Statistics and analyses

Risk Outlook

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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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La congiuntura e i rischi

Nel 2014, gli indici azionari dei maggiori paesi avanzati hanno registrato andamenti eterogenei e discontinui. Fino ad agosto, Stati Uniti, area euro e Regno Unito hanno mostrato performance positive (con incrementi pari, rispettivamente, all'8%, 2% e 1%), mentre il Giappone ha sperimentato un lieve calo (attorno al 2%). Nell'area euro, a fronte di una leggera correzione al ribasso intervenuta sul mercato tedesco (-1%), i rendimenti azionari in Italia e Spagna sono cresciuti (del 7,8% e 8,2%, rispettivamente), pur continuando a rimanere ampiamente al di sotto dei livelli del 2007, in particolare nel settore bancario. Dall'inizio di settembre, invece, tutti i maggiori mercati hanno sperimentato una improvvisa inversione di tendenza, che nell'area euro ha portato a cali oscillanti tra l'8% e il 10% (dato al 15 ottobre 2014). La fiducia degli operatori è stata intaccata dal crescente clima di incertezza, segnalato da molti indicatori macroeconomici inferiori alle attese, dalla persistente debolezza della domanda interna e dalle conseguenti pressioni deflazionistiche in molti paesi europei. Le crescenti tensioni geopolitiche (tra cui quelle connesse alla crisi nell'est Europa e all'impatto, sull'economia europea, delle sanzioni alla Russia) e, più di recente, i segnali di rallentamento dell'economia tedesca costituiscono ulteriori fonti di preoccupazione. A partire da maggio, infatti, nell'area euro il *sentiment* dei mercati, stimato sulla base dell'andamento dei corsi azionari, ha mostrato una correzione al ribasso; tal correzione è stata più marcata in Italia dove, dopo il picco registrato a inizio anno, la fiducia degli investitori ha subito un brusco calo. In concomitanza con il peggioramento delle prospettive macroeconomiche, nel mese di settembre anche gli indicatori di contagio hanno sperimentato un rapido incremento.

Il livello estremamente contenuto dei tassi di interesse e l'elevata liquidità connessi a politiche monetarie accomodanti sollevano il rischio che i prezzi delle attività finanziarie raggiungano livelli non coerenti con il ciclo economico. Nei mercati azionari dell'area euro, gli indicatori di *mispricing* (stimati sulla base del tasso di crescita del Pil, dell'*earnings per share* e del premio al rischio) segnalano una valutazione delle imprese generalmente in linea con i fondamentali economici, sia nel settore non finanziario sia in quello bancario. Fanno eccezione gli istituti di credito italiani, per i quali le quotazioni di mercato risultano superiori a quelle teoriche, probabilmente per effetto di aspettative positive circa le prospettive del sistema bancario italiano alimentate anche dalla "pulizia" dei bilanci effettuata in vista dell'attuazione del *Single Supervisory Mechanism* (SSM) e dagli aumenti di capitale realizzati nella prima metà dell'anno.

Nei mercati obbligazionari *corporate*, prosegue la dinamica discendente dei rendimenti in tutti i settori e tutte le categorie di rischio, a fronte di una volatilità attestatasi a livelli storicamente molto bassi. Tale dinamica è risultata più accentuata in Europa, dove i rendimenti sono scesi attorno al 2% per i titoli con rating BBB e attorno all'1% per quelli con un merito di credito superiore. In questo quadro, nella prima metà del 2014 le emissioni di obbligazioni *non-investment grade* (ossia con rating inferiore a BBB) da parte di imprese

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europee sono aumentate rispetto allo stesso periodo dell'anno precedente, portandosi al 26% del totale (circa 20% nel 2013).

Con riferimento al mercato secondario dei titoli pubblici, rispetto all'inizio dell'anno, tutti i principali paesi dell'area euro hanno assistito a una significativa riduzione dei rendimenti su tutte le scadenze e, in misura più accentuata, su quelle a lungo termine. Tale tendenza si è accompagnata a una generalizzata riduzione del rischio sovrano percepito dai mercati, come confermato anche dai rating impliciti nell'andamento dei rendimenti obbligazionari e dei prezzi dei CDS, attestatisi su livelli superiori al rating ufficiale dell'agenzia Moody's.

La discesa dei rendimenti dei titoli pubblici e degli *spread* è stata in parte connessa alla ripresa economica di alcuni paesi periferici dell'area euro: in particolare, Irlanda e Portogallo hanno terminato il programma di aiuti concordato a livello europeo e sono ritornati sui mercati dei capitali, mentre la Spagna ha perfezionato la ristrutturazione del sistema bancario domestico avviata grazie ai fondi di salvataggio europei. L'impatto maggiore è riconducibile, tuttavia, all'annuncio da parte della BCE delle ulteriori misure non convenzionali, ossia le prime due TLTRO e i programmi di acquisto di ABS e obbligazioni bancarie garantite: tali operazioni dovrebbero comportare una nuova espansione del bilancio della Banca centrale, dopo la contrazione di circa 1.000 miliardi di euro connessa al rimborso anticipato dei fondi erogati in occasione delle LTRO condotte nel 2012. Infine, la dinamica dei rendimenti delle obbligazioni governative è ascrivibile anche alle crescenti tensioni geopolitiche, a fronte delle quali è cresciuta la propensione a investire in strumenti percepiti a basso rischio, quali i titoli di Stato.

Nella prima parte dell'anno, la redditività delle maggiori banche europee rispetto agli attivi ponderati per il rischio è aumentata, dopo il calo del 2013 ascrivibile alle significative svalutazioni di crediti dubbi e avviamento effettuate dagli istituti di credito in vista dell'*Asset Quality Review* e dello stress test dell'EBA. Nello stesso periodo l'adeguatezza patrimoniale si è ridotta per tutte le maggiori banche, sebbene i nuovi coefficienti di solvibilità non siano pienamente comparabili con i precedenti a causa dell'entrata in vigore, da inizio anno, della nuova disciplina prudenziale di Basilea 3, contenuta nel pacchetto di norme europee denominato CRD IV-CRR. Solo le banche italiane hanno mostrato un incremento del *tier 1 ratio*, anche grazie alle significative ricapitalizzazioni effettuate sul mercato (circa 9 miliardi di euro nei primi sei mesi del 2014).

In Italia e Spagna, si è assistito a un rallentamento del deterioramento della qualità del credito. Inoltre, per la prima volta dal 2007, sono migliorate le condizioni di accesso al credito sia per le famiglie sia per le imprese, come si evince dall'indagine trimestrale BCE. Si sono ridotte, infine, le disomogeneità tra paesi nell'accesso al credito bancario, circostanza che indica una graduale riduzione della frammentazione dei mercati europei. Nonostante questi segnali incoraggianti, in Italia e Spagna il credito effettivamente erogato alle imprese ha continuato a calare (del 4 e 10% rispettivamente a luglio 2014), mentre i tassi di

interesse sui nuovi prestiti, sebbene in lieve diminuzione, sono rimasti su livelli più elevati rispetto a Francia e Germania.

Nelle maggiori economie europee il credito bancario ha registrato un tasso di crescita prossimo allo zero nel primo semestre del 2014, dopo essere risultato in forte calo a partire dal 2011. Questo andamento riflette il persistere di aspettative sfavorevoli circa una rapida inversione ciclica, come emerge dalla dinamica degli indici di fiducia, che continuano a essere negativi nei principali paesi europei. La redditività delle maggiori imprese quotate non finanziarie resta ampiamente inferiore ai livelli del 2007, mentre rispetto ai *competitors* europei l'Italia continua a caratterizzarsi per il più alto numero di società in perdita. Inoltre, in tutti i principali paesi, più dell'80% delle grandi imprese mostra una variazione dei ricavi inferiore alla media degli ultimi 10 anni.

La fragilità e l'eterogeneità del quadro macroeconomico nei paesi dell'eurozona si riflette sui parametri di finanza pubblica, compromettendo la sostenibilità dei vincoli europei introdotti dal Patto di Stabilità e Crescita (PSC). Il PSC, modificato nel 2010 al fine di mitigare i rischi di ulteriori crisi del debito sovrano in Europa, richiede che il debito pubblico in eccesso rispetto al 60% del Pil venga ridotto ad un tasso annuo pari, approssimativamente, a un ventesimo del debito eccedente. Tuttavia questo vincolo potrebbe comportare correzioni significative della spesa pubblica in molti paesi europei, la cui economia risulta ancora troppo fragile. Con riferimento all'Italia, il pieno rispetto dei parametri introdotti dal Fiscal Compact comporterebbe il conseguimento di un avanzo primario pari al 4% del Pil (circa il doppio del valore storico e di quello stimato per il 2014) se il Pil crescesse in media dello 0,85% e il tasso di interesse fosse pari al 2,2%. In Francia, invece, l'avanzo primario dovrebbe risultare pari allo 0,7% del Pil (con un tasso di crescita del prodotto dello 0,95% e un tasso di interesse allo 0,5%) a fronte di un disavanzo storico dell'1,2% e di un disavanzo stimato per l'anno in corso superiore al 2%.

In conclusione, dopo aver sperimentato condizioni complessivamente favorevoli grazie soprattutto a politiche monetarie accomodanti, i mercati sono tornati ad esprimere maggiore cautela a fronte di un sistema finanziario europeo ancora esposto a molteplici rischi. La debole crescita economica, la fragilità delle finanze pubbliche e il persistere di premi al rischio estremamente contenuti potrebbero innescare, infatti, improvvise correzioni nei prezzi, compromettendo il sentiero di stabilizzazione che i mercati sembravano aver intrapreso nei primi mesi dell'anno.

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Trends and risks

In 2014, equity markets recorded uneven and discontinuous performances across the main developed countries. In the first eight months, US, euro area and UK showed positive performances (around 8%, 2% and 1%, respectively), while the Japanese stock index experienced a slight decrease (around 2%). Within the euro area the German equity market experienced a downward correction (-1%), whilst Italy and Spain exhibited an upward trend (7.8 and 8.2% respectively). Except for Germany, all general stock indexes, and even more bank indexes, remained far below their 2007 levels. Since the beginning of September, stock prices in major advanced countries have been showing an abrupt correction, with the main Eurozone indexes suffering drops ranging between 8% and 10% (at the 15th of October 2014). In the euro area, investors' confidence took a hit after the release of several disappointing economic data, displaying an economy struggling against subdued domestic demand in many countries, weak public and private balance sheets, low levels of bank lending and credit demand, geopolitical tensions (such as the impact of Russia-related sanctions) and the reluctance of firms to invest in an uncertain business environment. More recently, the evidence on German economy slowing down is a further concern for the robustness of the euro area outlook.

In particular, the market sentiment indicator, as implied by stock market returns, has suffered a moderate correction since May, whereas in Italy, after a notable peak in early 2014, it sharply plummeted driven by thwarted expectations of a strong recovery. Consistently with weakening activity and disinflationary pressures, signals of soaring financial contagion have rapidly strengthened in the first half of the year.

Low interest rate environment and high liquidity levels supported by accommodative monetary policies may push asset prices upward, far beyond their fundamentals. In the euro area, market valuation of non-financial firms of the main economies do not seem to be especially stretched, as shown by our estimates of a mispricing indicator taking into account the trends in domestic GDP, the earnings per share and risk premiums. This holds for bank stocks' as well, with the exception of Italy where prices above theoretical values and high price-earnings ratios might reflect expectations about a positive development of Italian banks' outlook. This sentiment was probably driven by the balance sheet clean-up, undertaken ahead of the start of Single Supervisory Mechanism, and by the significant recapitalization via equity achieved by the major banking groups in the first half of the year.

In fixed income markets, corporate bond yields are now at historically low levels for all sectors and risk categories. The phenomenon is more pronounced in Europe, where yields of BBB corporate bonds fell down at around 2%, and those with higher rating bonds at around 1%. The descending trend of bond yields caused an increase in the share of non investment grade bonds on total issuance in Europe, from 20% in 2013 to 26% in the first half of 2014.

As for government bonds, relative to the beginning of the year, all major euro area countries have experienced a significant yields' reduction along the entire maturity spectrum. This pattern was coupled with an improvement in the perception of the sovereign risk, as signaled by the bond and CDS implied ratings, whose levels rose further with respect to Moody's official rating. The lowering of bond yields and credit spreads was partly driven by the economic recovery experienced by some peripheral countries, which either exited their EU/IMF support programmes and returned to capital markets (Ireland and Portugal), or consolidated the domestic banking sector, after benefiting of the ESM support (Spain), but mostly by the ECB announcement of new non-conventional policy measures (two TLTRO for about 400 billion euro and an ABS and CB repurchase program, both aimed at re-expanding the ECB balance sheet, which had contracted by about 1 trillion euro because of the early repayment of the two LTRO conducted in 2012). The demand for safe assets prompted by the escalation of geopolitical risks also contributed to drive euro area sovereign bond yields to record-low level.

In the first half of 2014, profitability (relative to risk weighted assets) of the major European banks rose after the steep drop recorded in 2013, when pre-emptive balance-sheet cleanup and de-risking measures were undertaken ahead of AQR and EU-wide stress test. Over the same period, the capital adequacy coefficients dropped for all major European banks, following the phase-in of the new transitional national rules enacting the CRD IV-CRR package, although the 2014 figures are not directly comparable with the previous ones. The only exception were Italian banks, which in 2014 undertook a heavy recapitalization via equity issuance (about nine billion euros). In the first six months of 2014, credit quality deterioration has significantly slowed down, especially in Italy and Spain, for the first time since 2011. In this framework, credit conditions for bank loans to households and firms has marked a progress: in the second quarter of 2014, as shown by the ECB lending survey, the net percentage of banks reporting a tightening in credit standards has become negative for the first time since 2007. Moreover, as an early signal of a gradual reversion in the financial fragmentation within the euro area, cross-country disparities in the overall conditions of lending supply to firms have decreased. However, both in Italy and Spain bank loans to non-financial corporations continued to fall (by 4% and 10% respectively at July 2014), while interest rates (both for large and small-medium size loans) record a persistent, although narrowing, gap with respect to the rates charged in France and Germany.

Negative trends in the demand of credit, mirroring expectations of a slow recovery, are persistent. Business confidence keeps being negative in the main euro area countries. Non-financial firms' profitability is still far below the 2007 levels, and Italy continues to show the highest percentage of loss-making companies relative to their European peers. Moreover, in all the main European countries more than 80% of the largest non-financial companies show a revenues growth rate below the 10-year average, confirming the gloomy state of the euro area economic activity. As a consequence, the demand of credit of non-financial corporations keeps being very weak (recording growth rates close to zero),

although it shows a slight recovery after the significant contraction experienced since 2011.

The persistently feeble economic activity may feedback negatively on public finance sustainability in the Eurozone and the application of the Stability and Growth Pact (SGP) raises concerns on its implication for the recovery prospects. The SPG, amended after 2010 in order to ward further debt crises off, requires that the general government debt ratio in excess of 60% of GDP has to be reduced approximately by 1/20th of the excess over 60% per year. However, this provision may entail significant and unsustainable adjustments for the public finances of the main Eurozone countries, still under strain. As for Italy, fulfilling the Fiscal Compact requirements would imply a primary surplus equal to 4% of GDP (2 times higher than its historical value and the estimated value for 2014) in a baseline scenario with GDP growing by 0.85% and interest rate equal to 2.2%, while France should record a primary balance of 0.7% (if GDP growth were equal to 0.95% and interest rate were equal to 0.5%), against an historical average equal to -1.2% and an estimated value for 2014 greater than 2%.

In conclusion, after having experienced overall benign conditions mainly driven by the expectation of strong ECB expansionary measures, the euro area financial markets are now retracing back towards a more cautious mood, in the wake of a wide range of risks still challenging financial stability. Indeed, an abrupt price correction could be triggered by weak economic growth, persistent public finance fragility, low interest rates and risk premia.

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Risk dashboards

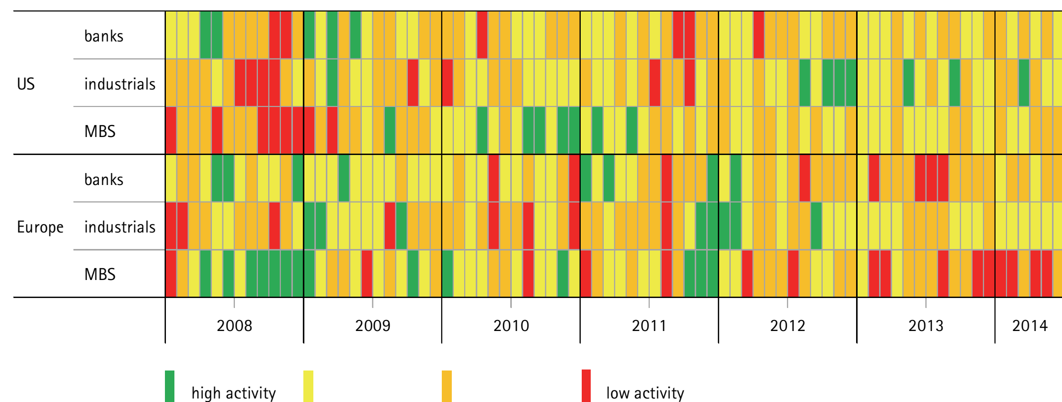
Sovereign risk indicator

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

Credit risk indicator

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

Gross issuance activity indicator by sector



Source: calculations on Dealogic data. The indicator is computed by comparing gross issuance of the period with its historical distribution and it is estimated by correcting for outliers.

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Equity markets

In 2014, equity markets recorded uneven and discontinuous performances across the main developed countries. In the first eight months, US, euro area and UK showed positive performances (around 8%, 2% and 1%, respectively), while the Japanese stock index experienced a slight decrease (around 2%; Fig 1.1). Within the euro area, the German equity market experienced a downward correction (-1%), whilst Italy and Spain exhibited an upward trend (7.8% and 8.2% respectively; Fig 1.2). Except for Germany, all general stock indexes, and even more bank indexes, remained far below their 2007 levels. Since the beginning of September, stock prices in major advanced countries have been showing an abrupt correction. In the euro area, Italian, German and French stock indexes suffered a sharp drop (by about 10%), followed by Spain (around 8%; data at the 15th of October). Investors' confidence took a hit after the release of several disappointing economic data, displaying an economy struggling against subdued domestic demand in many countries, weak public and private balance sheets, low levels of bank lending and credit demand, geopolitical tensions (such as the impact of Russia-related sanctions) and the reluctance of firms to invest in an uncertain business environment. More recently, the evidence on German economy slowing down is a further concern for the robustness of the euro area outlook. Due to the weak economic outlook, in Europe financial contagion has rapidly grown in the first half of 2014, while dropping in the third quarter after the ECB's announcements of the Targeted Long Term Refinancing Operations (TLTROs) and the purchase programme of ABS and covered bonds (Fig 1.4). The first TLTRO was conducted last September, when a total of 82.6 billions of euro was allotted to European credit institutions (in the same day, repayments of the three-year LTROs amounted to 20 billions).

Consistently with soaring contagion, during 2014 the investors' perception of extreme events risk recorded an upward trend both in the Eurozone and in Italy. During 2014, the indicator of herding behavior remained substantially stable at 2013 levels in the non-financial sector, signaling a general propensity not to undertake imitative strategies, whilst recording a new spike around mid-year in the banking sector (Fig 1.5). On the other side, information efficiency has shown a clear-cut further improvement across all sectors. The market sentiment indicator, as implied by stock market returns, has suffered a moderate downward correction since May, whereas in Italy, after a notable peak in early 2014, it sharply plummeted driven by thwarted expectations of a strong recovery (Fig 1.6). During 2014, both volatility and trading volume have fallen in the main advanced economies (Fig 1.7 e Fig 1.8). Liquidity conditions remained at high level in the euro area, while worsening in the Italian market (Fig 1.9). As for stock valuation, in 2014 price-earnings ratios showed a negative correction across bank and corporate sectors. For Italian and Spanish banks, such correction follows the significant upswing started in 2013 in the wake of the divergent pattern recorded by rising prices and falling earnings (Fig 1.11). At the end of September 2014, stock prices are in line with their theoretical values, estimated on the basis of earnings per share and risk premiums, across the major euro area countries (Fig 1.12 and Fig 1.13). The only exception was Italy, and in particular the Italian banking sector, where prices higher than theoretical values might reflect expectations about a positive development of Italian banks' fundamentals. This sentiment was probably driven by the balance sheet clean-up, undertaken ahead of the start of Single Supervisory Mechanism, and by the significant recapitalization via equity achieved by the major banking groups in the first half of the year.

