

Statistics and analyses

# Risk Outlook

13

2017



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

Nella prima metà del 2017 gli indici azionari delle principali economie avanzate hanno sperimentato un incremento, a fronte del miglioramento dello scenario macroeconomico globale. Dinamiche positive sono state registrate anche nei principali mercati dell'area euro, sia pure con persistenti disomogeneità tra paesi e settori economici. Nonostante numerose fonti di incertezza sulle politiche economiche di alcune regioni e sui relativi riflessi a livello globale, gli indicatori di volatilità e i volumi degli scambi hanno continuato a ridursi negli USA, nella zona euro e in Giappone, mentre le condizioni di liquidità dei mercati nell'area euro sono migliorate. Si è altresì ridotta la correlazione tra indici azionari, come evidenziato dal calo degli indicatori di contagio e di reattività a shock comuni. Per quanto riguarda l'attività sul mercato primario, nel 2016 le operazioni di prima quotazione hanno sperimentato una significativa contrazione nei principali paesi dell'area euro, ad eccezione della Germania.

Sul mercato secondario dei titoli pubblici, le incertezze politiche e le aspettative di un cambio nell'assetto di politica monetaria della BCE hanno solo marginalmente ridotto i benefici derivanti dal *quantitative easing*. I rendimenti dei titoli pubblici dei paesi dell'Eurozona, infatti, si sono stabilizzati dopo l'incremento registrato nel 2016, mentre i prezzi dei CDS sul debito sovrano hanno registrato un lieve calo. In tutti i paesi dell'area euro i rendimenti medi dei titoli pubblici sulle scadenze a breve si mantengono stabilmente su livelli negativi. Nella prima metà del 2017 circa il 60% del debito pubblico dell'Eurozona è stato emesso a tassi negativi, a beneficio del processo di risanamento dei conti pubblici dei paesi più indebitati. Nell'ultimo biennio è altresì aumentata la quota di titoli detenuta da non residenti anche per i paesi periferici (ad eccezione del Portogallo). Nel corso del 2016, il mercato primario delle obbligazioni *corporate* ha confermato le tendenze in atto nelle principali economie avanzate. Nel settore non finanziario le emissioni nette risultano relativamente stabili dal 2013, mentre nel settore bancario continuano ad attestarsi su valori negativi a partire dal 2012. Anche l'attività sul mercato primario dei titoli cartolarizzati è rimasta piuttosto modesta.

Nel 2016, nonostante la contrazione dei ricavi, le maggiori società quotate dei principali paesi europei hanno mostrato una sostanziale tenuta dei livelli reddituali, sia in termini di *Roe* sia in termini di *Ebit margin*, per effetto della riduzione di svalutazioni di *asset* materiali e immateriali e della spesa per interessi. La persistente debolezza dei ricavi si riflette anche nella quota di imprese che si attesta su livelli inferiori alla media decennale, sostanzialmente stabile nell'ultimo biennio e oscillante tra il 20% in Germania e il 40% in Italia. Con riferimento al profilo finanziario, emergono segnali di miglioramento in Italia e in Spagna, dove la quota di imprese che presentano un livello di leva finanziaria superiore ai valori storici si è notevolmente ridotta portandosi in linea

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con quella osservata negli altri maggiori paesi europei. Nel primo trimestre del 2017 le condizioni di accesso al credito bancario per le imprese non finanziarie sono rimaste pressoché stabili nell'area euro, mentre i tassi di interesse sui prestiti sono ulteriormente calati. Dallo scorso anno la domanda di credito bancario si è ridotta in Italia, per effetto del minor fabbisogno di finanziamento legato anche agli investimenti fissi, mentre è aumentata in Germania e Spagna.

Nel 2016 la redditività delle maggiori banche europee è migliorata. In Germania, Francia e Regno Unito, tuttavia, il maggior contributo è riferibile all'incremento di ricavi tipicamente soggetti a maggiore variabilità, mentre le tradizionali fonti di reddito bancario hanno esibito un calo generalizzato in tutti i paesi. L'adeguatezza patrimoniale delle maggiori banche italiane risulta in linea con i principali *competitors* spagnoli e francesi, ma ancora inferiore a quella dei maggiori istituti tedeschi e inglesi. Sulle banche europee gravano criticità di diversa natura, a seconda dei differenti modelli di *business*. Le maggiori banche tedesche, inglesi e francesi detengono le più complesse e illiquide attività finanziarie (cosiddette attività di livello 2 e 3) per un ammontare iscritto in bilancio corrispondente fino a 10 volte il capitale *common equity tier 1*. Le banche italiane, per contro, continuano a caratterizzarsi per notevoli criticità rispetto alla qualità del credito, con una quota di sofferenze sul totale dei crediti significativamente superiore alla media europea, benché in termini netti essa sia calata nel 2016 per effetto delle forti svalutazioni di fine anno. La disomogeneità nella redditività e nella qualità del credito tra le banche dei paesi europei contribuisce ad alimentare differenze nel rischio percepito dai mercati. Nella prima metà del 2017, i prezzi dei CDS hanno toccato il minimo dal 2015 per le banche europee, mentre si sono stabilizzati a livelli pari a circa il doppio per le banche italiane. Dal 2010 si è registrata, infine, una significativa contrazione sia dell'operatività internazionale delle banche sia dell'integrazione finanziaria nell'area euro, come emerge dal calo delle relative esposizioni estere.

Nel complesso, i mercati finanziari dell'Eurozona hanno mostrato una buona capacità di assorbimento delle tensioni di varia natura emerse nell'ultimo anno, anche grazie alla politica monetaria accomodante della BCE. Tale circostanza, assieme al progressivo miglioramento delle prospettive macroeconomiche, dovrebbe mitigare i rischi al ribasso, sebbene le incertezze persistenti a livello globale potrebbero ancora incidere negativamente sulla ripresa in atto.

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## Trends and risks

In the first semester of 2017, stock prices of the main advanced economies have risen in the wake of a global improvement of macroeconomic fundamentals. In the euro area the ongoing strengthening of recovery has triggered a marked upward adjustment in the short term expectations on stock returns. In spite of a number of sources of global uncertainty, touching both the political dimension and many policy settings, in the Eurozone volatility indicators have kept declining, as well as trading volumes, while liquidity conditions have continued to improve. Co-movements in stock indexes have also tightened, as shown by the drop in the indicators of contagion and of stock markets' sensitivity to common shocks. As for the activity on equity primary markets, over 2016 IPOs have experienced a marked slow-down across the main European countries (with the exception of Germany).

On sovereign bond markets, political uncertainties and expectations of a tighter ECB monetary policy have only marginally reduced the benefits of the QE. After the upsurge recorded in 2016, Eurozone government bond yields have indeed levelled off, while CDS premiums have slightly declined. Short term maturity yields of government bonds remain persistently below zero, with around 60% of Eurozone public debt issued at negative average yields in the first half of 2017. The negative yield environment is squeezing the roll-over costs of sovereign bonds, while non-residents' holdings have kept rising also for peripheral countries over the last two years (with the exception of Portugal). In 2016 activity on European primary corporate bond markets has confirmed the trends over the last few years, with non-financial net issuances relatively stable at 2013 levels and bank net issuances set at negative values since 2012. Also primary markets for securitized instruments have continued displaying a rather weak activity.

In 2016, in spite of the contraction in revenues recorded in the main Eurozone countries, large listed corporates displayed signs of improvement both in profitability and, consistently, in the Ebit margins due to the decline in impairment, write-offs and interest rate expenses. This persisting weakness is mirrored in the relative stability in the percentage of companies reporting net sales below their historical values (ranging from almost 20% in the Germany to more than 40% in Italy). As for financial situation, soundness of most large corporates displayed some sort of improvement, with a declining proportion of Italian and Spanish firms running leverage above their historical level. In the first quarter of 2017, credit standards for non-financial companies have remained fairly unchanged across the Eurozone, while interest rates charged on bank loans have declined further for both large and mid-size firms. The demand for bank loan declined in Italy, mainly driven by lower funding needs for fixed investments, while rose in Germany and Spain.

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Banks' profitability has improved, although in Germany, France and the UK the main contribution in 2016 has come from the less stable sources of revenues, while traditional sources have generally declined in all countries. Records for capital adequacy see Italy now almost in line with the main French and Spanish peers, which in turn keep lagging behind German and English banks. Challenges still hanging on banks vary across financial institutions, depending also on their business model. German, English and French banks show a significant exposure to the most illiquid and complex financial assets (so called level 2 and level 3), whose weight on common equity tier 1 capital ranges from 7 to 10. Italian banks keep displaying problematic credit quality metrics, with the share of bad loans on total loans still way above their European peers although decreasing in net terms as a consequence of large credit write-offs. Divergences in banks' profitability and credit quality across Europe contribute to the persisting discrepancies in banks' perceived risk: over the first months of this year CDS prices have touched their lowest record since 2015 for European credit institutions, while levelling off at twice as much for Italian banks. Both European banks' international activity, as measured by total foreign claims, and euro area financial integration, as tracked by intra-Eurozone banks' exposures, have kept marking a significant contraction thus confirming the trend started in 2010.

Overall, euro area financial markets have so far proven to be resilient, thanks also to the ECB monetary policy stance. Coupled with the ongoing improvement in macroeconomic activity, this should lessen the risks surrounding the Eurozone outlook, although persisting global uncertainties may still jeopardise recovery.

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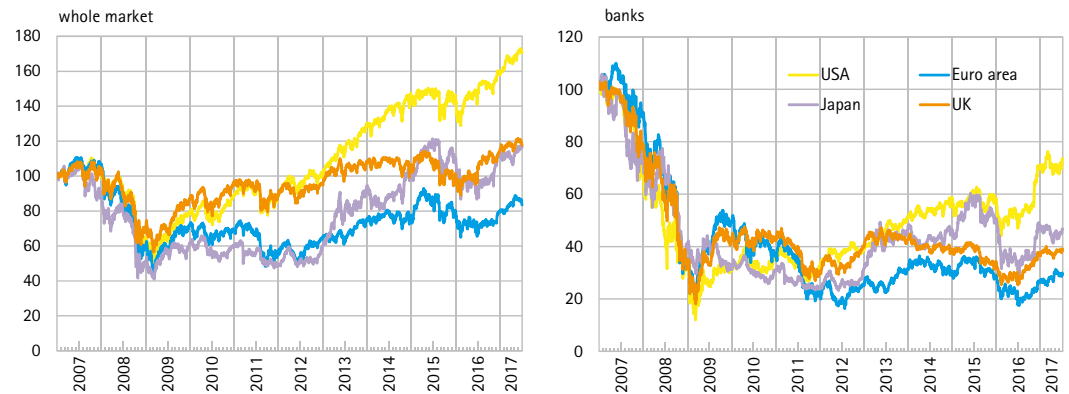
## Equity markets

In the first semester of 2017, stock prices of the main advanced economies have risen in the wake of a global improvement of macroeconomic fundamentals.

