

Statistics and analyses

## Risk Outlook

7

February 2014



**CONSOB**  
COMMISSIONE NAZIONALE  
PER LE SOCIETÀ E LA BORSA

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.

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This report was prepared by:

Nadia Linciano (coordinator)  
Valeria Caivano  
Francesco Fancello  
Monica Gentile  
Claudia Guagliano  
Lucia Pierantoni  
Paola Soccorso  
Eugenia Della Libera

The authors wish to thank Carmela Capasso for her contribution to Section 1, Cristiano Mantovani and Elisa Iacobini for their contribution to Section 2.

For information and clarification  
write to: [studi\\_analisi@consob.it](mailto:studi_analisi@consob.it).

ISSN 2281-3497 (online)

## Risk dashboards

1. Equity markets
2. Bonds markets
3. Non-financial companies
4. Banks

## La congiuntura e i rischi

Nella seconda metà del 2013, i mercati azionari delle principali economie avanzate hanno registrato un andamento positivo, grazie al venir meno di alcune delle incertezze che avevano caratterizzato la prima parte dell'anno. La crescita economica negli Stati Uniti si è rafforzata e la Fed, di conseguenza, ha annunciato la riduzione degli acquisti di titoli (cosiddetto *tapering*) a partire dal mese di gennaio 2014. Anche i mercati azionari del Regno Unito e del Giappone hanno beneficiato di una ripresa economica migliore delle aspettative. Nell'Area euro, i mercati finanziari sono stati influenzati positivamente dai segnali di modesta ripresa emersi a partire dal secondo trimestre 2013 e dal ritorno degli investitori esteri nella regione. Gli indici azionari sono cresciuti sia nei cosiddetti paesi *core* sia nei paesi periferici, registrando variazioni comprese tra il 15% in Francia e il 28% in Spagna (25% in Italia). Segnali di stabilizzazione si osservano anche sui mercati dei titoli pubblici dell'Area euro, con le curve dei rendimenti dei paesi periferici che attualmente si collocano a livelli notevolmente più bassi di quelli registrati dopo lo scoppio della crisi del debito sovrano.

All'inizio del 2014, la pubblicazione di dati congiunturali meno positivi del previsto e le incertezze legate al rischio di crisi monetarie nei paesi emergenti hanno determinato una lieve correzione al ribasso nei mercati azionari nelle principali economie avanzate (-3% nell'Area euro). Nonostante l'incremento della volatilità, gli indicatori di contagio e di fiducia desumibili dai prezzi degli strumenti finanziari segnalano un ritorno alla normalizzazione dell'andamento dei mercati, che dovrebbero ricominciare ad esprimere quotazioni sempre meno condizionate dalla percezione di rischi sistemici.

Nell'Area euro, tuttavia, il quadro resta complesso e i rischi legati alla crescita economica permangono al ribasso. L'euro forte continua a essere un rischio per la ripresa, sebbene dall'inizio del 2014 la moneta unica si sia indebolita nei confronti dello yen e della sterlina. Le differenze tra i paesi *core* e i paesi periferici sono significative, con livelli di disoccupazione ancora elevati nelle aree più vulnerabili (le stime per il 2014 indicano poco più del 12% in Italia e del 26% in Spagna). Il risanamento dei conti pubblici continua a essere una importante criticità nei paesi caratterizzati da un elevato rapporto debito/Pil. La frammentazione finanziaria, seppur in diminuzione, continua a rappresentare un tema rilevante per l'Area euro, dove persiste una eterogeneità nella dinamica del credito che penalizza le economie periferiche. In un contesto di tassi di inflazione molto bassi (il dato di gennaio 2014 si attesterebbe allo 0,7%), in parte ascrivibili alla dinamica dei prezzi dei beni energetici, rimane sullo sfondo il rischio di una spirale deflazionistica.

La politica monetaria espansiva della BCE ha avuto un impatto di gran lunga più modesto rispetto a quanto osservabile negli Stati Uniti e nel Regno Unito. In quei paesi, il *quantitative easing* (unitamente a bassi livelli dei tassi di interesse) ha influenzato positivamente la fiducia del settore privato e, di conseguenza, la ripresa della domanda

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

interna attraverso l'effetto ricchezza indotto dall'aumento dei corsi azionari e dei prezzi delle abitazioni. In particolare, da fine 2010, anno di avvio del *quantitative easing* da parte della Fed, a fine 2013 i prezzi degli immobili residenziali negli USA hanno registrato un incremento del 12% e l'indice azionario S&P500 del 43% circa; nel Regno Unito i dati corrispondenti si attestano rispettivamente al 7 e 18% circa (FTSE100). Dall'inizio della crisi finanziaria nel 2008, inoltre, negli USA e nel Regno Unito è stata condotta una politica di bilancio anti-ciclica che ha determinato un aumento sia del rapporto debito/PIL (rispettivamente, dal 73% circa al 106% a fine 2013 e dal 52% al 92%), sia del deficit pubblico sino a valori massimi nel 2009 (pari, rispettivamente, al 13% e a poco più dell'11% del PIL).

Nell'Area euro, invece, la variazione dei prezzi delle abitazioni registrata a partire dalla fine del 2010 è stata pari a -2,5%, mentre l'indice azionario Euro Stoxx è aumentato dell'11% circa. A tale dato corrisponde, tuttavia, una significativa eterogeneità nelle *performance* dei mercati azionari dei paesi dell'Area: nello stesso periodo, in Italia il FTSE Mib è sceso di circa il 6%, mentre in Spagna l'IBEX35 è tornato sui livelli registrati a fine 2010; in Francia il CAC40 è cresciuto del 13%, mentre di gran lunga più significativo è il dato relativo alla Germania, dove il DAX è aumentato del 38%.

La BCE ha tagliato i tassi di interesse due volte nel 2013 (fino allo 0,25% lo scorso novembre) e ha introdotto la cosiddetta *forward guidance* nella propria strategia di politica monetaria. All'inizio di febbraio 2014, il Presidente Draghi ha ribadito l'intenzione della BCE di adottare ulteriori misure se necessario. Al di là delle speculazioni sulle possibili opzioni attualmente praticabili, è verosimile che i tassi di interesse restino bassi per un lungo periodo.

Finora la riduzione dei tassi di interesse da parte della BCE non ha avuto l'impatto sperato, poiché l'incremento della frammentazione finanziaria nell'Area ha compromesso il meccanismo di trasmissione degli impulsi di politica monetaria alle economie in maggiore difficoltà.

La differenza tra i tassi di interesse bancari nei paesi periferici rispetto alla Germania oscilla tra circa 80 punti base per i finanziamenti di importo elevato a più di 180 punti base per i finanziamenti minori (130 per l'Italia). Il ricorso al mercato obbligazionario in alternativa al credito bancario è un'opzione accessibile soprattutto alle società maggiori. In Italia, ad esempio, dal 2007 alla prima metà del 2013, le maggiori società quotate italiane hanno compensato la riduzione del credito bancario (pari a circa il 12%) con il ricorso al mercato obbligazionario (+70% circa). L'elevato costo del credito bancario amplifica le vulnerabilità del settore *corporate* nei paesi periferici. I dati relativi all'Area euro mostrano, infatti, che nel complesso la probabilità di fallimento delle imprese non finanziarie è positivamente correlata con condizioni di credito meno vantaggiose, in particolare con riferimento alle piccole e medie imprese.

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

La sostenibilità del debito continua a rappresentare una criticità rilevante per le imprese italiane: nella prima metà del 2013 circa il 50% delle società quotate registra una copertura degli oneri finanziari tramite reddito operativo inferiore alla media di lungo periodo, mentre la leva finanziaria permane su livelli significativamente superiori a quelli dei *competitors* europei. Anche in termini di redditività le maggiori società quotate italiane restano fragili: nella prima metà del 2013 la percentuale di imprese che ha registrato un EBIT negativo si è attestata al 15% (25% a fine 2012).

In sistemi finanziari sostanzialmente banco-centrici, come quelli dei paesi dell'Area euro, le prospettive del settore *corporate* rimangono condizionate dalla situazione ancora fragile degli istituti di credito. Le ripercussioni della crisi del debito sovrano e della congiuntura economica sfavorevole, in particolare nei paesi periferici dell'Eurozona, continuano a incidere sulla redditività delle banche, mentre importanti modifiche regolamentari e di vigilanza in corso generano ulteriori fonti di incertezza.

Attualmente i margini di redditività delle banche risultano compressi dai bassi tassi di interesse, che solo gli istituti tedeschi, inglesi e francesi, con un *business* più vicino al modello di banca universale, sono riusciti a compensare con l'attività di *trading*. In Italia e Spagna le banche continuano a registrare un aumento delle sofferenze, sebbene a un ritmo inferiore a quello del 2012.

I livelli di patrimonializzazione migliorano per tutte le maggiori banche europee, ma nuovi fabbisogni di capitale potrebbero emergere in seguito all'*Asset quality review* (AQR) e allo stress test che la BCE e l'EBA si accingono a realizzare in vista dell'avvio del *Single Supervisory Mechanism* (SSM). A queste iniziative di vigilanza si aggiungono le indeterminatezze connesse a innovazioni regolamentari in fase di definizione (come la Direttiva su risanamento e risoluzione delle crisi nelle banche – BRRD – che dovrebbe essere recepita negli ordinamenti nazionali entro il 2016) o già intervenute (come le disposizioni relative agli aiuti di Stato adottate dalla Commissione europea ed entrate in vigore l'1 agosto 2013).

Le nuove regole fanno riferimento al principio del *burden-sharing*, teso a correggere fenomeni di azzardo morale da parte delle banche e a ridurre l'entità di un eventuale intervento pubblico. Tuttavia tale principio rende più costosa la raccolta bancaria attraverso alcune tipologie di strumenti finanziari (ossia obbligazioni non subordinate, strumenti ibridi e passività subordinate), poiché pone a carico dei detentori di tali strumenti l'onere di eventuali ricapitalizzazioni degli istituti di credito, prima che questi possano aver accesso a fondi pubblici. L'impatto sul costo complessivo della raccolta è di difficile quantificazione, poiché dipende, tra l'altro, dalla struttura del passivo e dalla rilevanza sistemica delle banche. D'altro canto, una più intensa disciplina del mercato potrebbe ridurre l'assunzione di rischi da parte degli istituti di credito e, per questa via, contenere l'aumento del costo della raccolta.

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

La comunicazione della Commissione europea relativa agli aiuti di Stato agli enti creditizi estende l'applicazione del principio del *burden-sharing* (per strumenti ibridi e passività subordinate) alla copertura di necessità patrimoniali derivanti non solo dall'AQR ma anche da esercizi di stress test. Quest'ultima estensione impone, dunque, l'obbligo di *bail-in* anche a seguito di fabbisogni di capitale corrispondenti a perdite solo potenziali, ossia a scenari che, per definizione, hanno una bassa probabilità di verificarsi.

I principi generali, resi noti dall'EBA a gennaio scorso, stabiliscono che ai fini dello stress test di fine anno rileverà anche l'esposizione al rischio sovrano. Le banche europee, e in particolare quelle italiane, si caratterizzano, come noto, per elevati investimenti in titoli di Stato domestici. A settembre 2013, le esposizioni degli istituti italiani ammontavano al 10% dell'attivo (valore comparabile solo a quello delle banche spagnole). Sebbene le condizioni dei mercati *sovereign* mostrino segnali di progressiva stabilizzazione, il legame tra rischio sovrano e rischio bancario continua, quindi, a rappresentare una criticità, che soltanto il completamento delle riforme regolamentari e degli assetti di vigilanza europei consentirà di superare.

## Risk dashboards

1. Equity markets
2. Bonds markets
3. Non-financial companies
4. Banks

## Trends and risks

In the second half of 2013, equity markets in advanced countries recorded significant gains, as some of the uncertainties which had characterized the beginning of the year began to fade. In the US, the economic recovery strengthened, so that the Federal Reserve in December announced the reduction in the pace of its asset purchases (tapering) starting in January 2014. UK and Japanese equity indexes benefited from a better-than-expected recovery as well. Eurozone equity markets were spurred by a moderate recovery since the second quarter of 2013 and the return of capital flows into the region. Both core and peripheral countries' equity indexes registered a steady growth, ranging from 15% in France to 28% in Spain (25% in Italy). Conditions of relative financial stability were observed also in the eurozone sovereign bond markets, where yield curves of peripheral countries are currently remarkably lower relative to the levels reached after the outburst of the sovereign crisis.

At the beginning of 2014, the release of disappointing regional economic data and fears over an emerging markets currency crisis triggered a mild correction of equity markets in the main advanced economies (-3% in the eurozone). Despite the renewed volatility, several indicators about contagion and investors' market sentiment point to a normalization process, which should bring financial markets back to a framework of asset prices much more driven by fundamentals rather than by the perception of systemic risks.

In the eurozone, however, the outlook is far from being stable, and the risks surrounding growth are still on the downside. The strength of the euro may jeopardize the pace of the recovery, although since the beginning of 2014 it has slightly weakened against the yen and the pound sterling. Significant differences still persist among core and peripheral countries, with unemployment at very high levels in the more vulnerable regions (2014 forecasts put it at slightly more than 12% for Italy and at 26% for Spain). Fiscal consolidation remains challenging and critical in countries with higher debt to GDP ratios. Although slowing down, financial fragmentation is still an issue across the eurozone, with a significant gap in private sector credit growth, which penalizes peripheral countries. While the inflation scenario remains subdued (with the January reading at 0.7%), partly because of energy prices dynamics, the risk of a deflationary spiral still remains in the background.

So far the ECB accommodative monetary policy has not triggered the effects observed in the US and in the UK. In these countries, the quantitative easing (together with low interest rates) has positively influenced private sector confidence and, therefore, stimulated internal demand through wealth effects brought about by higher stock market and real estate prices.

In particular, from the end of 2010, year in which the Fed started the quantitative easing, to the end of 2013, house prices in the US rose by 12% (by 7% in the UK), and the S&P index by around 43% (18% for the FTSE100 in the UK). Since the financial crisis outburst in 2008, the US and the UK have conducted a countercyclical fiscal policy which pushed the

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

debt to GDP ratio from about 73% to 106% for the US and from about 52% to 92% in the UK in 2013, and raised public deficits to a peak in 2009 (at 13% and 11% of GDP respectively).

Since the end of 2010, year in which the SMP was announced, house prices have fallen by 2.5% in the eurozone, while the Euro Stoxx 50 index has risen by 11%. However, single European stock markets have performed rather differently: over the same period, the Italian FTSE Mib has fallen by roughly 6%, the Spanish IBEX broken even, the French CAC40 risen by 13% instead, while the German DAX exhibited the best performance, with a 38% rise.

The ECB cut the official interest rate twice in 2013 (to a record low of 0.25% last November) and embraced forward guidance; at the beginning of February 2014 President Draghi remarked the ECB's determination to take further actions if necessary. Besides speculation over policy options currently available for the ECB, what is almost certain is that interest rates will stay low for a long while.

The interest rate cuts by the ECB have failed to achieved the expected and desired impact, because the financial market fragmentation has impaired the monetary policy transmission mechanism in the most weakened economies. Since the crisis outburst, government bond spreads have widened and interest rates in peripheral countries have not appeared correlated to ECB rates as much as to sovereign yields.

The gap in banking interest rates among core and non-core countries is currently up to around 80 basis points for large loans, and up to 180 bps for smaller loans (130 for Italy). Access to corporate bond markets remains an option much easier for larger companies. For instance, in Italy from 2007 to half 2013 the largest companies by market capitalization were able to compensate the reduction in bank credit (-12%) with an increase in bond issuance (+70%).

The high cost of bank credit amplifies the vulnerabilities of corporate firms, and especially so for those established in peripheral countries, more dependent on bank credit. Overall, the data for the eurozone show that expected default frequencies for European non-financial companies remain positively correlated to tight credit conditions, and particularly so for small and medium-sized companies.

Debt sustainability is still an issue for large Italian non-financial listed companies: in the first half of 2013, around 50% of them show a decrease in the interest rate coverage ratio compared to the 10-year average, while leverage remains at much higher levels than those of the European competitors.

Italian companies are also among the most fragile in terms of profitability: in the first half of 2013, the percentage of those recording a negative EBIT was around 15% (25% at the end of 2012).

In financial systems, like European countries, heavily relying on bank lending, the outlook for corporate firms remains strongly linked to the fragile conditions of the banking sectors.



## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

The impact of the sovereign debt crisis and negative market trends on banks' profitability is still high, especially in peripheral countries, while several innovations both on regulatory and surveillance grounds are keeping on.

As for market conditions, profit margins are squeezed by low interest rates, which only German, English and French banks, closer to universal bank models, have been able to compensate by increasing trading profits. Italian and Spanish banks have been keeping recording increases in non-performing loans, although at a slower pace than in 2012.

Regulatory capital ratios are improving for all the largest European banks, but new capital requirements might emerge following the Asset Quality Review (AQR) results and the stress tests being carried out by ECB and EBA in advance of the Single Supervisory Mechanism (SSM) becoming effective in 2014.

Moreover, these supervisory initiatives add to other changes in the regulatory framework still on the making, such as the Bank Recovery and Resolution Directive (BRRD), which, according to current agreements, should be transposed into national laws by 2016, or already approved, such as the State aid rules adopted by the European Commission and entered into force on August 1, 2013.

The new rules introduce the burden sharing principle, aimed at reining in moral hazard by banks and at reducing the public support to the financial sector. However, such principle raises funding costs for banks issuing non subordinated bonds or other hybrid or subordinated liabilities, because in case of bank capital shortfalls bondholders would suffer higher losses before access to public bail-out funds is granted.

However, the impact of a reallocation of bank liabilities is difficult to assess, as it depends on many factors. First of all, systemic relevant banks should bear a higher cost given that their higher reliance on an implicit public guarantee. Secondly, a greater market discipline could reduce risk taking behavior and, by this means, also contain funding costs.

The most critical issue for 2014 could anyway come from the European Commission's rules, according to which the burden sharing principle also applies (for hybrid and subordinated instruments) in case of a capital shortfall emerging not only from the AQR, but also from a stress test. This latter provision implies therefore a mandatory bail-in also for potential shortfalls, which, by definition, stem from extreme event scenarios.

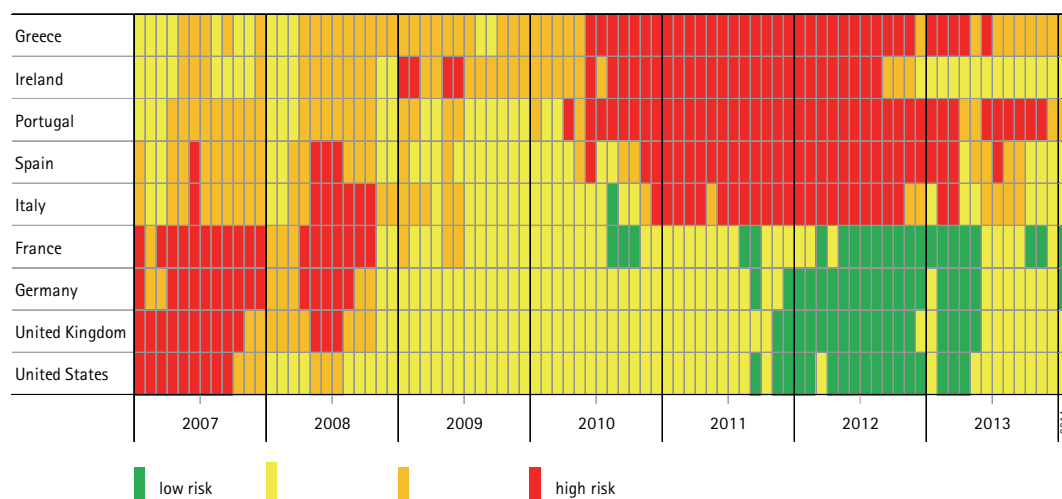
According to the key features of the 2014 EU-wide stress test, disclosed by the EBA last January, sovereign risk will also be taken into account. European banks, and especially Italian ones, show a high level of domestic government bond holdings. As of September 2013, exposure to sovereign bonds amounted to 10% of total assets for Italian banks (and close to that for their Spanish peers). Therefore, although sovereign bond markets are increasingly stabilizing, the link between sovereign and bank risk remains an issue, whose solution hangs on the completion of the regulatory and supervisory reforms underway.

## Risk dashboards

1. Equity markets
2. Bonds markets
3. Non-financial companies
4. Banks

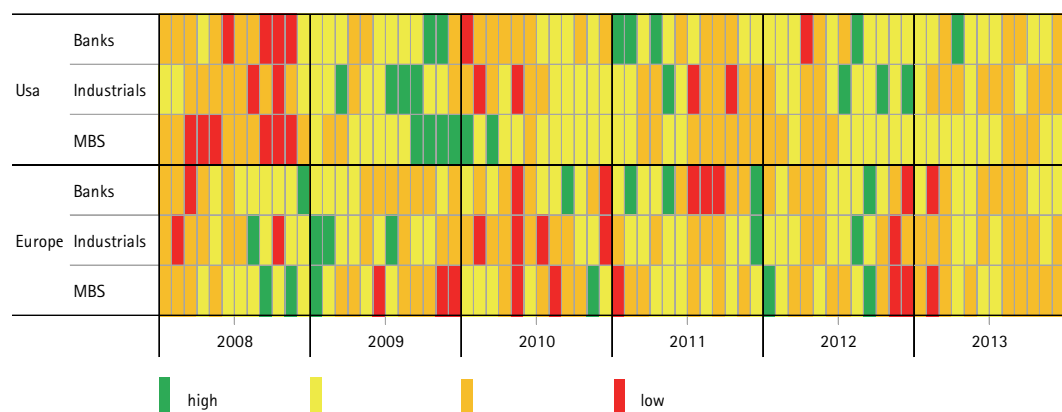
## Risk dashboards

## Sovereign risk indicator



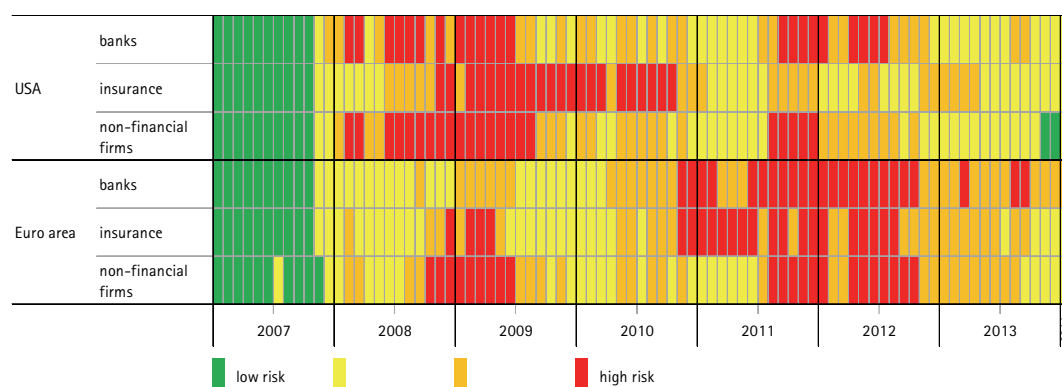
Source: calculations on Thomson Reuters data. The risk is computed on the basis of the historical distribution of 10-year sovereign yields.