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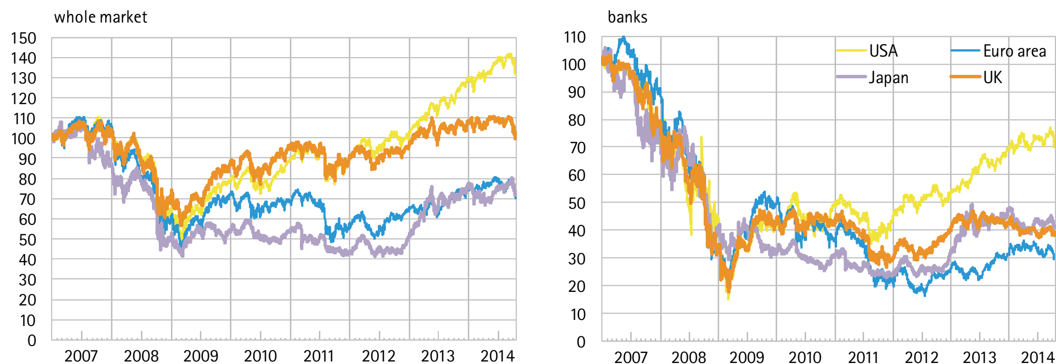
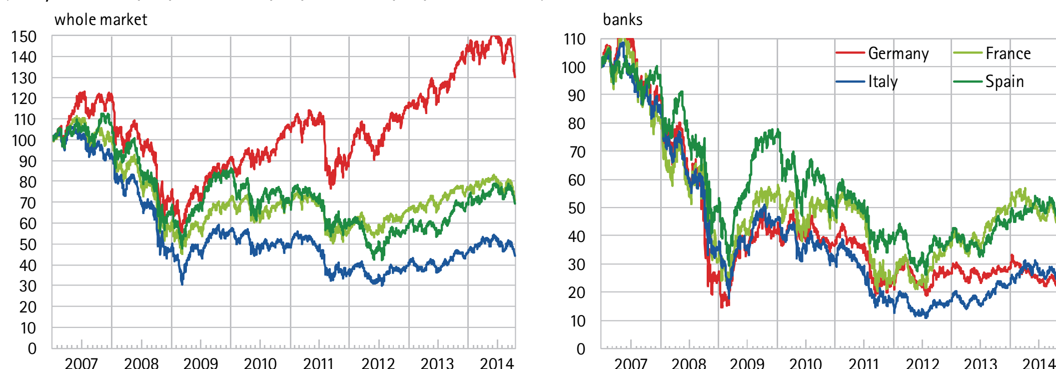
Since the beginning of September 2014, the financial markets of the main advanced countries have being suffering a sharp downward correction, marking a reversal with respect to the benign conditions experienced till then. In the euro area, this retracing mirrors the uncertain expectations of a sound recovery and the concerns raised by the evidence on German economy slowing down. All general stock indexes, except for Germany, remain far below their 2007 levels; this is particularly pronounced for the banking sector.

Figure 1.1 – Advanced countries stock indexes
(daily data; 01/01/2007 - 15/10/2014; 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.

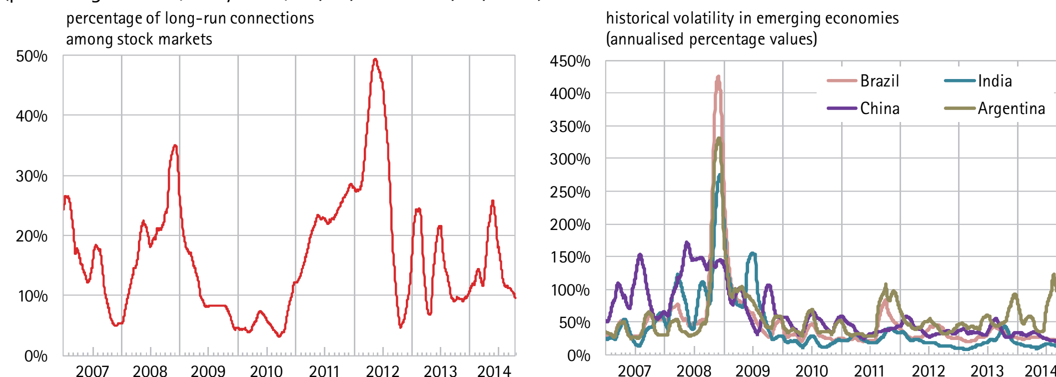
Figure 1.2 – Euro area stock indexes
(daily data; 01/01/2007 - 15/10/2014; 01/01/2007 = 100)



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.

In 2014, financial contagion at the global level has remained relatively low, although showing a moderate spike in June, and is now back to the early 2013 levels. Although historical volatility has reduced in almost all emerging markets, Argentina is experiencing a peak in volatility, though stock prices have doubled since the beginning of the year.

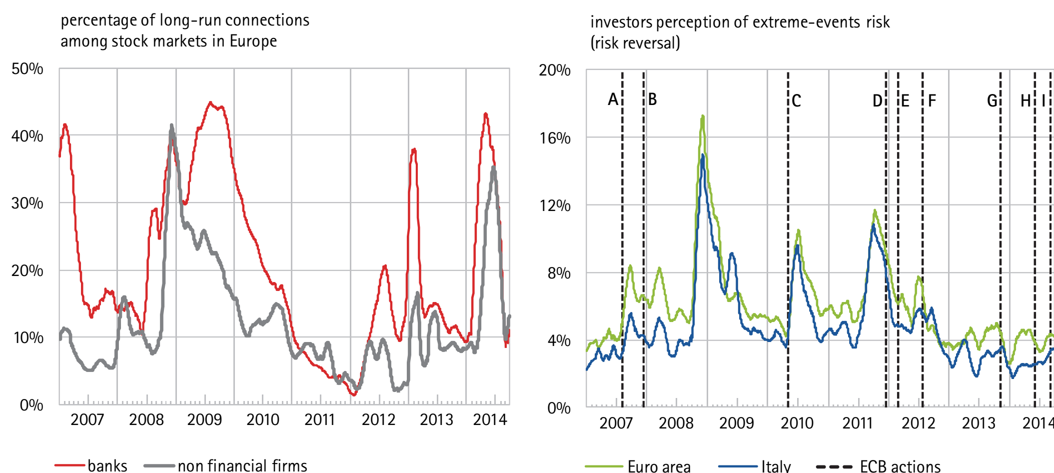
Figure 1.3 – Financial contagion at the global level
(percentage values; daily data; 01/01/2007 - 30/09/2014)



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.

In Europe, financial contagion has rapidly grown in the first half of 2014, while in the third quarter it dropped in the wake of the new non-conventional ECB monetary policy actions and the announcement of a purchase programme of ABS and covered bonds. Due to the weak economic outlook and to geopolitical tensions, during 2014 the investors' perception of extreme event risk recorded an upward trend both in the Eurozone and in Italy.

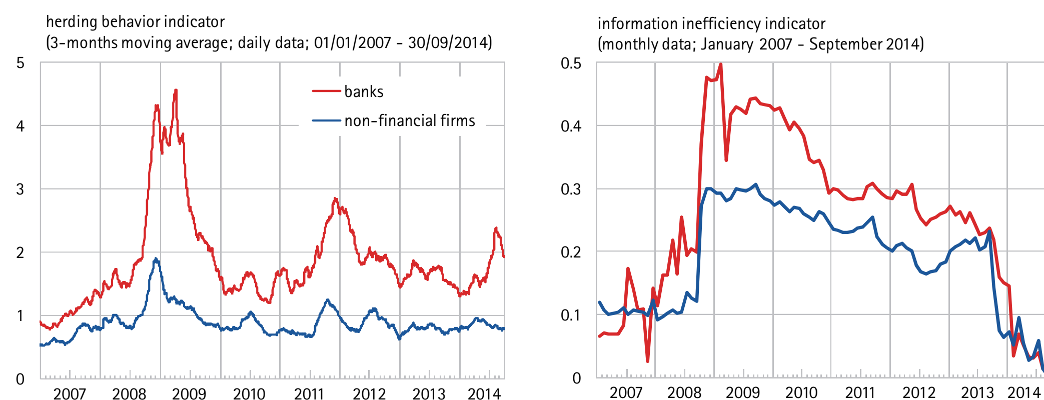
Figure 1.4 – Financial contagion and investors perception of extreme-event risk in Europe
(percentage values; daily data; 01/01/2007 - 30/09/2014)



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) interest rates cut (07/11/2013); H) interest rates cut and TLTRO announcement (05/06/2014); I) interest rates cut and ABSPP/CBPP3 announcement (04/09/2014). 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.

The indicator of herding behavior remained substantially stable at 2013 levels in the non-financial sector, signaling a general propensity not to undertake imitative strategies, whilst recording a new spike around mid-year in the banking sector. Information efficiency has shown a clear-cut further improvement across all sectors.

Figure 1.5 – Indicators of herding behavior and information inefficiency in the euro area stock markets



The indicator of herding behavior has been computed as the inverse of the cross-section standard deviation of stock market returns of 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.

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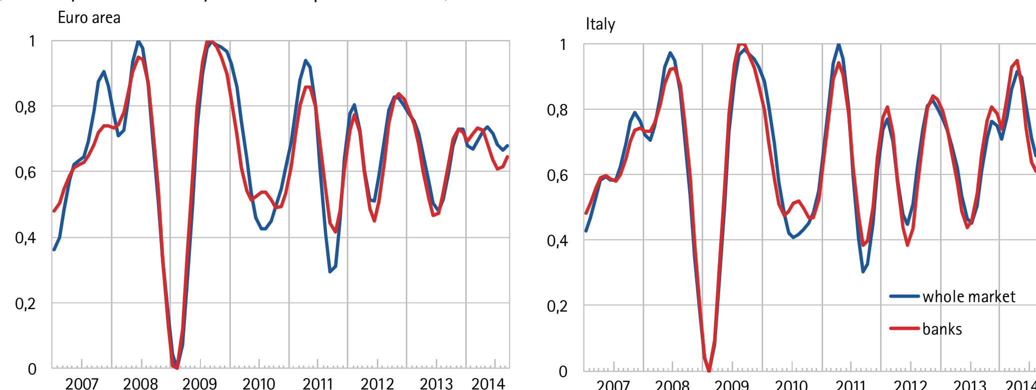
In the euro area, market sentiment (as implied by stock market returns) has been showing a moderate negative correction since May, denoting a pessimistic feeling about the economic outlook. In Italy, after a notable peak in early 2014, the market sentiment indicator has sharply plummeted in the last few months, when expectations of a strong recovery have been thwarted.

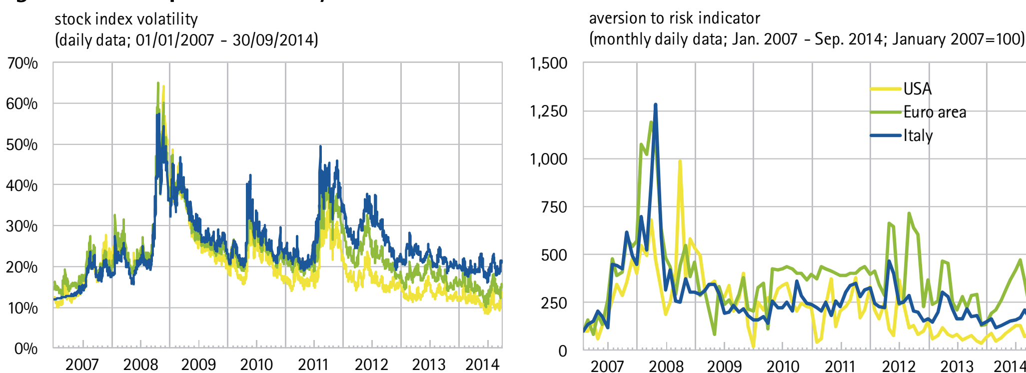
Figure 1.6 – Investors' market sentiment implied by stock prices in the euro area
(monthly data; January 2007 – September 2014)



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.

During 2014, volatility has fallen to the pre-crisis levels in US and Europe but in Italy has remained stable to higher values. In Italy, the risk aversion indicator, after a slight decrease in the first months of the year, has started to rise again in line with the fall in market sentiment.

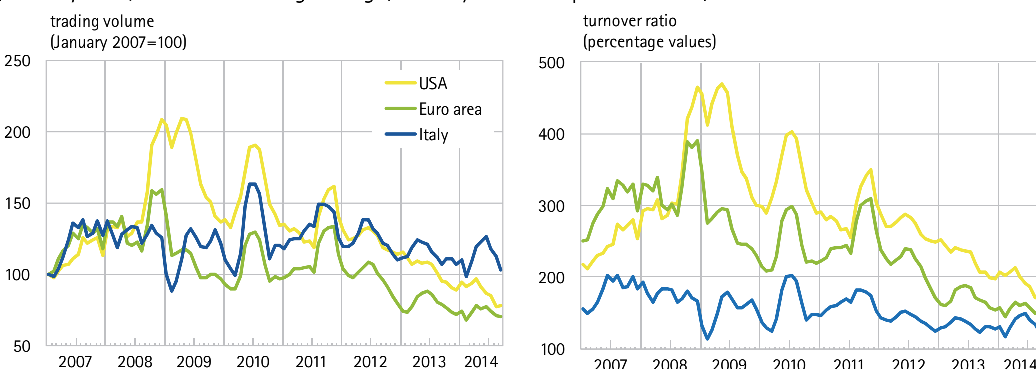
Figure 1.7 – Implied volatility and risk aversion indicator



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.

The reduction in stock market volatility correlates with lower trading activity in all major economies.

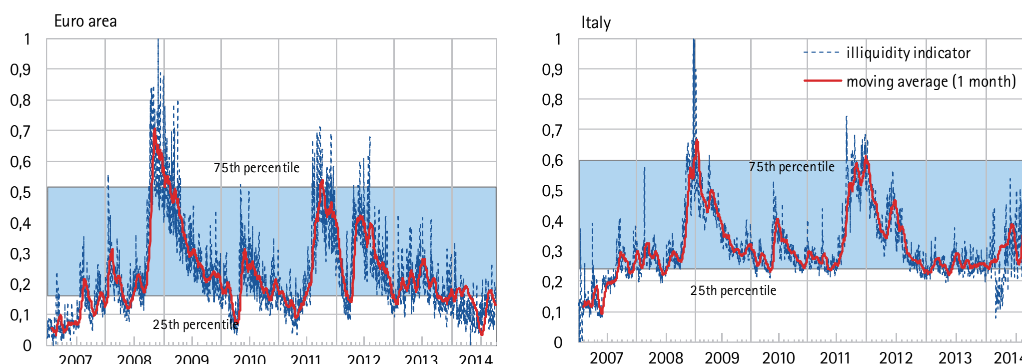
Figure 1.8 – Trading volume and turnover ratio
(monthly data; 4-months moving average; January 2007 – September 2014)



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.

Liquidity remains high in the euro area, while worsening in the Italian stock market.

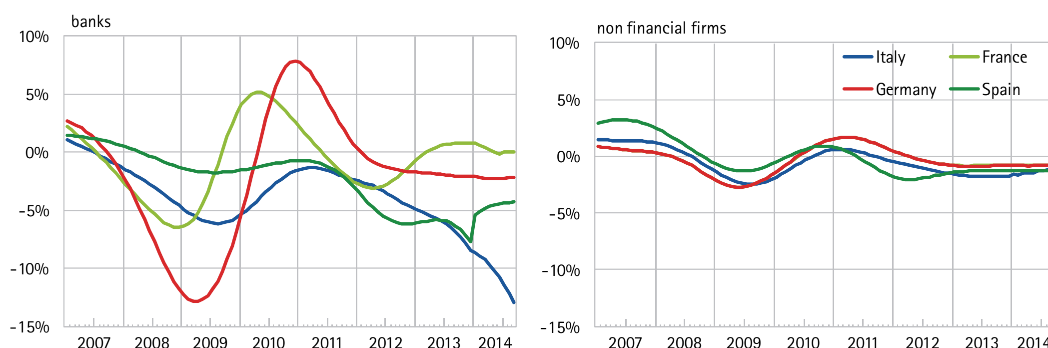
Figure 1.9 – Stock market illiquidity in the euro area
(daily data; 01/01/2007 - 30/09/2014)



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.

Actual growth rate of earnings per share remains negative for the main euro area countries. Spanish banking sector has recovered at a good pace, whereas Italian banks' EPS have been largely negative.

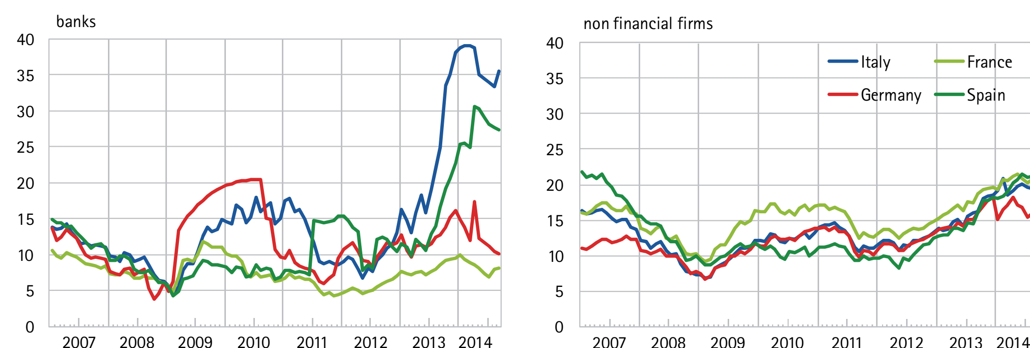
Figure 1.10 – Actual growth rate of earnings per share in the euro area
(monthly data; January 2007 - September 2014)



Source: calculations on Thomson Reuters Datastream data for main listed European banks (5 Italian groups, 5 French groups, 3 German groups, 7 Spanish groups). Corporate indicators are computed on each country Datastream non financial index.

In 2014, in the main euro area countries the banking sector experienced a negative correction of the price-earnings ratios. For Italian and Spanish banks, such correction follows the significant upswing started in 2013 in the wake of the divergent pattern of rising prices and falling earnings.

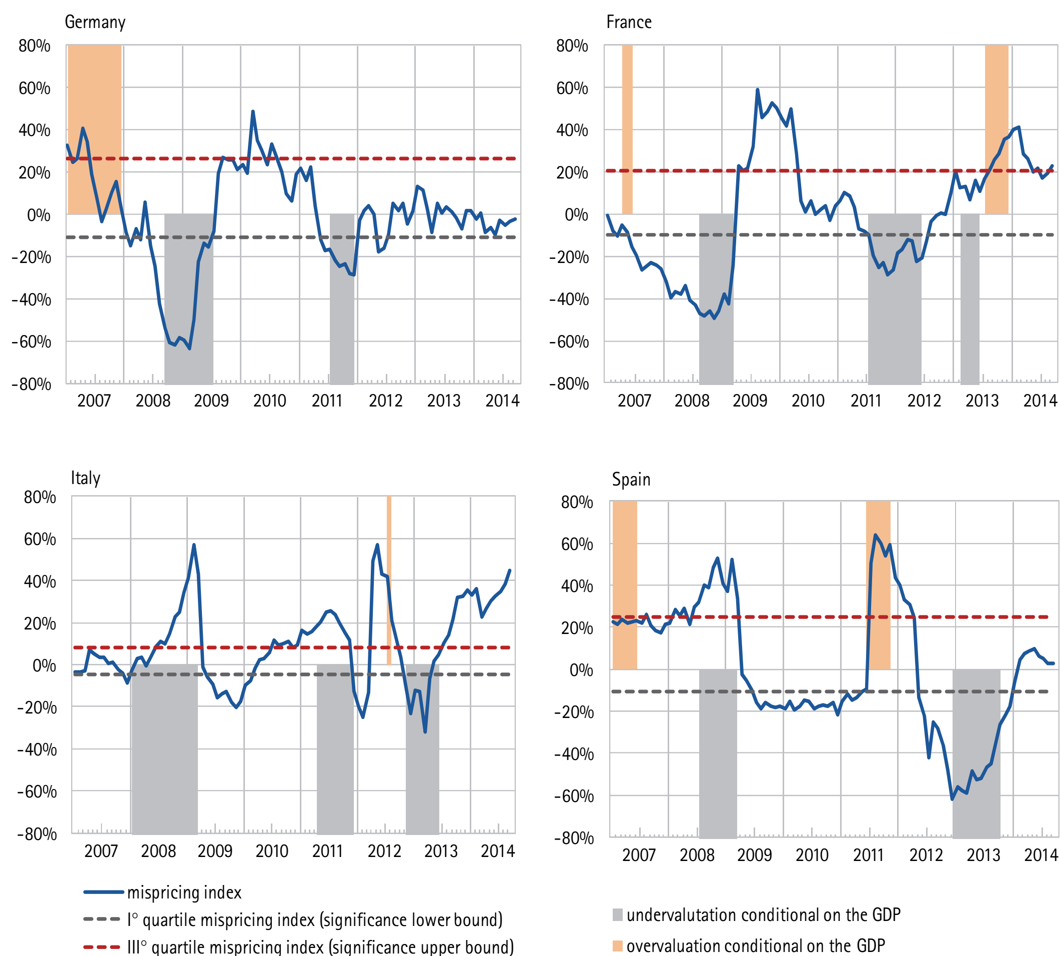
Figure 1.11 – Price-earnings ratio adjusted for the business cycle in the euro area
(monthly data; January 2007 – September 2014)



Source: calculations on Thomson Reuters Datastream data for main listed European banks (5 Italian groups, 5 French groups, 3 German groups, 7 Spanish groups). Corporate indicators are computed on each country Datastream non financial index. The price-earnings ratio is calculated on the earnings per share adjusted for the business cycle (Hodrick- Prescott filter).