Asset returns have followed a positive trend also in the major euro area countries, although divergences in the pace of recovery keep persisting across regions and sectors.

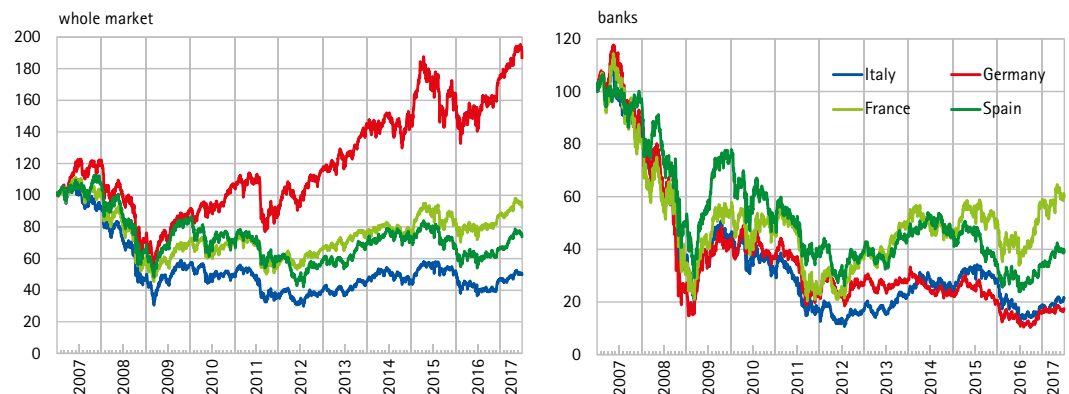
In spite of a number of sources of global uncertainty, touching both the political dimension and many policy settings, volatility indicators have kept declining ...

**Fig. 1.1 – Advanced countries stock index prices**  
(daily data; 01/01/2007 – 30/06/2017; 01/01/2007 = 100)



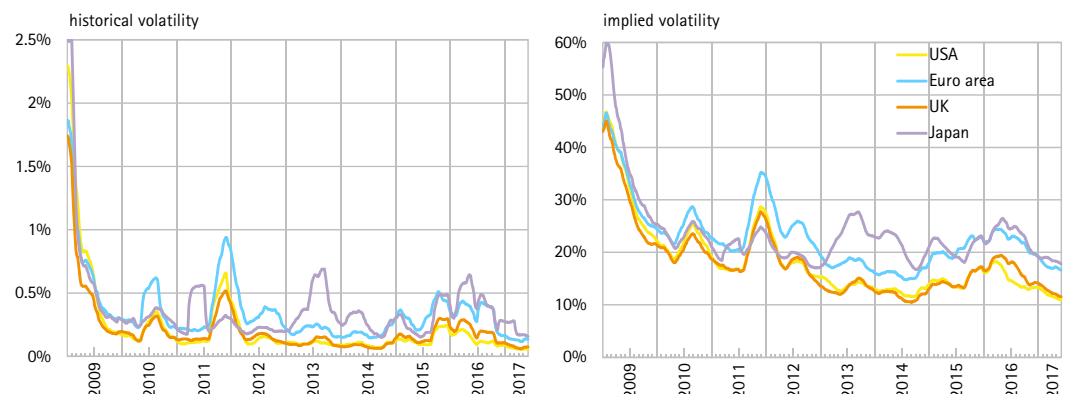
Source: Thomson Reuters Datastream. In the left graph stock indexes include: S&P500 (USA), Nikkei 225 (Japan), Fts100 (UK), Euro Stoxx 50 (euro area). In the right graph S&P500 Banks, Euro Stoxx Banks, Japan Ftse Banks and UK Ftse Banks are represented.

**Fig. 1.2 – Stock indexes of the main euro area countries**  
(daily data; 01/01/2007 – 30/06/2017; 01/01/2007 = 100)



Source: Thomson Reuters Datastream. Stock indexes represented are Ftse Mib (Italy), Cac40 (France), Ibex35 (Spain), Dax30 (Germany) in the left graph and Ftse Banks indexes in the right graph.

**Fig. 1.3 – Advanced countries stock index historical and implied volatilities**  
(daily data; 01/01/2009 – 31/05/2017; annualised volatilities in percentage terms; four-month moving average)



Historical volatilities are estimated by applying multivariate Garch models. Calculations are based on Thomson Reuters data.

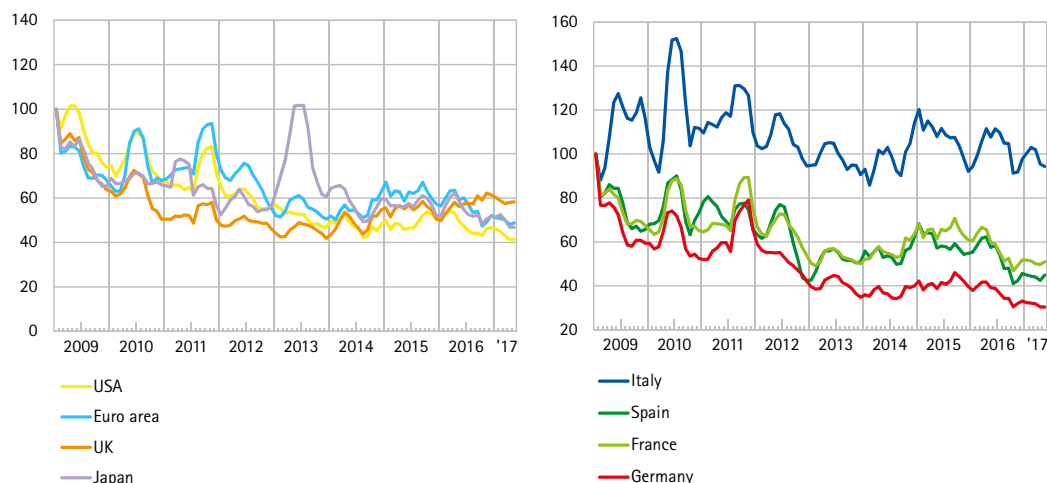
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...as well as trading volumes in the US, Eurozone and Japan, ...

**Fig. 1.4 – Trading volume in advanced countries**

(monthly data; January 2009 – May 2017; January 2009 = 100; four-month moving average)

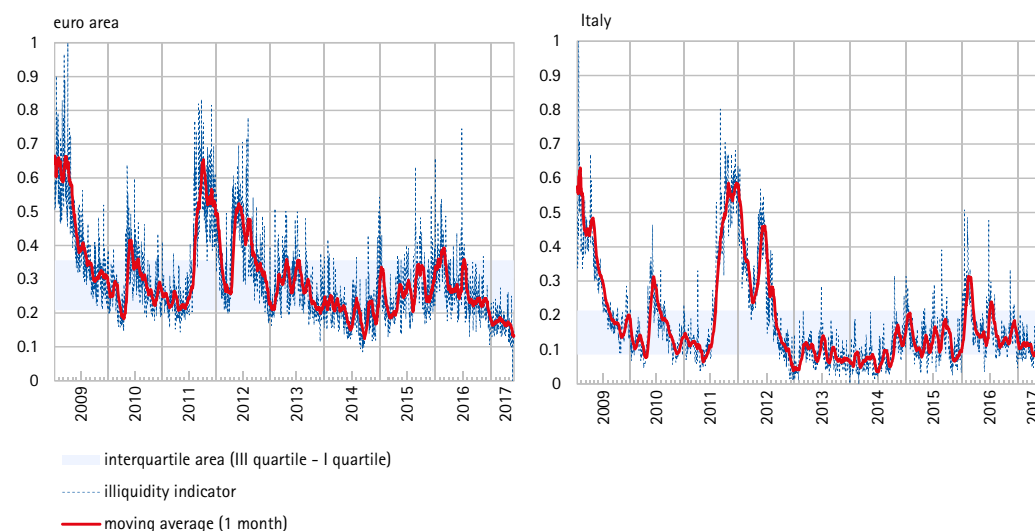


Trading volume is deflated on the basis of stock index prices. In the left graph trading volumes refer to S&P500 (USA), Nikkei 225 (Japan), Ftse 100 (UK), Euro Stoxx 50 (euro area) stock indexes. In the right graph trading volumes refer to Ftse Mib (Italy), Cac40 (France), Ibex35 (Spain), Dax30 (Germany) stock indexes. Calculations are based on Thomson Reuters data.

... while liquidity conditions have continued to improve in the euro area.

**Fig. 1.5 – Stock market illiquidity in the euro area**

(daily data; 01/01/2009 – 31/05/2017)



The illiquidity indicator is the first principal component calculated on the following illiquidity and volatility measures: price impact (Amihud, 2002), bid-ask spread, implied volatility and historical volatility (range based estimator). The indicator is rescaled between zero (= high liquidity) and one (= low liquidity). The first and the third quartiles are estimated on the sample distribution. Calculations are based on Thomson Reuters data referring to Euro Stoxx 50 (euro area) and Ftse Mib (Italy) stock indexes.



Co-movements in stock indexes have also tightened, as shown by the drop in the global contagion indicator (encompassing also emerging economies) ...

... and by the decline in the impact of common factors underlying asset returns across Eurozone countries.

