Italy, France, Germany, Spain, the Netherlands and the UK and their subsidiaries (even those established in other countries).

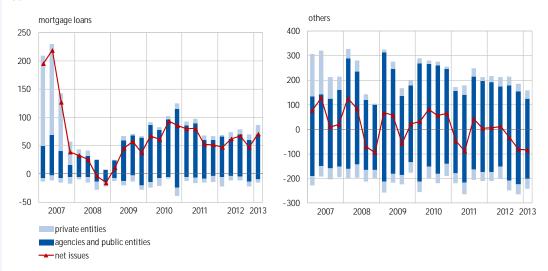
- 1. Macroeconomic background
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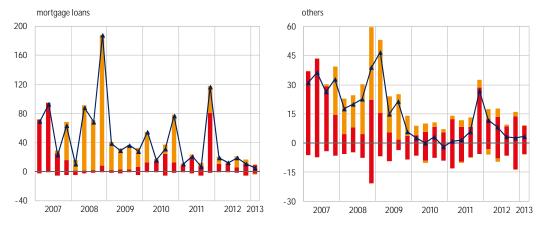
At the same time, the ABS market remains sluggish both in the US and Europe

Figure 4.20 – Securitisation issuances (quarterly data in billions of euro)

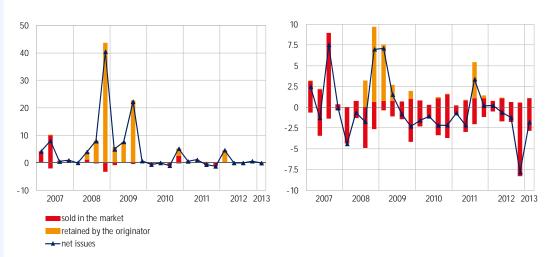
USA



EUROPE EX ITALY







Source: calculations on Dealogic data. The data for Europe refer to asset-backed securities of companies with registered office in Italy, France, Germany, Spain, the Netherlands and the UK and their subsidiaries.