## Gross 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.

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

## Equity markets

In the second half of 2013, equity markets in advanced countries recorded significant gains, ranging from 9% (UK), to 15% (US and Japan) or more (20% for eurozone; Fig. 1.1). In the US, the market welcomed the Federal Reserve's (Fed's) announcement that tapering, i.e. the reduction in the pace of its asset purchases (equal to \$85 billion dollars per month) by ten billion of dollars per month would start in January 2014. The US investors finally understood this decision as a positive signal of a stable recovery, which will be sustained also by the Fed's commitment to maintain zero short-term interest rates for a long time. Moreover, fears about the US fiscal deadlock settled down after the public debt ceiling was raised (first till February 2014, then till March 2015). The UK equity market benefited from the strength of the economy, higher than expected. The Bank of England (BoE) was surprised by the faster-than-forecasted drop in the unemployment rate, which might soon fall below the 7% threshold used for its forward guidance. Also Japanese equity markets priced a faster-than-anticipated recovery, which however will require further monetary and fiscal stimulus to stabilize and to offset the consumption tax rate hike, planned for April. The eurozone showed signs of modest recovery, and experienced an increase in capital flows into the region, which in turn reinforced the positive trend recorded by core countries in the first half of the year (the equity markets rose respectively by 20% and 15% in Germany and France), while reversing the negative trend exhibited by peripherals over the same period (the stock market indexes rose by 28% in Spain and 25% in Italy; Fig. 1.2). The gains in the banking sector were 40% in the eurozone (50% in Italy), far higher than those of other advanced economies (11% in the US, 12% in Japan and 2% in the UK). Throughout January 2014, fears over a systemic crisis in emerging markets were the main explaining factors of the fall recorded by the advanced economies equity markets (-4% in the US and the UK, -6% in Japan, -3% in the eurozone). The worries about a global financial contagion followed the release of worse-than-expected economic data from the US and China and the launch of the tapering program by the Fed, which triggered sharp capital outflows from emerging markets (Fig. 1.3). Notwithstanding this turbulence, contagion in the euro area equity markets has kept falling, both in corporate and banking sectors, due to the persistent signals of economic stabilization, also reflected in forward looking survey data, in Ireland exiting and Portugal in the process of exiting from their international bailout programmes (Fig. 1.4). The improved sentiment towards the eurozone is reflected also in the reduction of the investors' extreme event risk perception, which is also due to the ECB consolidating its role as backstop for the region.

The signs of a gradual improvement in the outlook of the euro area have not shown up in the company earnings yet. The growth rates of the earnings per share kept being negative in the major European countries both in the banking sector (except France) and the corporate sector (Fig. 1.5). Italian and Spanish banks experienced the sharpest decline in the earnings per share; this slump together with the concurrent hike in the stock prices led to a consistent rise in their price-earnings ratio adjusted for the business cycle and to a reduction in their earnings yield premium (Fig. 1.10 and Fig. 1.11). These trends explain the divergence of the prevailing stock prices from their theoretical values, which for the second half of 2013 are estimated to involve the banks of the major euro area countries, with the exception of Germany (Fig. 1.14). In January 2014, French banks appeared to be overvalued also given the domestic macroeconomic fundamentals. On the contrary, Spanish banks seemed undervalued since early 2012, although the gap has kept closing since the first months in 2013. After having been undervalued in the first half of the last year, Italian banks look currently overvalued, probably as a consequence of investors' expectations about positive developments in the macro-economic outlook.

## Risk dashboards

### 1. Equity markets

#### 2. Bonds markets

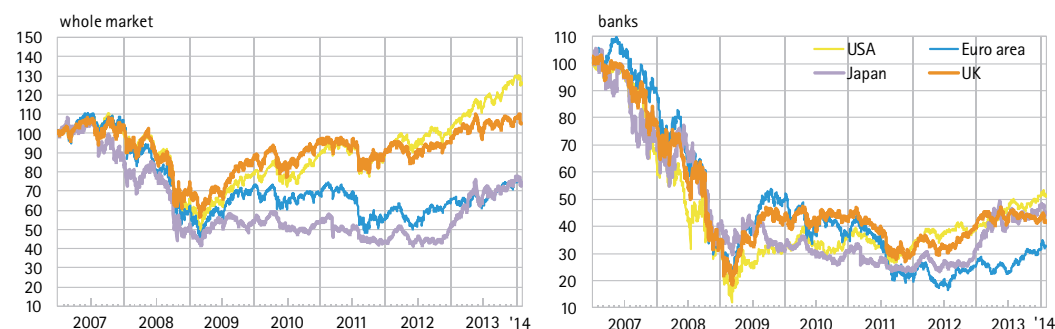
#### 3. Non-financial companies

#### 4. Banks

In the second half of 2013, equity markets in advanced countries recorded significant gains. The overriding driving factor was recovery, faster than expected both in the UK and Japan. In the US, the equity market finally welcomed the launch of tapering as a signal of the strength of the economy. The eurozone showed signs of moderate recovery and increased capital flows into the region, which reinforced the positive trend in the equity market of core countries, while reversing the negative trend experienced by peripherals in the first half of 2013.

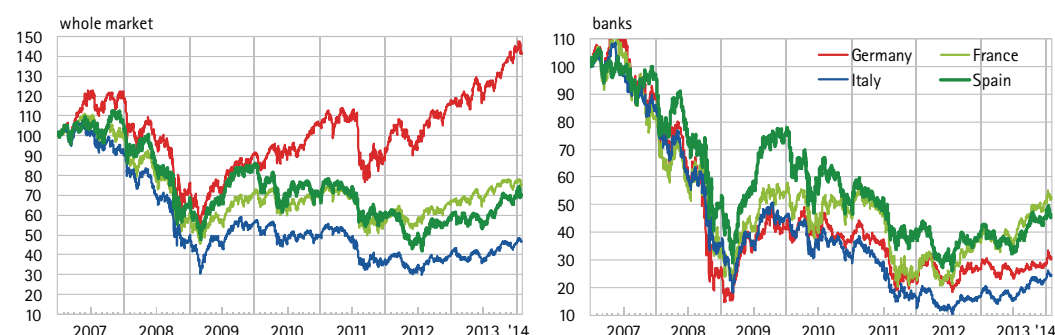
Throughout January 2014, fears over a systemic crisis in emerging markets, experiencing sharp capital outflows after the launch of the Fed's tapering, were the main explaining factor of the fall recorded by the advanced economies equity markets. Also the release of worse-than-expected economic data from the US and China fed worries about a global financial contagion.

**Figure 1.1 – Advanced countries stock indexes**  
(daily data; 01/01/2007 – 31/01/2014; 01/01/2007 = 100)



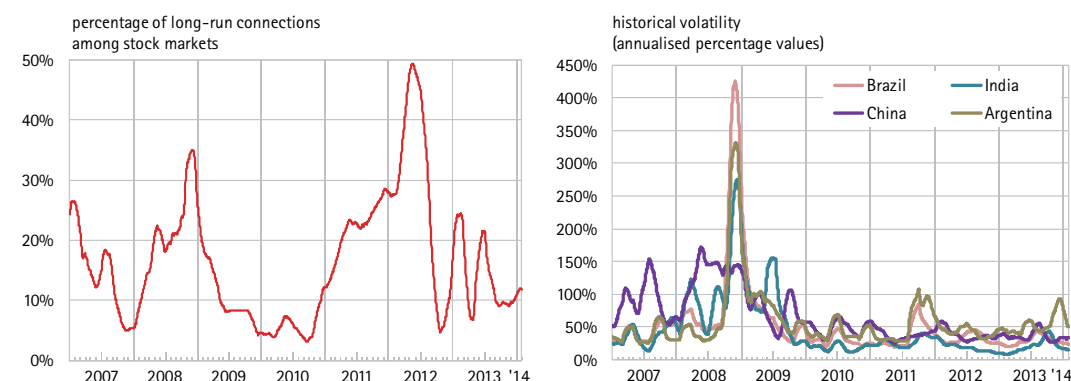
Source: Thomson Reuters Datastream. The left graph includes the following indexes: S&P500 (US), Topix (Japan), FTSE100 (UK), Euro Stoxx 50 (euro area). The right graph includes the following indexes: S&P500 Banks, Euro Stoxx Banks, Japan FTSE Banks and UK FTSE Banks.

**Figure 1.2 – Euro area stock indexes**  
(daily data; 01/01/2007 – 31/01/2014; 01/01/2007 = 100)



Source: Thomson Reuters Datastream. The left graph includes the following indexes: the Dax30 (Germany), Cac40 (France), Ibex35 (Spain), FTSE Mib (Italy). The right graph includes the FTSE Banks indexes for France, Germany, Italy and Spain.

**Figure 1.3 – Financial contagion in a global perspective**  
(percentage values; daily data; 01/01/2007 – 31/01/2014)



For the estimation of the contagion indicator the daily returns of the following stock indexes were considered: Merval (Argentina), Bovespa (Brazil), Micex (Russia), Sensex (India), Shenzhen SE (China), MSCI Turkey, S&P500 (US), Euro Stoxx 50 (euro area), FTSE100 (UK) and Topix (Japan) (left graph; for the methodology see Consob Working paper no. 72, 2012). The annualized historical stock index return volatility has been estimated by applying a multivariate Garch model (right graph). Two month moving average are reported for both the contagion and the risk perception indicators. Calculations are based on Thomson Reuters Datastream data.

## Risk dashboards

### 1. Equity markets

#### 2. Bonds markets

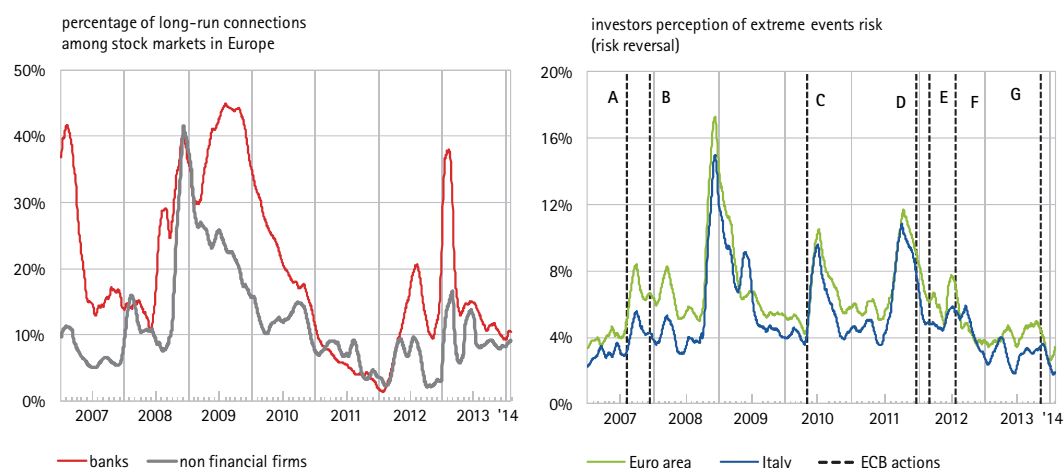
#### 3. Non-financial companies

#### 4. Banks

In Europe the contagion indicator has fallen in the second semester 2013, both in the corporate and the banking sectors. The sharp drop in the perceived level of risk, recorded since the last months of 2013, is driven by the persistent signs of economic stabilization in the eurozone, also reflected in forward looking survey data. Tension easing is also due to some peripheral countries exiting from their international bailout programmes (Ireland and Portugal).

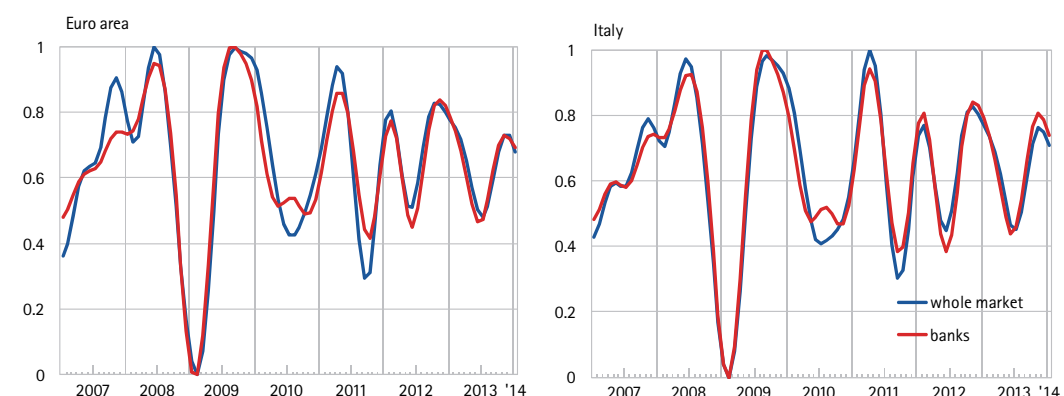
Since June 2013, in the euro area the investors' market sentiment about the economic outlook (as implied by stock returns) has mimicked the downward trend of the contagion indicator, in a declining volatility and risk aversion environment. Throughout January 2014, it slightly worsened both for the euro area and Italy.

**Figure 1.4 – Financial contagion and investors perception of extreme events risk in Europe**  
(percentage values; daily data; 01/01/2007 – 31/01/2014)



For the estimation of the contagion indicator the daily returns of the MSCI indexes of the UK, Germany, France, Italy, Spain, Greece, Portugal, Ireland, the Netherlands, Austria and Finland were considered (left graph; for the methodology see Consob Working paper no. 72, 2012). The indicator of risk reversal 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 sample includes options on the Euro Stoxx 50 index for the euro area and on the FTSE Mib index for Italy (right graph). Higher values of the risk reversal indicator signals a higher perception of the risk of extreme negative returns. 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 dollars 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); G) ECB interest rates cut (07/11/2013). Two month moving average are reported for both the contagion and the risk reversal indicator indicators. Calculations are based on Thomson Reuters Datastream and Bloomberg data.

**Figure 1.5 – Investors' market sentiment as implied by stock market indexes dynamics in the euro area**  
(monthly data; January 2007 – January 2014)



The market sentiment indicator has been estimated as the long-run component of the stock return (Andersson *et al.*, 2011). The cyclical component of each time series is normalized by scaling the indicator between zero (low growth expected) and one (high growth expected). The indicator is computed by applying the Christiano Fitzgerald filter. The stock indexes included in the sample are the FTSE Mib and the FTSE Banks for Italy and the Euro Stoxx 50 and the Euro Stoxx Banks for the euro area. Calculations are based on Thomson Reuters data.

## Risk dashboards

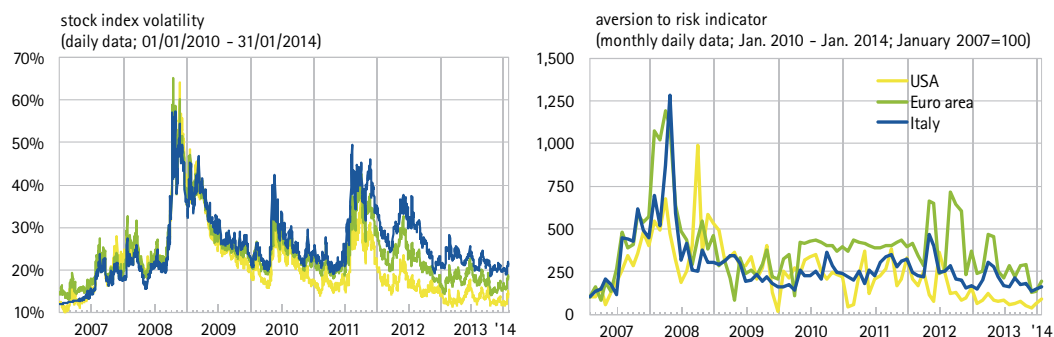
## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

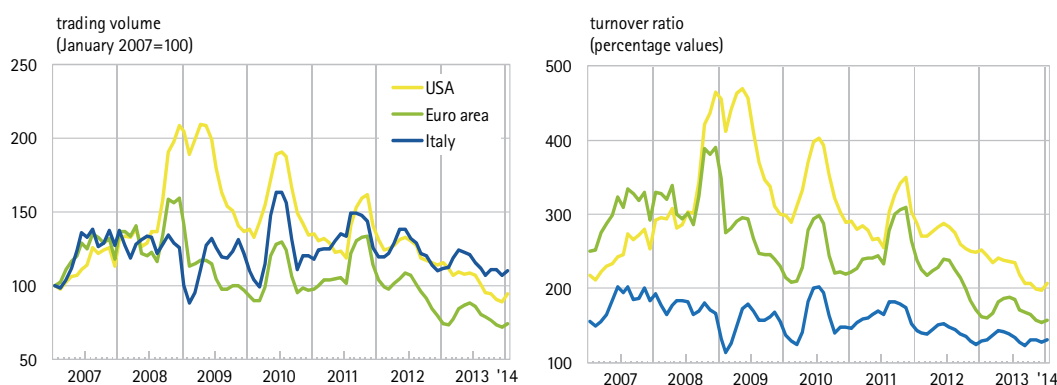
Figure 1.6 – Implied volatility and risk aversion indicator



The risk aversion indicator has been estimated by comparing the historical distribution of stock returns with the distribution implied by stock index option prices (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.

Figure 1.7 – Trading volume and turnover ratio

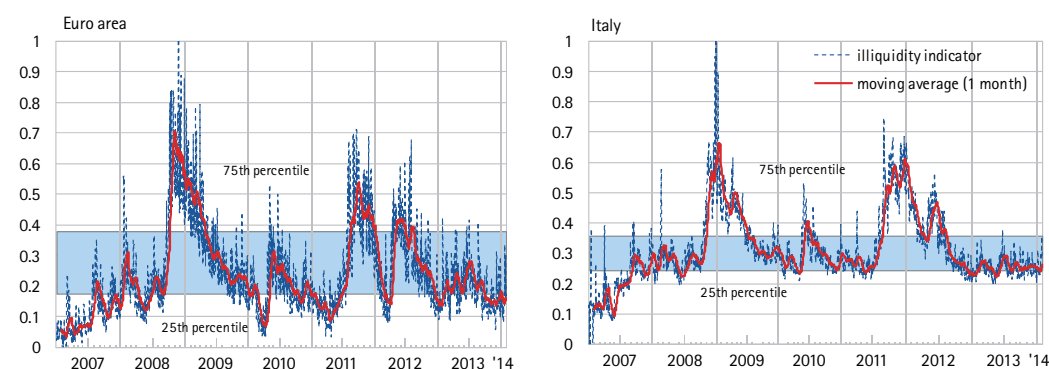
(monthly data; 4-months moving average; January 2007 – January 2014)



The trading volume has been deflated by using stock price indexes. The turnover indicator is computed as the ratio between stock index monthly average trading volume and monthly average market value. The sample includes the following indexes: S&P500 (US), Euro Stoxx 50 (euro area), FTSE Mib (Italy). Calculations are based on Thomson Reuters Datastream.

Figure 1.8 – Stock market illiquidity in the euro area

(daily data; 01/01/2007 – 31/01/2014)



The illiquidity indicator is the first factor estimated by applying principal component analysis on four liquidity measures of the Euro Stoxx 50 (euro area) and FTSE Mib (Italy) indexes, that is the price impact liquidity measure (Amihud, 2002), the bid-ask spread, the implied and historical volatility (range indicator). The indicator has been normalized between the lower bound equal to zero (= high liquidity) and the upper bound equal to one (= low liquidity). Calculations are based on Thomson Reuters Datastream data.

While the reduction in stock market volatility was paralleled by a decline in the turnover ratio in all major economies ...

... liquidity conditions remain at high levels in the euro area and, specifically, in Italy.



## Risk dashboards

### 1. Equity markets

#### 2. Bonds markets

#### 3. Non-financial companies

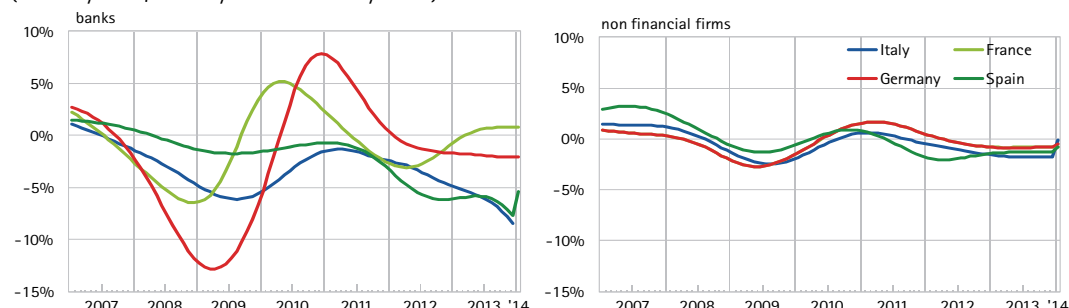
#### 4. Banks

The growth rates of the earnings per share kept being negative in the major European countries both in the banking sector (except France) and the corporate sector. Italian and Spanish banks are the worst performers.

The concurrent hike in the stock prices and the sharp decline of the earnings per share led to a consistent rise in the price-earnings ratio adjusted for the business cycle of Italian and Spanish banks ...

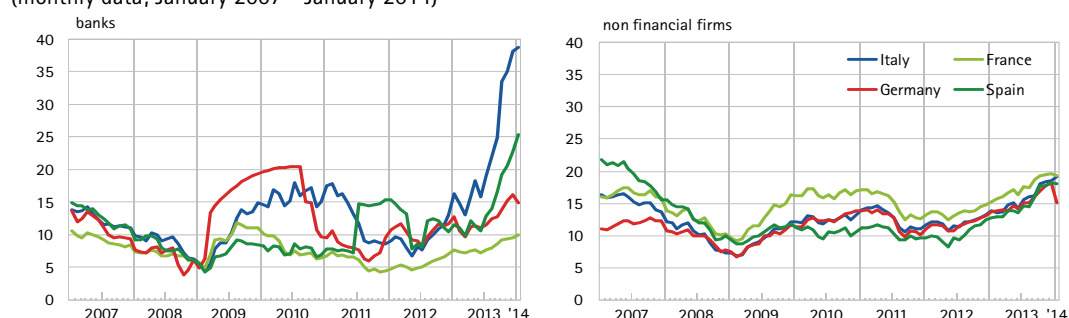
... and to a reduction in the earnings yield premium. Such a reduction was marked also for French and German banks.

**Figure 1.9 – Historical growth rate trends of earnings per share in the euro area**  
(monthly data; January 2007 – January 2014)



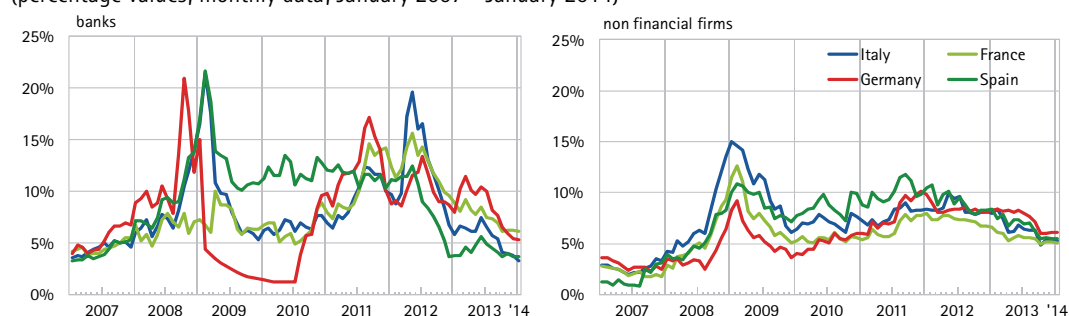
The banks included in the sample are: Deutsche Bank, Deutsche Postbank, Commerzbank, BNP Paribas, Credit Agricole, Soci t  Generale, Natixis, Credit Industriel et Commercial, Unicredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Banco Popolare, UBI, Banco Santander, Banco Bilbao Vizcaya Argentaria, Bankia (from 2011), Caixa Bank (from december 2012), Banco Popular Espanol; Banco Espanol de Credito, Banco de Sabadell. Corporate indicators are computed on each country Datastream non financial index. Calculations are based on Thomson Reuters Datastream data.