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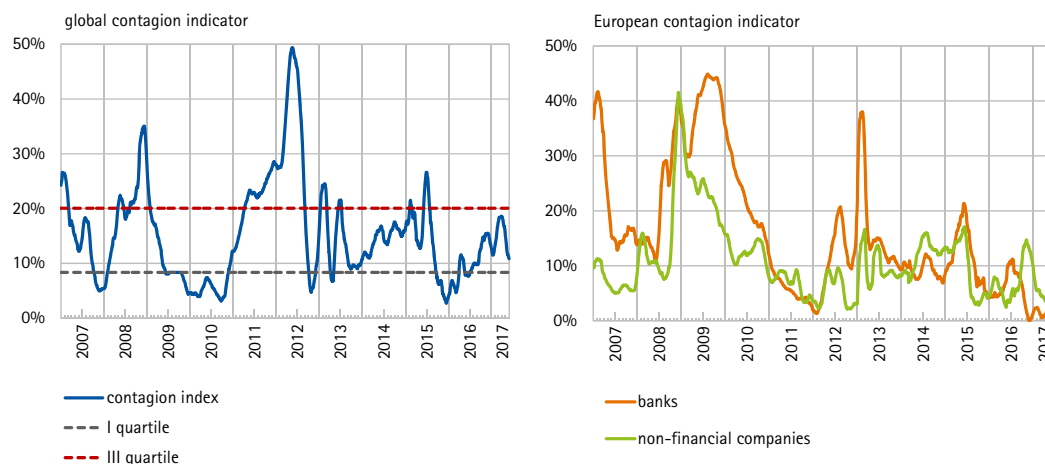
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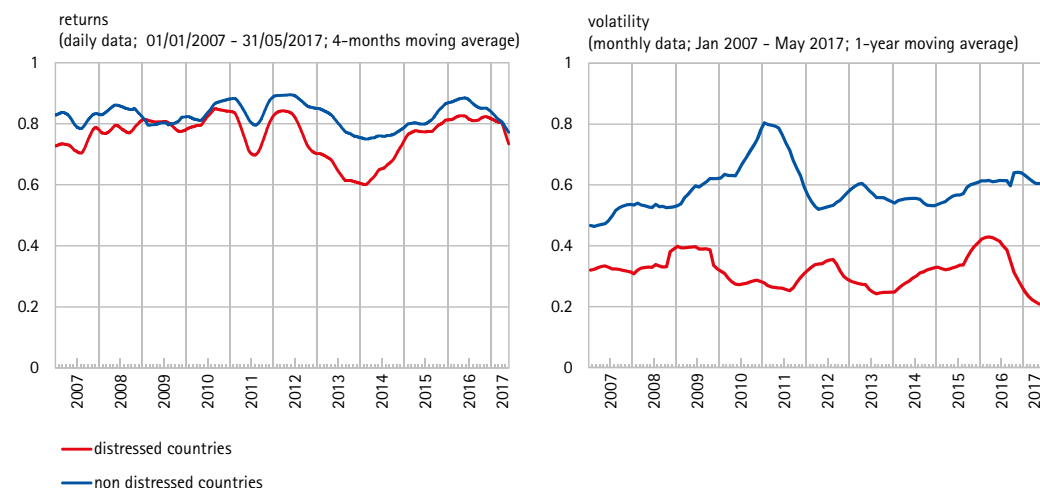
**Fig. 1.6 – Stock index price contagion indicator**

(percentage values; daily data; 01/01/2007 – 31/05/2017; two-month moving average)



On the left graph contagion is measured on the following stock index return time series: Merval (Argentina), Bovespa (Brazil), Micex (Russia), Sensex (India), Shenzhen SE (China), MSCI Turkey, S&P500 (USA), Euro Stoxx 50 (euro area), Ftse 100 (UK) and Topix (Japan). On the right graph contagion is measured on UK, Germany, France, Italy, Spain, Greece, Portugal, Ireland, Netherlands, Austria and Finland MSCI stock index return time series. First and third quartiles refer to sample distribution. For the methodology see Consob Working paper no. 72, 2012. Calculations are based on Thomson Reuters data.

**Fig. 1.7 – Euro area stock market sensitivity to common shocks**



Left graph represents the explanatory power of common factor equity portfolio, that is the average R-square of the following regressions (run separately for each country  $i$ ):  $return\_index_{i,t} = \alpha_i + \beta_i \theta_t + \varepsilon_{i,t}$ , where  $\theta_t$  is the return on the first common factor equity portfolio (first principal component) on day  $t$ . Regressions are estimated recursively (200 observations sample window; ECB – Financial integration in Europe, 2014). Right graph represents variance ratios, which are computed in two steps. Firstly, domestic historical volatility time series are estimated by applying Garch models ( $\sigma_{i,t}^2$ ). Secondly, the following regression is run for each country  $i$ :  $\sigma_{i,t}^2 = \alpha_i + \beta_i \sigma_{euro,t}^2 + \gamma_i \sigma_{usa,t}^2 + \varepsilon_{i,t}$ , where  $\sigma_{euro}^2$  and  $\sigma_{usa}^2$  are respectively Euro Stoxx 50 and S&P500 stock index volatilities. At each time  $t$ , the variance ratio indicator is computed as the average of  $VR_{usa,i,t} = \frac{\beta_i \sigma_{usa,t}^2}{\sigma_{i,t}^2}$  and  $VR_{euro,i,t} = \frac{\beta_i \sigma_{euro,t}^2}{\sigma_{i,t}^2}$  (Baele et al., 2004 and ECB – Financial integration in Europe, 2014). Non-distressed countries include Germany, France, Netherlands, Austria, Finland. Distressed countries include Italy, Portugal, Spain, Ireland. Calculations are based on Thomson Reuters data.

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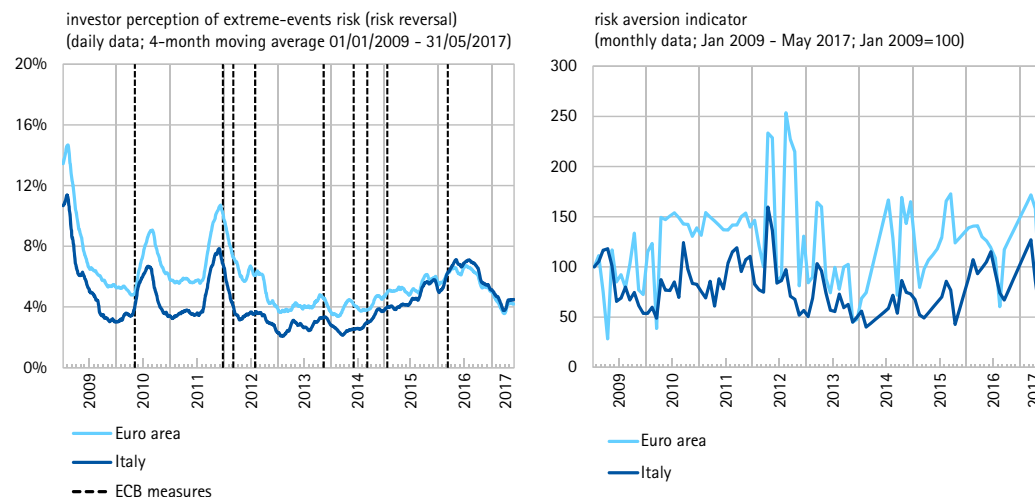
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However, uncertainties are still in the foreground, driving fluctuations in the investors' perception of extreme events.

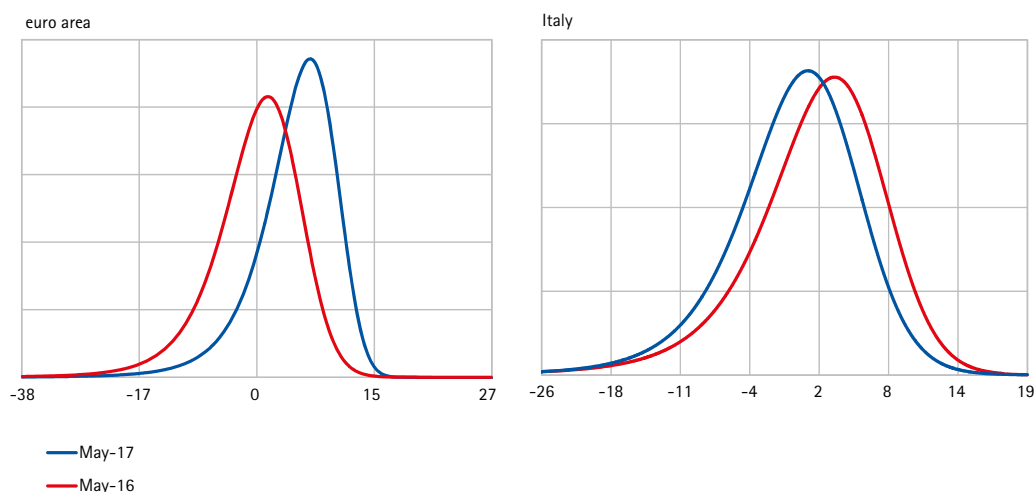
**Figure 1.8 – Investor perception of extreme events and risk aversion indicator**



The indicator of risk reversal (right graph) is defined as the difference between implied volatilities computed on put and the call out of the money options characterized by the same maturity (2 months) and equal risk premium sensitivity to the variations of the underlying asset price (delta equal to 25); the sample includes options on Euro Stoxx 50 (euro area) and on Ftse Mib (Italy). Higher values of the risk reversal indicator signals a higher perception of extreme-events risk (negative returns). The unconventional policy measures adopted by ECB and reported in the right graph are: 09/08/2007, injection of liquidity; 12/12/2007, swap agreement with Fed to inject liquidity in US dollars in exchange of guarantees in euro; 09/05/2010, Securities Market Programme; 20/12/2011, long-term refinancing operations (LTRO); 28/02/2012, LTRO; 26/07/2012, OMT announcement programme; 07/11/2013, interest rates cut; 05/06/2014, interest rates cut and TLTRO announcement; 04/09/2014, interest rates cut and ABSPP/CBPP3 announcement; 22/01/2015, PSPP announcement; 10/03/2016, ECB prolonged QE. Risk aversion is estimated by comparing stock return historical distribution with the distribution implied in stock index option prices (Shimko, 1993). Call and put on S&P500 (USA), Euro Stoxx 50 (euro area) and FTSE Mib (Italy) are taken into consideration. Calculations are based on Thomson Reuters and Bloomberg data.

In the Eurozone the improved macroeconomic outlook has triggered a marked upward adjustment in the short term expectations on stock returns, while Italy seems to have been penalized by the slower pace of economic recovery.

**Figure 1.9 – Stock return expectations on 3-month time horizon**



Risk neutral probability distributions are estimated on Ftse Mib and Euro Stoxx 50 option prices (Shimko, 1993). Calculations are based on Thomson Reuters data.

After the Brexit correction, market valuations in the banking sector appear now in line with fundamentals in almost all of the main Eurozone countries ...