In 2014, eurozone bank stock prices have moved in line with their theoretical values, estimated on the basis both of earnings per share and risk premiums and GDP trends. The only exception was Italy, where the upward trend in prices recorded till mid year, against falling earnings, possibly incorporated expectations about a positive development of Italian banks' fundamentals. Such sentiment was probably driven by the balance sheet clean-up undertaken ahead of the start of Single Supervisory Mechanism (SSM) in November, on one side, and by the significant recapitalization via equity achieved in the first half of the year, on the other side.

Figure 1.12 –Boom and bust episodes of bank stock price in the euro area
(monthly data; January 2007 - September 2014)



The figure plots two mispricing indicators: a micro indicator (blue line) and a macro indicator (shaded areas).

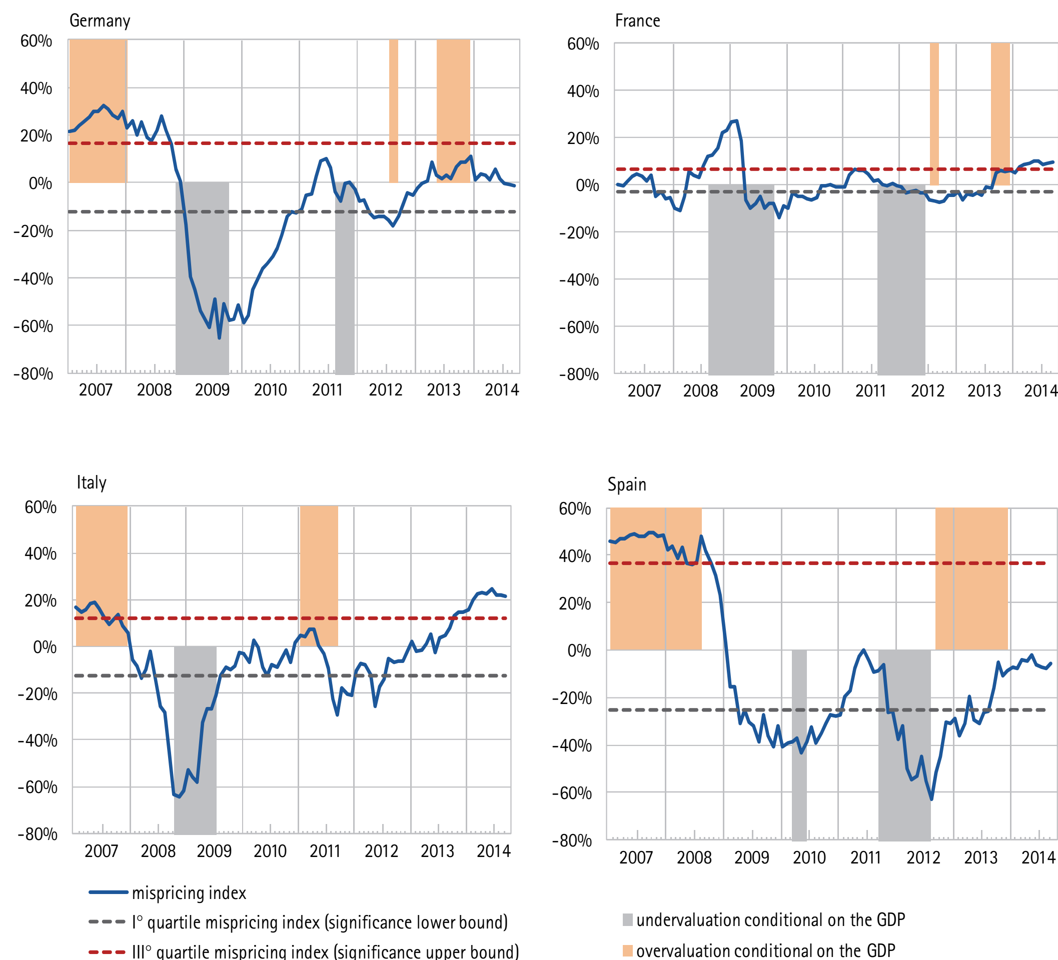
The micro mispricing index is the percentage difference between the observed price and the fundamental value (Campbell and Shiller, 1988; Nelson, 1999; De Bondt et al., 2010). The fundamental value is estimated by applying a VECM co-integration model on stock prices, earnings per share adjusted for the business cycle, and risk premium (earnings yield premium). The micro mispricing indicator signals undervaluation (overvaluation) if it is lower than its I° quartile (greater than its III° quartile).

The macro mispring indicator signals undervaluation (overvaluation) with respect to the business cycle. It 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 (grey area) if $p_t < p_t^{I°quartile,GDP}$; the indicators signals overvaluation (orange area) if $p_t > p_t^{III°quartile,GDP}$; white areas correspond to a statistically insignificant mispricing level (Quiros and Timmermann, 2001; Cassola and Morana, 2002; Detken and Smets, 2004).

Calculations are based on Thomson Reuters Datastream data for main listed European banks (5 Italian groups, 5 French groups, 3 German groups, 7 Spanish groups).

On the other hand, market valuation of non-financial firms do not seem to be especially stretched, as shown by the estimates of mispricing indicators conditional on domestic GDP trend, earnings per share and risk premiums.

Figure 1.13 –Boom and bust episodes of non-financial firms stock price in the euro area
(monthly data; January 2007 - September 2014)



The figure plots two mispricing indicators: a micro indicator (blue line) and a macro indicator (shaded areas).

The micro 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). The fundamental value is 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). The micro mispricing indicator signals undervaluation (overvaluation) if it is lower than its I° quartile (greater than its III° quartile).

The macro mispring indicator signals undervaluation (overvaluation) with respect to the business cycle. It 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 (grey area) if $\mathrm{p_t} < \mathrm{p_t}^{I°quartile,GDP}$; the indicators signals overvaluation (orange area) if $p_t > p_t^{III°quartile,GDP}$; white areas correspond to a statistically insignificant mispricing level (Quiros and Timmermann, 2001; Cassola and Morana, 2002; Detken and Smets, 2004).

Calculations are based on Thomson Reuters Datastream data for main listed European non-financial groups.

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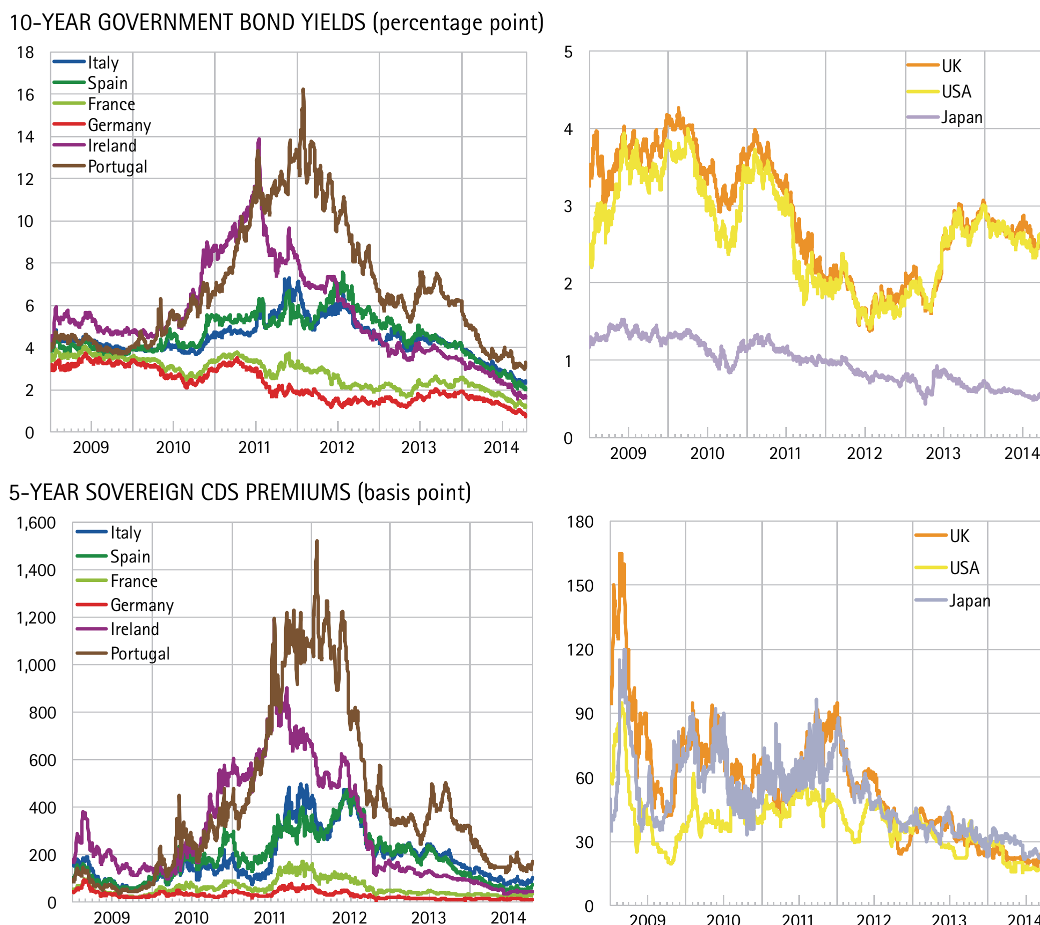
Bonds markets

During 2014, in the euro area 10-year government bond yields and CDS sovereign 5-year risk premia have continued their descending course, started in early 2012, towards record-low levels (Fig 2.1). In the first months of the year, this pattern reflected expectations of stable economic recovery, then disappointed. Since June, the main driver of the observed trend has been the announcement of new non-conventional ECB measures, aimed at improving the functioning of the monetary policy transmission mechanism and supporting the provision of credit to a flagging economy. Over the same period, in spite of the reduction of quantitative stimulus started by the Fed last December, US sovereign bond yields have continued to follow a downward path, reflecting concerns about weak economic activity in China, geo-political tension in Ukraine and deflation risk in Europe. Japanese bond yield were substantially stable, with the central bank maintaining its accommodative stance in spite of the moderate domestic recovery. In the European fixed income markets, conditional volatility has stabilized at historical low levels, but contagion has returned back to early 2013 values, mirroring the co-movement of long-term rates along a common declining trend (Fig 2.2). In 2014, all major industrialized countries experienced a significant reduction in sovereign yields (Fig 2.3). Moreover, the perception of insolvency risk implicit in government securities yields and CDS prices has significantly improved for Italy, Spain and Greece. This trend was more marked for Ireland because of its positive macroeconomic outlook and the ongoing fiscal consolidation, coupled with its return to capital markets (Fig 2.4). The overall decline in sovereign risk perception combined with foreign investors slightly increasing their exposures in sovereign bonds of peripheral eurozone countries, with the exception of Spain (Fig 2.5). ECB holdings of euro area public debt declined, while resident banks holdings slightly increased (Fig 2.6). Sovereign refinancing needs remain challenging in countries with high stocks of debt (Fig 2.7). As for the path of debt-to-GDP ratio, in 2015 the Italian public debt is expected to exceed 136% of GDP, while in France is forecast to reach almost 98% and in Spain should rise to 101%. The primary deficit is the key driver for France and Spain, whilst Italy keeps being penalised by the high stock of debt and the gap between the growth rate and the interest rate (Fig 2.8). The public finance adjustments required by the Fiscal Compact rules are significant for both peripheral and core countries. As for Italy, in the baseline scenario (i.e. GDP growth equal to 0.85% and interest rate equal to 2.2%) fulfilling the Fiscal Compact requirements would imply a primary surplus equal to 4% of GDP (2 times higher than its historical value), while France should record a primary balance of 0.7% (if GDP growth were equal to 0.95% and interest rate were equal to 0.5%), against an historical average equal to -1.2% (Fig 2.9). The GDP nowcasts for the third quarter of 2014 confirm that the economic activity is slowing down in Italy and France, whilst Spain seems to exhibit a good recovery and Germany appears to be stagnant (Fig 2.10). As for the corporate sector in 2014, US bond yields experienced a decline for non-financials, whereas remained substantially stable for banks. In Europe, bond yields dropped across all sectors (Fig 2.11). In the first half of 2014, the primary market of non-financial corporate bonds showed signs of a slowdown both in the US and in Europe compared to the first half of 2013. On the contrary, in Italy net issuance volumes in the first half of 2014 were 4 times higher than those recorded in the same period of the previous year (Fig 2.12). This development probably signals the rising propensity to turn to debt capital markets, in the wake of the enduring shrink in the availability of bank lending. As for bank bond issuance, the activity was stagnant in the US and showed feeble signs of recovery in Europe, whereas in Italy credit institutions increased their recourse to debt markets. Turning to the refinancing needs, in the second half of 2014, maturing bank bond appear to be higher in Europe (around 5% of the total amount issued in 2007) than in the US (about 2% of total of issuance since 2007; Fig 2.13). Market for securitized assets remained stagnant both in US and Europe. In Italy, the issuance of mortgage backed securities showed slight signs of recovery, while the net issuances of other securitized assets continued to be negative (Fig 2.14).

During 2014, euro area sovereign yields and CDS have continued to decline, in line with a trend started in early 2012. This pattern reflected the new ECB stimulative measures, aimed at improving the functioning of the monetary policy transmission mechanism and supporting the provision of credit to a flagging economy. In the US, sovereign yields followed a downward path, in spite of the substantial reduction of Fed's monthly bond purchases (which should end in October). Japanese bond yield were stable, with the central bank maintaining its accommodative stance.

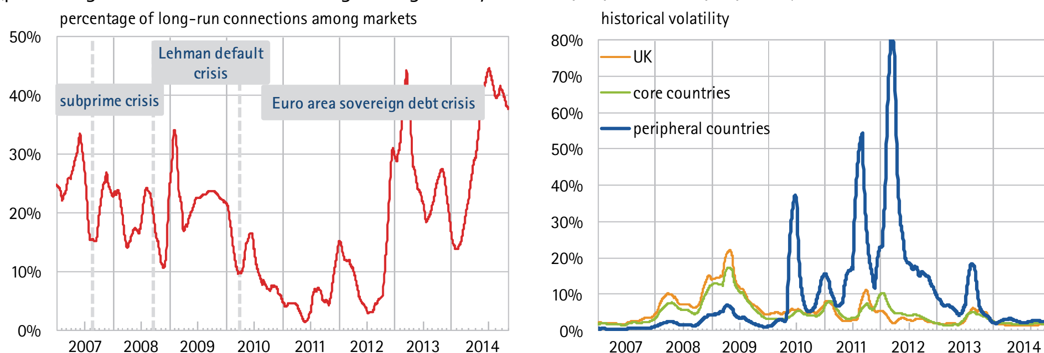
Figure 2.1 – Government bond yields and CDS on public debt in advanced countries
(daily data; 01/01/2009 – 15/10/2014)



Source: Thomson Reuters.

Although contagion rose back to early 2013 values, sovereign spread volatility has stabilized at historical low levels. Soaring contagion mirrors the important co-movements in long-term rates, along a declining trend.

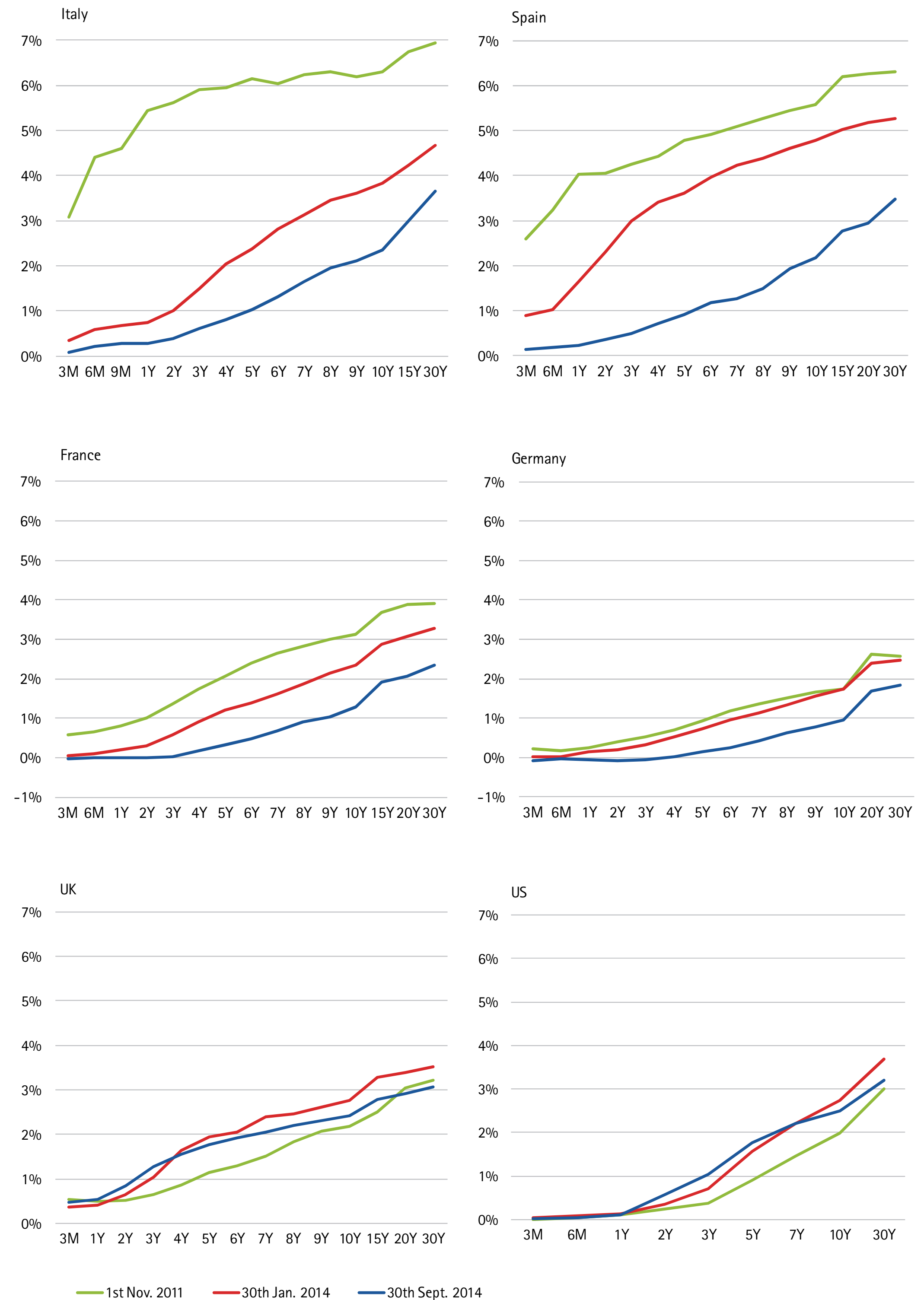
Figure 2.2 – Contagion and historical volatility of 10-year sovereign bond spreads for some European countries
(percentage values; 2-months moving average; daily data; 01/01/2007 - 30/09/2014)



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.

Relative to the beginning of the year, sovereign yields in all major industrialized countries have experienced a significant reduction along the entire maturity spectrum. French and German short-term government securities have even fell into negative territory. The expectations of new non-conventional monetary actions by the ECB and the increased demand for safe assets, prompted by the escalation of geopolitical risks, drove eurozone sovereign bond yields to record-low levels.