**Figure 1.10 – Price-earnings ratio adjusted for the business cycle in the euro area**  
(monthly data; January 2007 – January 2014)



The price-earnings ratio has been calculated on the earnings per share adjusted for the business cycle (Hodrick-Prescott filter). The banks included in the sample are: BNP Paribas, Credit Agricole, Soci t  Generale, Natixis, Credit Industriel et Commercial, Unicredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Banco Popolare, UBI, Banco Santander, Banco Bilbao Vizcaya Argentaria, Bankia (from 2011), Caixa Bank (from december 2012), Banco Popular Espanol; Banco Espanol de Credito, Banco de Sabadell. The multiples for non financial firms are computed on Datastream non financial indexes for France, Germany, Italy and Spain. Calculations are based on Thomson Reuters Datastream data.

**Figure 1.11 – Earnings yield premiums in the euro area**  
(percentage values; monthly data; January 2007 – January 2014)



The banks included in the sample are: Deutsche Bank, Deutsche Postbank, Commerzbank, BNP Paribas, Credit Agricole, Soci t  Generale, Natixis, Credit Industriel et Commercial, Unicredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Banco Popolare, UBI, Banco Santander, Banco Bilbao Vizcaya Argentaria, Bankia (from 2011), Caixa Bank (from december 2012), Banco Popular Espanol; Banco Espanol de Credito, Banco de Sabadell. For non financial firms the Datastream non financial indexes for France, Germany, Italy and Spain were considered. The risk premium is estimated as the average earnings yield premium, that is the difference between the earnings yield (the inverse of the P/E ratio) and the real risk-free interest rate (proxied by the euro area overnight interest rate). For German banks risk premiums from March 2009 to June 2010 are interpolated. Calculations are based on Thomson Reuters Datastream data.

## Risk dashboards

### 1. Equity markets

#### 2. Bonds markets

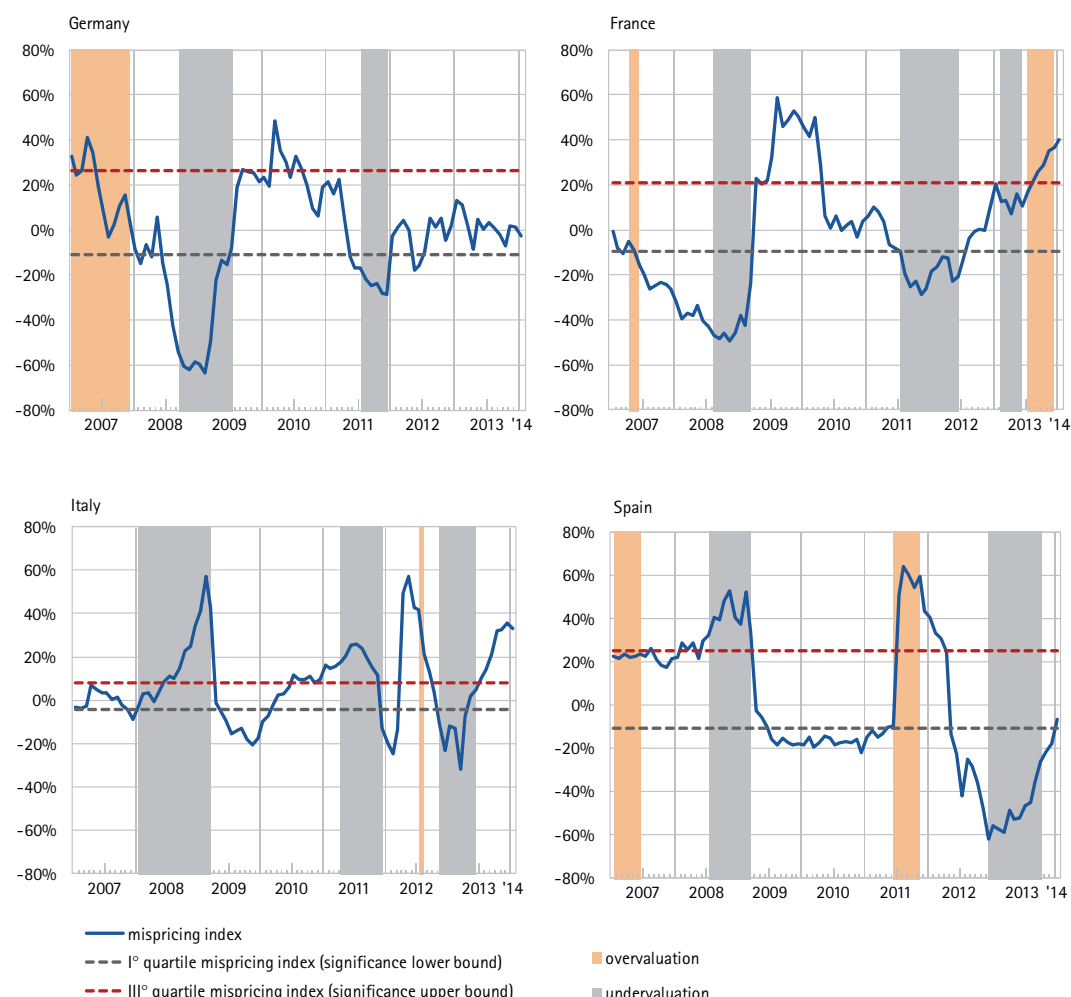
#### 3. Non-financial companies

#### 4. Banks

In 2013 the prevailing stock prices diverged from the theoretical values, estimated on the basis of the earnings per share and the risk premiums, for the banks of the major euro area countries, with the exception of Germany. In January 2014, French banks appeared to be overvalued also given the domestic macroeconomic fundamentals. On the contrary, Spanish banks seemed undervalued since early 2012, although the gap has kept closing since the first months in 2013.

After having been undervalued in the first half of the last year, Italian banks look currently overvalued, probably as a consequence of investors' expectations about positive developments in the macro-economic outlook.

**Figure 1.12 – Bank stock price boom and bust episodes in the euro area**  
(monthly data; January 2007 – January 2014)



The mispricing index is the percentage difference between the observed price and the fundamental value (Campbell and Shiller, 1988; Nelson, 1999; De Bondt et al., 2010). Bank's fundamental value has been estimated by applying a VECM co-integration model on stock prices, earnings per share adjusted for the business cycle, and risk premium (earnings yield premium). Undervaluation (overvaluation) with respect to the business cycle is computed by estimating the time series of the 1<sup>st</sup> quartile (3<sup>rd</sup> quartile) of the stock index price distribution conditioned on the GDP (trend component estimated by applying the Hodrick-Prescott filter). The indicator signals undervaluation if  $p_t < p_t^{1^{st}quartile,GDP}$ ; the indicator signals overvaluation if  $p_t > p_t^{3^{rd}quartile,GDP}$  (Quiros and Timmermann, 2001; Cassola and Morana, 2002; Detken and Smets, 2004). Calculations are based on Thomson Reuters Datastream data for the following sample: Deutsche Bank, Deutsche Postbank, Commerzbank, BNP Paribas, Credit Agricole, Societe Generale, Natixis, Credit Industriel et Commercial, Unicredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Banco Popolare, UBI, Banco Santander, Banco Bilbao Vizcaya Argentaria, Bankia (from 2011), Caixa Bank (from 2012), Banco Popular Espanol; Banco Espanol de Credito, Banco de Sabadell.



## Risk dashboards

## 1. Equity markets

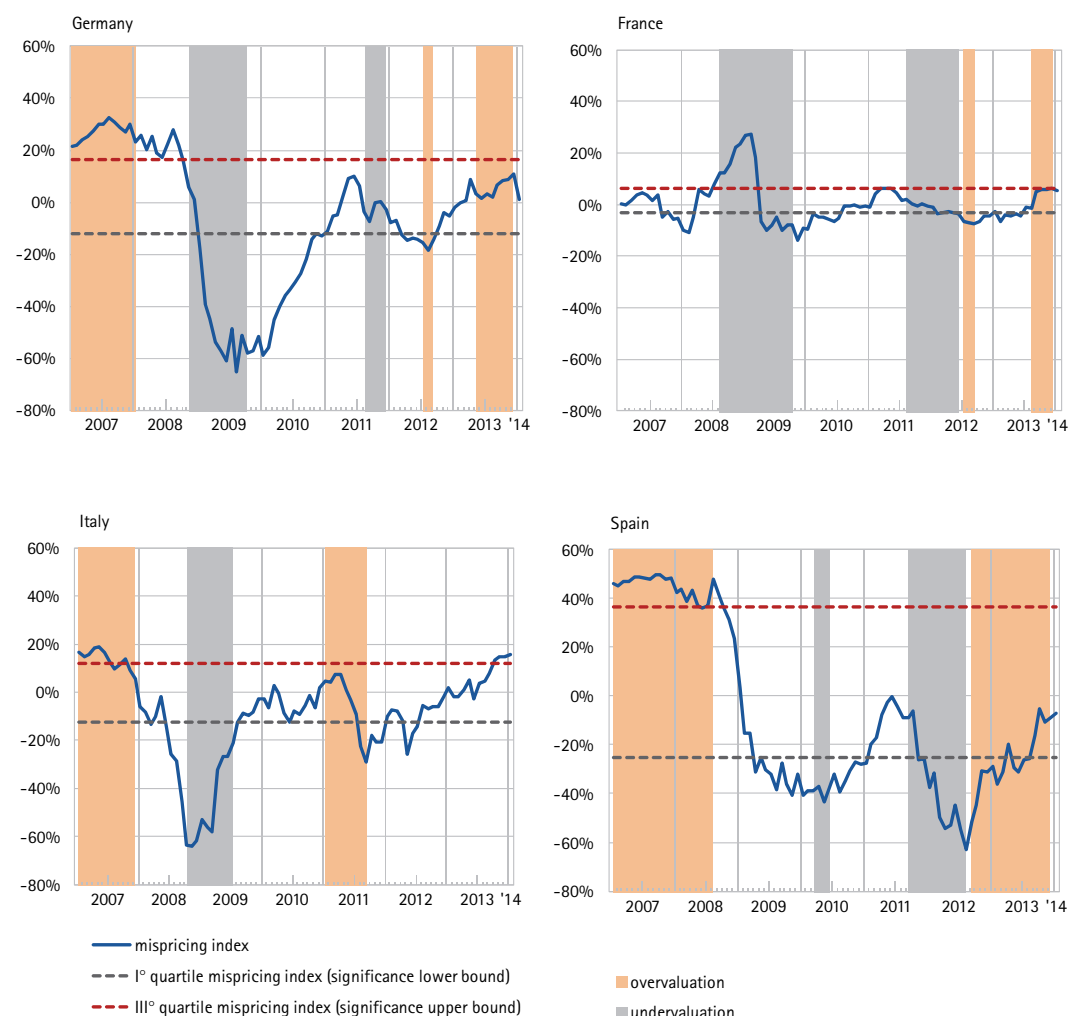
## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

Contrary to the banking sectors, non-financial firms of the main eurozone economies do not seem to be affected by any significant mispricing process, given the trends in domestic GDP, earnings per share and risk premiums.

**Figure 1.13 – Non-financial firms price boom and bust episodes in the euro area**  
(monthly data; January 2007 – January 2014)



The mispricing index is the percentage difference between the observed price and the fundamental value (Campbell and Shiller, 1988; Nelson, 1999; De Bondt *et al.*, 2010). Non-financial firms fundamental value has been estimated by applying a VECM co-integration model on stock prices, earnings per share adjusted for the business cycle, and risk premium (earnings yield premium). Undervaluation (overvaluation) with respect to the business cycle is computed by estimating the time series of the I° quartile (III° quartile) of the stock index price distribution conditioned on the GDP (trend component estimated by applying the Hodrick-Prescott filter). The indicator signals undervaluation if  $p_t < p_t^{I^{quartile,GDP}}$ ; the indicators signals overvaluation if  $p_t > p_t^{III^{quartile,GDP}}$  (Quiros and Timmermann, 2001; Cassola and Morana, 2002; Detken and Smets, 2004). Calculations are based on Thomson Reuters Datastream data.

## Risk dashboards

### 1. Equity markets

#### 2. Bonds markets

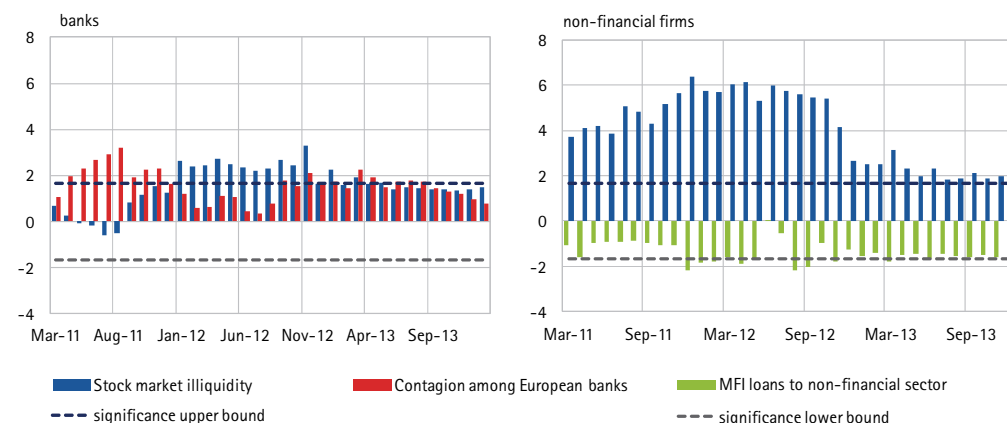
#### 3. Non-financial companies

#### 4. Banks

The market prices of the Italian firms undervalued over crisis times seem to be affected also by variables other than GDP, earnings per share and risk-premiums. A low level of market liquidity appears to contribute positively to undervaluation both in the banking and corporate sectors, while equity market contagion seems to be relevant only for banks.

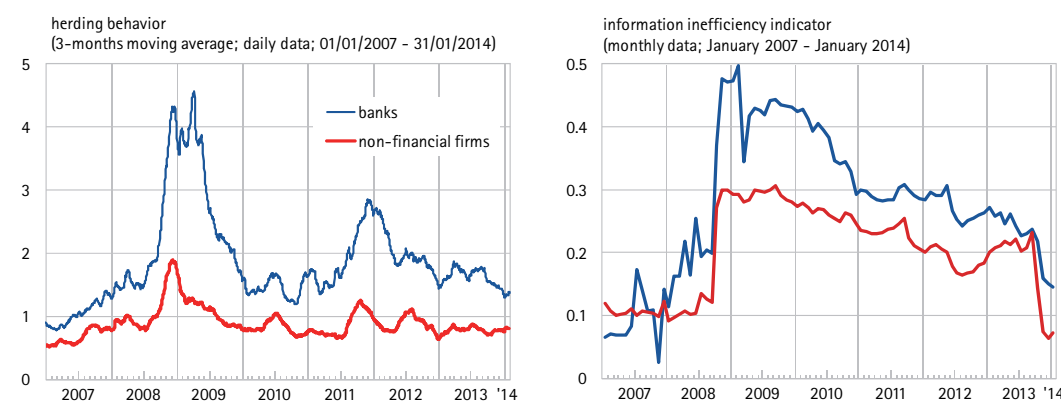
In the second half of 2013 the propensity of investors to follow imitative strategies slowed down in the euro area, as shown by the trend of the herding indicator, which continues to be higher for the financial sector. The likelihood that stock prices movements mirror fundamental values has risen. Consistently, the information efficiency has marked an improvement since June 2013 in the major European countries.

**Figure 1.14 – Determinants of undervaluation in the Italian stock market**  
(monthly data; March 2011 – January 2014)



The reported weights are T-Student statistics estimated over a rolling window of 50 monthly observations applying a 1° quartile quantile regression whose dependent variable is the mispricing index (i.e. the percentage difference between observed stock price and fundamental value on the basis of earnings and risk premium) and whose explicative variable set includes a wide range of macroeconomic and financial variables (M3, MFI loans to non financial sector, GDP, stock market information inefficiency, herding behavior, stock market illiquidity). For the methodology applied to estimate the contagion indicator see the footnote in Fig. 1.4; for the methodology applied to estimate the illiquidity index see the footnote in Fig. 1.8. 90% significance level lower/upper bound are reported. Calculations are based on Thomson Reuters Datastream data.

**Figure 1.15 – Indicators of stock market herding behavior and information inefficiency in the euro area**



The indicator of herding behavior has been computed as the inverse of the cross-section standard deviation of stock market returns of the main blue chips in the euro area (Chang, E., Cheng, J. and Khorana, A. 2000). A lower dispersion (i.e. a higher level of the indicator) signals that the investors adopt more frequently similar or imitative investment strategies and, therefore, that the herding behavior phenomenon is more intense. The information inefficiency indicator is the absolute value of the first order stock index return autocorrelation. The indicators are computed on euro area Datastream non-financial countries' indexes and on Euro Stoxx Banks index. Calculations are based on Thomson Reuters data.

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

## Bonds markets

In the second half of 2013, in the US, the tapering of the easing quantitative policy, launched by the Fed in December, prompted a reversal in the 10-year sovereign spreads and a steepening of the yield curve (Fig. 2.1). Government bond yields are declining also in Japan, although discontinuously, where the aggressive monetary easing introduced by the BoJ and the solid domestic investor base offset the upward pressures due to deteriorating fiscal conditions. Over the same period government bond yields and CDS premiums for the eurozone peripheral countries kept declining back around levels observed in 2009. These developments confirm the trend triggered by the OMT announcement by the ECB in mid 2012 and the outlook of a moderate recovery. However the still high unemployment rates and the uncertain dynamics of the demand and the exports make risks to growth be on the downside. The improvement in risk perception is reflected in the gradual reduction in contagion effects and historic volatility in European sovereign bond markets (Fig. 2.2).

As a result of the easing in sovereign risk perception, the yield curves of the eurozone peripheral countries have experienced a significant downward shift with respect to the highest levels achieved after the outburst of the sovereign crisis (Fig. 2.3). At the same time, the decline of foreign investors exposure towards the government debt of peripheral countries has partially stabilized and, in some cases, reversed (Fig. 2.5). The share of non-resident holdings of Italian bonds dropped by around 20% over 2011-2012 and slightly rose in 2013; the reversal was more pronounced in Spain, which experienced first a slump greater than 30% and then an equivalent rise. As for public debt domestic holdings, the share held by resident banks varies a lot across the main advanced economies, exceeding 23% in the euro area versus only 2% in the US (Fig. 2.6). Consistently, also Central Banks holdings exhibit a significant variation: almost 10% for the Fed, 25% for the Bank of England, slightly higher than 3% for the ECB. The ECB holdings of eurozone public debt further shrunk in 2013, following the redemption of securities acquired under the Securities Market Programme.

In spite of prevailing conditions of relative financial calm in eurozone sovereign bond markets, the government refinancing needs are still a risk factor for some major countries (Fig. 2.7). In 2014 the total needs of the Italian Government will amount to around 22% of GDP (or 354 billion of euros). Of this, slightly more than 11% stems from the budget deficit and the remaining from maturing debt (44% of which is short term). In 2014, while the Italian estimated public deficit (2.5% of GDP) is far lower than the forecast for Spain (5.9%) and France (3.8%), the reverse holds true with respect to maturing debt (around 19.7% of GDP in Italy versus 14.4% and 16.6% respectively for France and Spain). As shown by the historical path of debt-to-GDP ratio and its components, the primary deficit seems to be the key risky driver for France and Spain, while for Italy the issue remains the gap between the growth rate and the interest rate (Fig. 2.8).

The data currently available for the euro area point to the third quarter of 2013 as the turning corner from recession to a fragile recovery. This is confirmed also by the GDP nowcasts for the last quarter of 2013 and the beginning of 2014, which are based on the information contained in soft and hard indicators of the health of the economies (Fig. 2.9). The nowcasts for Italy indicate a growth rate equal to 0.4% and 0.3%, respectively, in the last quarter of 2013 and in the first quarter of 2014.

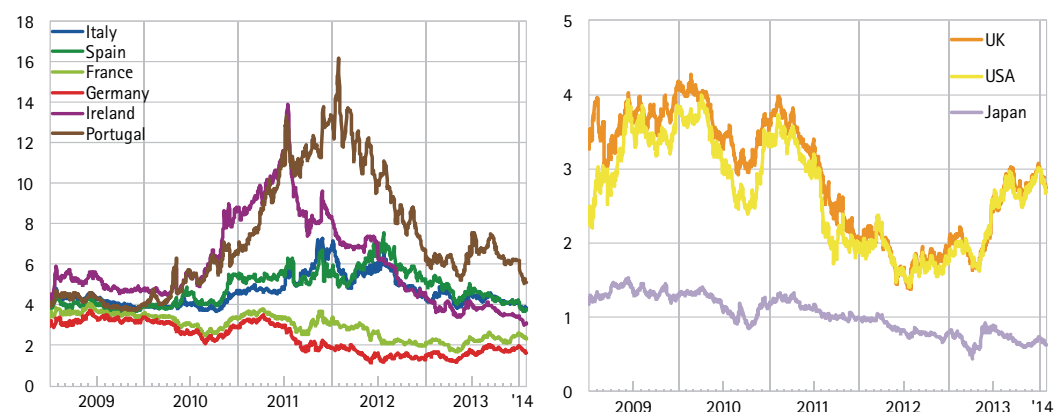
As for non-government securities, in 2013 issuance activity has maintained a good pace for non-financial bonds (Fig. 2.12), while looks still subdued for bank bonds (Fig. 2.13). Markets for securitized assets remain stagnant in Europe, while in the US net issuances are positive only on the segment of mortgages-backed securities (Fig. 2.14).

Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

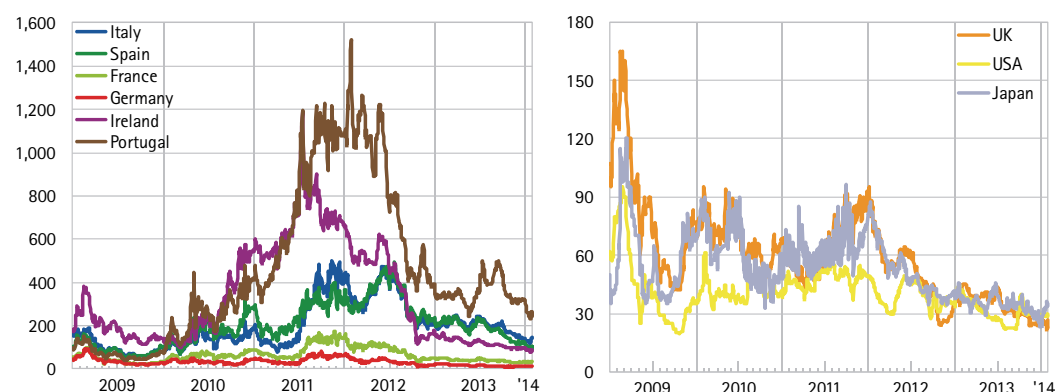
In the second half of 2013, government bond yields and CDS premiums for the eurozone peripheral countries kept declining back around levels observed in 2009. The improvement in risk perception is reflected in the gradual reduction in contagion effects and historic volatility for sovereign bond markets. Government bond yields declined also in Japan, although discontinuously, thanks to the aggressive monetary easing introduced by the BoJ. In the US, since May 2013 it was observed a reversal in the sovereign spreads due to the expected tapering of the easing quantitative policy, launched by the Fed in January 2014.