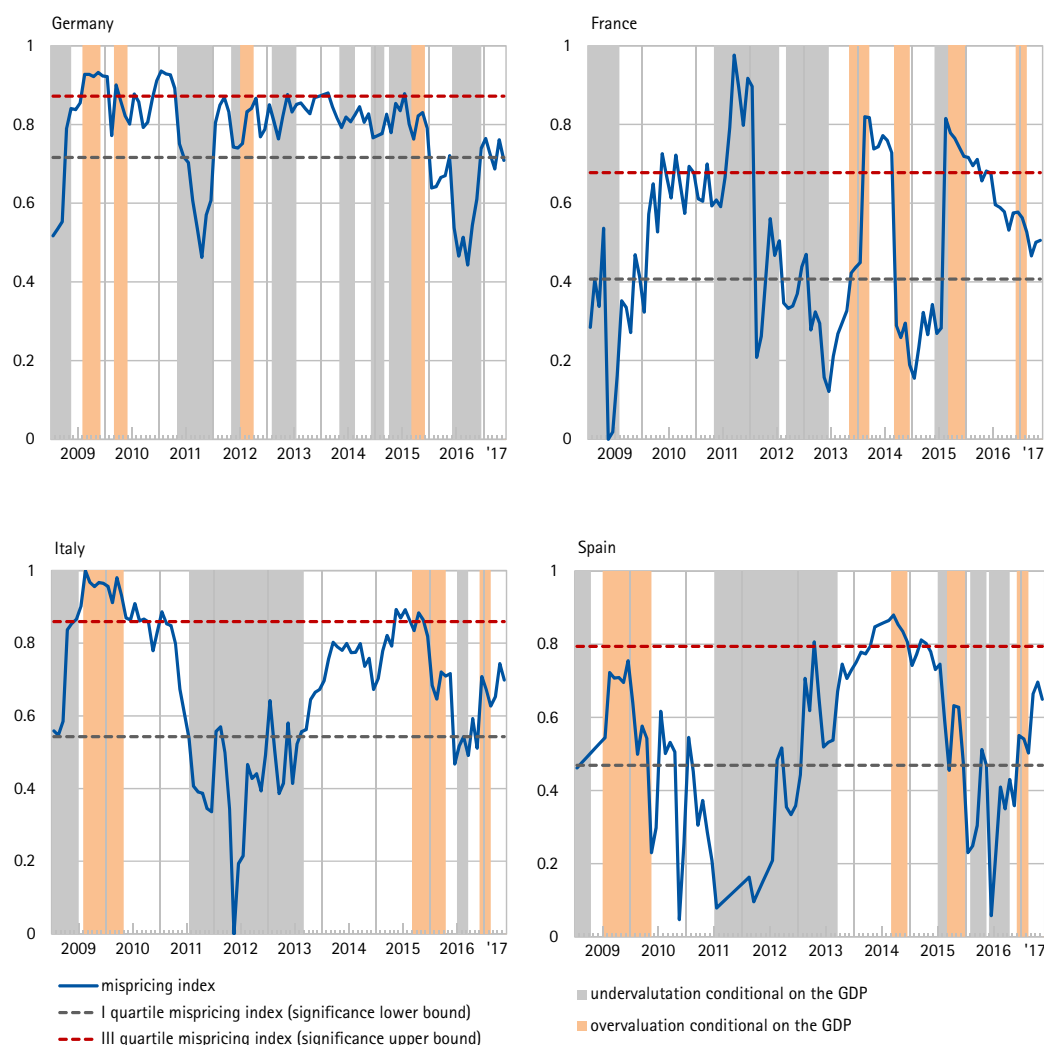
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**Fig. 1.10 – Boom and bust episodes of bank stock price in the euro area**  
(monthly data; January 2009 – May 2017)



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 is rescaled between zero (=undervaluation) and 1 (=overvaluation) and signals undervaluation (overvaluation) if it is lower than its I quartile (greater than its III quartile). The quartiles are computed on micro mispricing indicator's distribution estimated by taking into consideration time series starting from January 2000.

The macro mispricing indicator signals undervaluation (overvaluation) with respect to the business cycle. It is computed by estimating the time series of the  $p_t^{Iquartile,GDP}$  ( $p_t^{IIIquartile,GDP}$ ) 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  $p_t < p_t^{Iquartile,GDP}$ ; the indicator signals overvaluation (orange area) if  $p_t > p_t^{IIIquartile,GDP}$ ; 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 bank indexes (stocks included in the sample are selected on the basis of market capitalization and secondary market liquidity level; in previous risk outlook issues mispricing indicators were computed on main banks selected on the basis of asset performance reported in the balance sheet).

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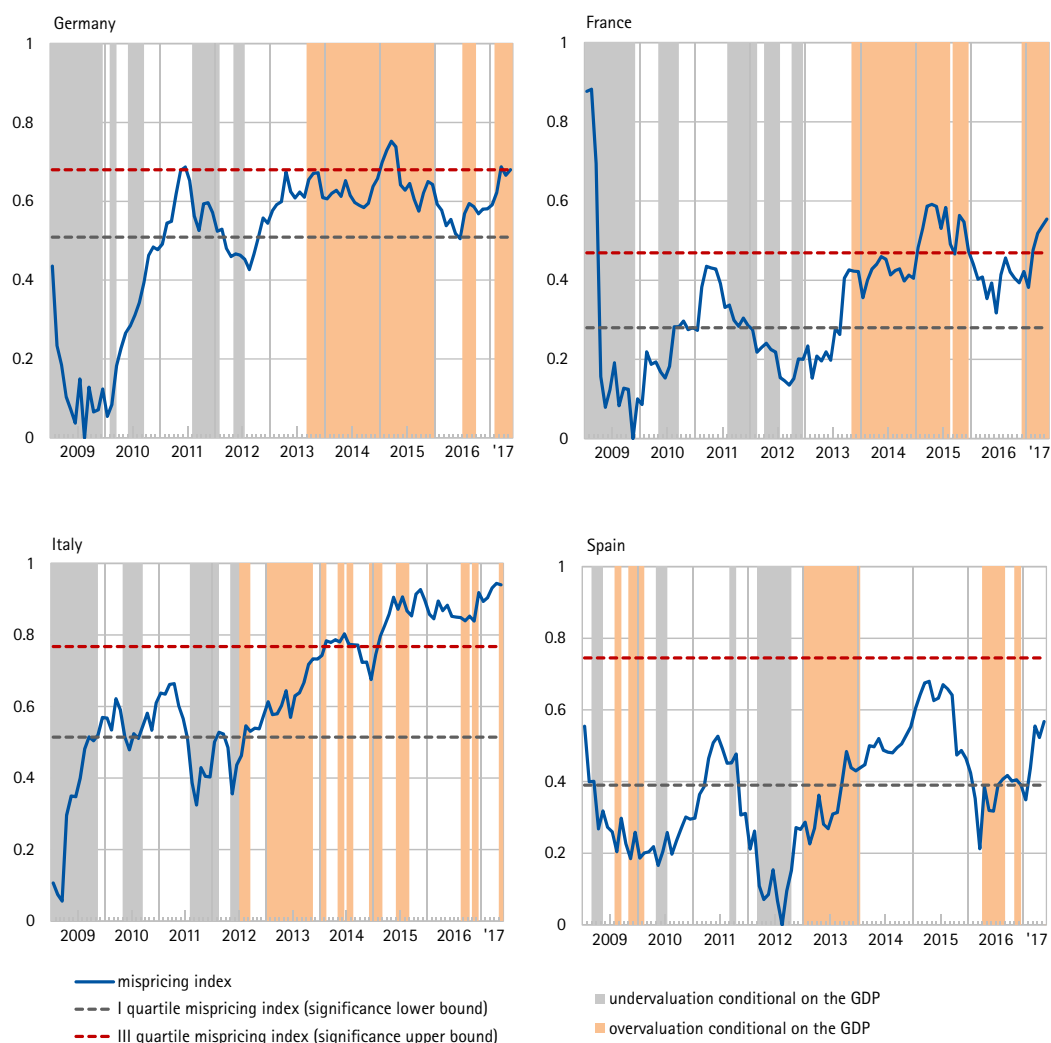
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... while signals of overvaluation in the non-financial sector are detected in Italy and France.

**Fig. 1.11 – Boom and bust episodes of non-financial firms stock price in the euro area**  
(monthly data; January 2009 – May 2017)



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 is rescaled between zero (=undervaluation) and 1 (=overvaluation) and signals undervaluation (overvaluation) if it is lower than its I quartile (greater than its III quartile). The quartiles are computed on micro mispricing indicator's distribution estimated by taking into consideration time series starting from January 2000.

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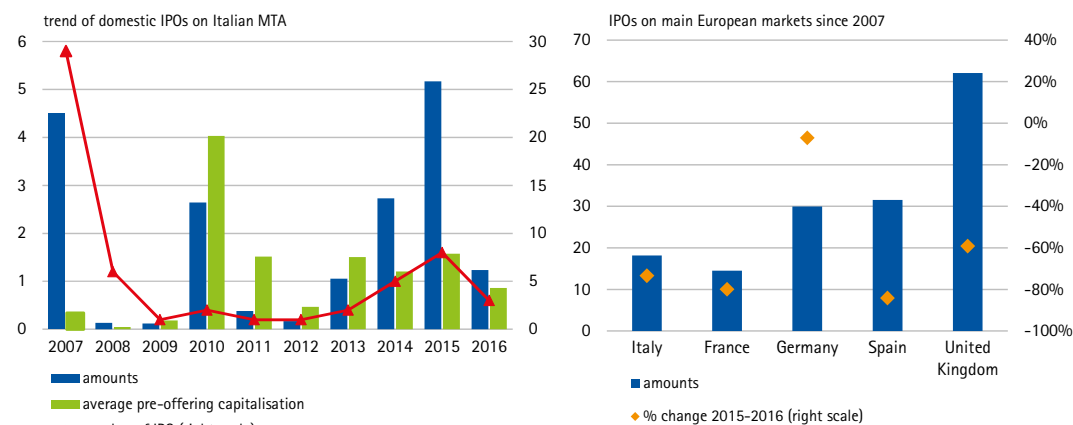
As for the activity on equity primary markets, over 2016 IPOs have experienced a marked slow-down across the main European countries (with the exception of Germany).

Focusing on the Italian market, also total placements have recorded a significant decline with respect to the previous year.

Overall, funds raised through the Italian primary stock markets have remained stable over the last two years, while the number of delisting following a takeover bid have slightly increased.

**Fig. 1.12 – Advanced countries initial public offerings (IPO)**

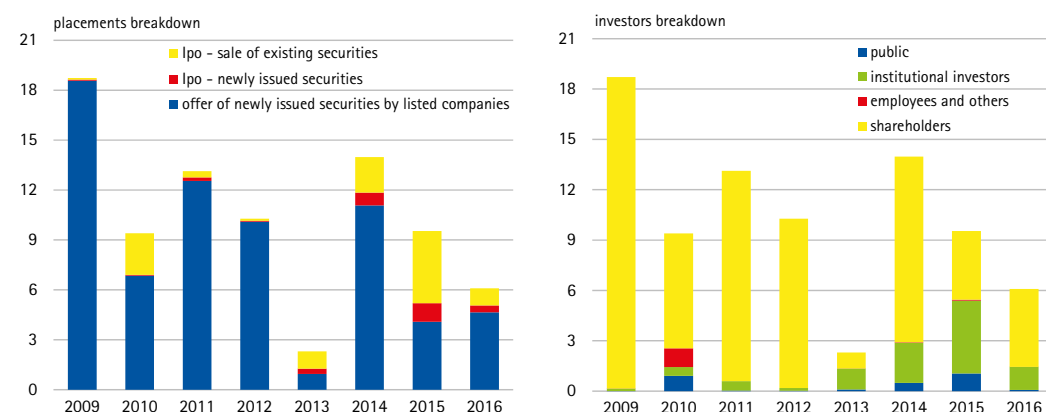
(amounts in billions of euro; latest data as of December 2016)



Source: Consob and Borsa Italiana data for Italy (including the Expandi Market until 2009); Bloomberg data for European countries. Average capitalisation of companies admitted to listing is computed on the basis of the offering price and the pre-offering number of shares.