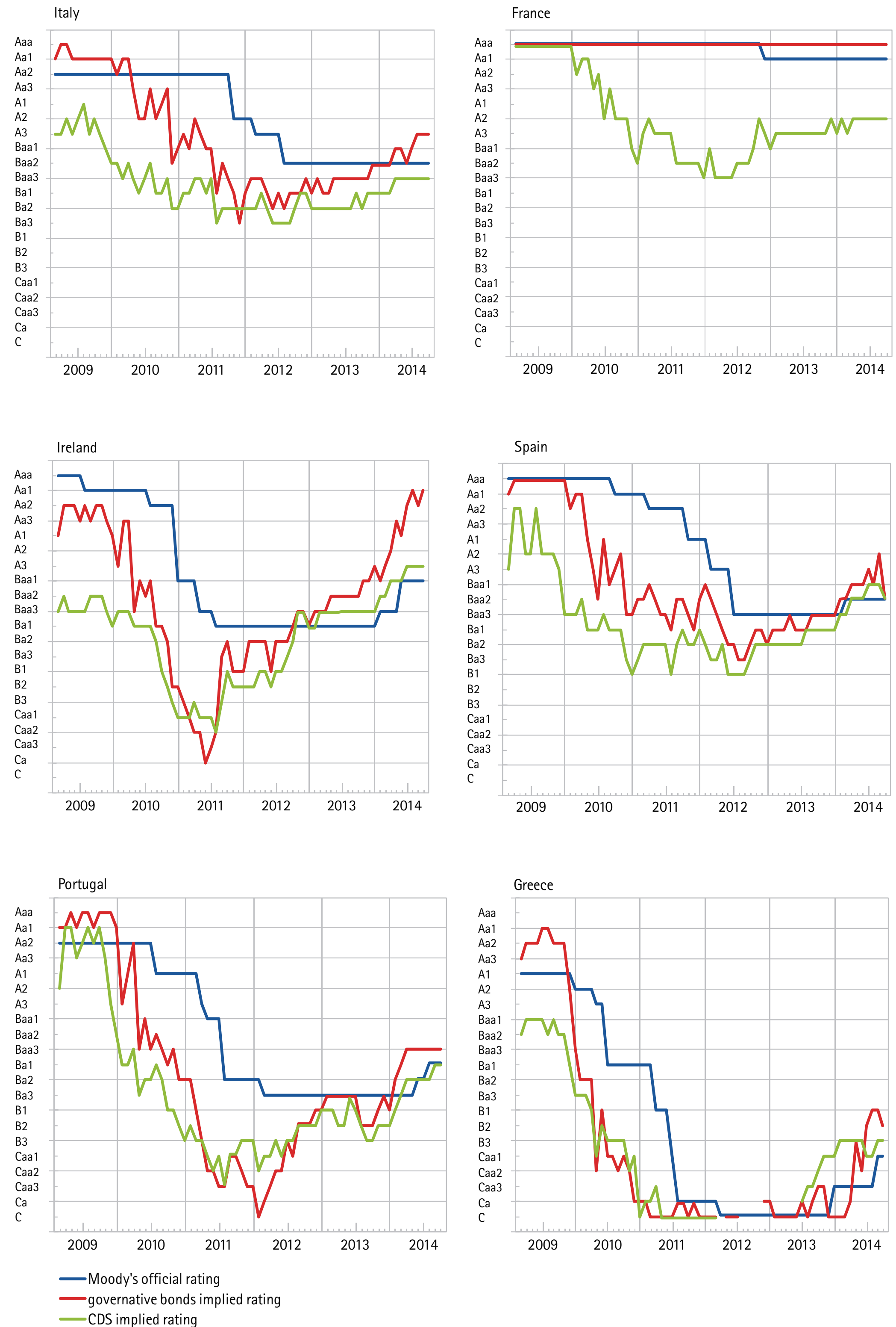
Figure 2.3 – Sovereign yield curves in major advanced countries



Source: calculations on Thomson Reuters data.

During 2014 the perception of insolvency risk implicit in sovereign spreads and CDS prices has significantly improved for Italy and Spain. In particular, investors' risk perception has become lower than Moody's official rating. The improvement of the investors' confidence in the Irish public bonds further heightened, due to the positive macroeconomic outlook and the ongoing fiscal consolidation, coupled with Ireland's return to capital markets.

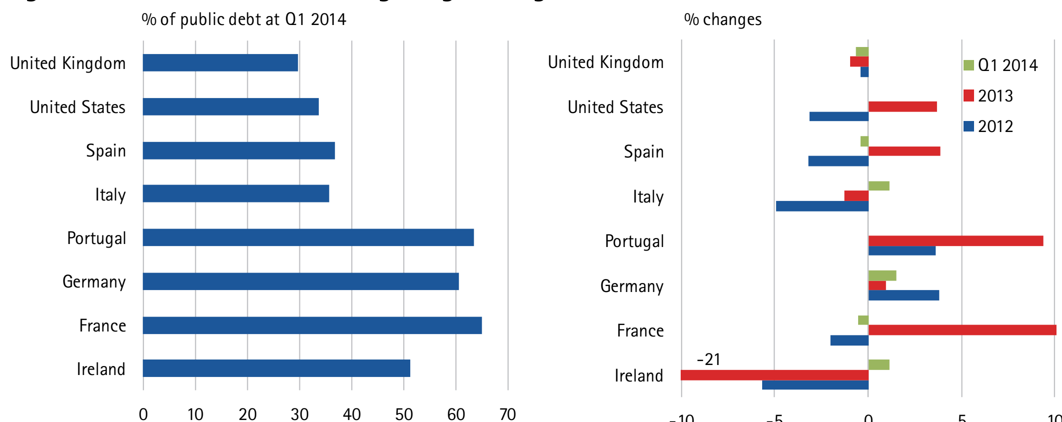
Figure 2.4 – Bond and CDS implied ratings in some euro area countries
(monthly data; January 2009 – September 2014)



Source: calculations on Moody's data.

In the first quarter of 2014, foreign investors slightly increased their exposures in Italian and Irish government bonds, after the strong disinvestments in the two years before.

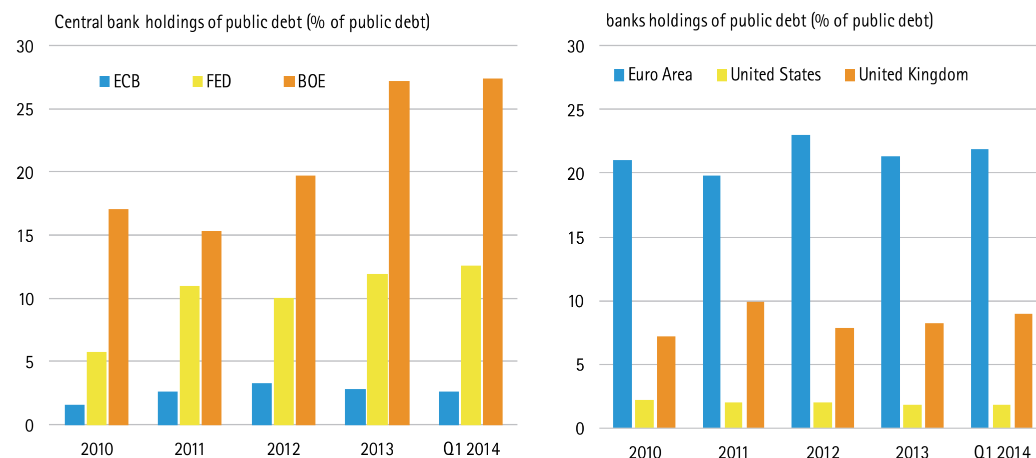
Figure 2.5 – Non-resident holdings of general government debt in selected countries



Source: calculations on data from Bruegel database of sovereign bond holdings developed in Merler and Pisani-Ferry (2012; www.bruegel.org) and IMF data (for Portugal). Last available data for US and Portugal is at December 2013.

In the first quarter of 2014, ECB holdings of eurozone public debt further declined to 2.6%, whilst resident banks' holdings slightly rose to 21.8%. The distribution of government bonds holdings between central and private banks continues to be significantly heterogeneous across countries, reflecting discrepancies in the monetary policies instruments adopted by central banks as well as differences in the structural features of financial systems.

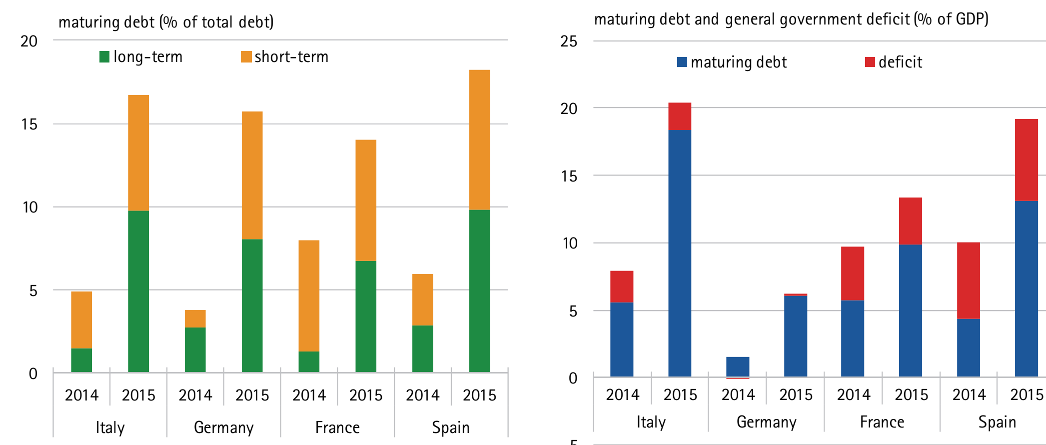
Figure 2.6 – Central bank and private banks holdings of general government debt in main advanced countries



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.

Sovereign refinancing needs remain challenging in countries with a high debt stocks. In 2015, Italy will need to refinance a maturing debt equal to 18% of GDP, and an estimated deficit equal to 2.2% of GDP (according to 2014 EC Spring Forecasts).

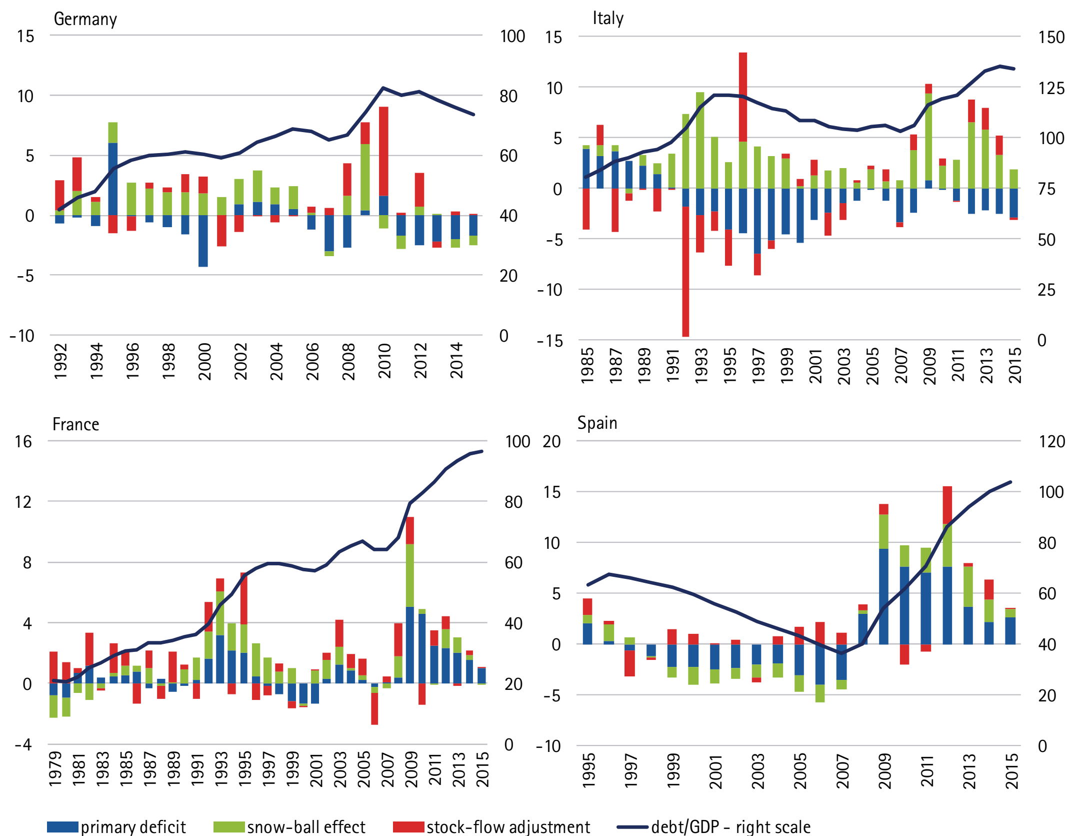
Figure 2.7 – The refinancing needs of general government debt in main euro area countries



Source: calculations on data from Thomson Reuters Eikon and EU Commission, Spring Forecasts 2014.

The path of debt-to-GDP ratio and the contribution of its components reflect deep structural differences across the major euro are countries. The primary deficit is the key driver for France and Spain, whilst Italy keeps being penalized by the high debt stock and the gap between GDP growth rate and interest rates. In 2015 the Italian public debt is expected to exceed 134% of GDP. France is forecast to reach almost 97%, Spain should rise around 104%.

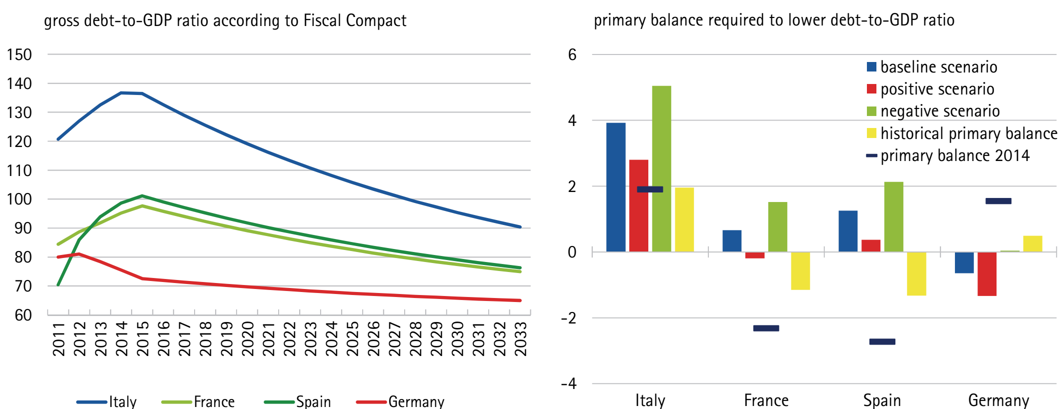
Figure 2.8 – General Government debt components in main euro area countries



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.

Adjustments required by the Fiscal Compact are substantial for both peripheral and core countries. As for Italy, in the baseline scenario (i.e. GDP growth equal to 0.85% and interest rate equal to 2.2%), fulfilling the Fiscal Compact requirements would imply a primary surplus equal to 4% of GDP (2 times higher than its historical value), while France should record a primary balance of 0.7% (if GDP growth were equal to 0.95% and interest rate were equal to 0.5%), against an historical average equal to -1.2%.

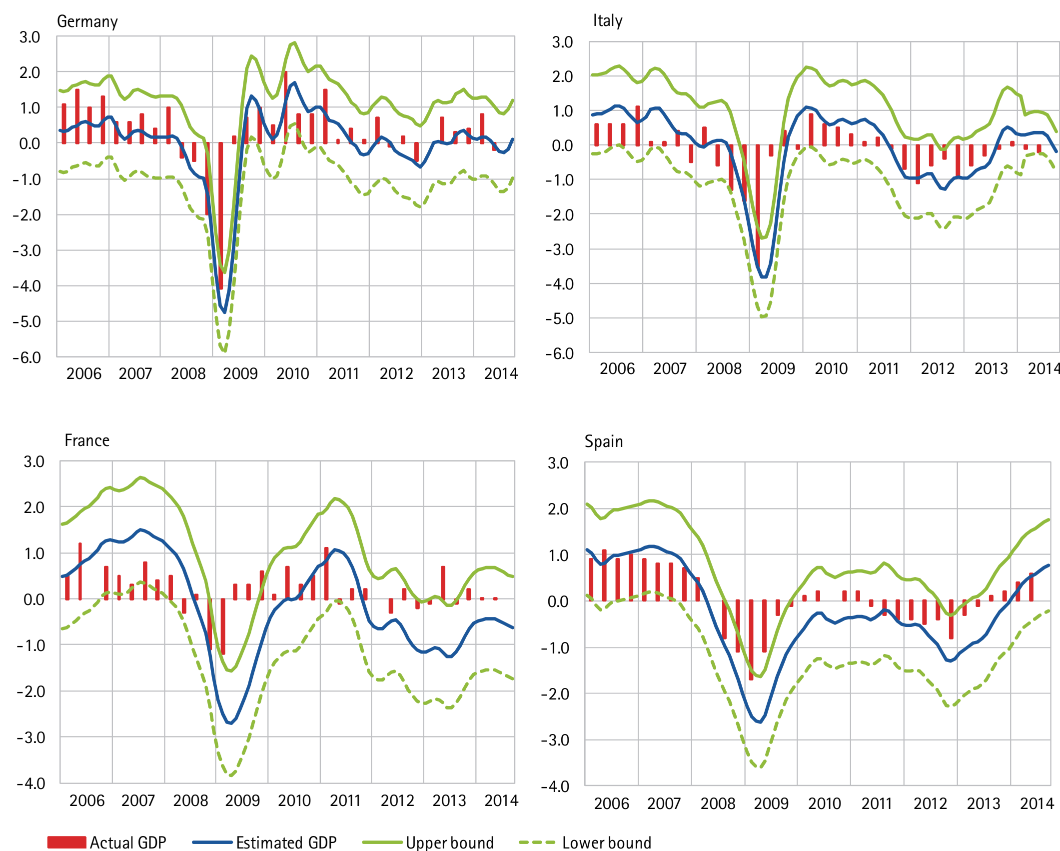
Figure 2.9 – Primary balance required to comply with the Fiscal Compact Treaty in some euro area countries



In the baseline scenario interest rates and GDP growth rates are equal to those forecast for 2015 (i.e., GDP growth rate equal to 0.85% for Italy, 1.45% for Germany, 0.95% for France and 1.68% for Spain; and real interest rates equal to 2.2% for Italy, -0.3% for Germany, 0.5% for France and 1.8% for Spain). In the positive scenario, interest rates are equal to those forecast for 2015 and GDP growth rates are equal to those forecast for 2015 plus 1%. In the negative scenario, interest rates are 1% higher than those forecast for 2015 and GDP growth rates are equal to those forecast for 2015. In all scenarios the inflation rate is equal to that forecast for 2015. The source for all data is the IMF. Historical primary balance is the average of cyclically adjusted primary balances from 1999 to 2013.

The GDP nowcasts for the third quarter of 2014, based on soft and hard indicators of economic health, indicate that the real economy is slowing down in Italy and France. Spain seems to exhibit a more stable recovery, whilst Germany is stagnant.

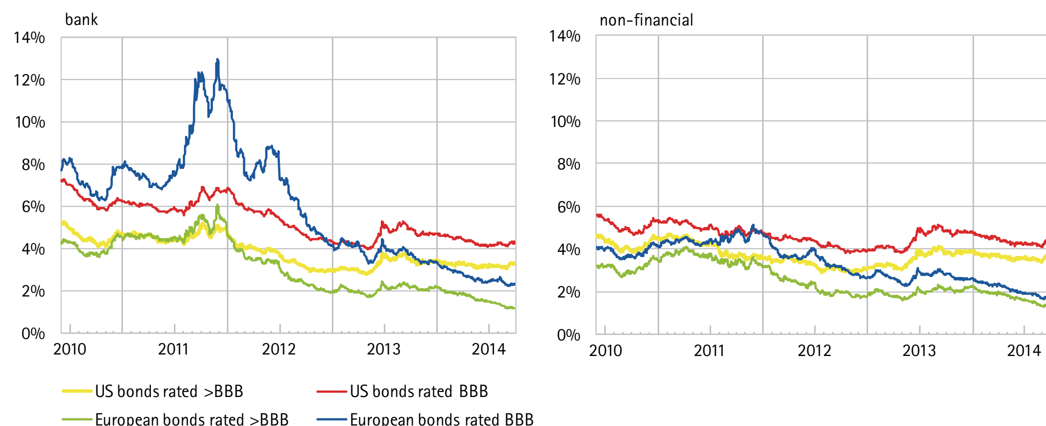
Figure 2.10 – GDP nowcasts for some euro area countries
(percentage values)



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 September 2014.