**Figure 2.1 – Government bond yields and CDS on public debt in advance countries**  
(daily data; 01/01/2009 - 31/01/2014)

10-YEAR GOVERNMENT BOND YIELDS (percentage point)



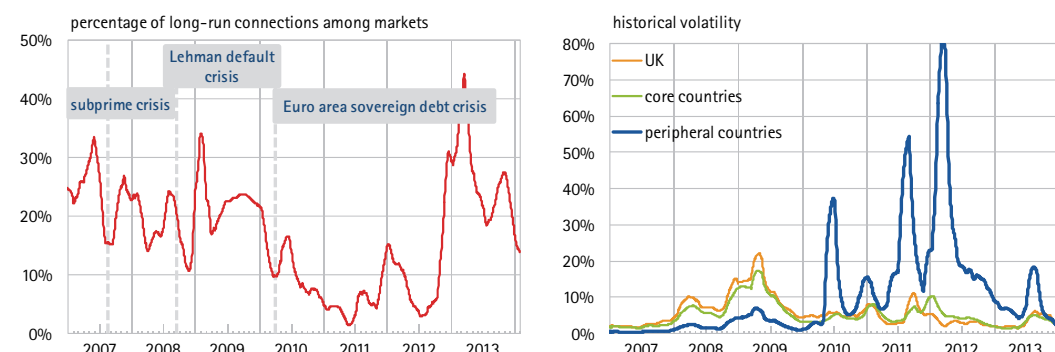
5-YEAR SOVEREIGN CDS PREMIUMS (basis point)



Fonte: Thomson Reuters.

**Figure 2.2 – Contagion and historical volatility of 10-year sovereign bond spreads for some European countries**

(percentage values; 2-months moving average; daily data; 01/01/2007 - 31/01/2014)



For the methodology applied to estimate the contagion indicator see Consob Working paper no. 72, 2012 (left graph). On the left graph 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 the UK, Germany, France, Austria, the 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, the Netherlands 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.

## Risk dashboards

## 1. Equity markets

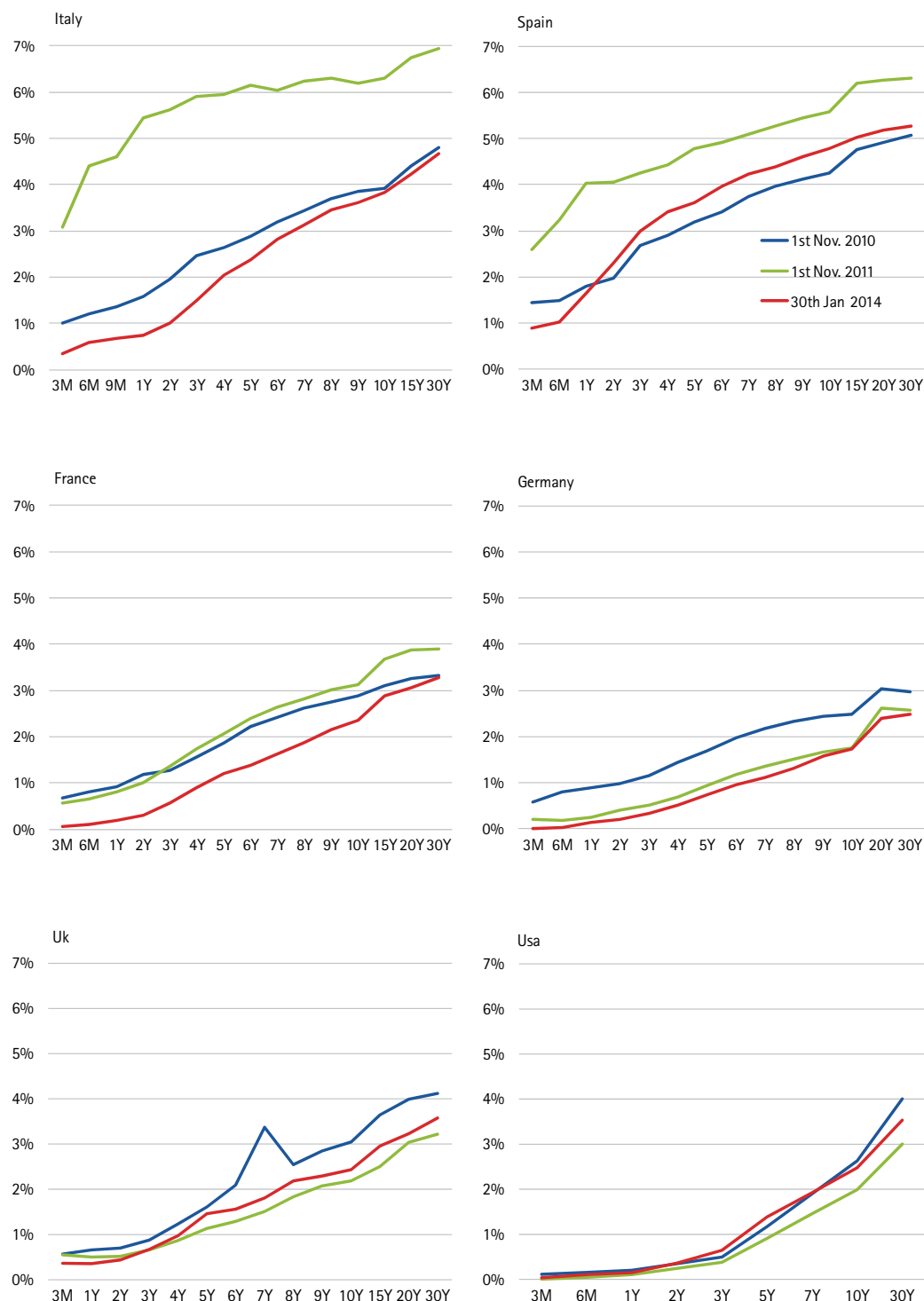
## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

As a result of the easing in sovereign risk perception, eurozone peripheral countries have experienced a significant downward shift with respect to the highest levels achieved after the outburst of the sovereign crisis. The US yield curve has steepened as a consequence of the tapering of the quantitative stimulus. Also the UK yield curve is lower than the pre-crisis level thanks to the persistent accommodative monetary policy of the Bank of England.

Figure 2.3 – Yield curves in advanced countries



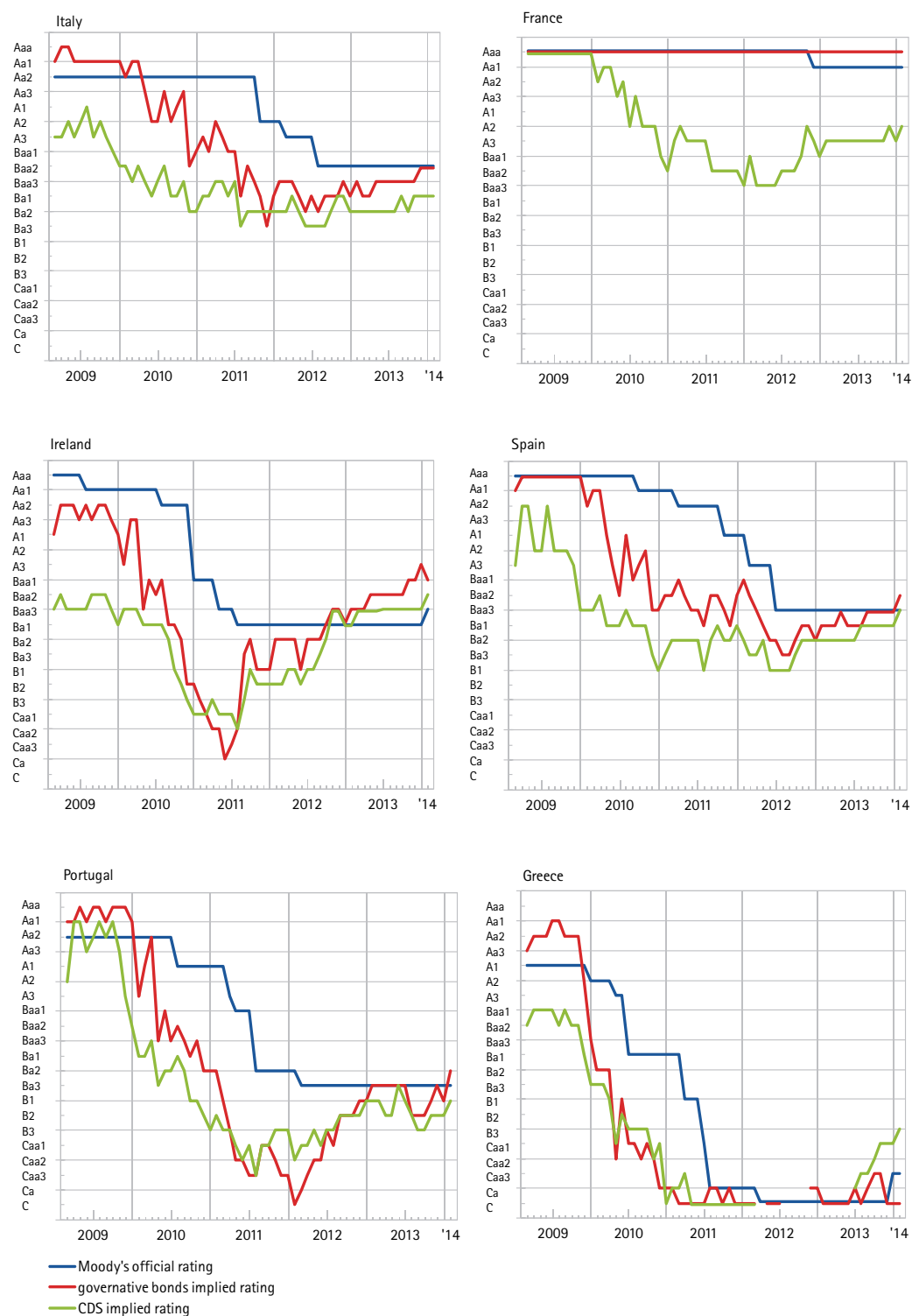
Source: calculations on Thomson Reuters data.

Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

For the first time, after the beginning of the sovereign debt crisis, Italy and Spain have closed the gap between the official rating released by Moody's and the perception of insolvency risk implicit in the performance of government securities and CDS.

For Ireland the implied rating rose significantly during 2012 to a level stably higher than the Italian and the Spanish ones. The main driver for the upgrade was the growth potential of the Irish economy, which together with ongoing fiscal consolidation is expected to bring government debt ratios down from their recent peak. Also the exit from its EU/IMF support programme on schedule, with improved solvency and restored market access, plays a relevant role.

**Figure 2.4 – Bond and CDS implied ratings in some euro area countries**  
(monthly data; January 2009 – January 2014)



Source: calculations on Moody's data.

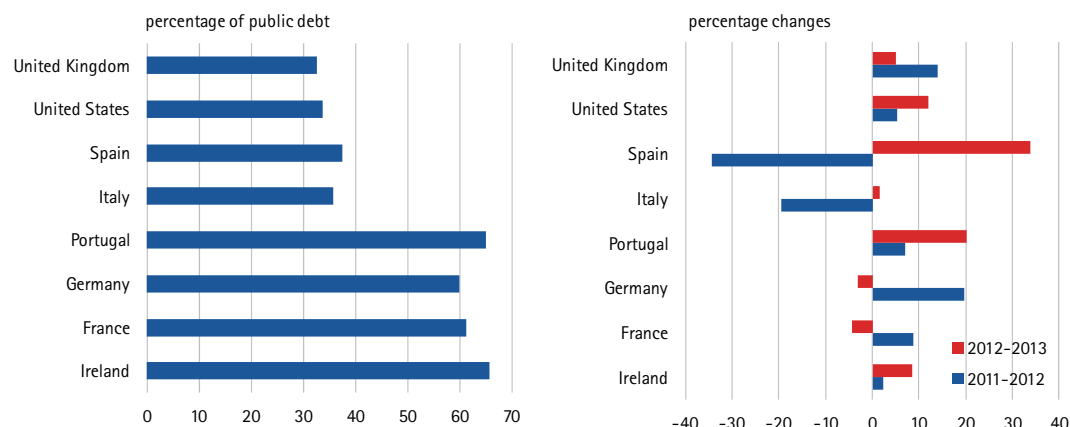
Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

The decline in foreign investors exposure towards the government debt of peripheral countries has partially stabilized and, in some cases, reversed following the improved perception of sovereign risk in peripheral countries.

The public debt held by Central banks and domestic banks varies a lot across the main advanced economies. In 2013, ECB holdings of eurozone public debt shrunk to 3.1%, following the redemption of securities acquired under the SMP, while resident banks holdings seemed stable around 23%.

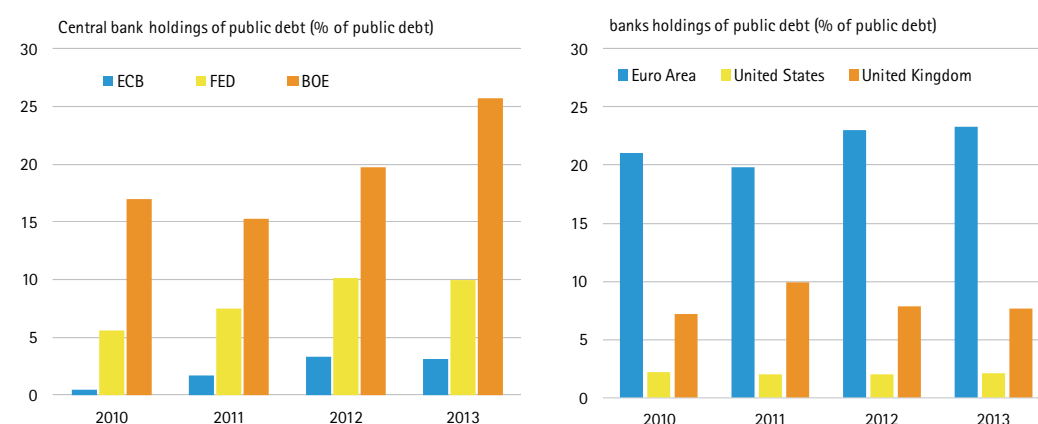
Government financing needs, due both to maturing bonds and public deficit, keep being challenging especially for high debt-stock countries. Italy will be facing maturing debt equal to 18% of GDP, while at the same time having to finance public deficit estimated at 2.5% of GDP.

Figure 2.5 – Non-resident holdings of general government debt



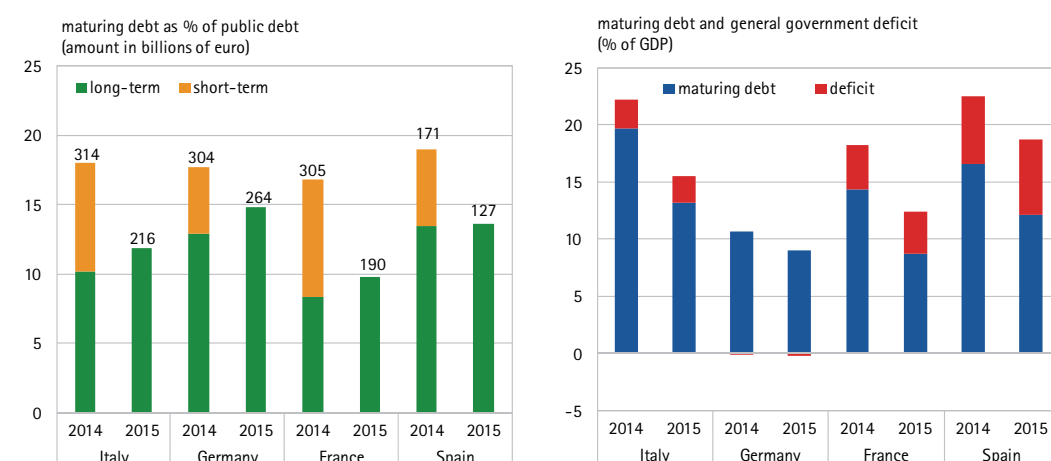
Source: calculations on IMF data.

Figure 2.6 – 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). The data for euro area refer to private bank holdings of Greece, Ireland, Italy, France, Germany, Spain and the Netherlands.

Figure 2.7 – The refinancing needs of general government debt

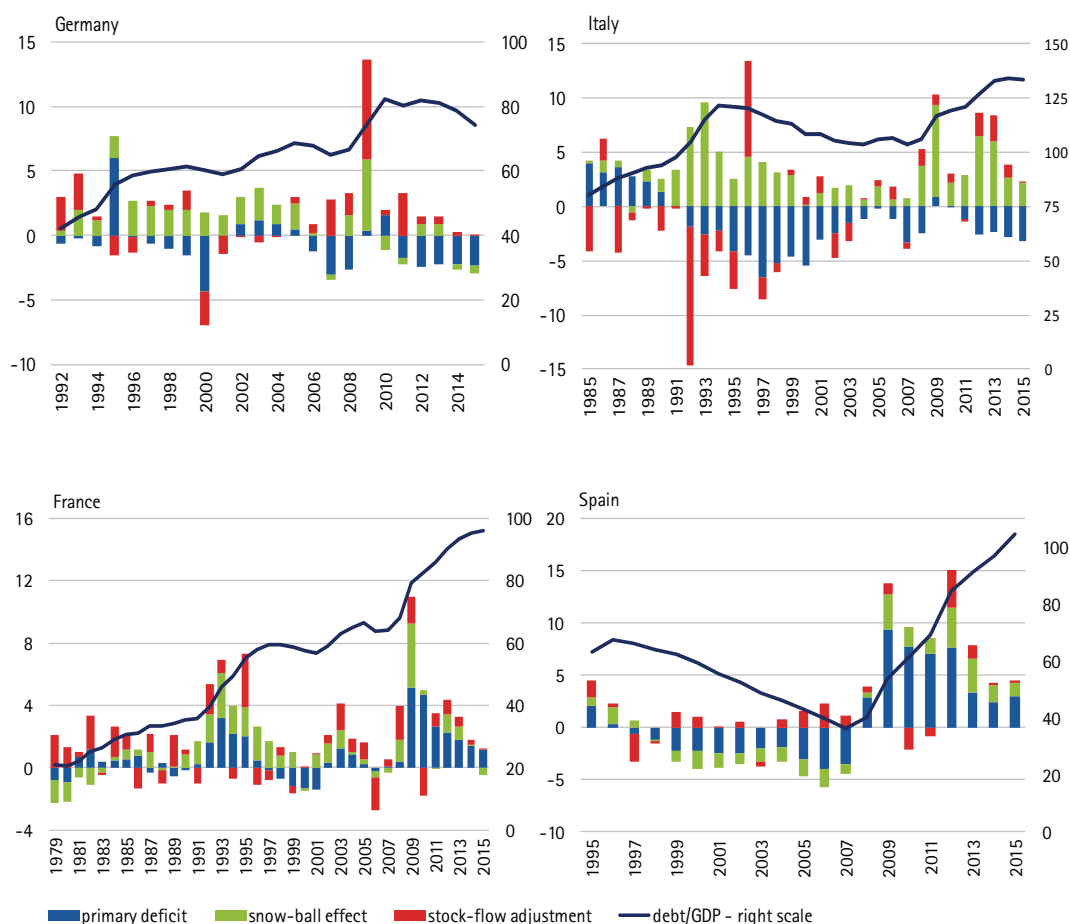


Source: calculations on Thomson Reuters Eikon and EU commission data.

Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

The path of debt-to-GDP ratio and the contribution of its components differ widely across the major eurozone countries. In 2015 the Italian public debt is expected to stabilize around 130% of GDP (based on the hypothesis of a real growth rate equal respectively to 0.7 and 1.2 in 2014 and 2015). Spain is forecast to reach almost 110% (growth estimates being equal to 0.5 in 2014 and 1.7 in 2015), while France should slightly exceed 90% (with real GDP predicted to grow by 0.9 and 1.7). While the primary deficit seems to be the key risky driver for France and Spain, for Italy the issue remains the gap between the growth rate and the interest rate.

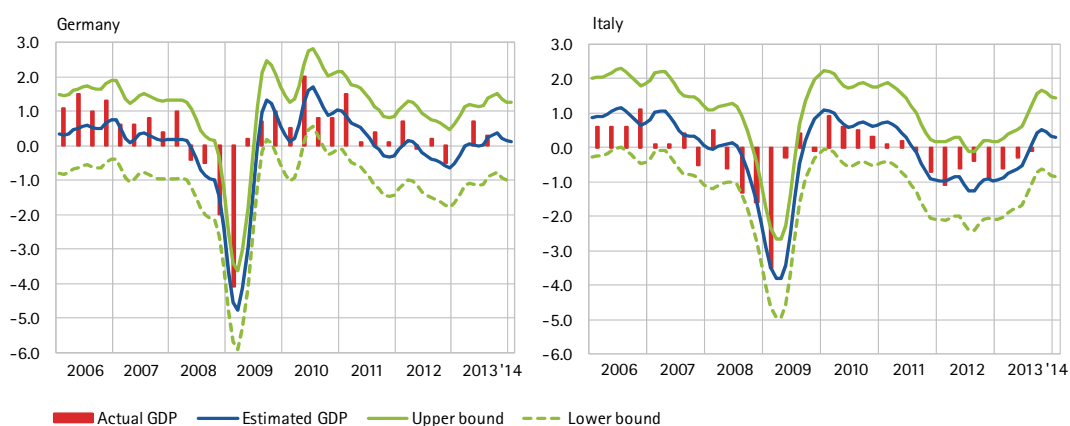
Figure 2.8 – General government debt components



Source: EU Commission. 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.

The recovery expected in both core and peripheral euro area countries is confirmed also by the GDP nowcasts for the last quarter of 2013 and the beginning of 2014. These nowcasts, based on the information contained in soft and hard indicators of the health of the economy, point to a growth rate in Italy equal to 0.4% and 0.3%, respectively, in the last quarter of 2013 and in the first quarter of 2014.