**Fig. 1.13 – Total placement of listed shares and convertible bonds in the Italian market**

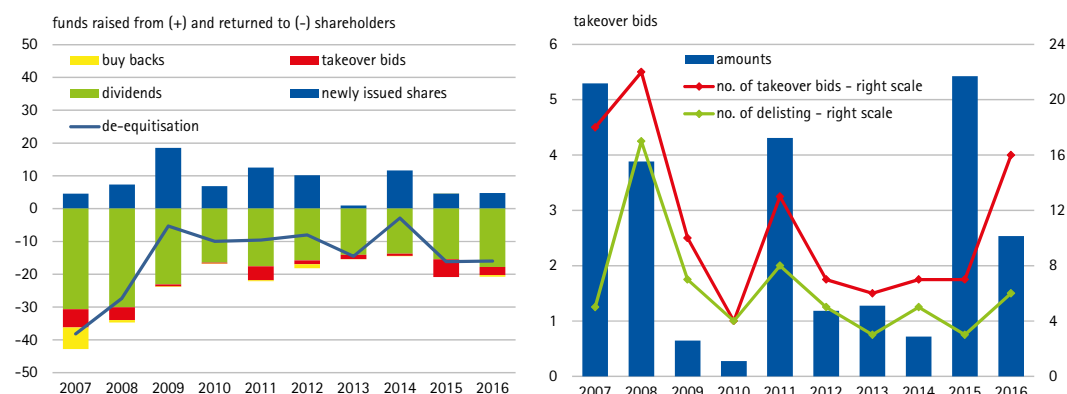
(issues of new securities and sale of existing securities; billions of euro)



Source: Borsa Italiana.

**Fig. 1.14 – De-equitisation and takeover bids on Italian listed shares**

(amounts in billions of euro)



The de-equitisation indicator is computed as the difference between new issues and the sum of dividends, takeover bids and buybacks. Buybacks are net acquisitions of own shares, disclosed by the issuers to Consob; the amount of buyback in 2014 is estimated. Calculations are based on Consob, Borsa Italiana and Thomson Reuters data.

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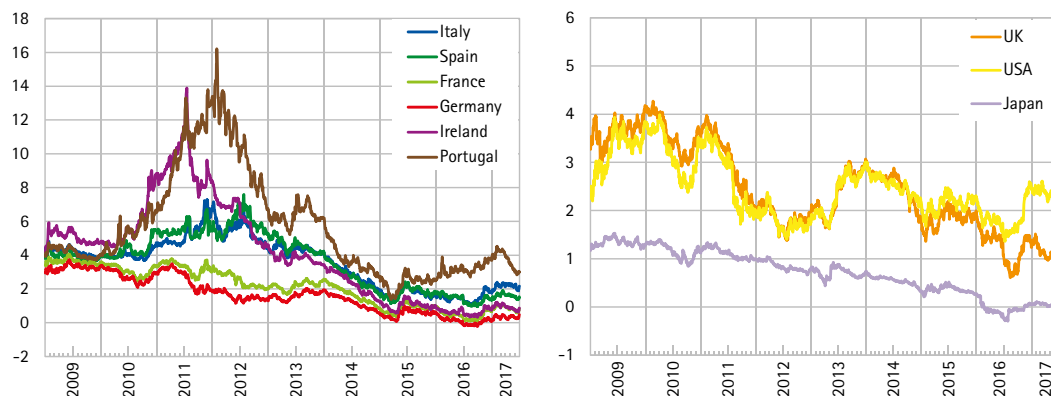
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## Non-equity markets

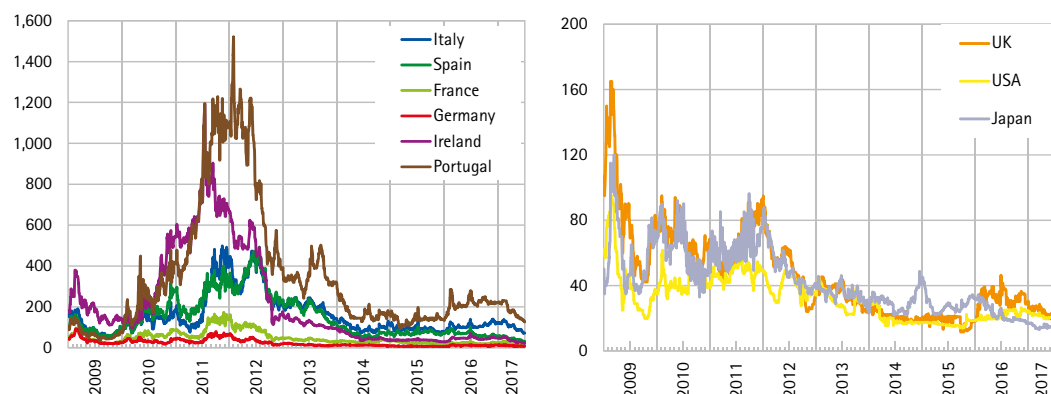
After the upsurge recorded in 2016, Eurozone government bond yields have levelled off, while CDS premiums have slightly declined. Political uncertainties and expectations of a tighter ECB monetary policy (in the light of the ongoing decline in deflationary risks) have only marginally reduced the benefits of the QE, as shown by the small widening of the 10-year yield spreads between core and peripheral countries.

**Fig. 2.1 – Government bond yields and CDS on public debt in advanced countries**  
(daily data; 01/01/2009 – 30/06/2017)

Ten-year Government bond yields (percentage values)



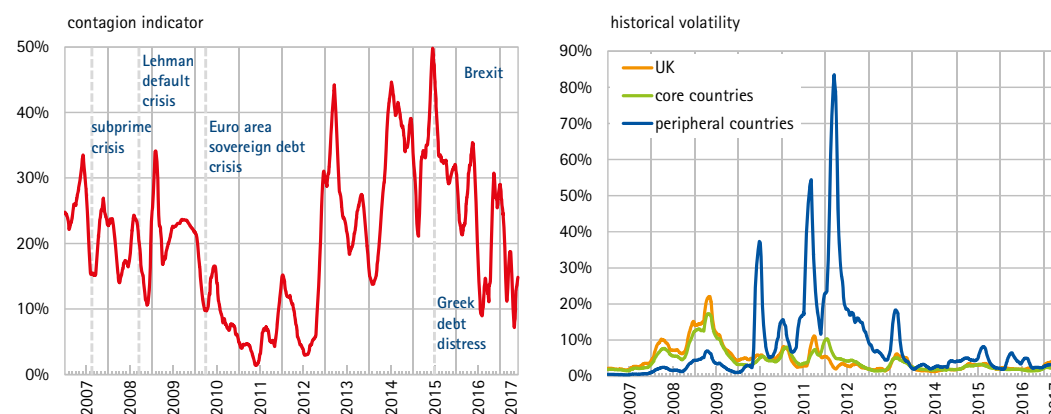
Five-year sovereign CDS premiums (basis points)



Source: Thomson Reuters.

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

(daily data; 01/01/2007 – 31/05/2017; percentage values; two-month moving average)



For the methodology applied to estimate the contagion indicator see Consob Working paper no. 72, 2012 (left graph) and Note Figure 2.2 RO no. 9.

After the peak hit at the end of 2016, the contagion indicator for the Eurozone sovereign bond markets has significantly decreased. Historical volatility remains to very low levels across all countries, with the exception of the UK where it has been increasing since the start of the Brexit negotiations under Article 50 of the Treaty on EU.