In 2014, US corporate bond yields have slightly declined in the non-financial sector, whereas remained stable in the banking sector. In Europe, yields dropped across all sectors. The spread between BBB rated bonds and those with higher rating held stable.

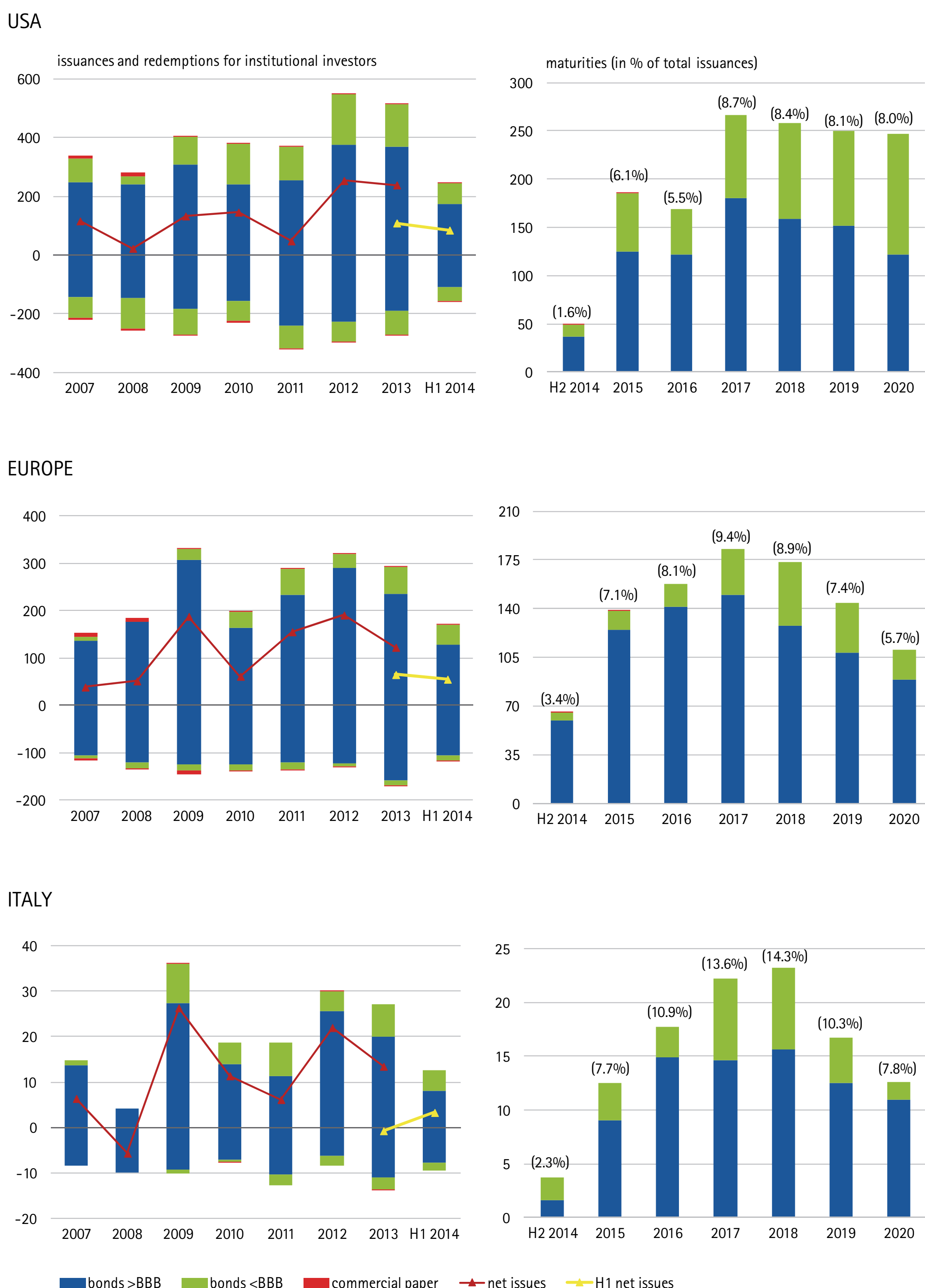
Figure 2.11 – Bank and non-financial corporate bond yields
(percentage values; daily data; 01/06/2010 - 30/09/2014)



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

In the first half of 2014, the activity in the primary market of non-financial corporate bonds was substantially stable both in the US and in Europe compared to the first half of the previous year. On the contrary, in Italy net issuance rose significantly, from the negative values recorded in the same period of 2013. This development probably signals the rising propensity to turn to debt capital markets, in the wake of the enduring shrink in the availability of bank lending. The volume of securities maturing in the second half of 2014 is roughly equal to 50 billion euros in the United States, 65 billion in Europe and 3.7 billion in Italy (respectively 1.6%, 3.4% and 2.3% of gross issuances since 2007), thus positing a limited refinancing risk in the short run.

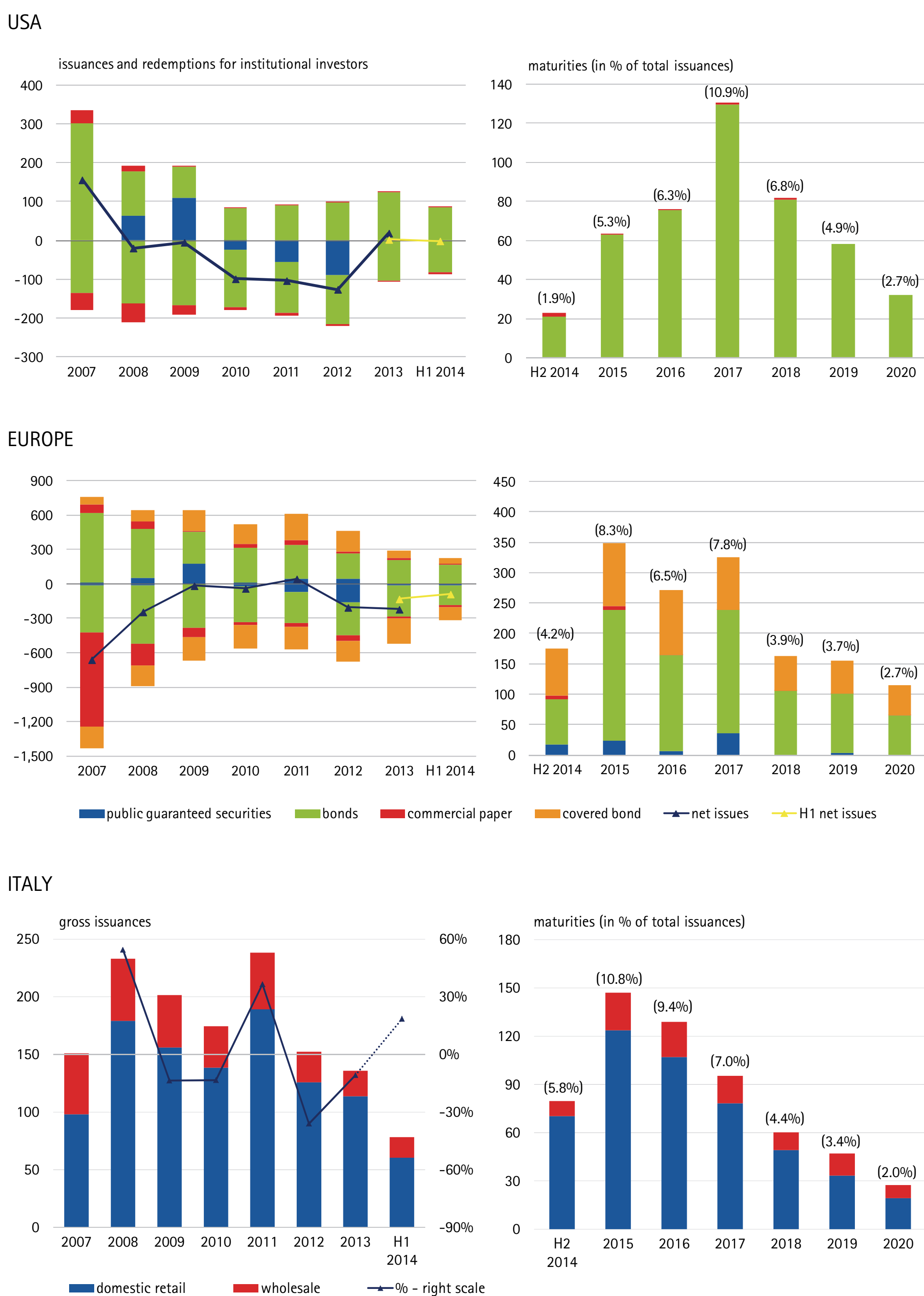
Figure 2.12 – Non-financial corporate bonds issues and maturities
(billions of euro)



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). Maturities refer to bonds issued since 2007.

In the first half of 2014, bank bond issuance was stagnant in the US, with net volumes close to zero. Over the same period, the European market showed feeble signs of recovery, although net issuances remained largely negative. In Italy, credit institutions increased their recourse to debt markets, with net issuances rising by 18.5% compared to the first half of 2013, mainly as a consequence of an increase in the demand by institutional investors. In the second half of 2014, the refinancing needs appears to be higher in Europe (around 5% of the total amount issued since 2007) than in the US (equal to about 2%). In Italy, the maturing bonds account for 5.8% of the total amount issued since 2007.

Figure 2.13 – Bank bonds issues and maturities
(billions of euro)

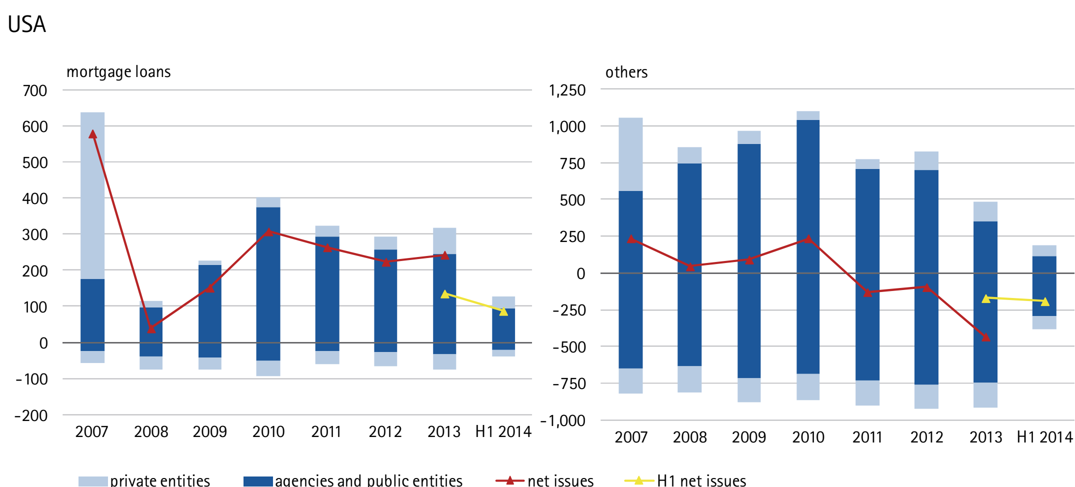


Source: calculations on Dealogic data. European issuance data refer to companies with registered office in Italy, France, Germany, Spain, the Netherlands and the UK and their subsidiaries (even those established in other countries). Gross issuance change for H1 2014 is computed relative to H1 2013. Maturities refer to bonds issued since 2007.

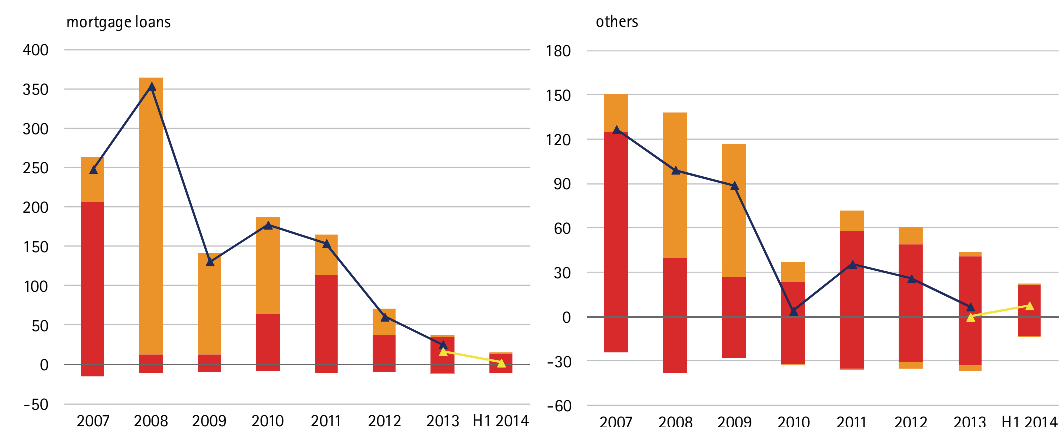
In the first half of 2014, the volume of mortgage-backed securities issued by American and European banks declined. Over the same period, the activity in the Italian market showed a very slight recovery. Primary markets for other securitized assets remained stagnant in US, showed some signs of reversal in Europe, whilst continuing to exhibit negative net issuances in Italy.

Figure 2.14 – Securitisation issuances
(billions of euro)

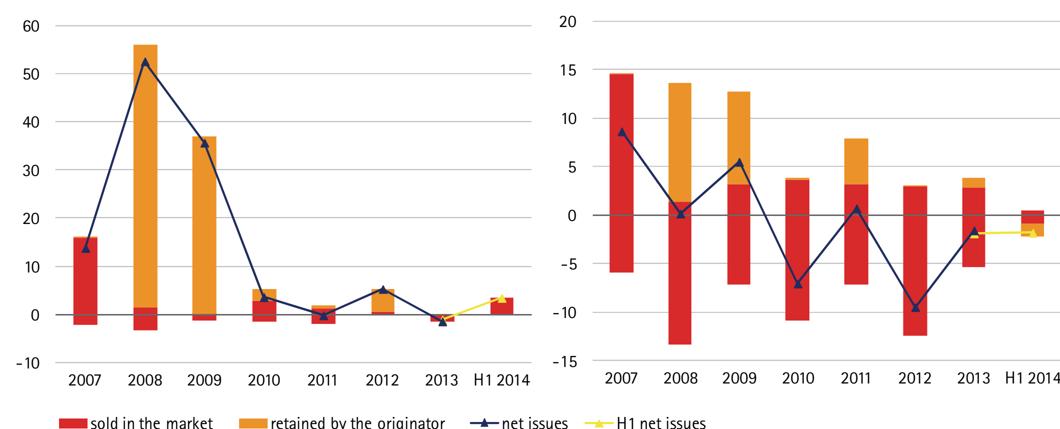
USA



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.

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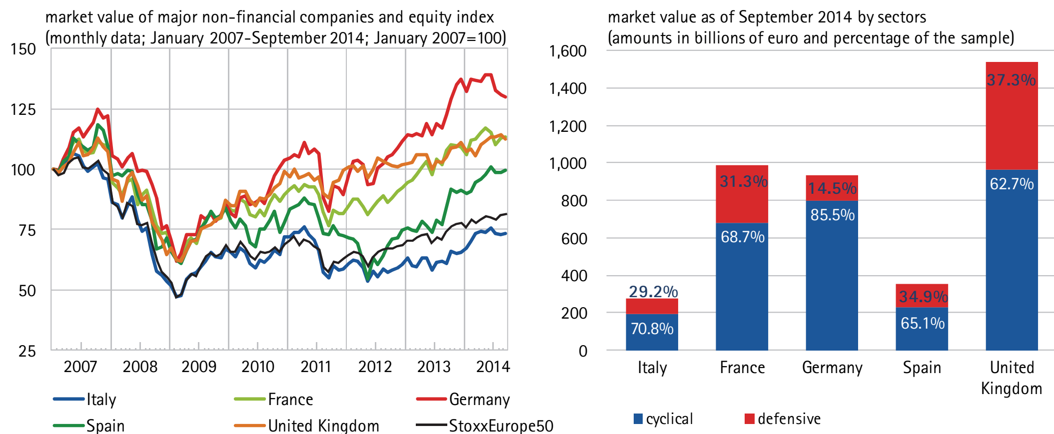
Non-financial companies

Until the first six months of 2014, the market capitalization of the main European companies continued to rise in line with the leading European stock index. Since June, this trend has slowed down or reversed in the wake of the newly mounting uncertainty about the Eurozone economic perspectives (Fig 3.1). In the first half of 2014, large Italian companies' profitability remained flat, after the increase experienced the previous year, and in line with the UK peers (Fig 3.2). French and Spanish groups exhibited on average the most significant improvements in terms of Ebit margin, whilst the profitability of German firms keeps being more subdued. As for the financial structure, only Italian companies showed a further reduction in the short term to total debt ratio (at 18.6%, in line with the UK, much lower than French and German averages). Large Italian and Spanish firms remained the most leveraged, with an equity base well below their European peers; however, around 60% of UK and German companies had a leverage ratio higher than the 10-year average, similarly to Italian firms (Fig 3.3). Consistently with their higher levearage, Spanish and Italian groups displayed the lowest, albeit stable, interest expense coverage ratio, which was below the 10-year average in about 67% and 80% of the cases, respectively. UK firms boasted the best (but declining) coverage, while France and Germany had the lowest percentage of companies below the long term average. At the end of June 2014, liquidity ratios were stable for large French non-financial companies, but deteriorated significantly for UK and German firms and, to a lesser extent, for Italian and Spanish groups (Fig 3.4). As for the payout of debt (i.e. the ratio between cash flows from operating activity net of capital expenditure and net financial debt), Italian and German companies exhibited the lowest ratios, while UK and French groups boasted the richest cash flows from their core operations. Turning to the main vulnerabilities, in the first half of 2014 the percentage of non-financial groups showing revenues below the 10-year average was greater than 80% across all the main European countries (Fig 3.5). Italy showed both the highest percentage of groups with revenues below their historical average (close to 90%) and the highest percentage of loss-making companies. The vulnerability indicators on the financial structure point to a substantial stability in terms of leverage and interest coverage relative to the 10-year averages for the main European groups, apart from France (Fig 3.6). On the other hand, the mix of liquidity conditions and debt payout has worsened, except for UK and Spanish groups. Firms in the peripheral countries are still penalized by higher bank loan rates, which reflect persistent heterogeneities in the functioning of the monetary policy transmission mechanism across the euro area (Fig 3.7 and Fig 3.8). Moreover, Italy and Spain have suffered a much more severe contraction in bank lending than France and Germany, although with slight signs of recovery in the first half of 2014. During the first half of 2014, signals of an easing of corporate credit risk perception have emerged, with both observed CDS quotes and their EDF implied values declining to new lows, especially for Italian companies (Fig 3.9). Positive developments in the perceived risk of European companies are also found in the changes recorded by the official and market implied ratings: at the end of September stock, bond and CDS implied ratings across Europe were on average higher than those prevailing at the beginning of the year (Fig 3.10).

Until the first half of 2014, the market capitalization of the main European companies continued to rise in line with the leading European stock index. Since June, this trend has slowed down or reversed following the increased uncertainty about the Eurozone economic perspectives.