Figure 2.9 – GDP nowcasts for some euro area countries (percentage values)





## Risk dashboards

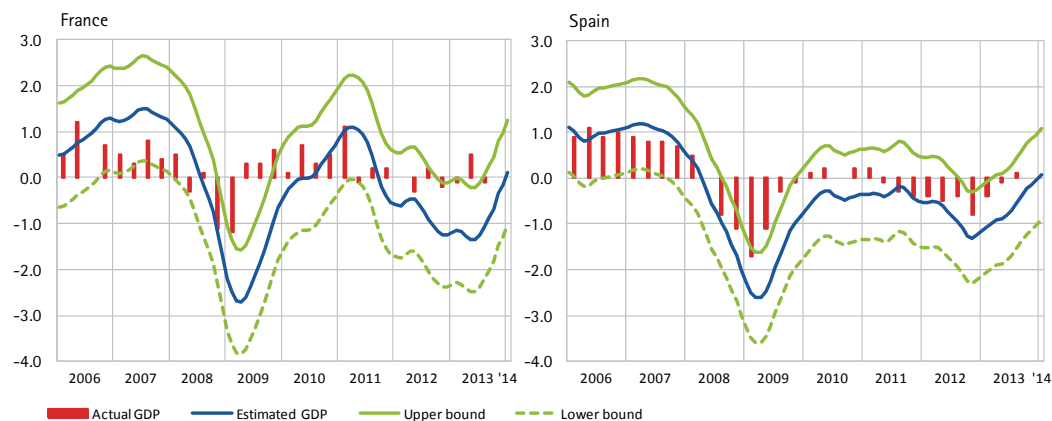
## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

Figure 2.9 (cont.) – GDP nowcasts for some euro area countries

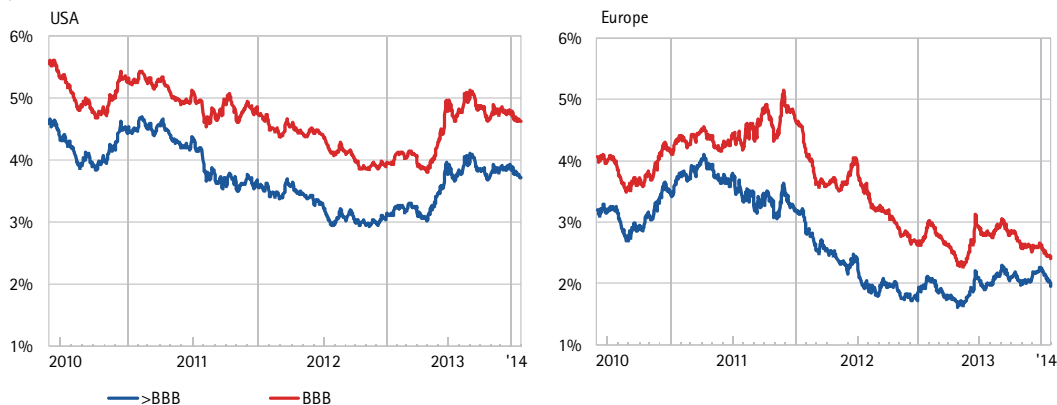


The methodology applied to construct the forecast is based on a small-size state space model, using 11 hard and soft indicators (preliminary and final estimates of GDP; hard indicators: Exports, Industrial Production Index, Retail Sales, Employment; soft indicators: Economic Sentiment Indicator, Business Confidence Indicator, Consumer Confidence Indicator, Building Confidence Indicator) adapted from Camacho and Perez-Quiros (2010); the Kalman filter methodology is used to extract a common factor. The model is estimated separately for each country (Italy, Germany, France, Spain). Calculations are based on data from EU Commission, Istat, Insee, Bundesbank, Ine. The sample used to construct the forecast ranges from June 2002 to January 2014.

After an increase in 2013, corporate bond yields have decreased since the beginning of 2014 both in the US and Europe. Bank bonds keep showing stable yields in the US and Europe for all rating classes. In Europe yield spreads between BBB securities and higher rated securities are declining both in bank and corporate sectors, signalling an improvement in investors' market sentiment.

Figure 2.10 – Corporate bond yields

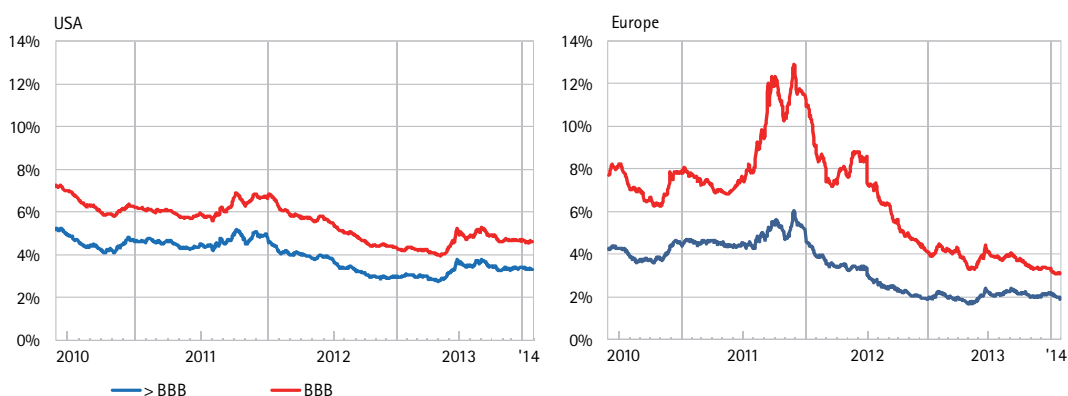
(percentage values; daily data; 01/06/2010 – 31/01/2014)



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

Figure 2.11 – Bank bond yields

(percentage values; daily data; 01/06/2010 – 31/01/2014)



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

## Risk dashboards

## 1. Equity markets

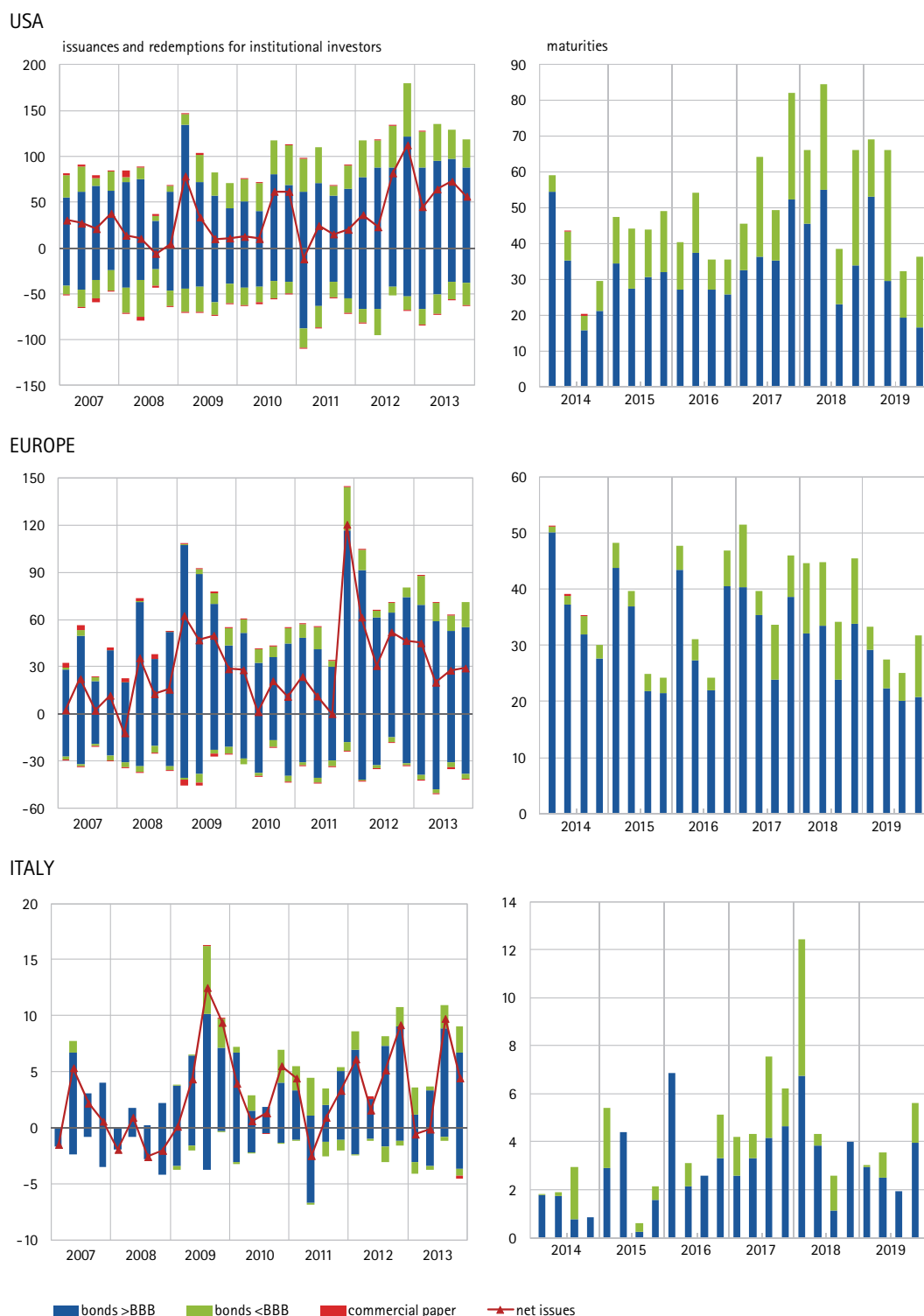
## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

During 2013 the primary markets of corporate bonds showed signs of recovery both in the US and Europe, reaching their highest since 2007. In 2013 the share of investment-grade bonds accounted for almost 84% of total issuances in Europe and 70% in the US. In Italy corporate bonds issuance remained subdued till the second half of the year. Italian corporate bonds maturing in 2014 amount to about 7.5 billions of euro.

**Figure 2.12 – 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).

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

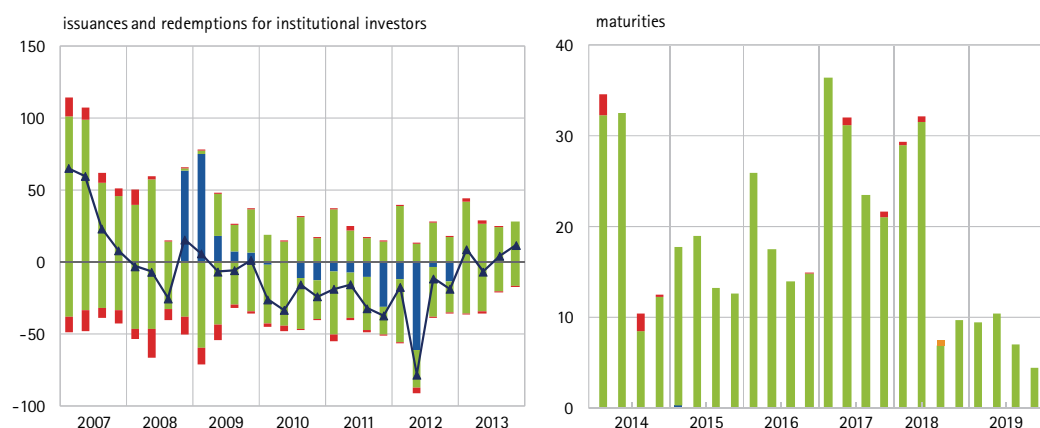
## 3. Non-financial companies

## 4. Banks

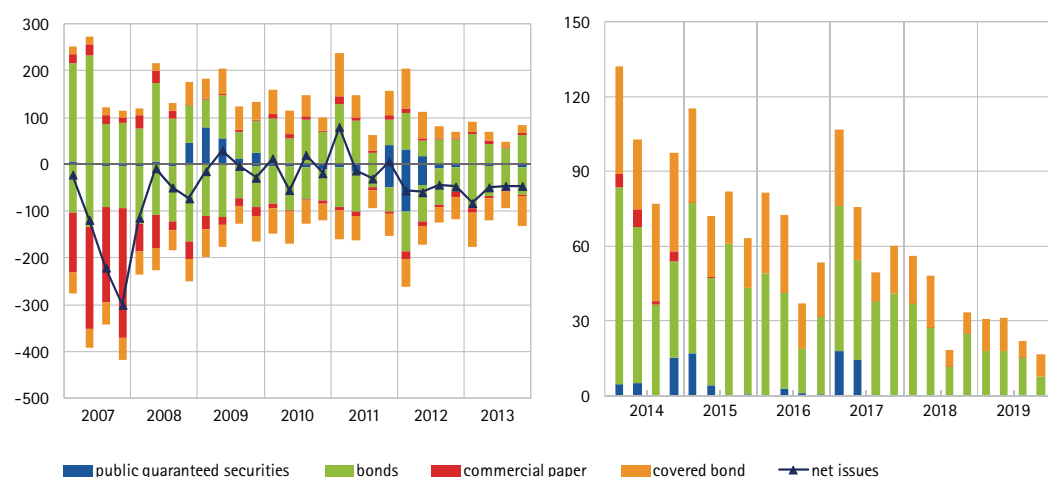
During 2013 the primary market for bank bonds remained stagnant in Europe, where the net issuances were negative, while showed signs of a slight improvement in the US. Over 2013 gross issuances by Italian banks exhibited a substantial stability. Consistently with historical trends, the share of securities distributed to retail investors accounted for almost 84% (compared with levels below 80% recorded until the first half of 2011). In 2014 refinancing needs appear to be significant both for the US and European banks. In Italy bonds maturing in the first half of 2014 account for almost 90 billion of euros (of these 70 billion were distributed to retail investors).

**Figure 2.13 – Bank bonds issues and maturities**  
(quarterly data in billions of euro)

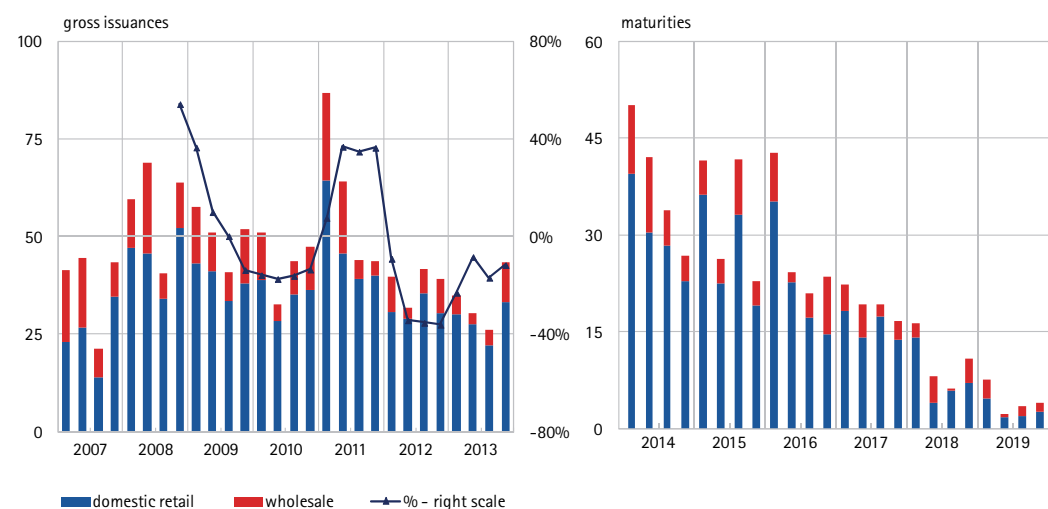
## USA



## EUROPE



## ITALY



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).

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

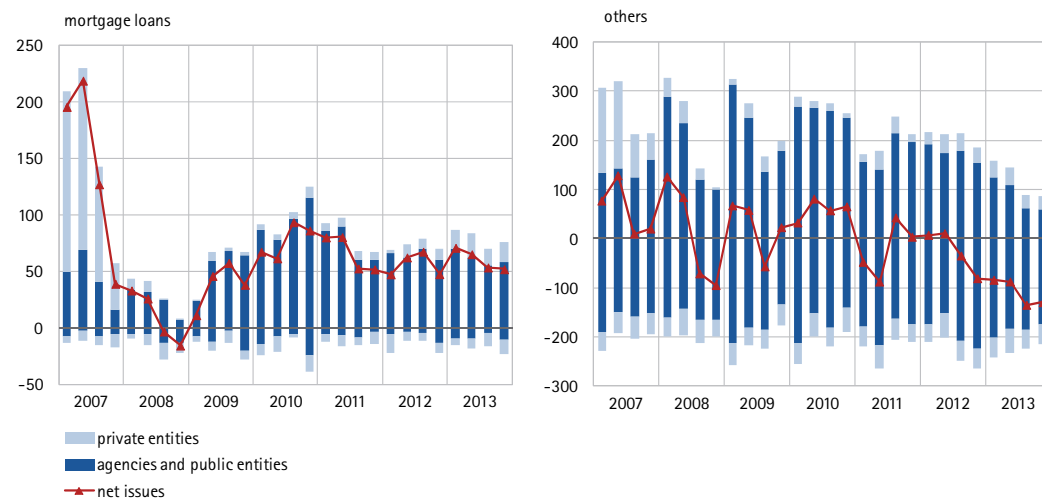
## 3. Non-financial companies

## 4. Banks

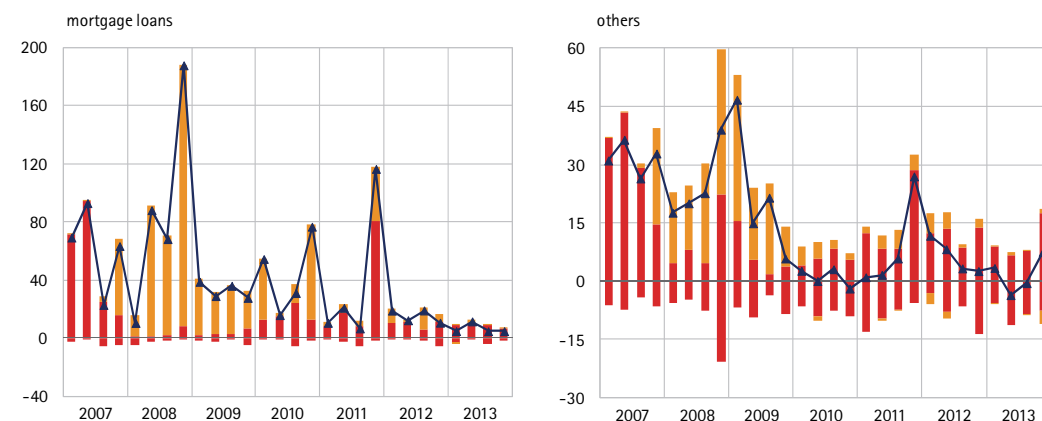
As for securitized assets, the US markets show positive net issuances only on the segment of mortgages-backed securities. Markets remain stagnant in Europe and especially in Italy.

**Figure 2.14 – Securitisation issuances**  
(quarterly data in billions of euro)

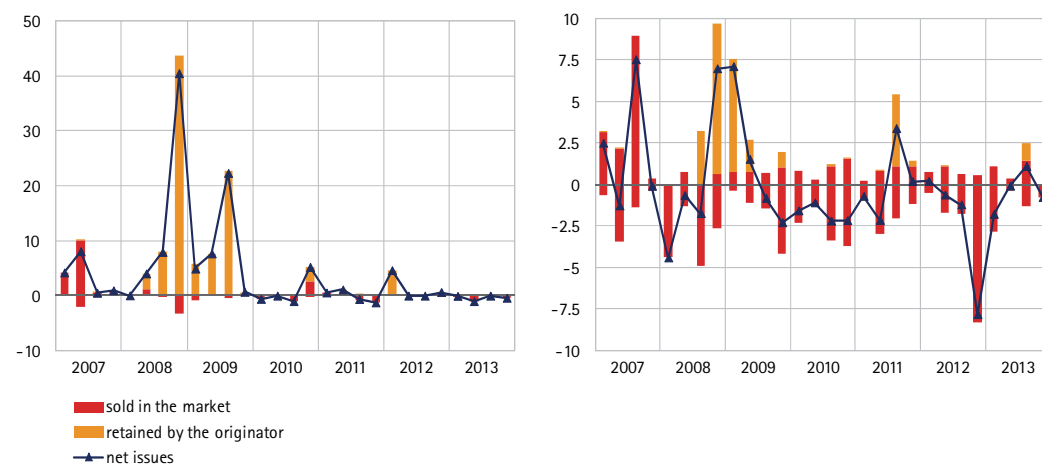
## USA



## EUROPE EX ITALY



## 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.

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

## Non-financial companies

Since 2007, turnover for main UK, French and German non-financial listed companies operating in cyclical or defensive sectors has increased in absolute terms more significantly than for Spanish and Italian firms. However, in percentage terms, defensive sector Spanish and Italian firms have grown the most over the same period, with Italian companies doing very well also in cyclical sectors, which on aggregate represent around three quarters of total turnover (Fig. 3.1).

Nevertheless, that has translated into an increase in market capitalization only for French and German cyclical sector companies, and UK defensive sector companies. Over the same period, Italy and Spain have lost market value both in cyclical and defensive sectors.

Considering internationalization, foreign sales contribution to total turnover of large Italian listed companies is in line with their European peers in percentage terms. However, the breakdown by industry is only partially representative of the sectors where Italy has a significant (but in some cases declining) market share in world exports. Large German companies, instead, remain leaders in the export of premium quality products, such as in the automobile industry (Fig. 3.2).

Among large European non-financial listed companies, profitability as measured by return on equity (ROE) has generally decreased in the first nine months of 2013. On average, it is much lower than it was in 2007, with a wider gap across European firms operating in defensive sectors (2-23%) rather than in cyclical sectors (3-14%).

While UK and German companies are currently the most profitable, with a ROE close to 13%, Italian companies have by far lagged behind their competitors in recent years, with a ROE falling from 17% in 2007 to 3% in the third quarter of 2013 (Fig. 3.3).

As of 30 June 2013, Italian and Spanish non-financial listed companies are still characterized by the highest levels of leverage and lower interest expense coverage ratios (also relative to 10-year averages), while UK groups remain the best capitalized, followed by French and German companies.

Looking at the short-term debt ratio, while French and German non-financial listed companies currently exhibit the highest incidence of short-term liabilities (at roughly 29% and 35% respectively, close to average since 2007), the ratio is lower for Spain and Italy (at around 19% and 18% respectively), and improved for Italian companies relative to its average (21%) since 2007 (Fig. 3.4).

In the first half of 2013, with the exception of German companies, the cash flow from operating activities to net financial debt ratio has generally worsened significantly for large non-financial listed companies in Europe. The debt payout ratio is the lowest for Italian companies (at 6.5%), and the highest for UK groups (15.8%), with the former also most characterized by smaller levels of debt payout ratio relative to 10-year averages. Liquidity ratios have declined as well, and have roughly aligned for Italian, Spanish and UK companies (at around 1.45; Fig. 3.5).

For large Italian non-financial listed companies, the contraction in bank funds (-11.5% from 2007 to half 2013) has been more than compensated by a larger increase (+71%) in bond issuances over the same period (Fig. 3.6).

Overall, Italian companies still remain among the most fragile in terms of profitability and debt sustainability, with nearly a third of them recording a net loss, and about 14% a negative EBIT. French and German companies are among the most resilient in terms of turnover stability, although with a different incidence of short-term debt relative to 10-year averages (worsening for 57% of the French, and just 30% of the German sample; Fig. 3.7 to 3.10).