## 1. Equity markets

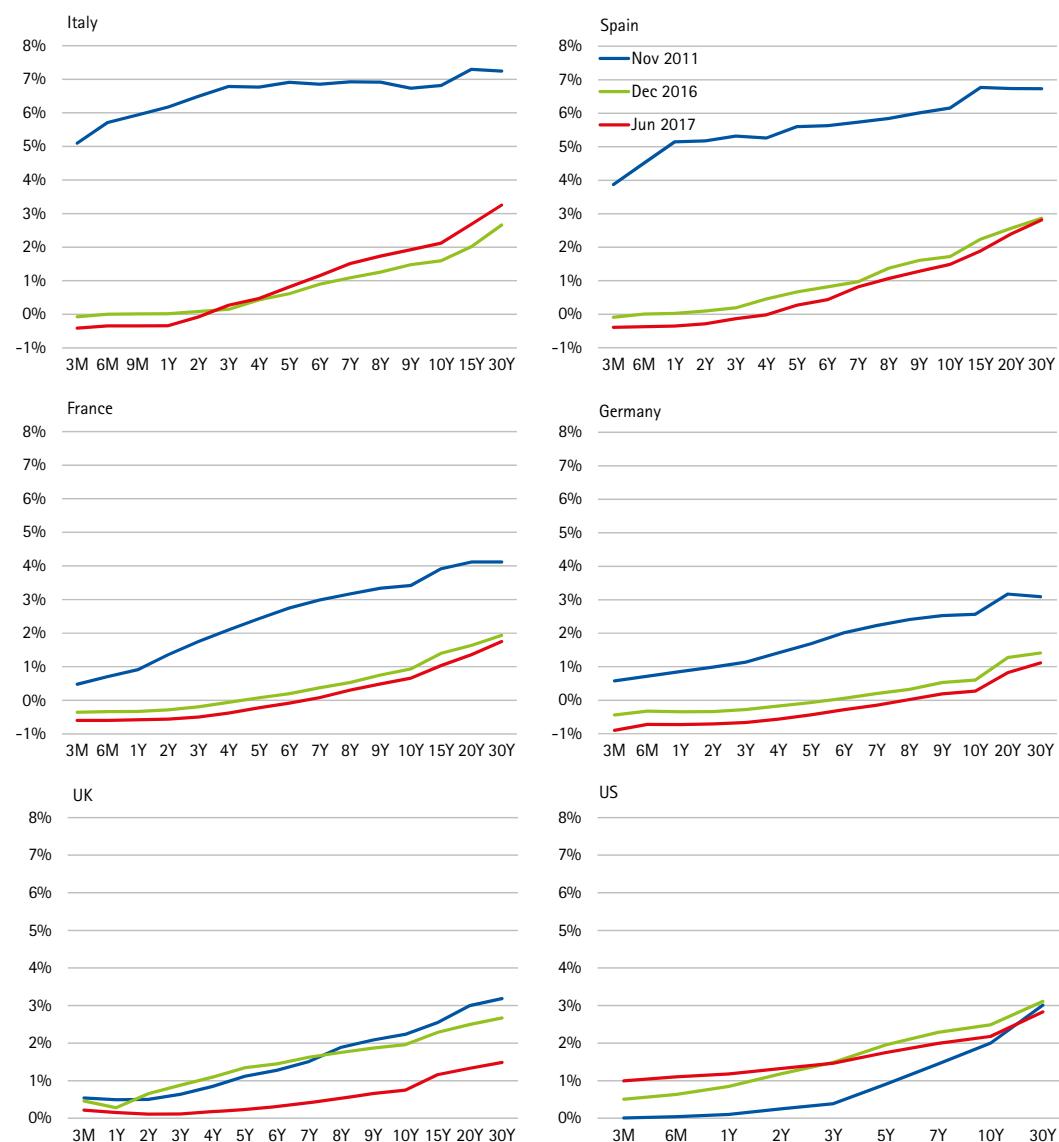
## 2. Non-equity markets

## 3. Non-financial companies

## 4. Banks

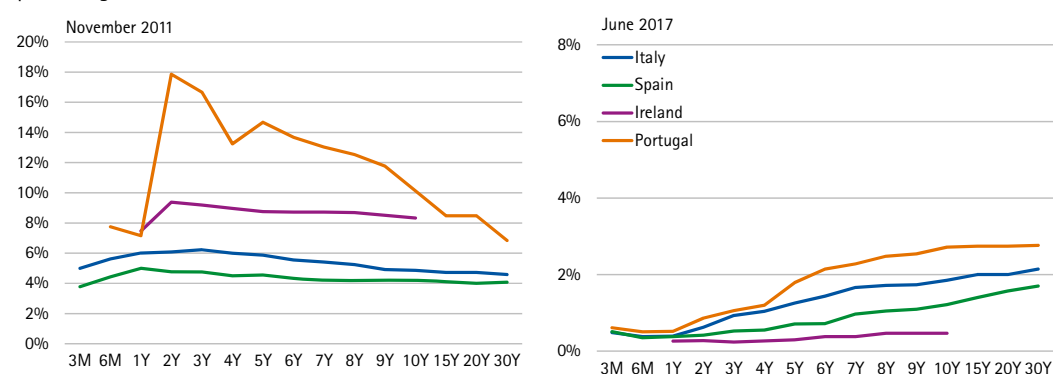
In the first half of 2017 the sovereign yield curve marked a downward shift in Spain, Germany and France, while becoming steeper in Italy. In the Eurozone, short term maturity yields remain persistently below zero ...

**Fig. 2.3 – Sovereign yield curves in major advanced countries**  
(monthly average; percentage values)



Source: calculations on Thomson Reuters data.

**Fig. 2.4 – Term structure of yield spreads between peripheral euro area countries and Germany**  
(percentage values)



Source: calculations on Thomson Reuters data.

... while spreads between peripheral euro area countries and the German benchmark keep lying well below the threshold touched in November 2011.

## 1. Equity markets

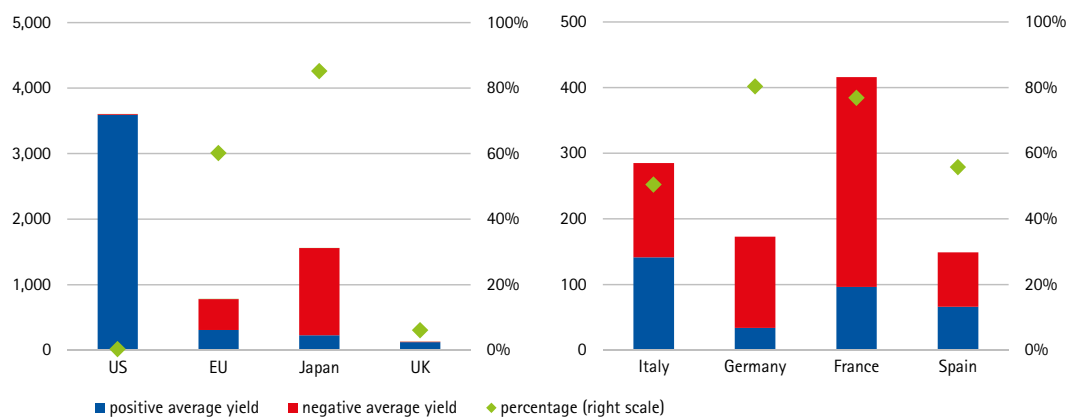
## 2. Non-equity markets

## 3. Non-financial companies

## 4. Banks

In the first half of 2017 around 60% of Eurozone public debt was issued at negative average yields, with Germany and France benefiting the most.

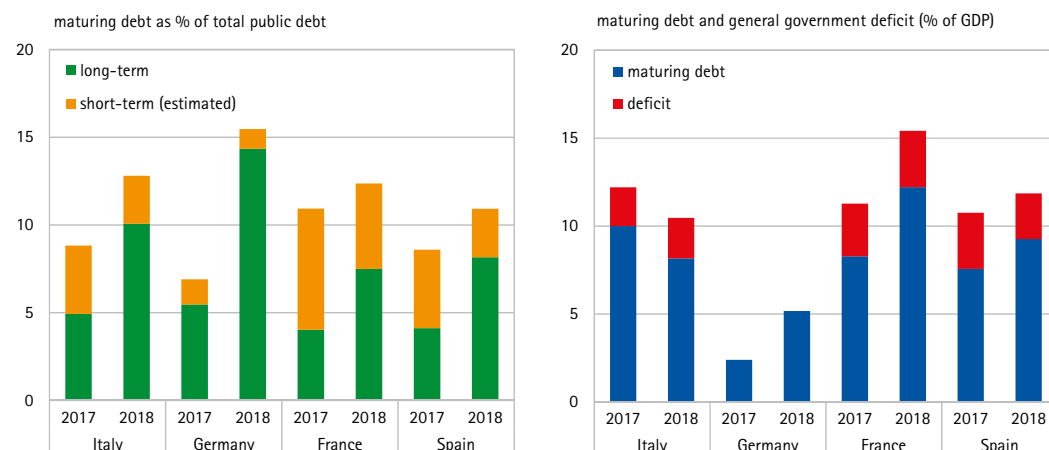
**Fig. 2.5 – Negative-yielding sovereign bonds issued in the first half of 2017**  
(billions of euro)



Source: calculations on data from Thomson Reuters Eikon. Data as at 20 June 2017.

The negative yield environment is squeezing the roll-over costs of sovereign bonds, thus favouring public finance rebalancing, in particular in high deficit and high debt countries.

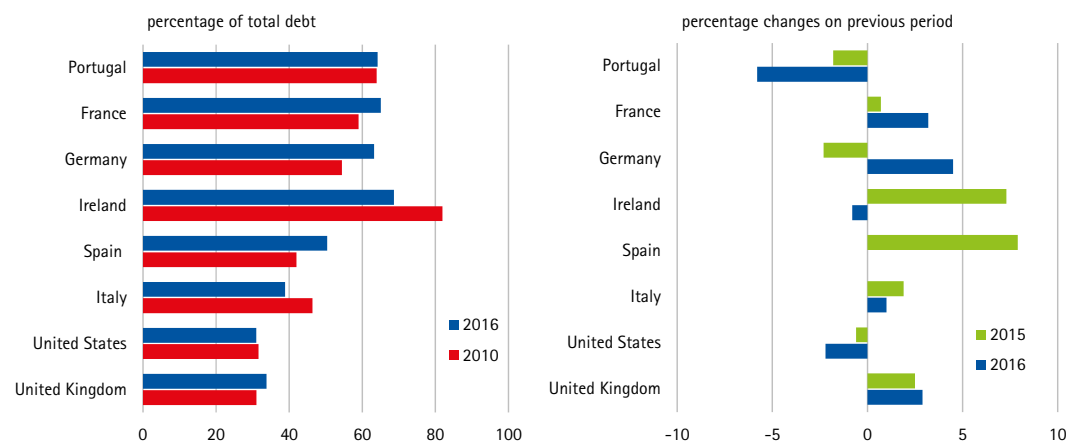
**Fig. 2.6 – The refinancing needs of general government debt in main euro area countries**  
(percentage values)



Source: calculations on data from Thomson Reuters Eikon and EU Commission.

Although still lower than its 2010 level, the share of Italian public debt held by non-residents has slightly increased over the last two years. This development is in line with Irish records, while Spain has also experienced an overall increase in non-residents holdings.

**Fig. 2.7 – Non-resident holdings of general government debt in selected countries**



Source: calculations on data from IMF Fiscal Monitor.