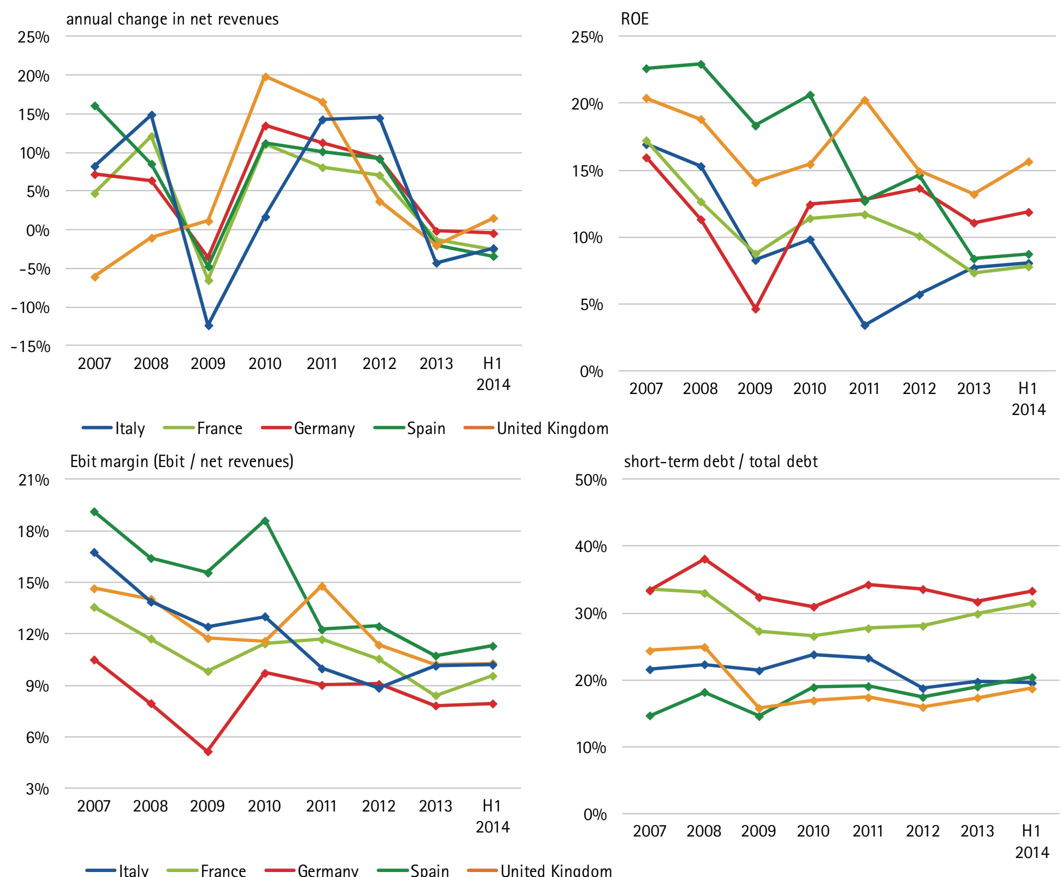
Figure 3.1 – Relative size of large cyclical and defensive sector non-financial listed companies



Source: calculations on Thomson Reuters Datastream data on the top 30 non-financial companies by capitalisation as of September 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. Cyclical sectors include: basic materials, energy, chemicals, aerospace, automobiles and components, personal and household products, media, distribution, travel and leisure, telecommunications, transport, construction, industrial machinery; belong to these sectors 23 listed companies in France, 23 in Germany, 22 in Spain, 18 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, 12 in the UK and 7 in Italy.

In the first half of 2014, profitability of large non-financial companies remained subdued in Spain Italy and France. In these countries firms continued to exhibit declining revenues, due to the weak economic activity. In all countries profitability is far below 2007 levels. As for the financial structure, German and French companies continued to be the most exposed to short-term debt, relative to the other European peers.

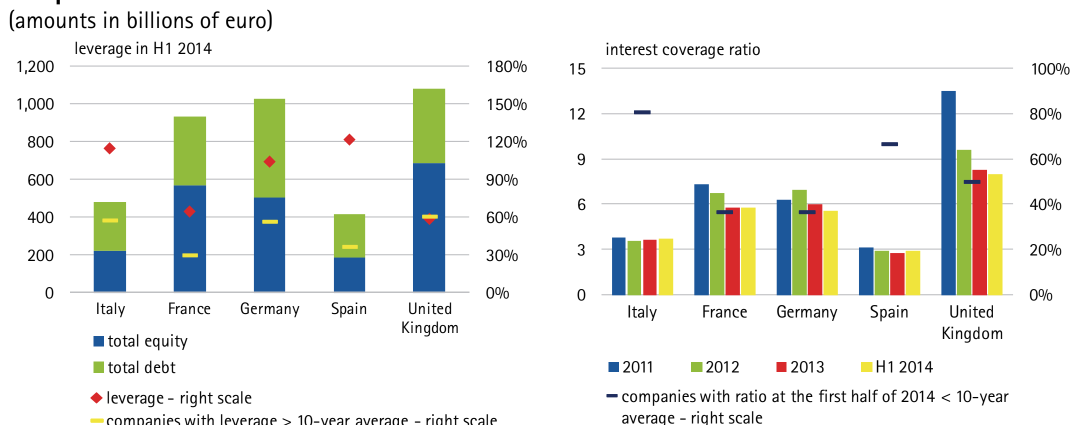
Figure 3.2 – Profitability and financial structure of major European non-financial listed companies



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of September 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. The annual change in net revenues is computed with respect to the restated figure for the previous year. The figures for the first half of 2014 are annualised and partly estimated.

Although Italian and Spanish non-financial groups remain by far the most leveraged, as of June 2014 around 60% of UK and German companies had a leverage ratio higher than the 10-year average, in line with Italy. Spain and Italy displayed the lowest, albeit stable, interest coverage ratios, UK boasted the best (but declining) coverage, while French and German showed the lowest percentage of firms with a ratio below the long term average.

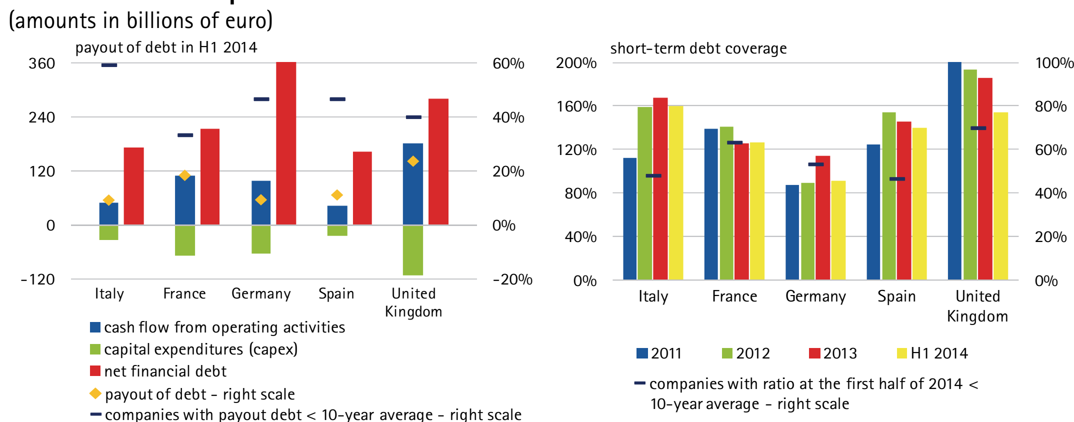
Figure 3.3 – Leverage and interest expenses coverage of major European non-financial listed companies
(amounts in billions of euro)



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of September 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. The leverage is the ratio between total debt and total equity. The interest coverage ratio is calculated between Ebit and interest expenses. The figures for the first half of 2014 are annualised and partly estimated.

Italian and German firms displayed the lowest payout ratio, while UK groups boast the richest cash flows from core operations. Italy has also the highest percentage of firms with a debt payout ratio below the 10-year average. At the end of June, coverage ratios were little changed for large French companies, while significantly worsened for other European groups. Italy and the UK exhibit the highest coverage ratio for short-term debt.

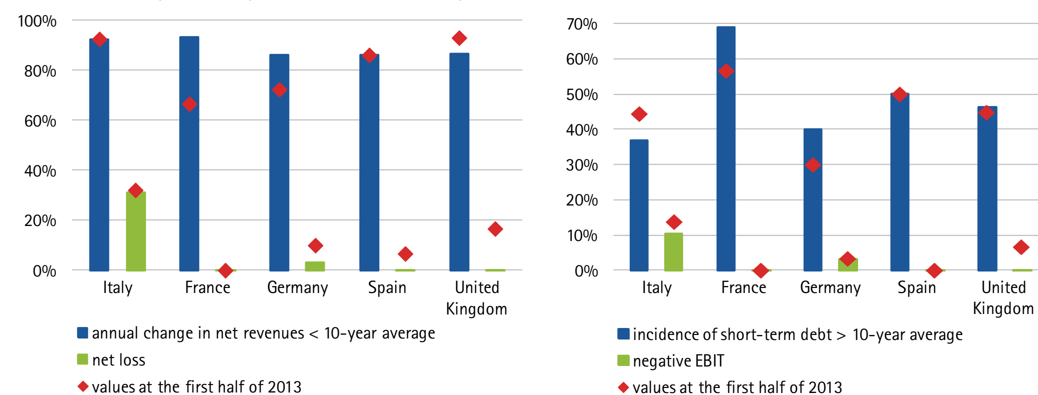
Figure 3.4 – Payout of debt and coverage of short-term debt of major European non-financial listed companies
(amounts in billions of euro)



Source: calculations on Worldscope data on the top 30 non-financial companies by capitalisation as of September 2014 for France, Germany, Spain and the UK, and on major Italian listed groups. The payout of debt ratio is calculated between cash flows from operating activity net of capital expenditure and net financial debt. The coverage of short-term debt is the ratio between cash plus short term investments and short-term debt. The figures for the first half of 2014 are annualised and partly estimated.

In the first half of 2014, despite the improvement in average profitability, Italy still exhibited the highest percentage of loss-making companies. The percentage of groups showing a change in revenues below the 10-year average was greater than 80% across all the main European countries. Over the same period, Italian firms recorded an improvement in short-term debt incidence.

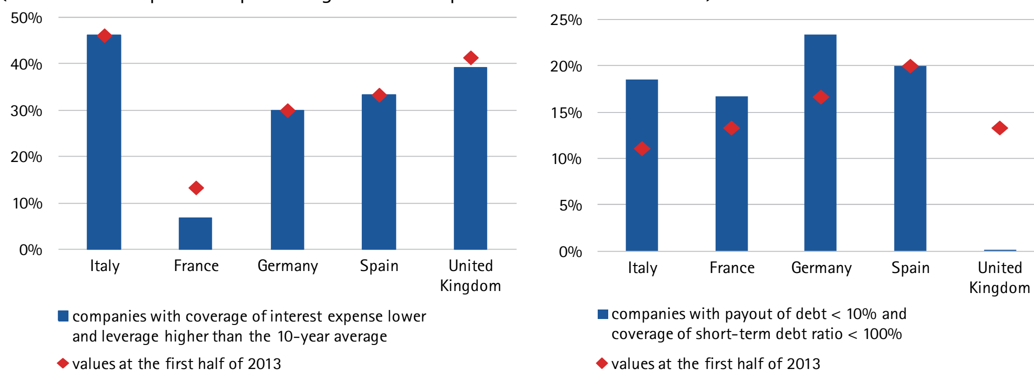
Figure 3.5 – Profit vulnerability of major European non-financial listed companies
(number of companies in percentage of the sample at the first half of 2014)



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

Considering the financial structure, the vulnerability indicators for European groups look stable in terms of leverage and interest coverage relative to their 10-year average, apart from France. On the other hand, the mix of liquidity conditions and debt payout has worsened, except for UK and Spanish groups.

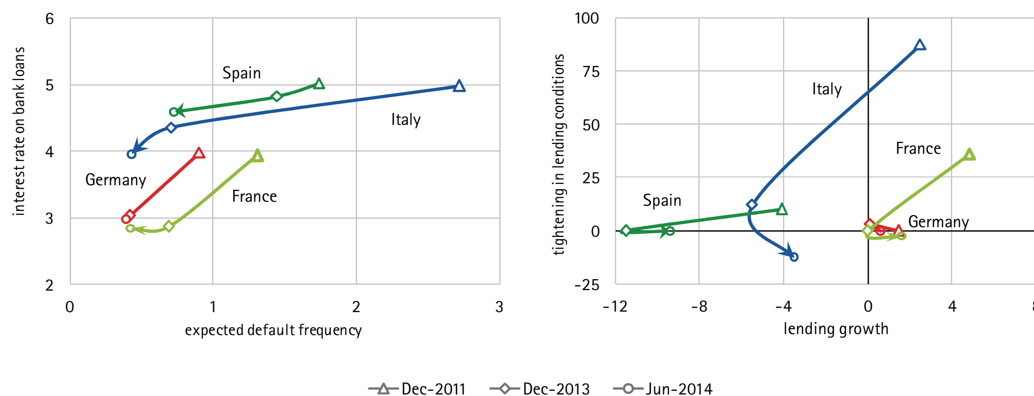
Figure 3.6 – Financial structure vulnerability of major European non-financial listed companies
(number of companies in percentage of the sample at the first half of 2014)



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

Since the end of 2011, although decreasing, discrepancies in bank loan rates among peripheral and core countries' firms are persistent, mirroring a gap in the functioning of the monetary policy transmission mechanism across the euro area. Moreover, Italy and Spain have suffered a much more severe contraction in bank lending than France and Germany, although with slight signs of easing in the first half of 2014.

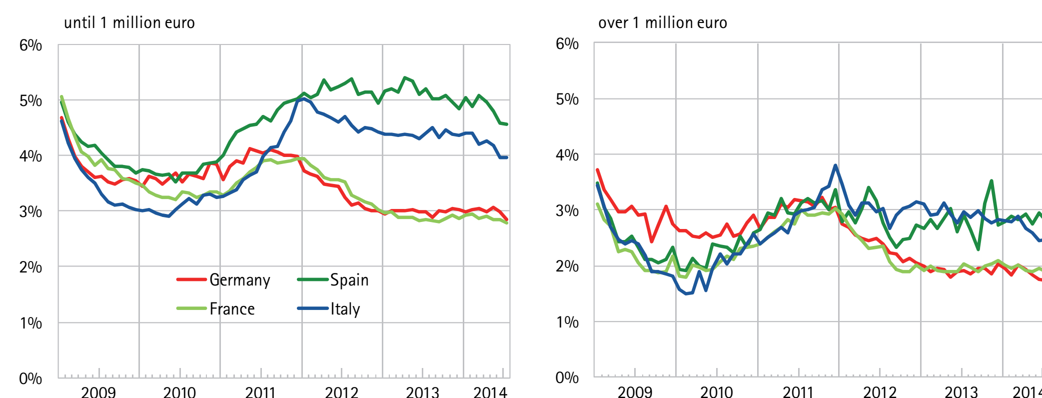
Figure 3.7 – Trends in bank lending to non-financial companies and expected default frequencies
(percentage values)



Source: ECB and Moody's Credit Edge data. Tightening in lending conditions is the net percentage of banks reporting a tightening in credit standards (for Italy, Germany and Spain) and the net percentage of banks reporting a tightening in credit standards weighted for the share of each bank in the total loan outstanding amount in the sample (for France). Lending growth is the annual growth rate of bank loans to non-financial companies. Corporate EDF (one year) are the average of the 25th, 50th and 75th percentiles; the sample comprises publicly traded firms.

During 2014, the decline in sovereign spreads was not entirely reflected in the pattern of the interest rates on bank loans to Italian and Spanish firms.

Figure 3.8 – Interest rates on bank loans to non-financial corporations in major euro area countries
(monthly data; January 2009 – July 2014)



Source: ECB; interest rates on new loans.

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

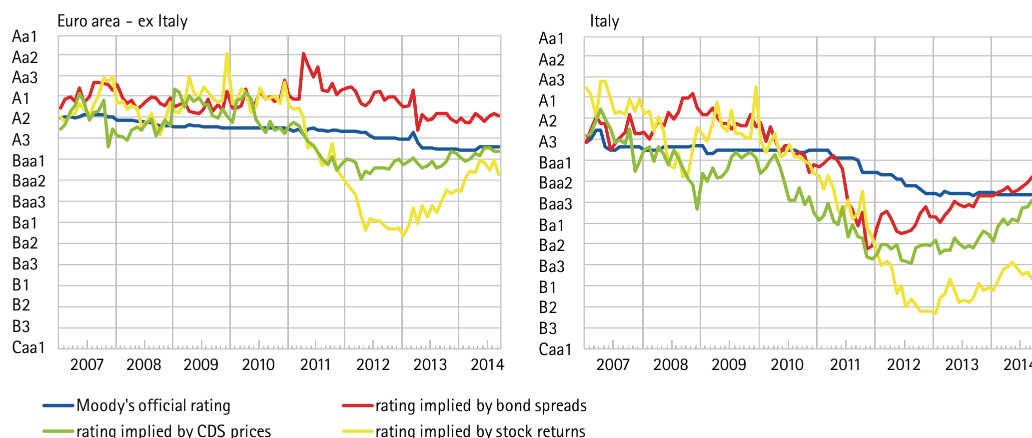
In the first nine months of 2014, average actual and theoretical CDS quotes of non-financial European companies declined to new lows (at around 70 basis points), signaling an easing of credit risk perception. The fall was sharper for Italian companies (from 230 to 150 bps).

Figure 3.9 – Prices of 5-year CDS observed and implied by the expected default frequencies (EDF) for euro area non-financial firms
(basis point; daily data; 31/01/2008 – 30/09/2014)

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.

Since the beginning of the year, average official ratings for large non-financial European companies have slightly improved (stabilizing at just below A3 on average), whilst those for Italian firms remained flat at above Baa3, i.e. two notches lower. Stock, bond and CDS implied ratings across Europe were also higher on average than those prevailing at the beginning of the year.

Figure 3.10 – Official and market implied ratings for euro area non-financial firms
(monthly data; January 2007 - September 2014)



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

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

Banks

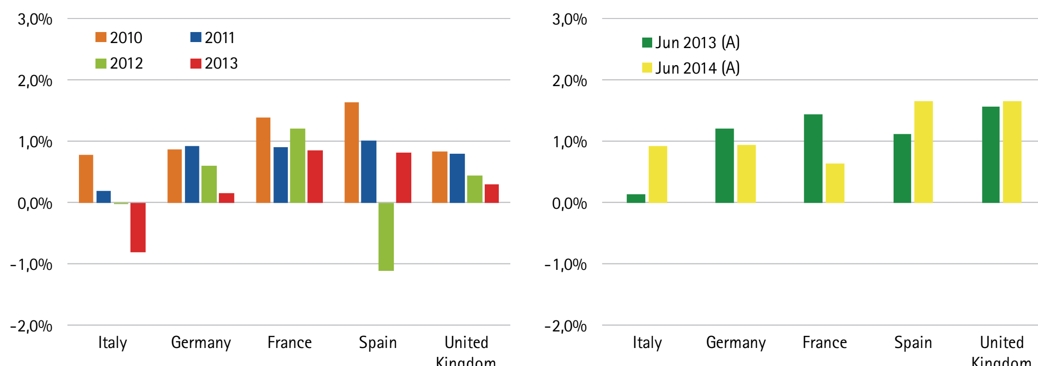
In the first half of 2014, profitability relative to risk weighted assets (RWAs) of the major European banks rose after the steep drop recorded in 2013, when pre-emptive balance-sheet clean-up and de-risking measures were undertaken ahead of AQR and EU-wide stress test (Fig 4.1). In the same time period, with the exception of France, gross income lowered driven by the decline in trading profits (Figs 4.2 and 4.3). As for capital adequacy, in the first semester of 2014, following the phase-in of the new transitional national rules enacting the CRD IV-CRR package (in force since the 1st of January), the tier 1 ratio dropped for all major European banks (2014 capital adequacy coefficients, however, are not directly comparable with the previous figures; Fig 4.4). The only exception were Italian banks, which in 2014 undertook a heavy recapitalization via equity issuance (Fig 4.5). Italian and Spanish banks continued to exhibit a higher ratio of RWAs to total assets compared to their European peers, mirroring differences in business models and balance-sheet structure. Consistently, holdings of financial assets and derivatives keep being significantly lower for Italian and Spanish institutions (Fig 4.6). In the first half of 2014, the credit quality deterioration has significantly slowed down, especially in Italy and Spain for the first time since 2011 (Fig 4.7). Nonetheless, in Italy the weight of bad loans on total gross loans continued to rise, due to the contraction of total loans. In the same time period, the cost of risk (i.e. the ratio between loan-loss provisions and total loans) declined back to 2011 level, after the peak recorded in 2013. As for bank lending, in the second quarter of 2014, credit conditions to households and firms eased for the first time since 2007 (Fig 4.9). However, in the first months of 2014 bank loans to non-financial corporations fell further in Italy and Spain (respectively, by 4% and 10% at the end of July; Fig 4.10). Moreover, except for Germany, the demand for bank loans remained weak, due to persistently low business confidence (Fig 4.11). In 2014, also residential mortgages continued to record negative growth rates, due to weak activity in property markets putting downward pressure on the price-to-rent ratio (Fig 4.12). In early 2014, the sovereign-bank nexus, as measured by bank exposure to domestic sovereign bonds, rose in Spain, while remaining stable in Italy and Germany (Fig 4.13). Financial fragmentation, as measured by total banks' foreign claims, fell during the first months of 2014 in all the largest euro area countries (Figs 4.15, 4.16 and 4.17).