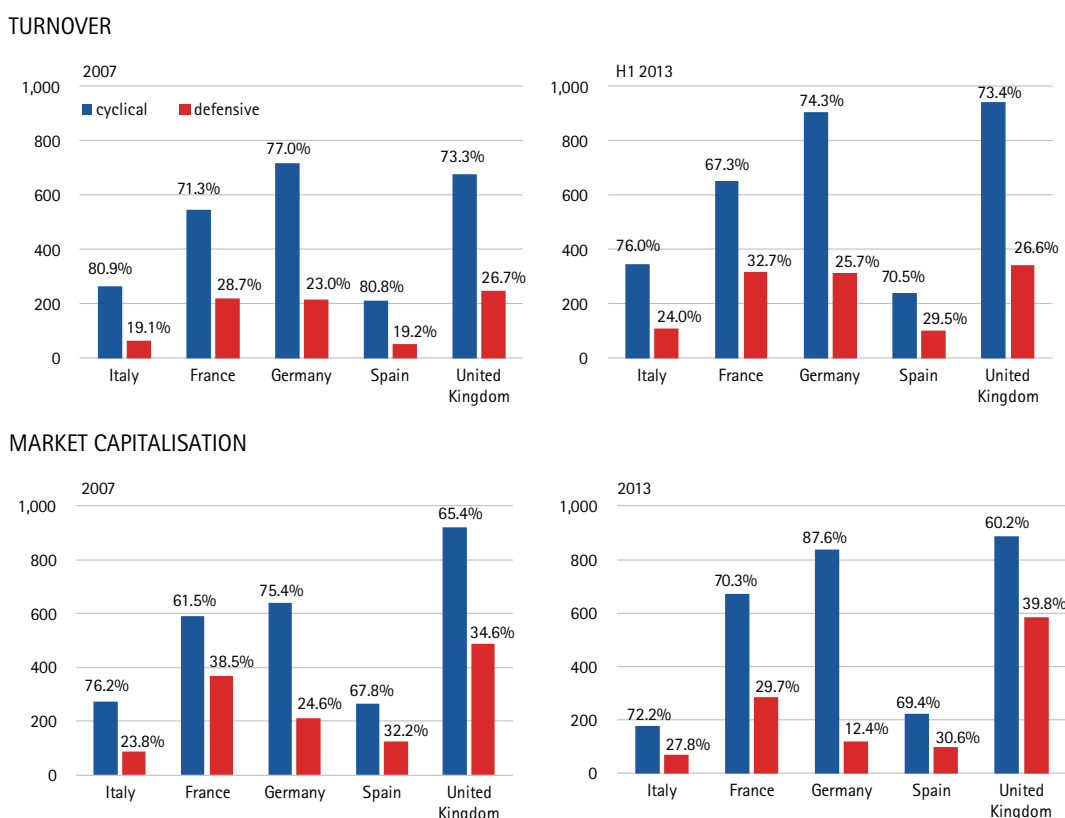
The greater vulnerability of the Italian non-financial companies relative to their European peers is also reflected in the higher observed CDS prices, which at the beginning of 2014 keep being steadily higher than those of the euro area. However, the EDF implied risk of the Italian firms has continued declining towards the European average (Fig. 3.11).

Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

Since 2007, turnover for main French, German and UK non-financial listed companies has risen more in absolute terms than for Spanish and Italian firms, both in cyclical and defensive sectors. Consistently, market capitalization has increased for French and German cyclical sector companies and UK defensive sector companies, while Italian and Spanish companies recorded a loss of market value.

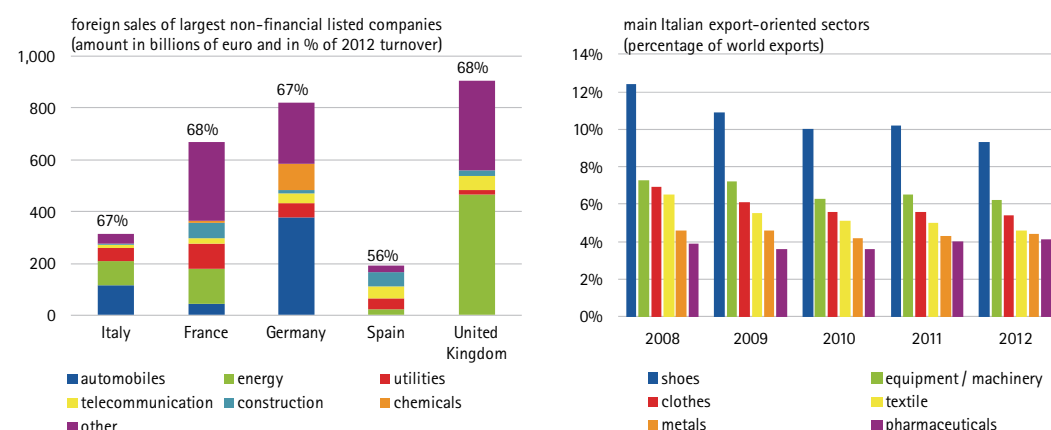
Foreign sales contribution to total turnover of large Italian listed companies is in line with their European peers in percentage terms. Nevertheless, the breakdown by industry is only partially representative of the sectors where Italy has a significant market share in world exports.

**Figure 3.1 – Size of major non-financial listed companies by cyclical and defensive sectors**  
(amounts in billions of euro and percentage of the sample)



Source: calculations on Worldscope (turnover) and Thomson Reuters Datastream (market capitalization) data on the top 30 non-financial companies by capitalisation as of January 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. For 2013, turnover is annualised. 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, 23 in Germany, 22 in Spain, 17 in the UK and 22 in Italy. Defensive sectors include: food (and drinks), tobacco, pharmaceuticals, health, utilities; belong to these sectors 7 companies listed in France, 7 in Germany, 8 in Spain, 13 in the UK and 7 in Italy.

**Figure 3.2 – Level of internationalization of Italian non-financial companies**



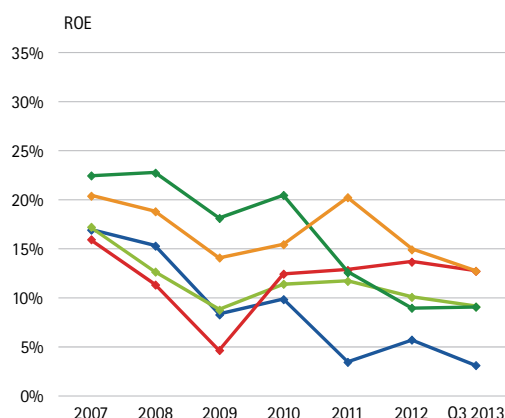
Source: calculations on Worldscope annualised data on the top 30 non-financial companies by capitalisation as of January 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. Ice-Istat and Eurostat data for world export shares; some sector are aggregated.

Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

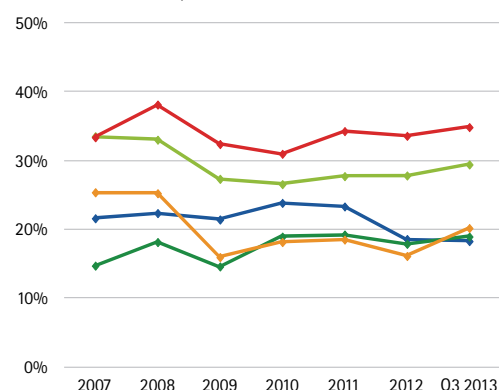
Among main European non-financial listed companies, profitability has kept declining for Italian and Spanish companies since 2007 and is generally much lower than six years ago. UK and German firms are currently the most profitable, with a ROE close to 13%, while Italian companies have lagged behind their competitors in recent years, with ROE falling from 17% in 2007 to 3% in the third quarter of 2013. In cyclical sectors, German companies are leading, while in defensive sectors UK companies have systematically outperformed their peers since 2007. As for the short-term debt ratio, German and French companies on average exhibit the highest incidence of short-term liabilities since 2007. The ratio has little changed for Spanish firms and decreased for Italian ones.

Figure 3.3 – Profitability and financial structure of major non-financial listed companies

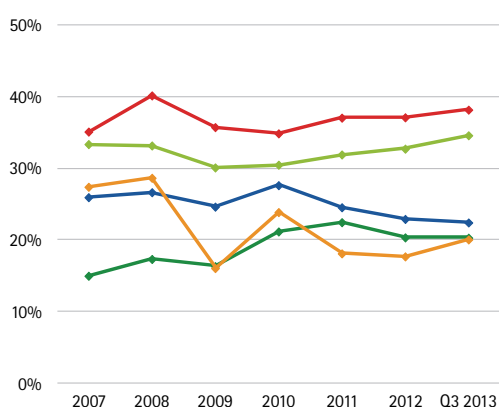
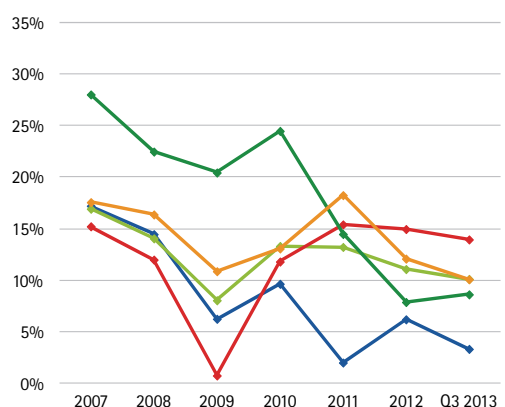
ALL SECTORS



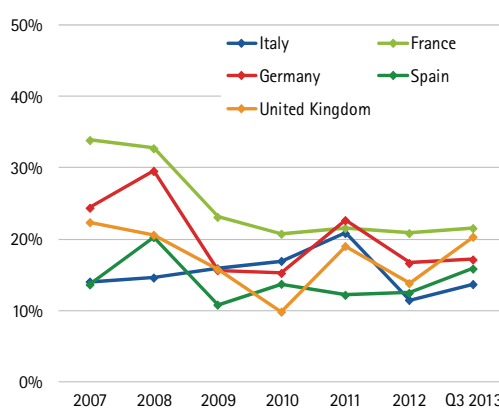
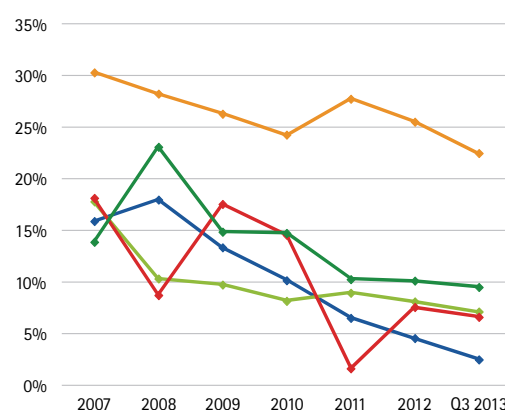
short-term debt / total debt



CYCLICAL SECTORS



DEFENSIVE SECTORS



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of January 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. The figures for the third quarter of 2013 are annualised and partly estimated.

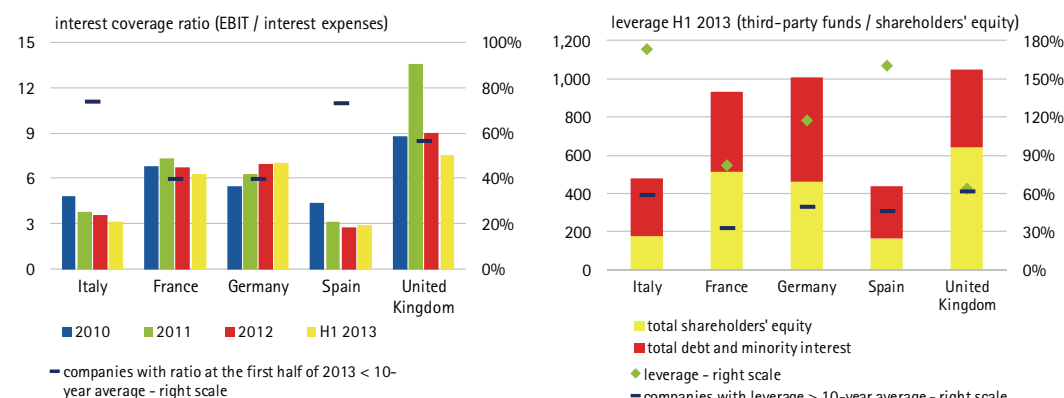
Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

Italian and Spanish non-financial listed companies still show higher levels of leverage (at 170 and 160% respectively) and lower interest expense coverage ratios (at around 3), also relative to 10 year averages. UK groups remain the best capitalized, followed by French and German firms.

Except for Germany, liquidity ratios have generally worsened for large non-financial listed companies in Europe, and look similar for Italian, Spanish and UK firms. Italian companies are also characterized by the lowest level (6.5%) of debt payout ratio.

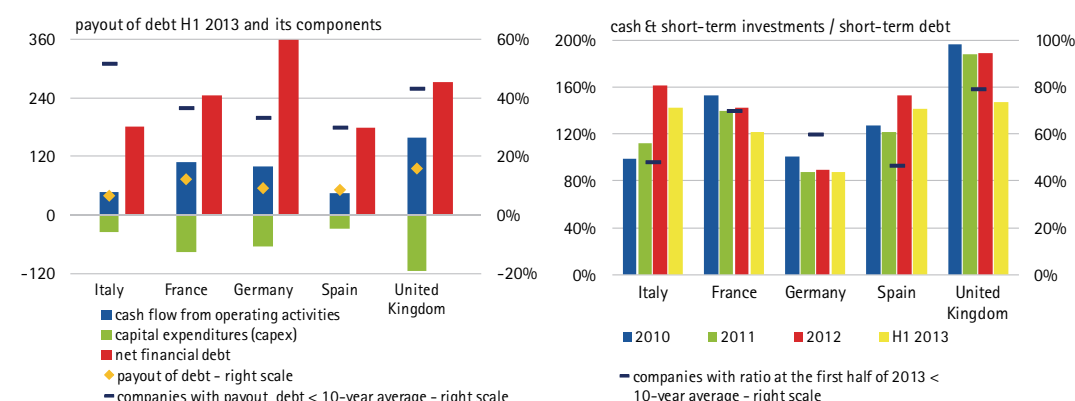
Since 2007, European bank loans, whose largest share is absorbed by real estate, have declined roughly proportionally in the main sectors. For large Italian listed companies, the contraction in bank funds has been more than compensated by a larger increase in bond issuances over the same period.

**Figure 3.4 – Interest expenses coverage and leverage of the largest non-financial listed companies in major European countries**  
(amounts in billions of euro)



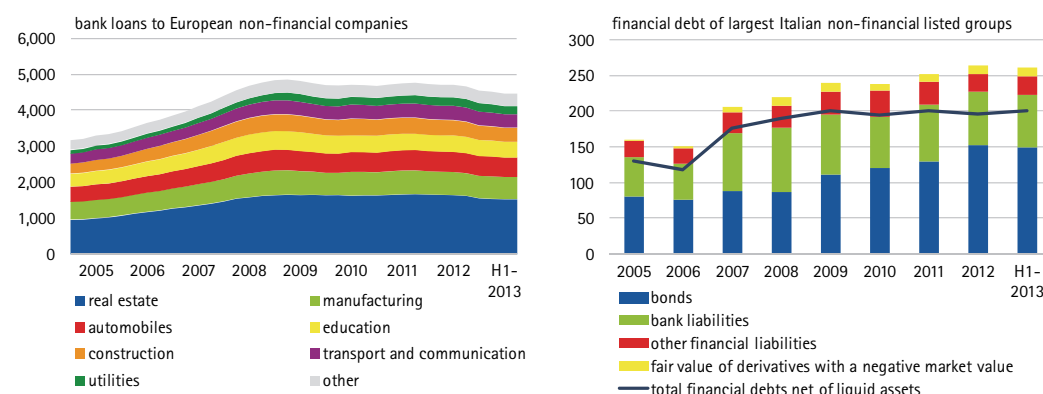
Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of January 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. The figures for the first half of 2013 are annualised.

**Figure 3.5 – Payout of debt and coverage of short-term debt 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 January 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. The figures for the first half of 2013 are annualised.

**Figure 3.6 – Bank loans to European non-financial companies and breakdown of financial debt for the largest Italian non-financial listed groups**  
(amounts in billions of euro)



Source: ECB for European bank loans and calculations on consolidated financial statements and interim reports of Italian listed groups. Breakdown by NACE sector of European bank loans is estimated.



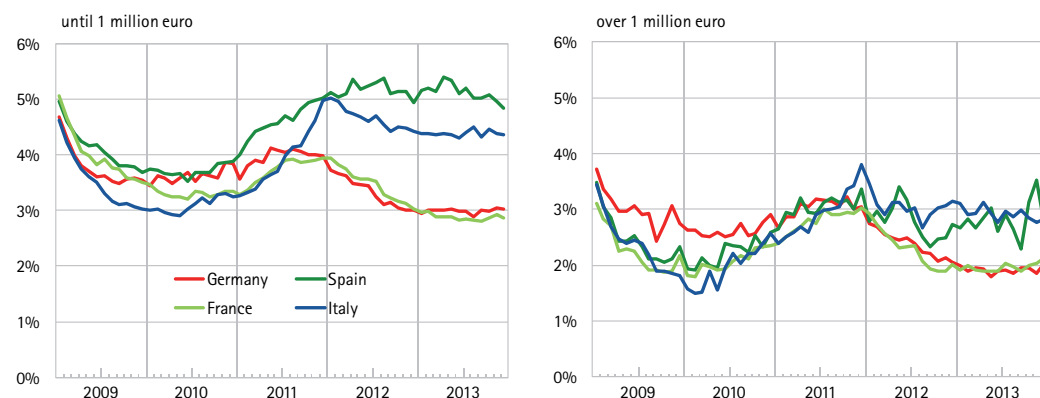
Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

One key factor affecting the relative position of non-financial companies in the euro area is the prolonged gap in banking interest rates across core and non-core countries, varying also according to loan size.

In Europe, expected default frequencies for non-financial companies remain positively correlated to tight credit conditions, and particularly so for small-medium sized companies in non-core countries.

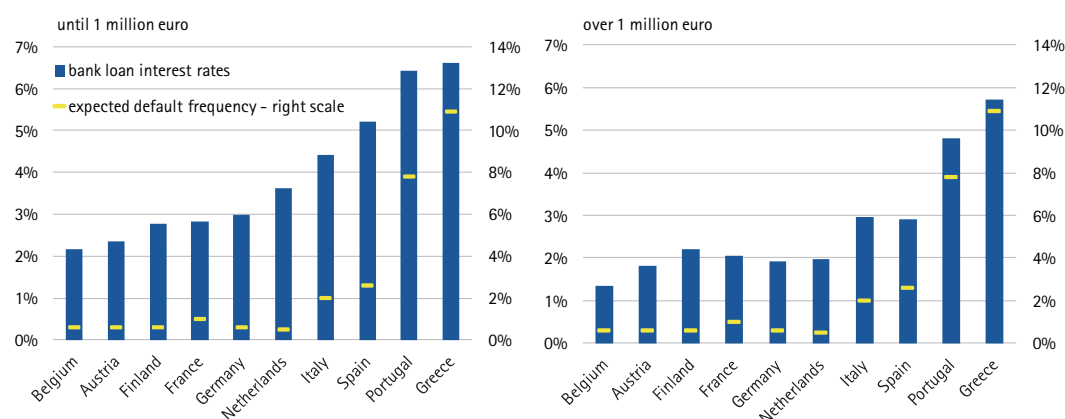
Overall, Italian companies still remain among the most fragile in terms of profitability and debt sustainability. French and German firms are among the most resilient in terms of turnover stability, although the former exhibit a higher incidence in short-term debt relative to 10-year averages.

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



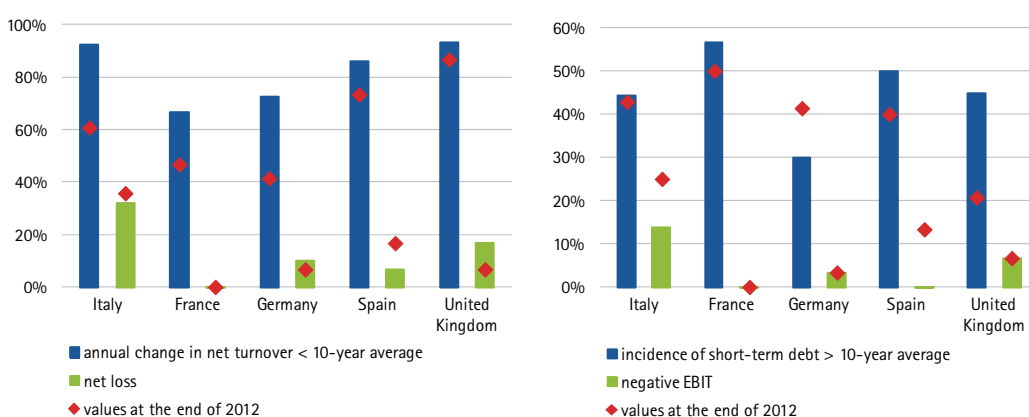
Source: ECB; interest rates on new loans.

**Figure 3.8 – Bank loan interest rates and expected default frequencies**  
(July 2013)



Source: calculations IMF based on Bloomberg, ECB and Moody's Credit Edge data.

**Figure 3.9 – Vulnerability of the largest non-financial listed companies in major European countries by profitability**  
(number of companies in percentage of the sample at the first half of 2013)



Source: calculations on Worldscope annualised data on the top 30 non-financial companies by capitalisation as of January 2014 for France, Germany, Spain and the UK, and on major Italian listed groups.

## Risk dashboards

### 1. Equity markets

### 2. Bonds markets

### 3. Non-financial companies

### 4. Banks

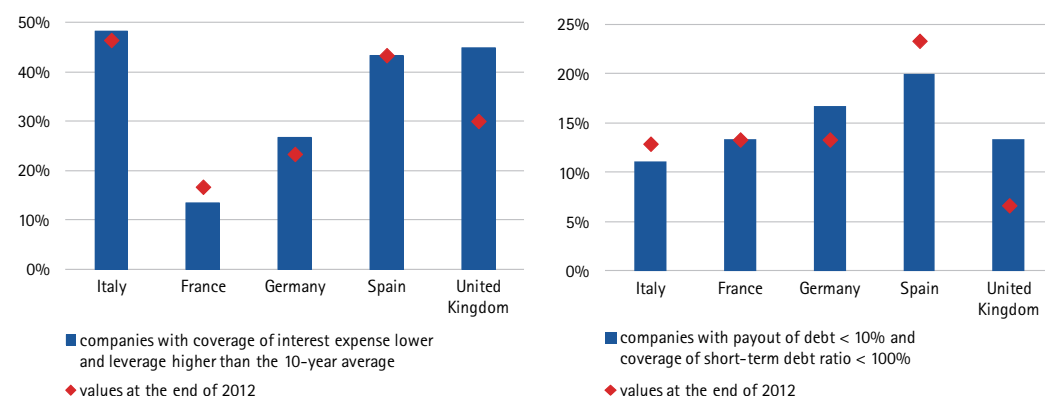
As for the financial structure, the percentage of German and UK most vulnerable companies has increased, while Spanish and Italian ones have slightly improved. However, they remain among the most exposed compared to 10-year averages, due to protracted low profitability and financial structure imbalances.

The greater vulnerability of the Italian non-financial companies relative to their European peers is also reflected in the higher observed CDS prices, which at the beginning of 2014 continue to be steadily higher than those of the euro area. However, the EDF implied risk of the Italian firms has kept declining towards the European average.

Rating implied by CDS prices and stock returns for Italian non-financial companies have slightly improved.