## 1. Equity markets

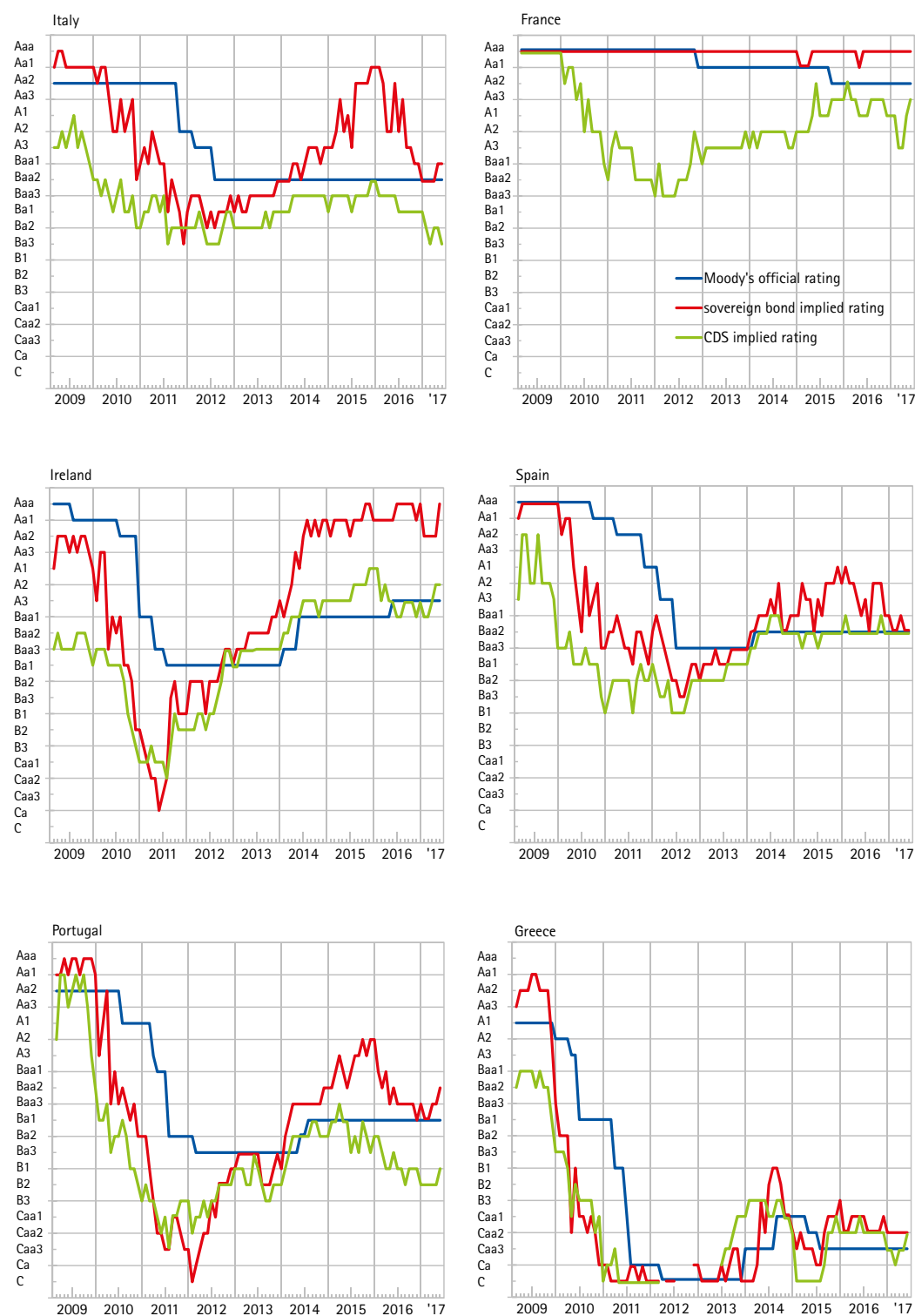
## 2. Non-equity markets

## 3. Non-financial companies

## 4. Banks

After the decline displayed last year, in the first months of 2017 market implied ratings of selected euro area countries have levelled off in the wake of a more benign outlook of the Eurozone economy. Sovereign bond implied ratings are generally higher than the official ratings, probably mirroring the QE impact on secondary bond markets.

**Fig. 2.8 – Sovereign bond and CDS implied ratings in some euro area countries**  
(monthly data; January 2009 – May 2017)



Source: calculations on Moody's data.

## 1. Equity markets

## 2. Non-equity markets

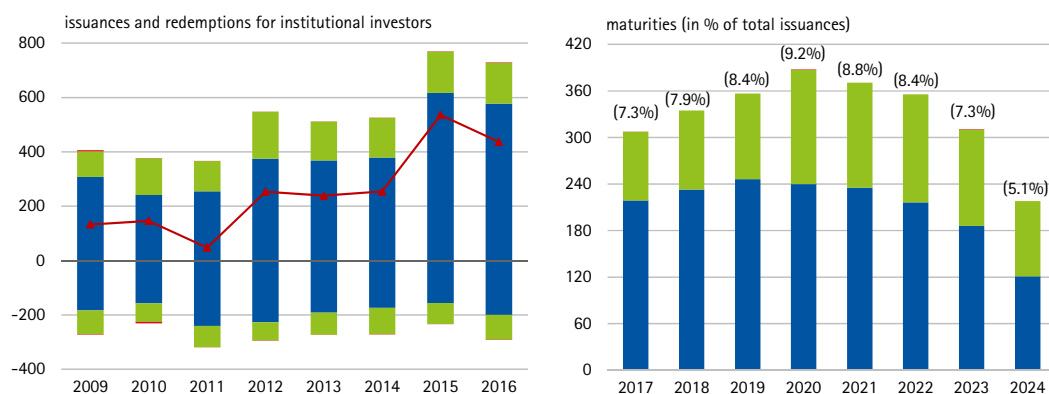
## 3. Non-financial companies

## 4. Banks

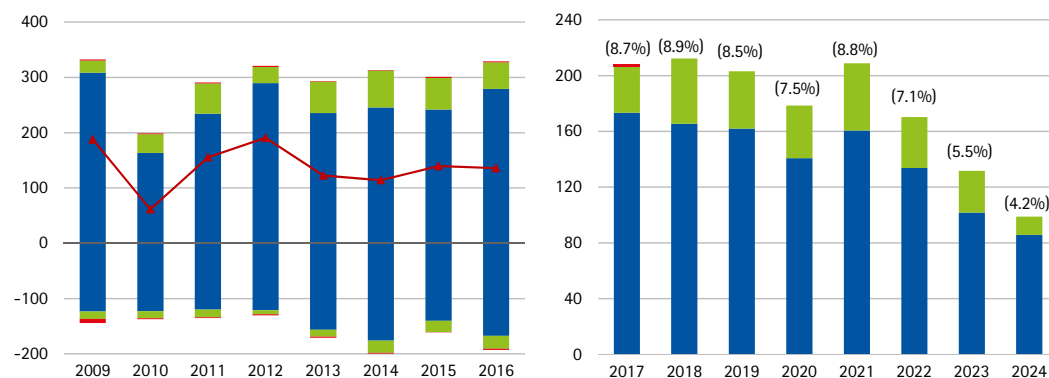
In 2016 non-financial corporate bond issuances stood substantially steady in Europe, whilst experiencing a slowdown in Italy and in the US. 2017 refinancing needs, as measured by the share of maturing bonds on the total outstanding debt, are slightly higher in Italy than in the US and Europe.

**Fig. 2.9 – Non-financial corporate bonds issues and maturities**  
(billions of euro)

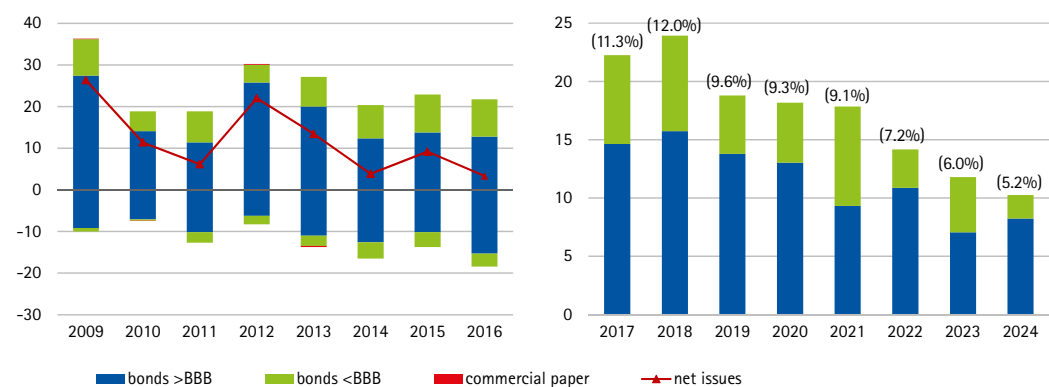
## USA



## EUROPE



## ITALY



Source: calculations on Dealogic data. European issuance data refer to companies with registered office in Italy, France, Germany, Spain, the Netherlands and the UK and their subsidiaries (including those established in other countries). Maturities refer to bonds issued since 2009.

Last year activity on bank bond primary markets remained subdued in Europe, where negative net issuances have been recorded since 2012. Italian gross issuances have declined both in retail and in wholesale markets.