The decrease of Target 2 imbalances confirms this trend, with the peripheral countries (i.e. Italy and Spain) improving their external debt position. Such developments were driven by the introduction of a negative interest rate on ECB deposit facilities, which prompted an increase in capital flows towards those countries formerly perceived as more vulnerable (Fig 4.18). However, Italy's international financial investment position remains negative (by 500 billions of euro at the end of July), mainly because of valuation effects. Indeed, the decline in the sovereign spreads and the increase in share prices resulted in a higher market value of the Italian securities held by non-residents. Recourse to ECB funding fell for Italian and Spanish banks at 4.5% and 6% of total assets, respectively, as a consequence of the early repayments of ECB funds allotted in December 2011 and February 2012 during the 3-years LTRO (Fig 4.19). The exposures of Italian banks to emerging markets is lower than 1% of total assets, while Spanish and English banks are the most exposed (about 5% and 3,5% respectively; Fig 4.20). During 2014, the perceived credit risk of European financial institutions kept declining, as shown by the trends in both the observed values of CDS and those implied by the EDF. Italian banks continued to be perceived riskier than their European peers, although the relative gap is narrowing (Fig 4.22). The improvement in European banks' risk perception is also signaled by the ratings implied in bond spreads and CDS prices. This phenomenon is more marked for Italian banks, whose implied bond and CDS ratings reached levels higher than the official rating (Fig 4.23).

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

In 2013, the balance-sheet clean-up and the de-risking measures undertaken ahead of AQR and EU-wide stress test drove the profitability of major European banks downward, with the notable exception of Spain. In Italy, profits relative to RWAs suffered a steep drop in 2013, followed by a recovery in the first half of 2014 mainly due to a decline in RWAs.

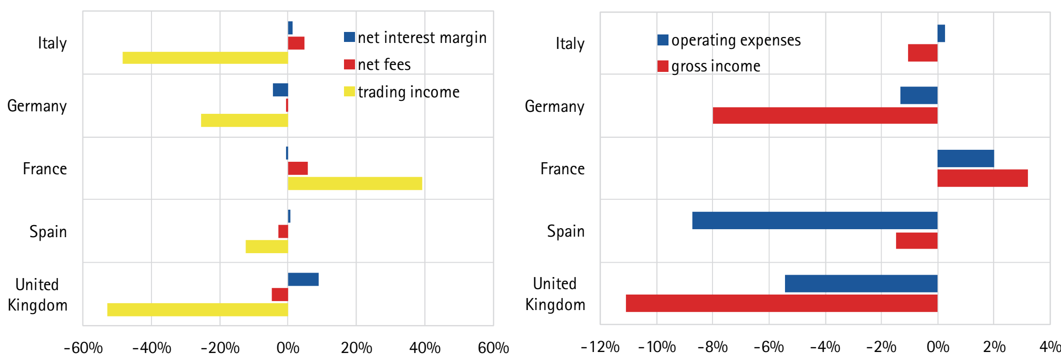
Figure 4.1 – Profitability of main listed European banks
(profit before taxes / risk-weighted assets)



Source: calculations on data from consolidated annual reports of main listed European banks (24 groups). The profit before taxes is calculated excluding goodwill impairment. The figures as at June 30 are annualised and partly estimated.

In the first half of 2014, the major Italian banks experienced a reduction of the gross income, due to the decline in trading profits that was not offset by the slight increase in net interests margin and in net commissions. In the same period, the main European banks have shown a fall in gross income and costs, with the exception of France.

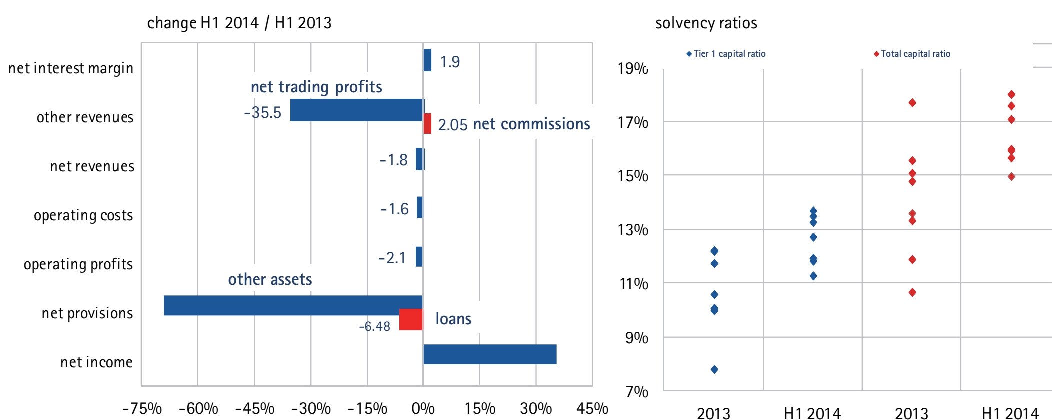
Figure 4.2 – Change in revenues and costs of main listed European banks
(change H1 2013 / H1 2014)



Source: calculations on data from consolidated annual and interim reports of main listed European banks (24 groups). The figures as at 30 June are annualised and partly estimated.

The largest Italian banking groups showed a strong reduction of profits from trading activities in H1 2014. Net income, however, exhibited a significant increase compared to the same period of 2013. This dynamics derived from the rise of net interest margin and net commissions and the decline of net provisions. Capital adequacy ratio rose for almost all banking groups.

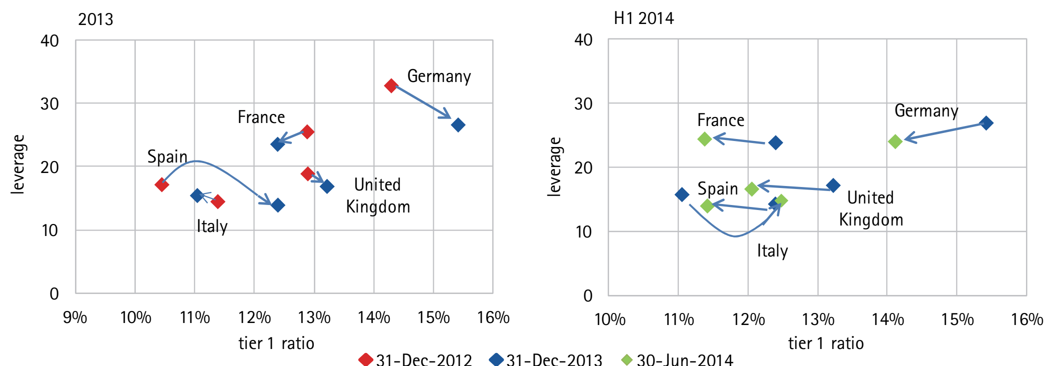
Figure 4.3 – Income and solvency ratios of major Italian banking groups



Source: calculations on data from consolidated annual reports. Data refer to the 8 largest banking groups by total assets. The retrospective application of IFRS 10 "Consolidated Financial Statements" and IFRS 11 "Joint Arrangements" back to the 1st of January 2013 caused a change in the consolidation scope. Figures as of December 2013 and June 2014 are not fully comparables to previous figures.

In 2013, capital ratios improved for Spanish and German banks, while remained almost stable in Italy, France and the UK. In the first semester of 2014, following the implementation of the CRD IV-CRR package (in force since the 1st of January), the phase-in of the new national rules led to a drop in the tier 1 ratio for all major European banks, with the exception of Italy.

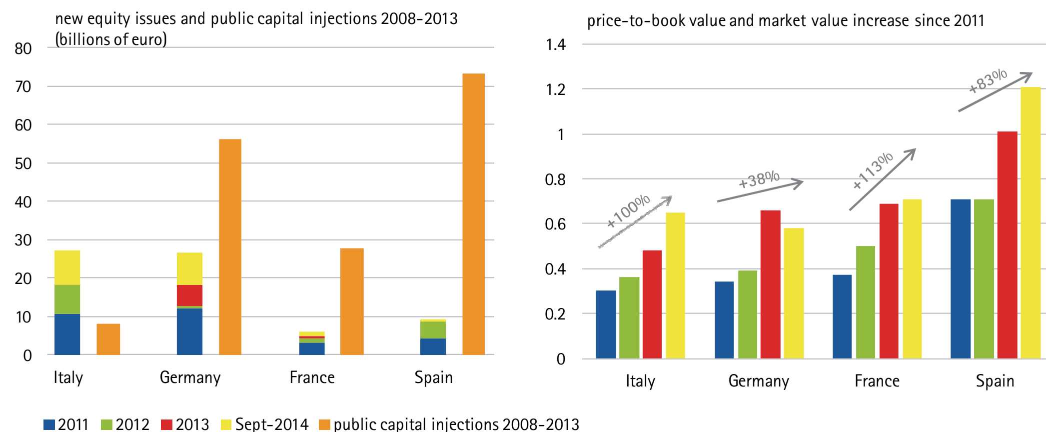
Figure 4.4 – Capital adequacy and leverage of main listed European banks



Source: calculations on data from consolidated annual and interim reports of main listed European banks (24 groups). The figures as at 30 June are partly estimated. Figures as of December 2013 and June 2014 are not fully comparables to previous figures as a result of both the retrospective application of IFRS 10 "Consolidated Financial Statements" and IFRS 11 "Joint Arrangements" back to the 1st of January 2013, that caused a change in the consolidation scope, and the phase in of Basel III framework.

Since 2011, European banks have been raising new equity capital by about 70 billion euros. In 2014, Italian banks are the largest equity issuers, ahead of the AQR and stress test. The recapitalization was reflected into market trends, with an increase in share prices and multiples.

Figure 4.5 – Equity capital raised by listed banks of main euro area countries and price-to-book values

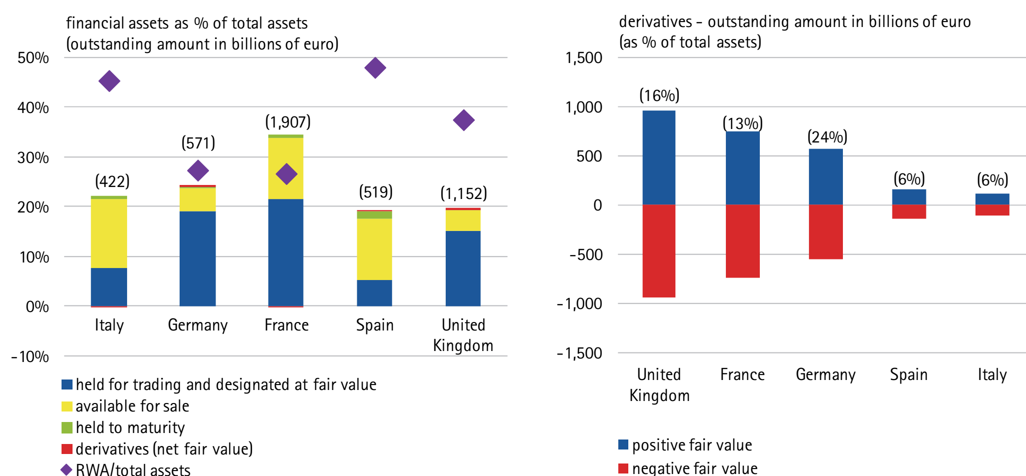


Source: calculations on data from ECB, Thomson Reuters and MBRES. Last available data for new equity issues is at August 2014.

Italian and Spanish banks continued to exhibit a higher ratio of RWAs to total assets compared to their European peers, mirroring differences in business models and balance-sheet structure. Consistently, holdings of financial assets and derivatives are significantly lower for Italian and Spanish institutions.

Figure 4.6 – Financial assets and derivatives of main listed European banks

(figures as of H1 2014)



Source: calculations on data from consolidated annual reports of main listed European banks (24 groups).

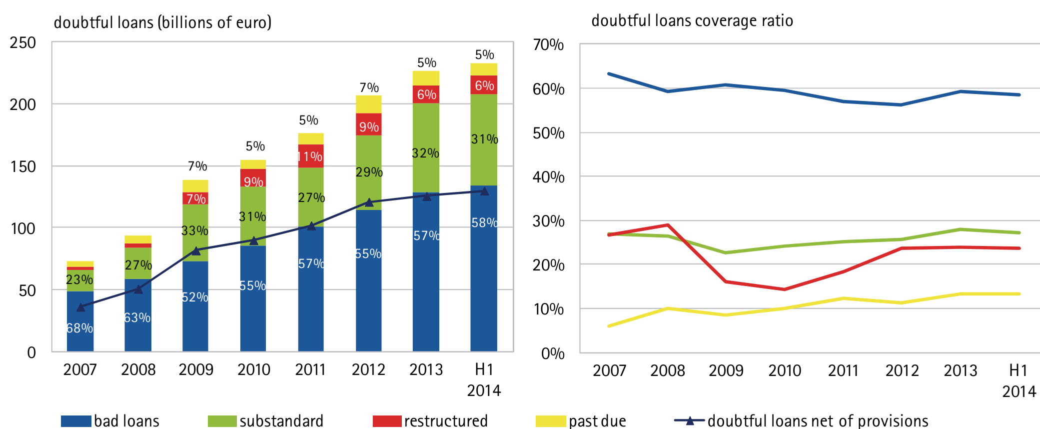
In the first half of 2014, the quality of loan portfolios of Italian and Spanish banks, as measured by the rate of change in bad loans, has recorded slight improvements for the first time since 2011. Nonetheless, in Italy the weight of bad loans on total gross loans continued to rise, due to the contraction of total loans. In the same time period, the cost of risk declined back to 2011 level, after the peak recorded in 2013.

Figure 4.7 – Credit quality of main listed European banks

Source: calculations on data from consolidated annual reports of main listed European banks (24 groups) 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. The retrospective application of IFRS 10 "Consolidated Financial Statements" and IFRS 11 "Joint Arrangements" back to the 1st of January 2013 caused a change in the consolidation scope. Figures as of December 2013 and June 2014 are not fully comparables to previous figures.

Since 2007, for the main Italian banking groups almost all classes of doubtful loans have continued to increase both in gross and net terms. The coverage ratio has remained substantially stable, with the exception of a slight increase for past due loans.

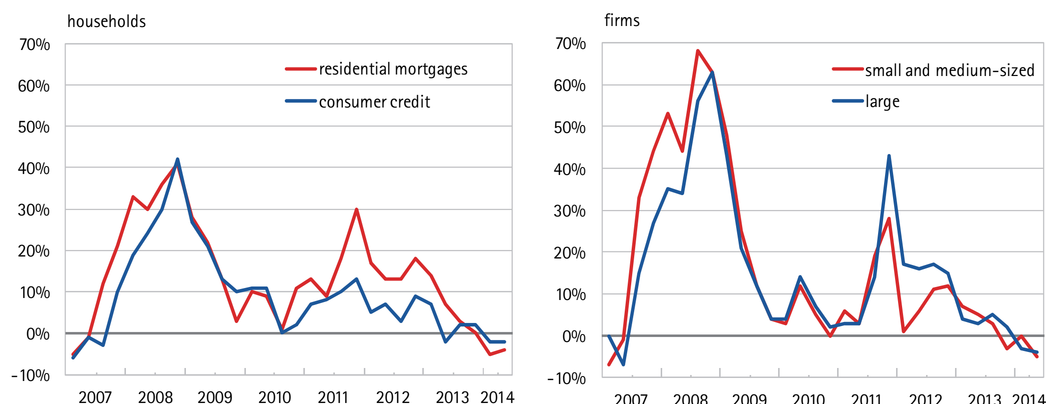
Figure 4.8 – Credit quality of major Italian banking groups



Source: calculations on data from consolidated annual reports of the 8 largest Italian banking groups. The retrospective application since the 1st January 2013 of IFRS 10 "Consolidated Financial Statements" and IFRS 11 "Joint Arrangements" caused a change in the consolidation scope. Figures as of December 2013 and June 2014 are not fully comparables to previous figures.

Since mid 2012, in the euro area credit standards for bank loans to households and firms have continued to ease. In particular, in the second quarter of 2014, the net percentage of banks reporting a tightening in credit conditions became negative for the first time since 2007.

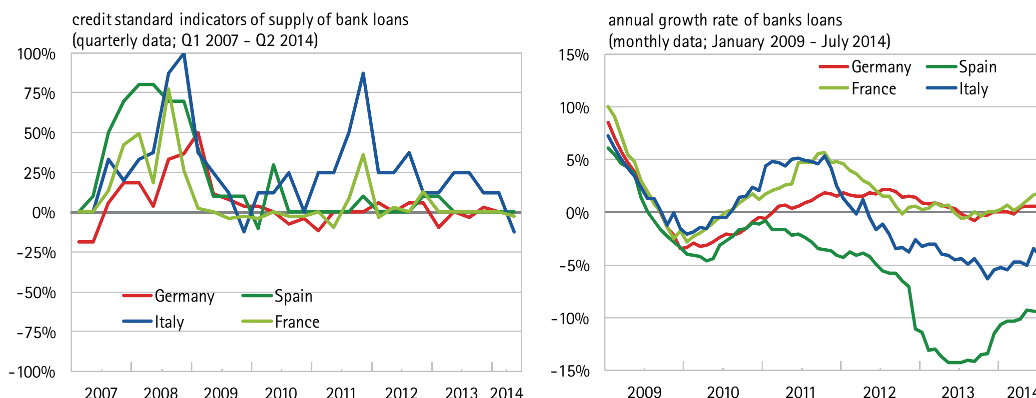
Figure 4.9 – Credit standard indicators for bank loans in the euro area
(quarterly data; 1Q 2007 – 2Q 2014)



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

In the first months of 2014, bank loans to non-financial firms fell further in Italy and Spain (respectively, by 5% and 10%).

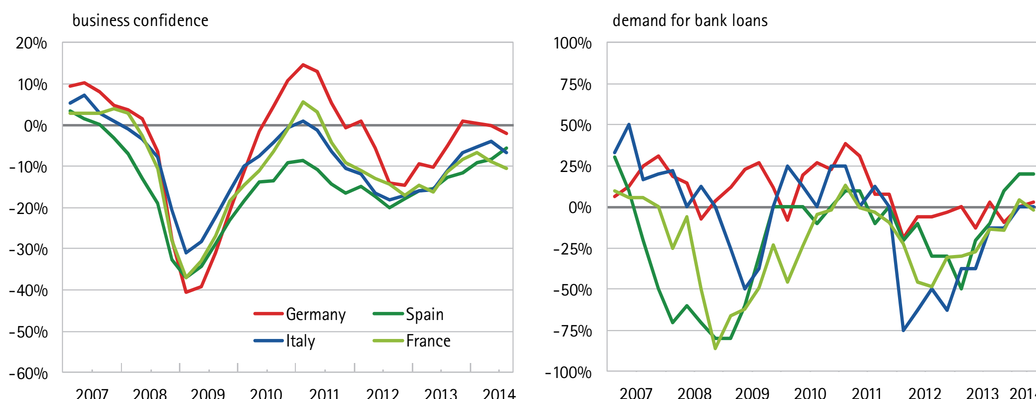
Figure 4.10 – Credit conditions and bank lending to non-financial companies in main euro area countries



Source: ECB.

Business confidence remained negative in the main euro area countries, except for Germany, and the demand for bank loans stayed weak, with cross-country disparities declining in the second quarter of 2014.

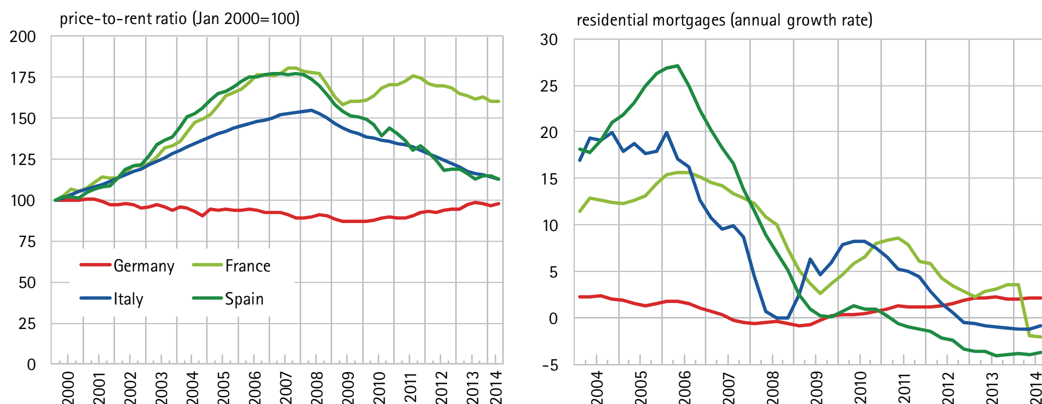
Figure 4.11 – Business confidence and demand for bank loans from non-financial corporations in main euro area countries
(quarterly data; 1Q 2007 – 2Q 2014)



Source: ECB and Thomson Reuters Datastream. The credit demand indicator is the net percentage of banks reporting an increase in loans demand from firms. For France net percentages are weighted based on the amounts outstanding of loans of the individual banks in the respective national samples.