**Figure 3.10 – Vulnerability of the largest non-financial listed companies in major European countries by financial structure**

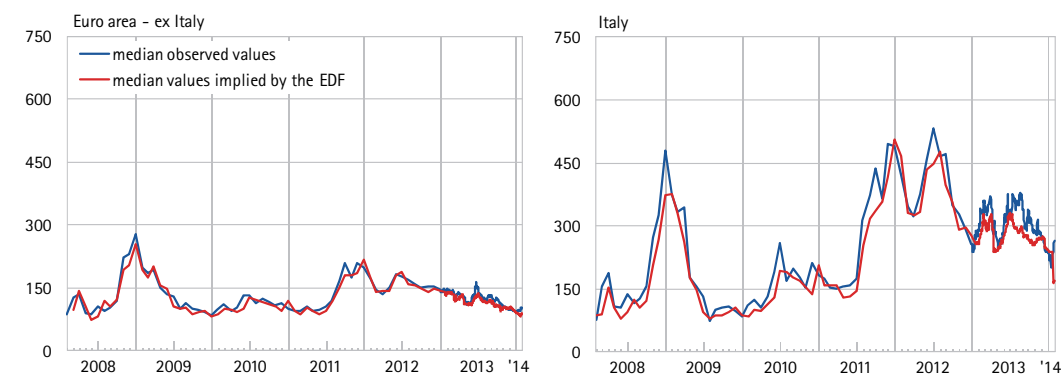
(number of companies in percentage of the sample at the first half of 2013)



Source: calculations on Worldscope annualised data on the top 30 non-financial companies by capitalisation as of January 2014 for France, Germany, Spain and the UK, and on major Italian listed groups.

**Figure 3.11 – Prices of 5-year CDS observed and implied by the expected default frequencies (EDF)**

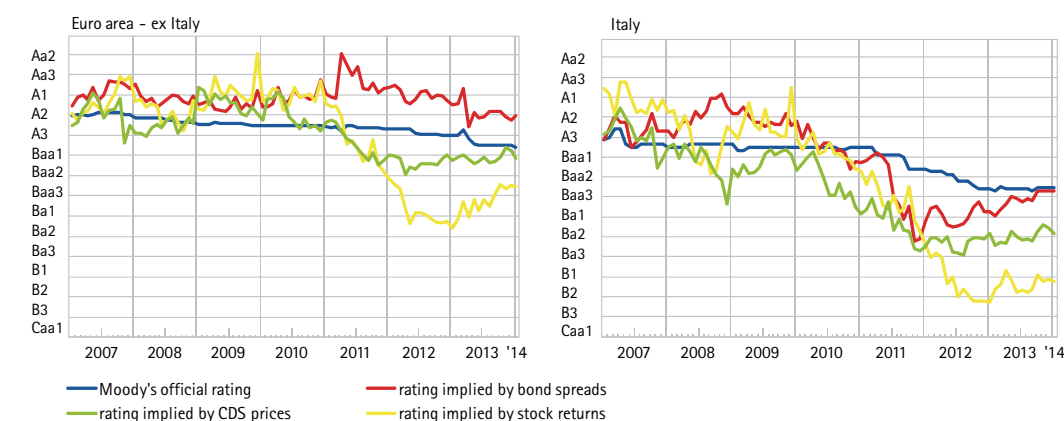
(basis point; daily data; 31/01/2008 – 31/01/2014)



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).

**Figure 3.12 – Rating implied by financial instruments prices**

(monthly data; January 2007 – January 2014)



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 non-financial companies included in the FTSE Mib.

## Risk dashboards

## 1. Equity markets

## 2. Bonds markets

## 3. Non-financial companies

## 4. Banks

## Banks

In the first nine months of 2013 the profitability of the largest banks remained subdued in Italy and Germany (Fig. 4.1). French banks showed more stable profits relative to risk-weighted assets (RWAs), while in the UK banks' profits increased thanks to a strong cost-cutting process. Revenues of the largest European banks were mainly driven by a recovery in profitability of trading activity and by an increase in net fees (only in Italy and Germany), while interest margins showed a strong decline depending on the persistent low level of short-term rates (Fig. 4.2). The negative impact of a low interest rate environment was higher for Italian and Spanish banks because of their business model.

The improvement in capital adequacy has proceeded for all major European banks but, in many cases, it has been the result of a significant decrease in RWAs (Fig. 4.3). In Spain and the UK the higher tier 1 ratios were driven both by a reduction in RWAs and by capital increases (which for Spanish banks is due mainly to public support).

As of 30 June 2013, credit quality kept deteriorating for Spanish and Italian banks, although at a slower pace (Fig. 4.5). In Italy, since 2007 almost all classes of doubtful loans have significantly stepped up both in gross and net terms. At the same time the coverage ratio has declined, with the exception of past due loans (Fig. 4.7).

Credit standards of European banks for loans to households and firms eased slightly in the last quarter of the year (Fig. 4.8). However, banks' lending continued to decline both to non-financial companies and to families in Spain and Italy, in the context of a persistently fragile economic activity and weak property market (Fig. 4.11). These trends were less marked in Italy, which recorded small signals of stabilization.

At the end of the third quarter of 2013, Italian, German and Spanish banks continued to show a high exposure to domestic sovereign bonds (Fig. 4.12). As of September 2013, domestic sovereign bonds holdings amounted to 10% of total assets for Italian banks (and close to that for their Spanish peers). Financial fragmentation (as measured by banks' foreign claims) has increased since the beginning of the sovereign crisis (Fig. 4.13 to 4.15). Over 2010-2013, the overall drop in cross-border exposures among European banks ranges from 10% (Spain) to around 30% (UK). However, in 2013 this trend seems to have weakened or reversed, as shown also by the downward trend in Target 2 imbalances, which have decreased by about 34 billion euros for Italy and 138 billion for Spain from their peak one year ago (Fig. 4.16).

Among the main European countries, the Italian banks continue to record the highest level of recourse to repos as source of short-term funding (around 4% of their assets, contrary to their French and German peers; Fig. 4.17). Reliance on ECB funding remains stable for Italian banks (roughly 6% of total assets), while it has declined for Spanish banks' towards a still significant 7% of total assets (Fig. 4.18). Risks stemming from some emerging countries appear to be quite low for European credit institutions, with the exception of Spanish and British banks whose exposures are very high both in absolute terms and relative to total assets (respectively 4% and 3%; Fig. 4.19).

In the second half of 2013 contagion of sovereign risk to banking risk (as measured by the dynamic correlation between CDS spreads) has declined in large eurozone countries (Fig. 4.20). Contagion among banks (as measured by the joint probability of default implied in CDS spreads) has fallen back to 2010 levels (Fig. 4.21). These trends are consistent with the perception of a lower systemic risk, which is also reflected in decreasing CDS spreads, especially marked for Italian banks (Fig. 4.22).

## Risk dashboards

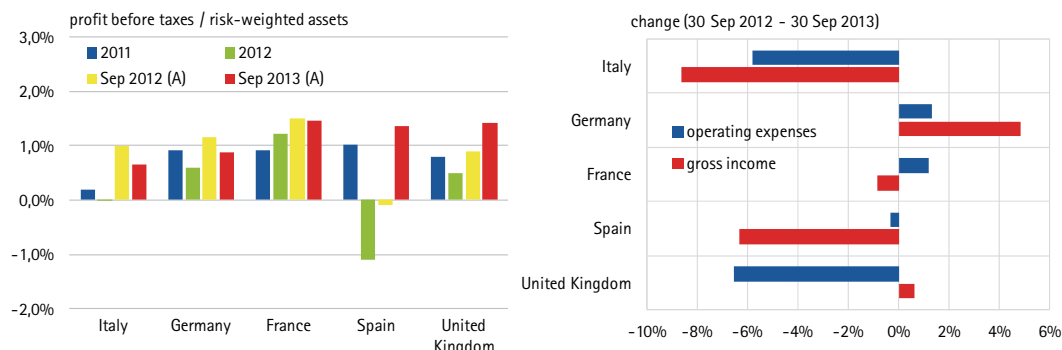
1. Equity markets
2. Bonds markets
3. Non-financial companies
4. Banks

In the first nine months of 2013 the profitability of the largest banks remained subdued in Italy, in spite of significant efficiency gains (operating expenses decreased by 6%), and in Germany. French banks maintain stable profits relative to risk-weighted assets (RWAs), while in the UK profitability increased thanks to strong cost-cutting.

Profitability of European banks is hampered by low short-term interest rates, which curb the interest margins. In the first half of 2013 net interest margin fell by 10% or more in all countries. Italian and Spanish banks are the most exposed because of their business model.

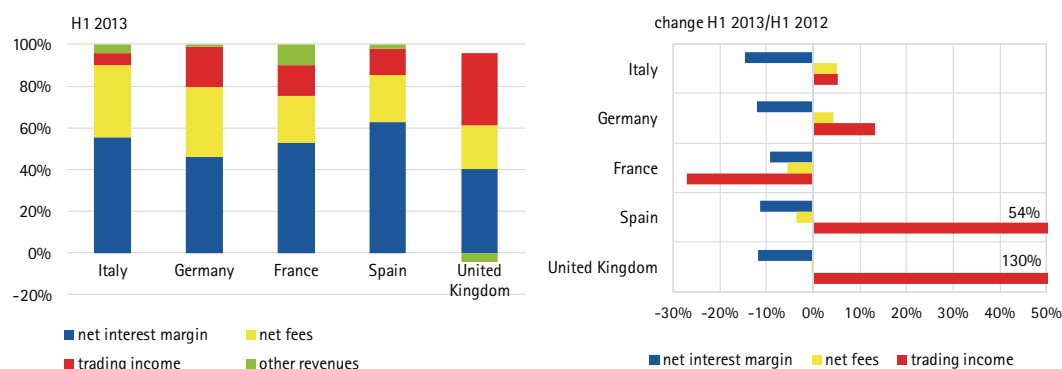
Capital adequacy strongly improved for all main European banks. In Spain and the UK this improvement was driven by a reduction in RWAs and an increase in capital levels. In the other countries higher tier 1 ratios resulted from a significant decrease in RWAs, due both to deleveraging and to the adoption of more sophisticated techniques in credit risk mitigation.

Figure 4.1 – Profitability of the main listed European banks



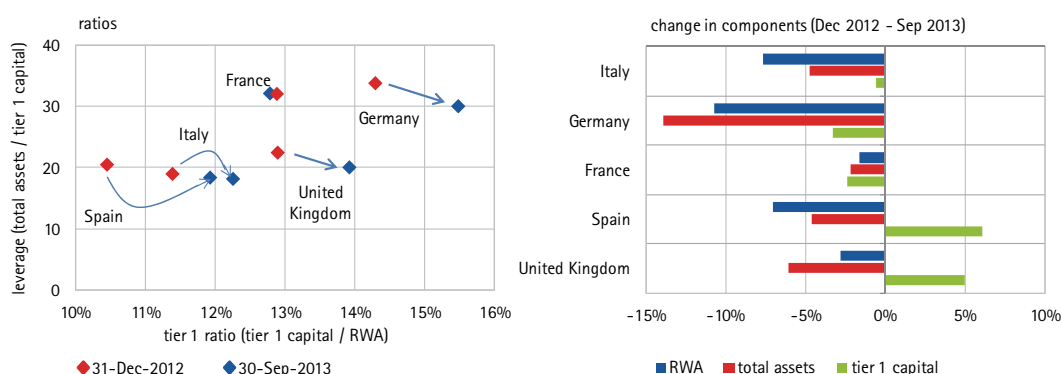
Source: calculations on data from consolidated annual reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin (delisted), Société Générale, Credit Agricole, BNP Paribas, Natixis, 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 figures as at 30 September are annualised and partly estimated.

Figure 4.2 – Revenues breakdown 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 (delisted), 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.

Figure 4.3 – Capital adequacy and leverage of the main listed European banks



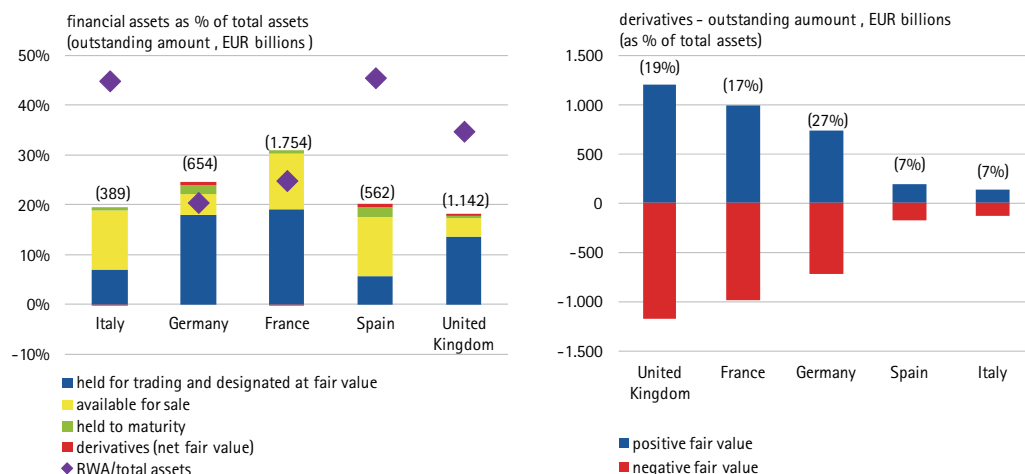
Source: calculations on data from consolidated annual and interim reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin (delisted), Société Générale, Credit Agricole, BNP Paribas, 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 30 September are partly estimated.

**Risk dashboards**  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
**4. Banks**

Italian and Spanish financial institutions structurally show a higher RWAs to total assets ratio (45%) compared to their European peers (20% for German banks and 25% for French ones). This disparity is explained by differences in holdings of financial assets and derivatives, along with variations in the calculation of RWAs across jurisdictions.

In the first semester 2013 credit quality kept deteriorating in Spain and Italy, although at a slower pace than in the first half of 2012. For the main Italian and Spanish banks non performing loans (NPLs) are close to 8% and 9% of total gross loans respectively, but the cost of risk is decreasing and the coverage ratio remains high (roughly 60%).

**Figure 4.4 – Financial assets and derivatives 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 (delisted), 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).

**Figure 4.5 – Credit quality of the main listed European banks**

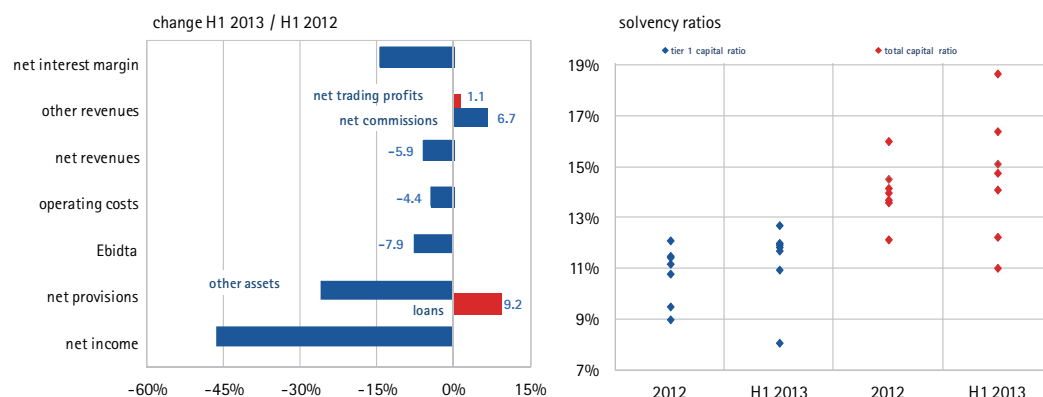


Source: calculations on data from consolidated annual reports of the main listed European banks (Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca, Deutsche Bank, Commerzbank, Deutsche Postbank, Landesbank Berlin (delisted), Société Générale, Credit Agricole, BNP Paribas, Natixis, 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.

**Risk dashboards**  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
**4. Banks**

During the first half of 2013 the largest Italian banking groups showed a significant reduction in all major components of income, with the exception of trading profits and net commissions. Capital adequacy ratios rose for almost all the groups.

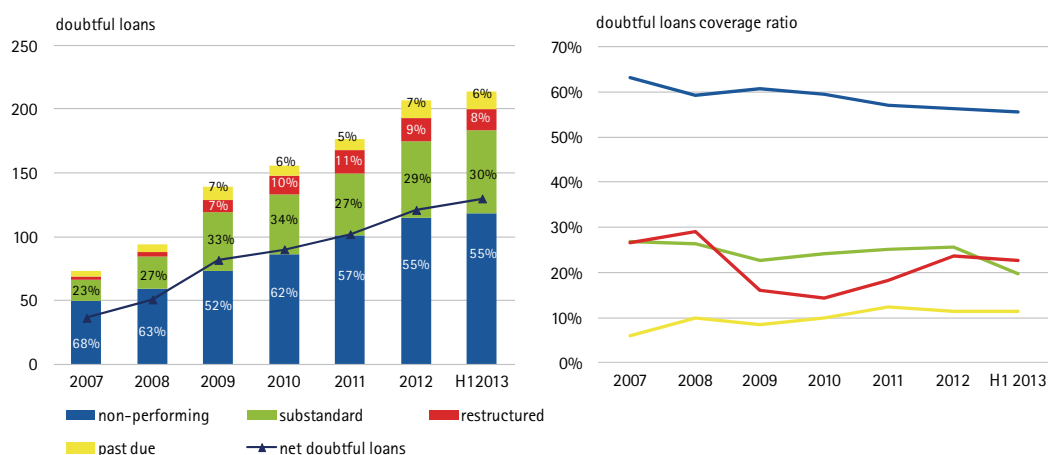
**Figure 4.6 – Income and solvency ratios of major Italian banking groups**



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

Since 2007 almost all classes of doubtful loans have significantly stepped up both in gross and net terms. At the same time the coverage ratio declined, with the exception of past due loans.

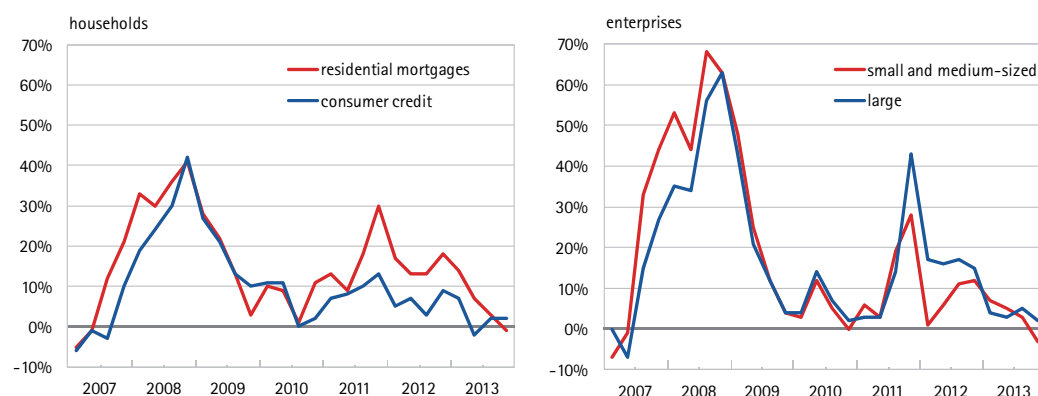
**Figure 4.7 – Credit quality of major Italian banking groups**



Source: calculations on data from consolidated annual reports of the 8 largest Italian banking groups.

Bank credit conditions for firms and households have improved in the second half of 2013.

**Figure 4.8 – Credit standard indicators for bank loans in the euro area**  
(quarterly data; 1Q 2007 – 4Q 2013)



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

## Risk dashboards

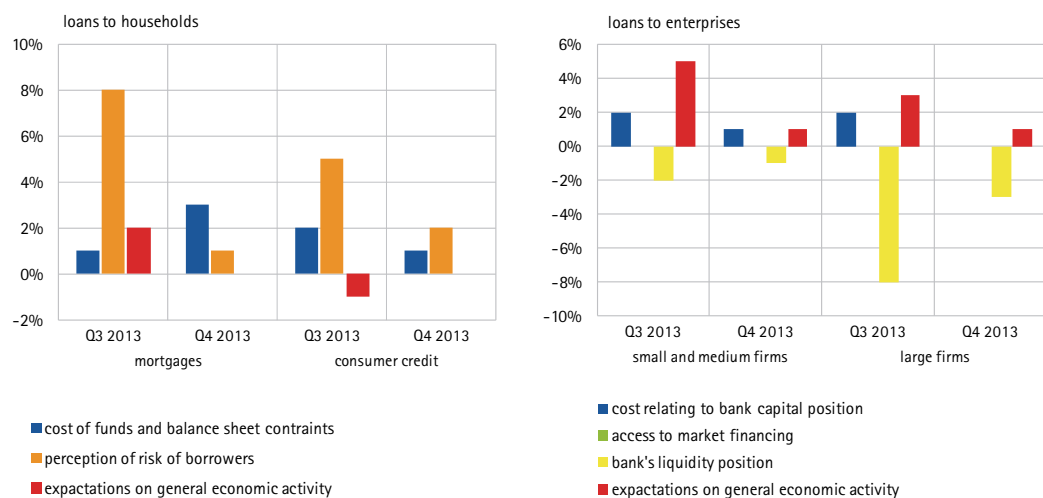
1. Equity markets
2. Bonds markets
3. Non-financial companies
4. Banks

In the last quarter of 2013 the perception of borrowers' risk and the expectations on general economic outlook played a minor role than in the previous quarter in explaining the tightening of banks' lending policies, respectively, to households and firms. Bank liquidity conditions contributed to a net easing in bank credit standards.

Given the persistently weak economic activity, loans to non-financial corporations are still declining in Spain and Italy (by 13% and 6% respectively).

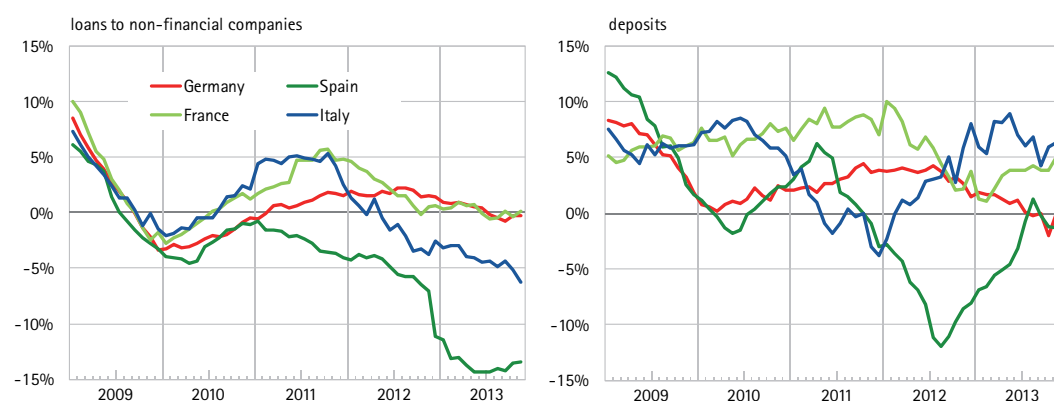
In Spain and in Italy the property market is still weak and bank's lending for house purchase keeps declining.