In 2014, also residential mortgages continued to record negative growth rates, due to weak activity in property markets putting downward pressure on the price to rent ratio

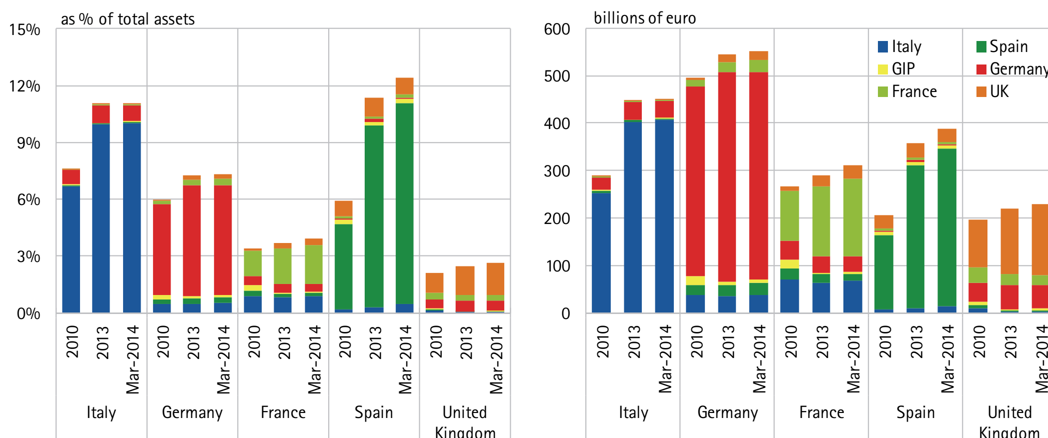
Figure 4.12 – House prices and residential mortgages in main euro area countries



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

In early 2014, the sovereign-bank nexus, as measured by the exposure to domestic sovereign bonds, rose in Spain, while remaining stable in Italy and Germany

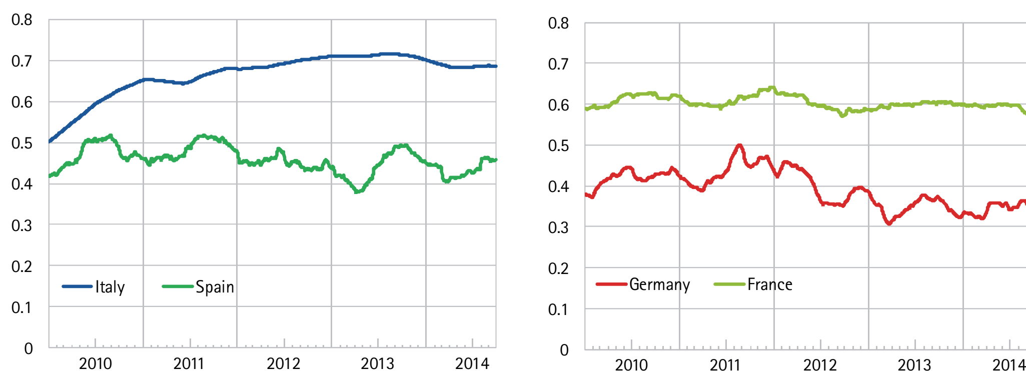
Figure 4.13 – Exposures of banks to domestic sovereign debt for main European countries



Source: calculations on Bank for International Settlements and Bruegel data. GIP: Greece, Ireland and Portugal. Figures 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 link between bank and sovereign risks, as measured by dynamic correlation between CDS spreads, remained substantially unchanged in the first nine months of 2014, with Italy and France recording the highest values.

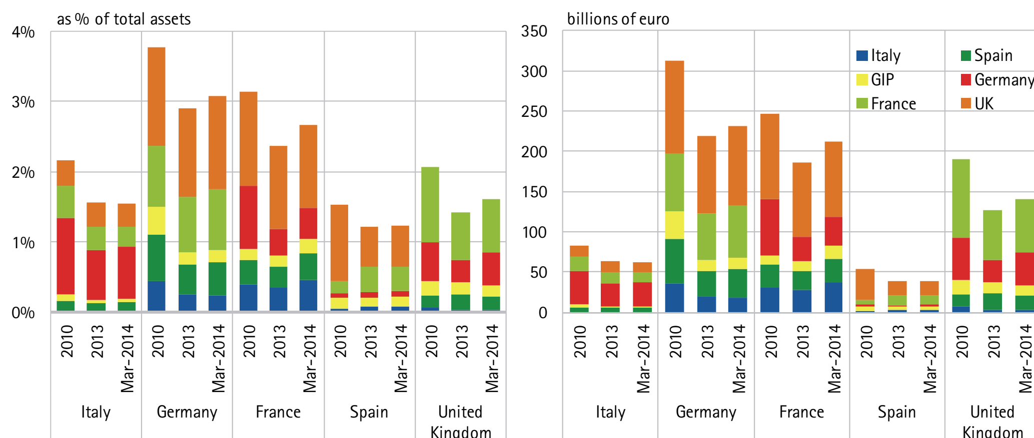
Figure 4.14 – Dynamic correlation between sovereign CDS spreads and bank CDS spreads for main European banks
(daily data; six month moving average; 01/01/2010 - 30/09/2014)



Source: calculations on Thomson Reuters Datastream data. The bank samples include main listed groups in each country (5 for Italy and Spain, 3 for Germany and 4 for France). Dynamic correlation has been estimated following Engle (2002).

In the first quarter of 2014, European banks either raised or maintained stable their cross-border exposures with respect to end-2013 levels, thus reversing the significant fall recorded since 2010.

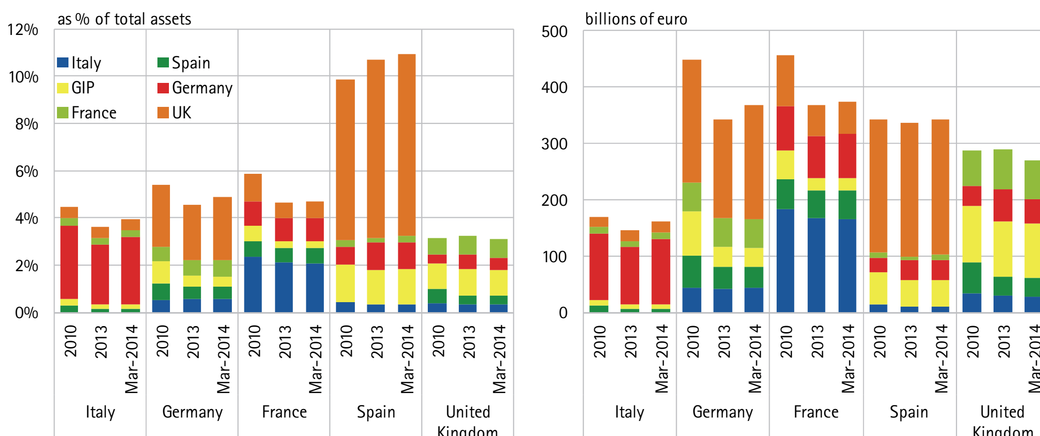
Figure 4.15 – Cross-border exposures among banks of main European countries



Source: calculations on Bank for International Settlements data. GIP: Greece, Ireland and Portugal. Figures refer to total banking system of Italy, Germany, France, Spain and the United Kingdom and do not include exposures to the country of origin.

The same developments can be observed with respect to the foreign exposure of Italian, German and French banks to the private sector of the other major European countries.

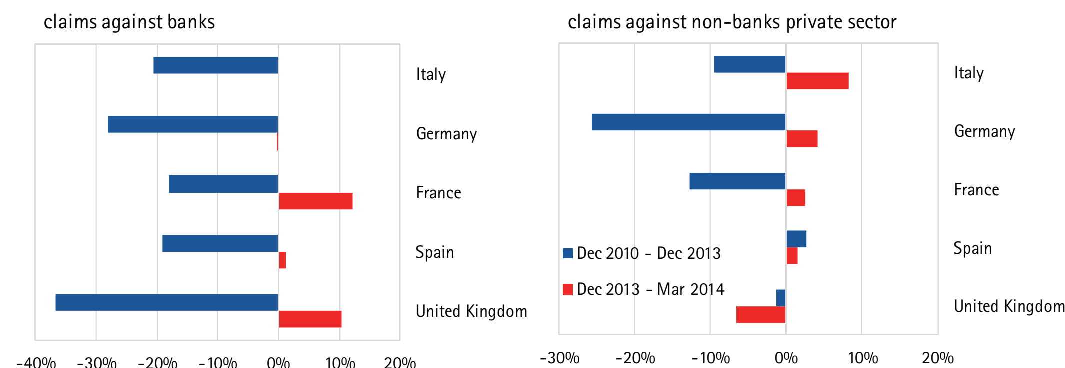
Figure 4.16 – Foreign exposures of banks to the private sector of main European countries



Source: calculations on Bank for International Settlements data. GIP: Greece, Ireland and Portugal. Figures refer to total banking system of Italy, Germany, France, Spain and the United Kingdom and do not include exposures to the country of origin.

Overall, financial fragmentation, as measured by total banks' foreign claims, fell during the first months of 2014 in all the largest euro area countries.

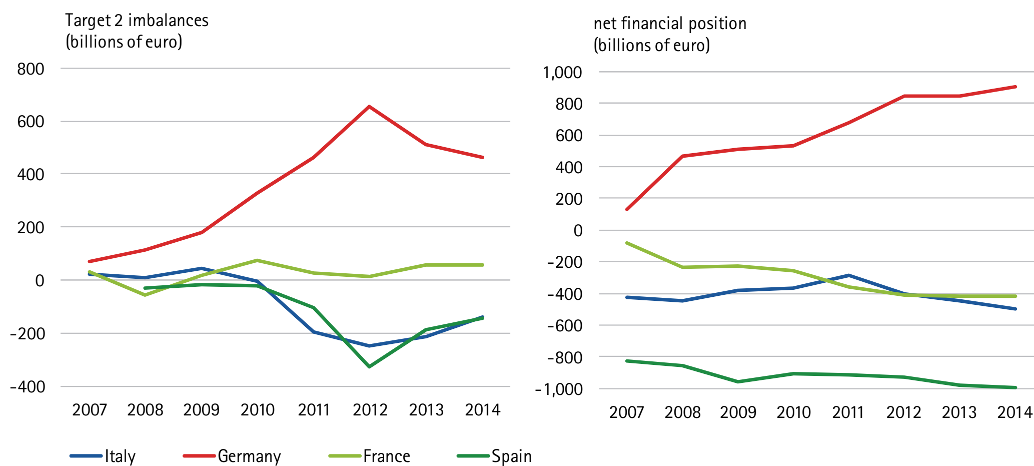
Figure 4.17 – Change in foreign claims of banks of main European countries



Source: calculations on Bank for International Settlements data. Figures 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 availables are Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, Spain, Sweden, the United Kingdom. For Italy the change Dec 2013 – Mar 2014 does not include exposures to Austria, the Netherlands and Poland.

The decline in financial fragmentation is also signaled by the improvements in the debtor balances of peripheral countries in the Target 2 payment system, driven by the introduction of a negative interest rate on ECB deposit facilities. Italy's international net financial position continued to be negative, mainly because of valuation effects.

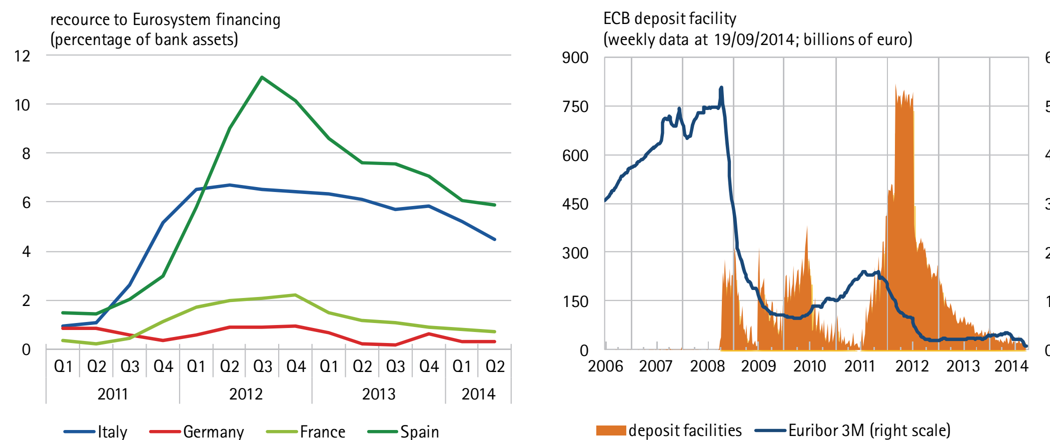
Figure 4.18 – Target 2 imbalances and net financial position for main euro area countries



Source: calculations on ECB and Central banks data.

Recourse to ECB funding fell for Italian and Spanish banks at 4.5% and 6% of total assets, respectively, as a consequence of the early repayments of ECB funds allotted during the 3-years LTRO in December 2011 and February 2012. Deposits with the ECB continued to decrease mainly because of negative rates. The 3 months Euribor rate reached values near to zero in September.

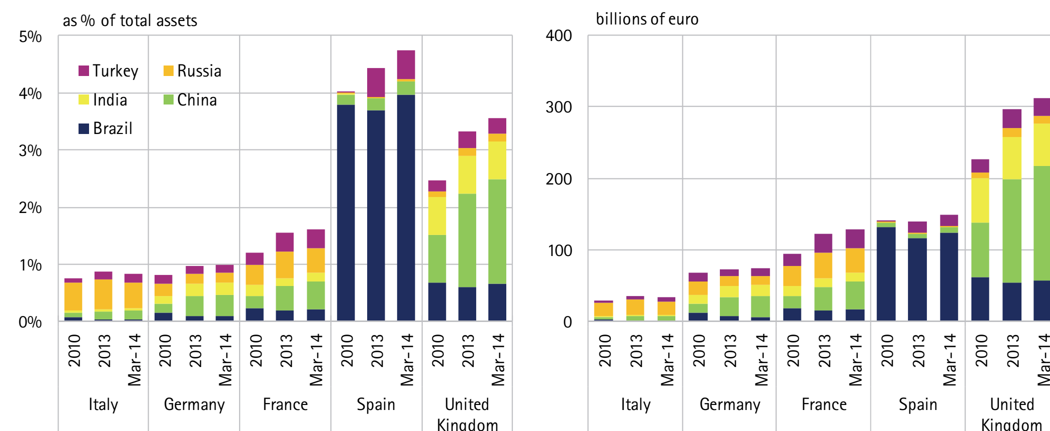
Figure 4.19 – Reliance on Eurosystem funding by credit institutions of main euro area countries and ECB deposit facility



Source: calculations on ECB and national central banks data.

The exposures of Italian banks to emerging markets is lower than 1% of total assets, while Spanish and English banks are the most exposed (about 5% and 3,5% respectively)

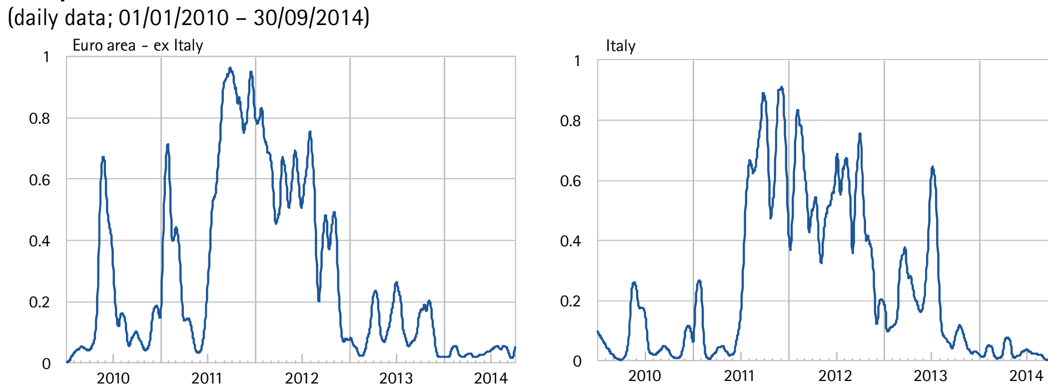
Figure 4.20 – Foreign exposures of banks of main European countries to selected emerging markets



Source: calculations on Bank for International Settlements data.

In 2014, contagion among banks (as measured by the joint probability of default implied by CDS spreads movements) reached values near to zero, both in the euro area and in Italy, although slightly increasing in September.

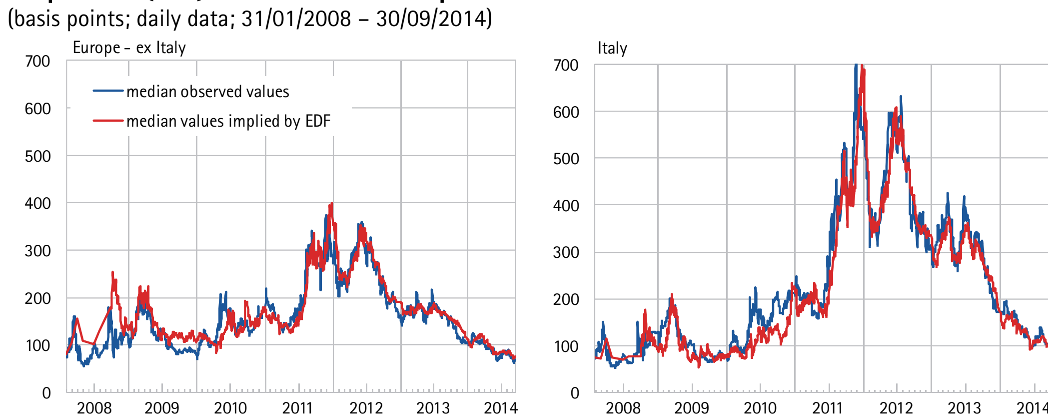
Figure 4.21 – Indicator of joint probability of default implied by CDS spreads for main European banks
(daily data; 01/01/2010 – 30/09/2014)



Source: calculations on Thomson Reuters Datastream data. The Italian sample includes 5 groups; the euro area sample includes 16 groups. 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).

During 2014, the perceived credit risk of European financial institutions kept declining, as shown by the trends in both the observed values of CDS and those implied by EDF. Italian banks continued to be perceived as slightly riskier than their European peers, although the relative gap is narrowing.

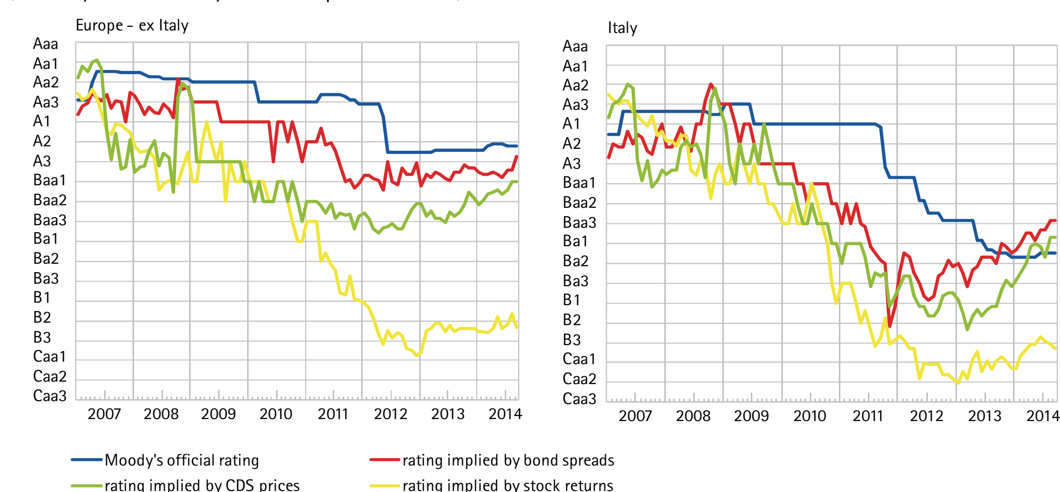
Figure 4.22 – Average 5-year CDS prices observed and implied by the expected default frequencies (EDF) for main listed European banks
(basis points; daily data; 31/01/2008 – 30/09/2014)



Source: calculations on Thomson Reuters Datastream and KMV - Credit Edge data for main listed groups (5 for Italy and 16 for Europe).

The improvement in European banks' credit risk perception is signaled also by the ratings implied in bond spreads and CDS prices recorded at the end of September. This phenomenon was more marked for Italian banks, whose implied bond and CDS ratings reached levels higher than the official rating.

Figure 4.23 – Official and market implied rating for main European bank
(monthly data; January 2007 – September 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 main listed Italian banks with Moody's rating.