**Figure 4.9 – Factors explaining the tightening in credit standards in the euro area**



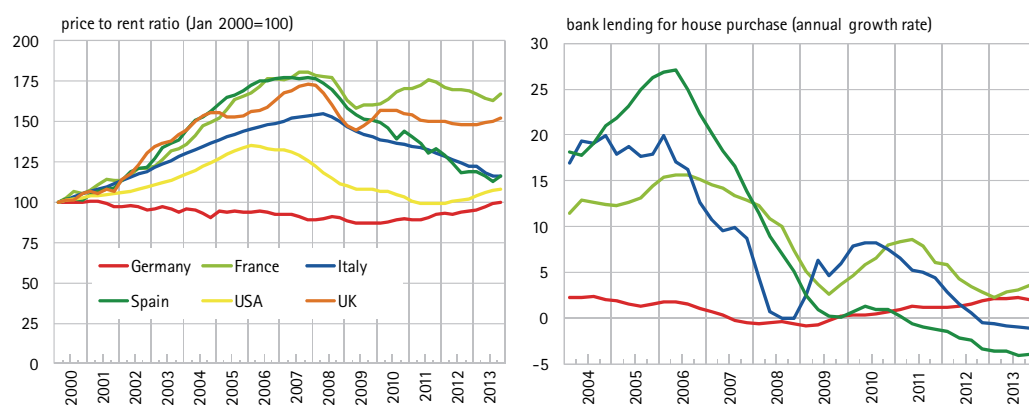
Source: calculations on data from ECB (Bank Lending Survey). Net percentage of banks reporting that a given factor contributed to a tightening in credit standards.

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



Source: ECB.

**Figure 4.11 – House prices and bank lending for house purchase in the main European countries**



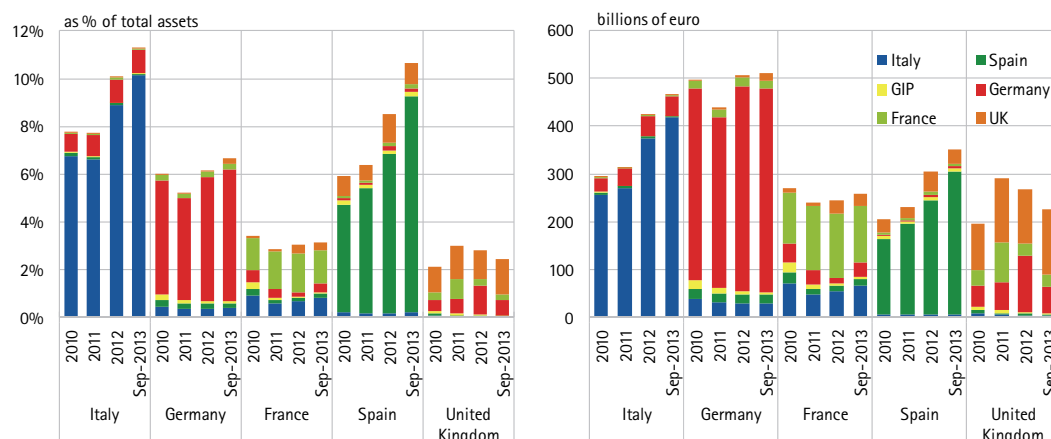
Source: calculations on Thomson Reuters, BIS and ECB data.



**Risk dashboards**  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

Italian, German and Spanish banks keep increasing their exposure to domestic sovereign bonds both as a percentage of total assets and in absolute value.

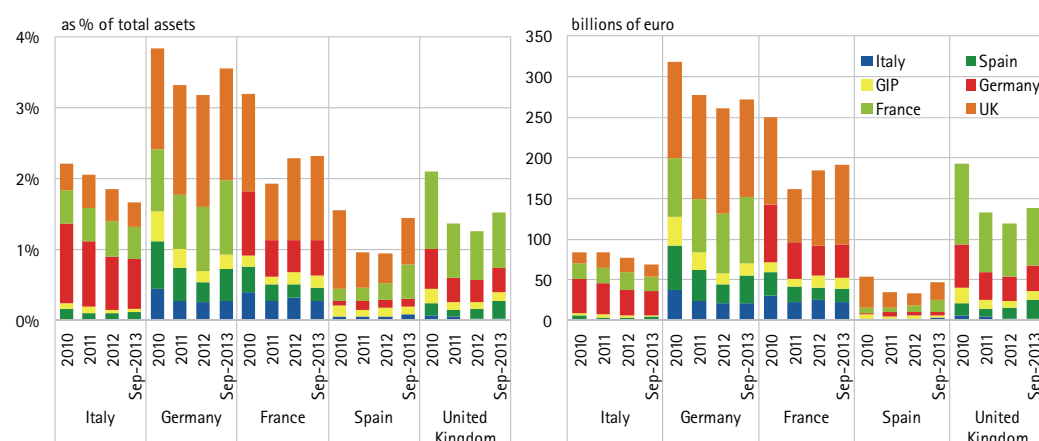
**Figure 4.12 – Exposures of the main European banks to domestic sovereign debt of some countries of euro area**



Source: Bank for 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.

The decline in cross-border exposures among European banks, which had been recorded since 2010, seems to have lessened during 2013. Over the last four years, German banks reduced their exposure to peripheral countries (Italy, Spain and the GIP). A significant drop is registered also for French banks' exposures vis-à-vis their German peers.

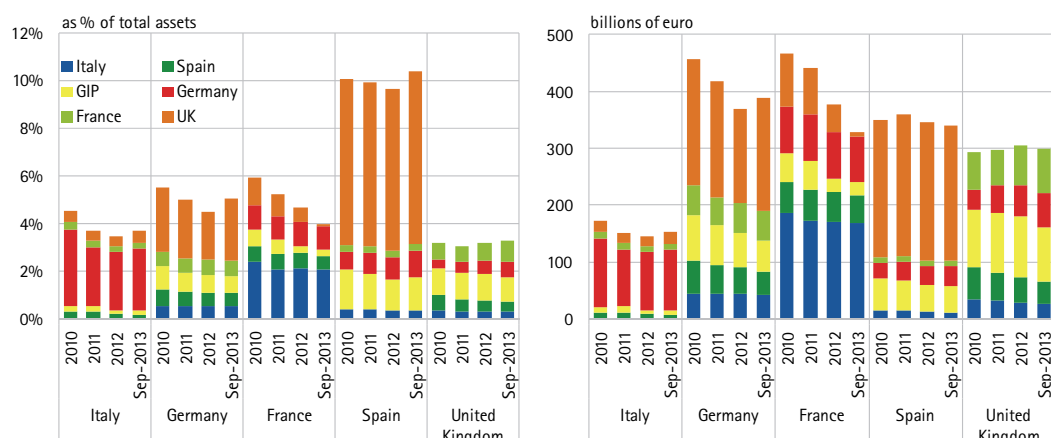
**Figure 4.13 – Cross-border exposures among euro area banks**



Source: Bank for 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.

Within the euro area banks' foreign exposures declined also with respect to the private non financial sector, although to a lesser extent than the rates recorded for the banking sector.

**Figure 4.14 – Foreign exposures of the main European banks to private sector of some countries of euro area**



Source: Bank for 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.



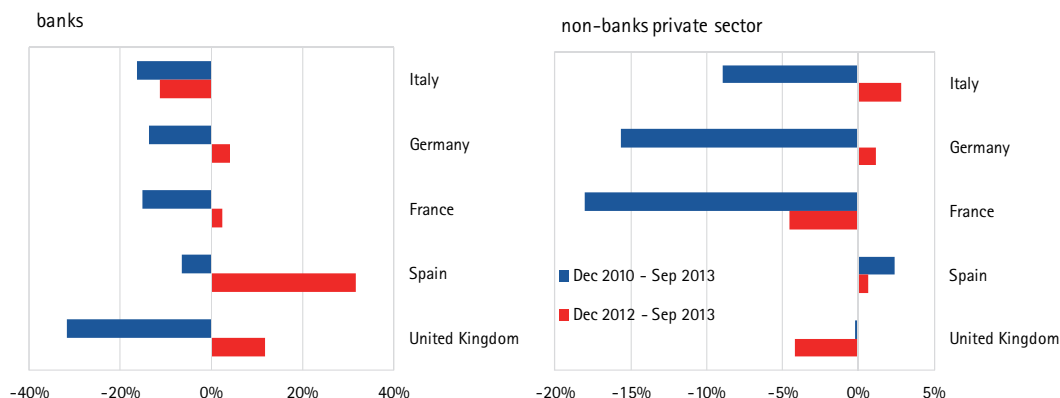
Risk dashboards  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

Overall cross-border banks' foreign claims (a measure of financial fragmentation) have fallen since the beginning of the sovereign crisis by a percentage ranging from 10% (Spain) to around 30% (UK). However, in 2013 this trend seems to have weakened or reversed.

The most recent improvements in financial fragmentation is confirmed by the downward trend in Target 2 imbalances. These have been reduced by about 34 billion euros for Italy and 138 billion for Spain from their peak one year ago. For all countries, Target 2 imbalances have returned to levels observed before the three-year LTROs in December 2011 and in March 2012.

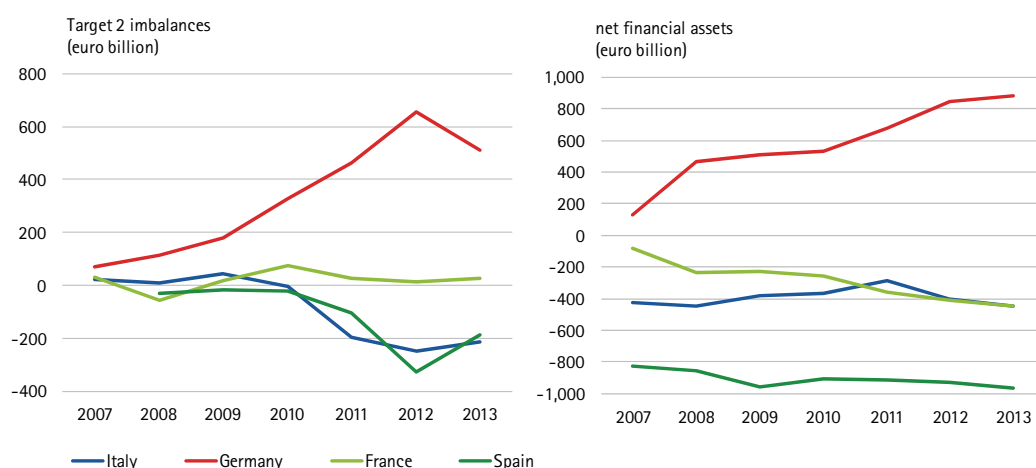
Italian banks continue to record a higher reliance on repo market, as a source of short-term funding, compared to their French and German peers. Interest rates remain very low, although slightly increasing since mid 2013.

Figure 4.15 – Change in foreign claims of banks vis-à-vis main European countries



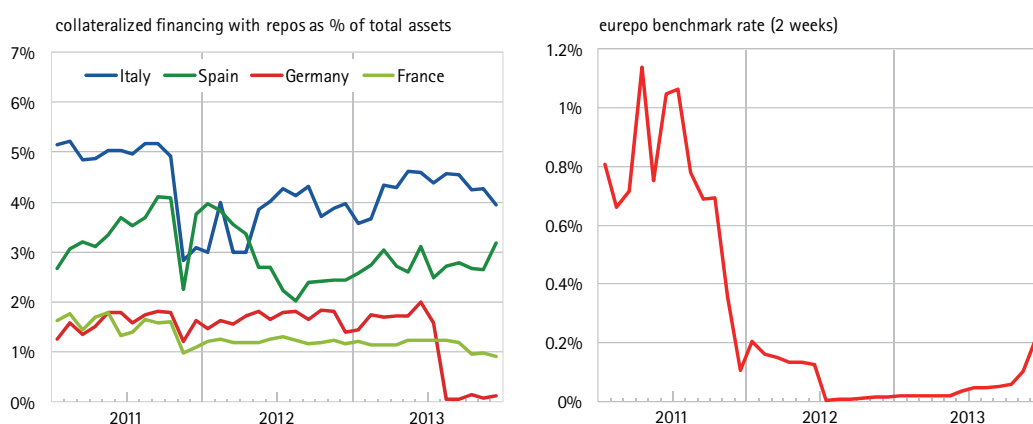
Source: Bank for International Settlements. Data on foreign claims of total banking system in Italy, Germany, France, Spain and the United Kingdom and do not include exposures to the country of origin. European countries for which foreign claims are available are Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, Spain, Sweden, the United Kingdom.

Figure 4.16 – Target 2 imbalances and financial inflows



Source: calculations on ECB and Central banks data.

Figure 4.17 – Collateralized financing with repos

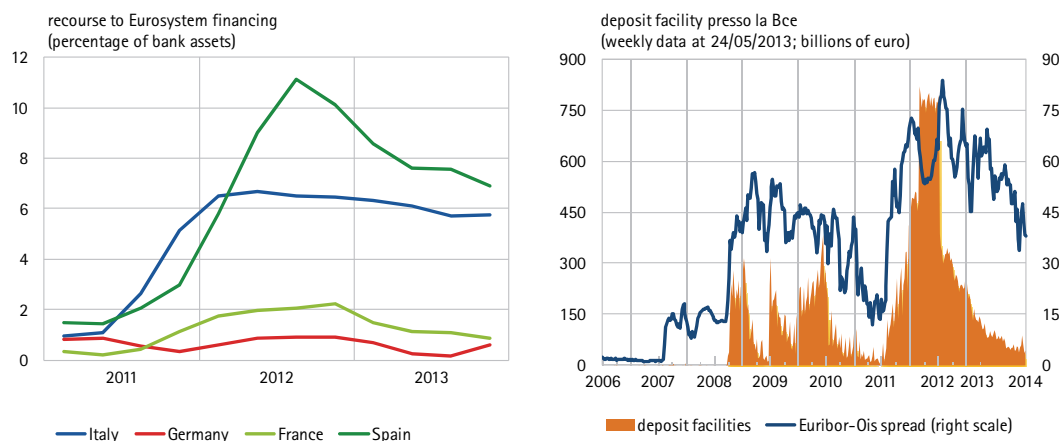


Source: calculations on Central banks data.

**Risk dashboards**  
1. Equity markets  
2. Bonds markets  
3. Non-financial companies  
4. Banks

Reliance on ECB funding remains stable for Italian banks (roughly at 6% of total assets), while it is declining for Spanish ones towards a still significant 7% of total assets. Liquidity deposited at the ECB continues to shrink.

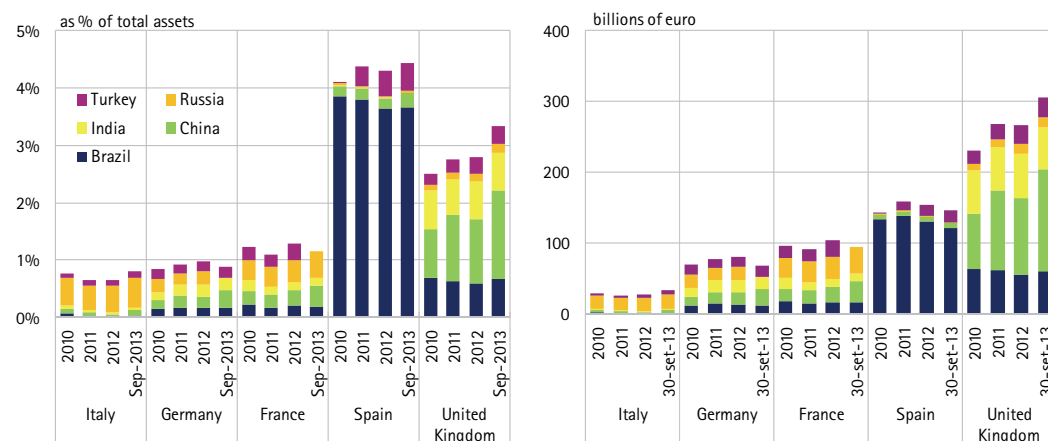
**Figure 4.18 – Reliance on Eurosystem by credit institutions of some euro area countries and ECB deposit facility**



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

Spanish and British banks are the most exposed to emerging markets (about 4% and 3% of their total assets, respectively). With the exception of the UK, the exposure to emerging economies have been stable for all major European banks since 2010.

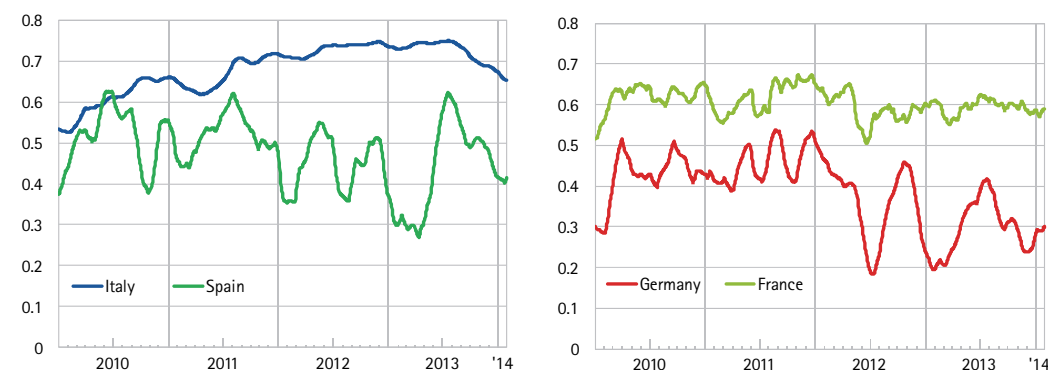
**Figure 4.19 – Foreign exposures of the main European banks to some emerging countries**



Source: Bank for International Settlements.

In the second half of 2013 contagion of sovereign risk to banking risk (as measured by dynamic correlation between CDS spreads) has declined in main eurozone countries. However, Italian and French banks still show the highest levels of the contagion indicator.

**Figure 4.20 – Dynamic correlation between sovereign CDS spreads and bank CDS spreads**  
(daily data; six month moving average; 01/04/2009 – 31/01/2014)



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

## Risk dashboards

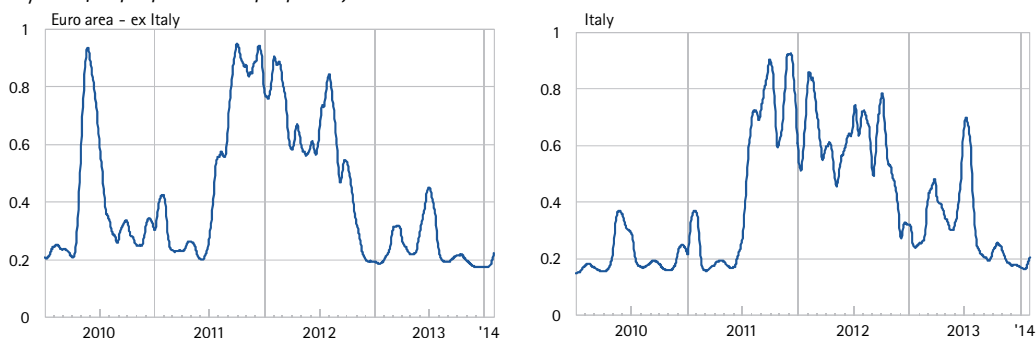
1. Equity markets
2. Bonds markets
3. Non-financial companies
4. Banks

In the second half of 2013, contagion among eurozone and Italian banks (as measured by the joint probability of default implied by CDS spreads) has declined back to 2010 levels. Since the beginning of 2014, the contagion indicator has recorded a slight increase in the wake of a worsening in market sentiment.

The decline in both observed and EDF implied CDS spreads in the second half of 2013 seems to have reversed at the beginning of 2014 both in Europe and in Italy. The gap between Europe and Italy keeps narrowing from the peak achieved at the end of 2011.

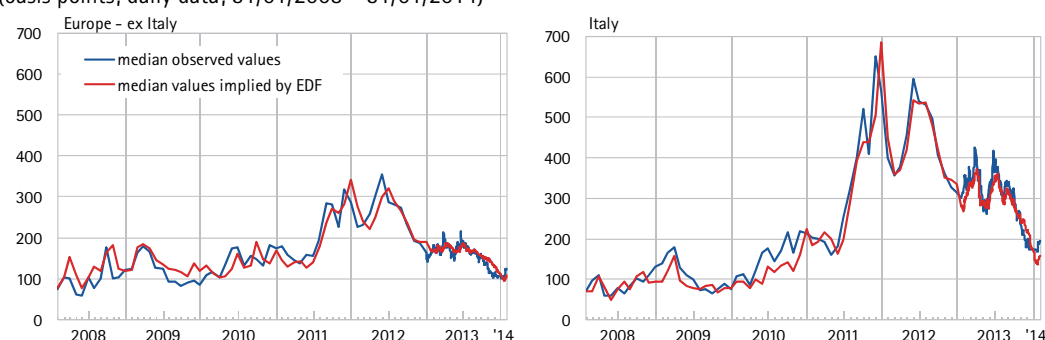
During 2013 the perceived credit risk as measured by rating implied in bond prices and CDS spreads improved for Italian banks.

**Figure 4.21 – Indicator of joint probability of default implied by CDS spreads**  
(daily data; 01/03/2009 – 31/01/2014)



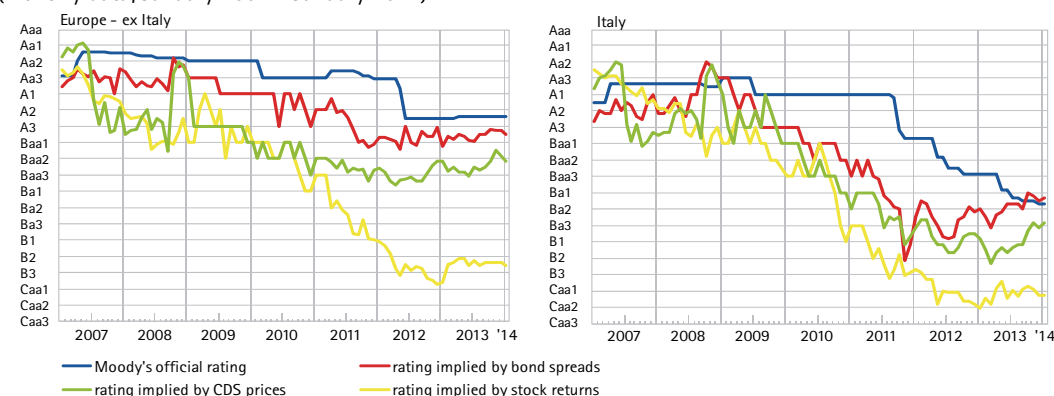
Italian bank sample includes Unicredit, Intesa Sanpaolo, Banca Monte Paschi, Banco Popolare, UBI Banca; for the euro area the following banks are taken into consideration Deutsche Bank, Commerzbank, Deutsche Postbank Berlin, Société Générale, Crédit Agricole, BNP Paribas, Natixis, BBVA, Santander, Caixa 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 Datastream data.

**Figure 4.22 – Average 5-year CDS prices observed and implied by expected frequency of default (EDF) for the main listed banks**  
(basis points; daily data; 31/01/2008 – 31/01/2014)



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 Europe, the banks taken into consideration are the following: Deutsche Bank, Commerzbank, Deutsche Postbank Berlin, Société Générale, Crédit Agricole, BNP Paribas, Natixis, BBVA, Santander, Caixa Bank, Banco Popolare, Banco de Sabadell, Barclays, HSBC, Lloyds e Royal Bank of Scotland.

**Figure 4.23 – Rating implied by financial instruments prices**  
(monthly data; January 2007 – January 2014)



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).