## 1. Equity markets

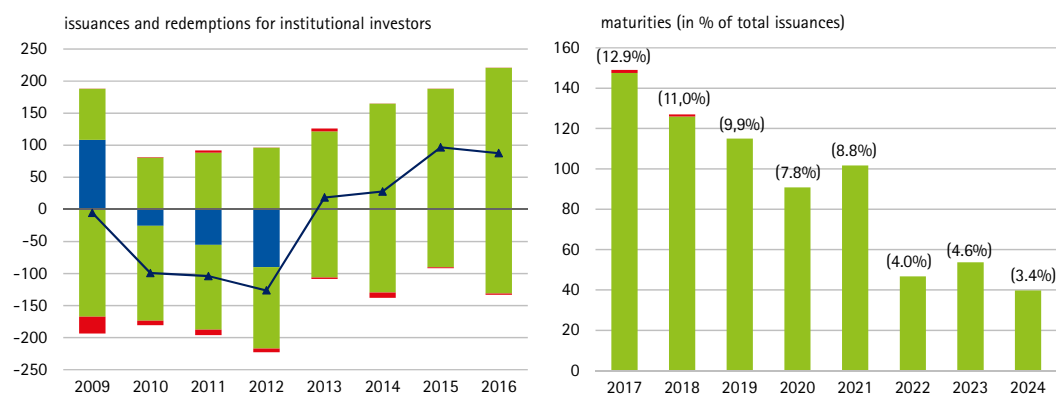
## 2. Non-equity markets

## 3. Non-financial companies

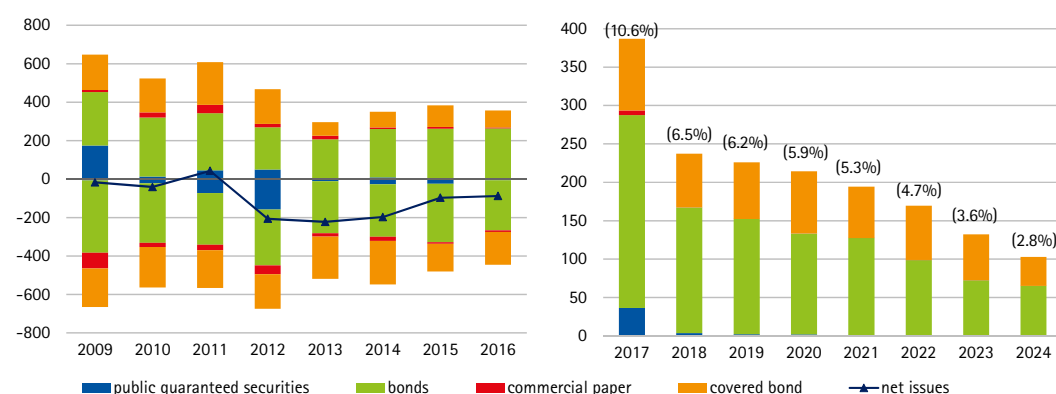
## 4. Banks

**Fig. 2.10 – Bank bonds issues and maturities**  
(billions of euro)

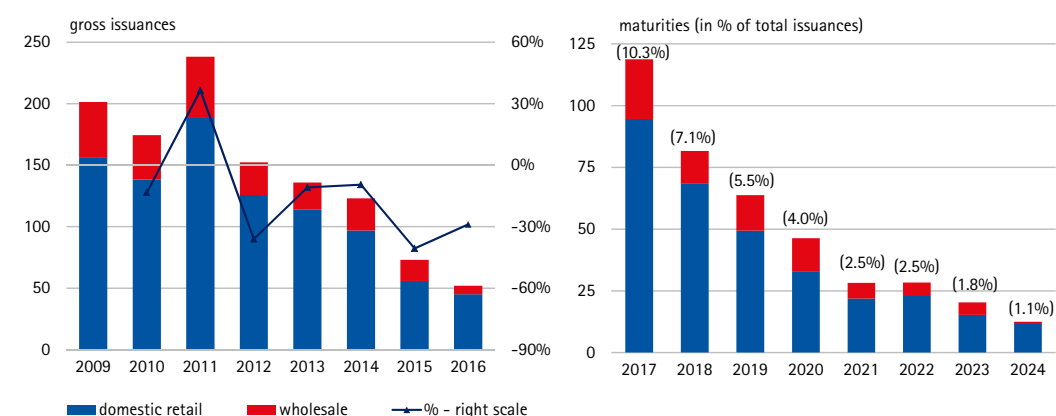
## USA



## EUROPE



## ITALY

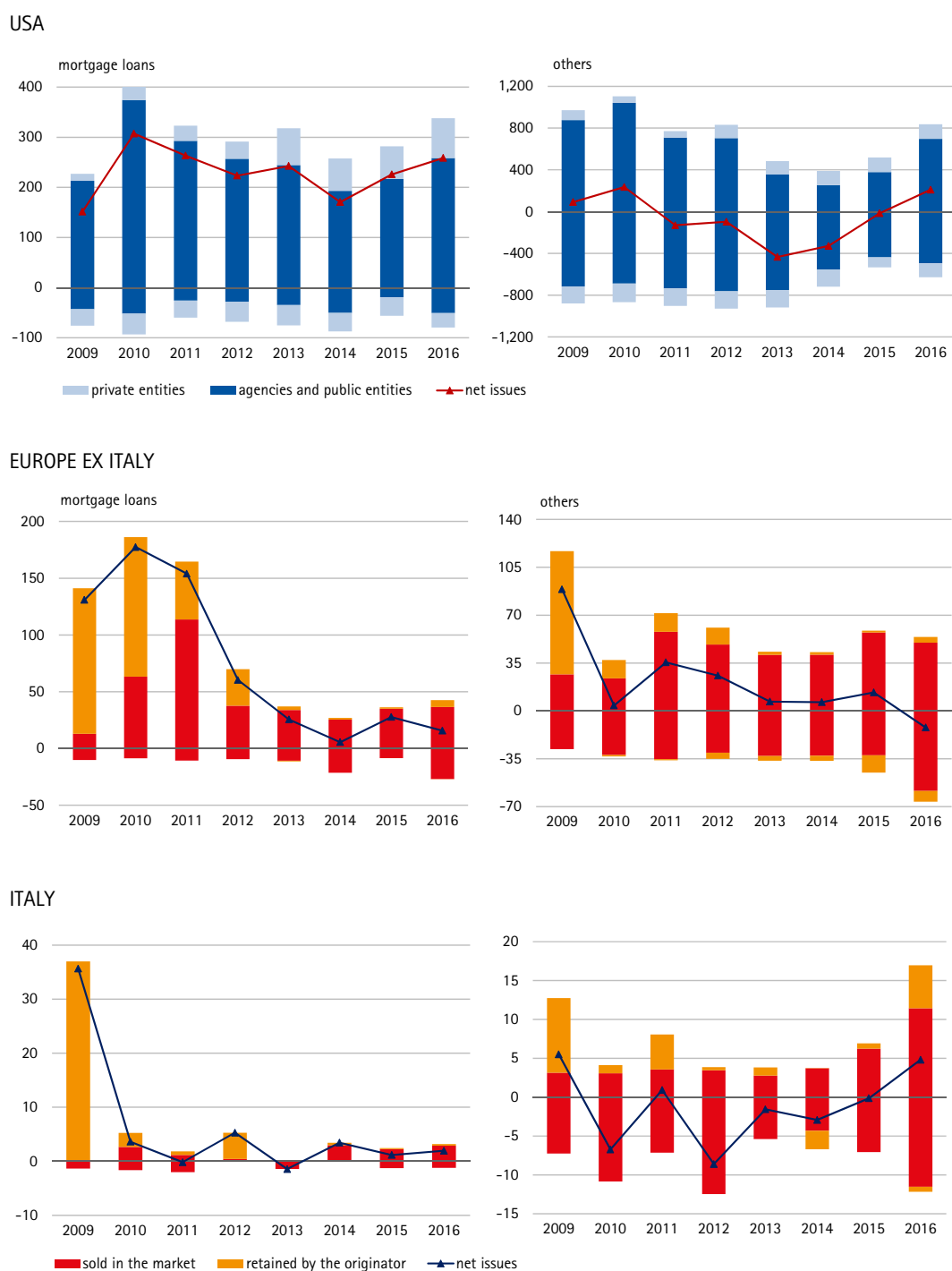


Source: calculations on Dealogic data. European issuance data refer to companies with registered office in Italy, France, Germany, Spain, the Netherlands and the UK and their subsidiaries (including those established in other countries). Maturities refer to bonds issued since 2009.

1. Equity markets
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The US primary markets for securitized instruments have recently shown signs of recovery, whereas Europe and (to a lesser extent) Italy keep lagging behind.

**Fig. 2.11 – Securitisation issuances**  
(billions of euro)



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.

## 1. Equity markets

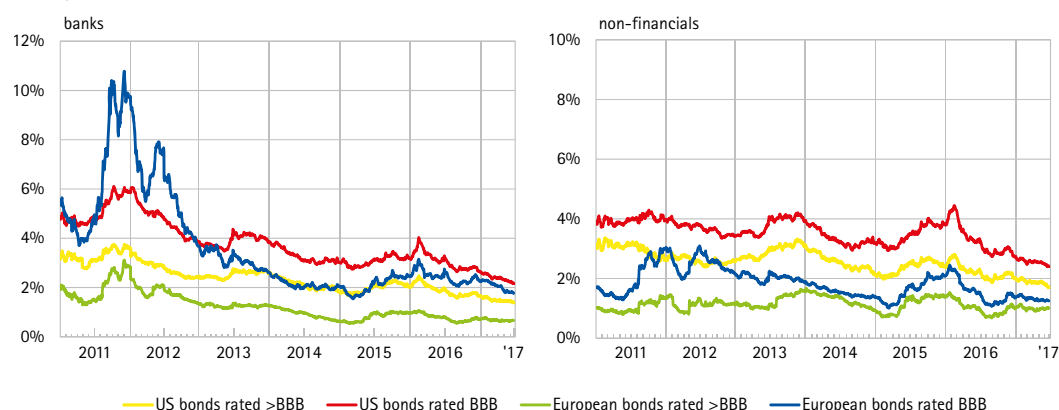
## 2. Non-equity markets

## 3. Non-financial companies

## 4. Banks

Following a broad decline in 2016, yield spreads of corporate financial and non-financial bonds relative to IRS have remained relatively stable in the first months of 2017.

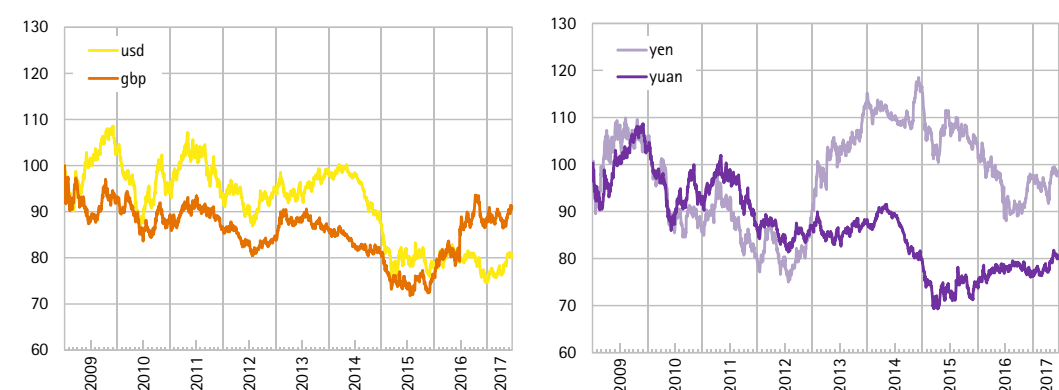
**Fig. 2.12 – Bank and non-financial corporate bond yield spreads over IRS**  
(basis points; daily data; 01/01/2011 – 30/06/2017)



Source: Calculations on Thomson Reuters Eikon data. Spreads refer to Markit Iboxx (overall) average bank and non-financial corporate bond yields and the 3-year EUR and USD IRS respectively. Spreads for bonds rated ">BBB" computed relative to simple average of A, AA and AAA bond yields.

Waning uncertainties on Eurozone economic recovery and on political developments across regions are among the main drivers triggering the appreciation of the euro vis-à-vis all other main currencies.

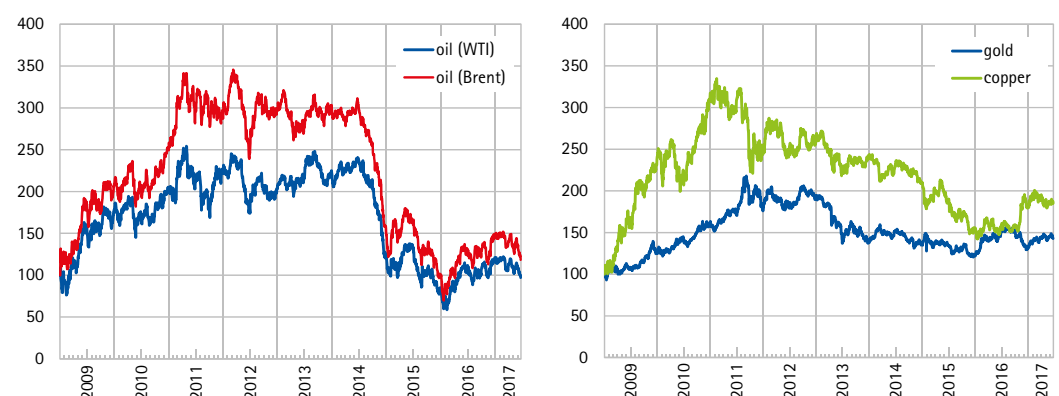
**Fig. 2.13 – Nominal exchange rates of selected foreign countries against euro**  
(daily data; 01/01/2011 – 30/06/2017; 01/01/2009 = 100)



Source: calculations on data from Thomson Reuters.

As for the commodity markets, oil prices show a slight decline, although remaining largely above their early 2016 minimum, due to a weak global demand.

**Fig. 2.14 – Commodity prices**  
(daily data; 01/01/2011 – 30/06/2017; 01/01/2009 = 100)



Source: calculations on data from Thomson Reuters. The future - spot differential is computed as the monthly moving average of the difference between the re-scaled series.

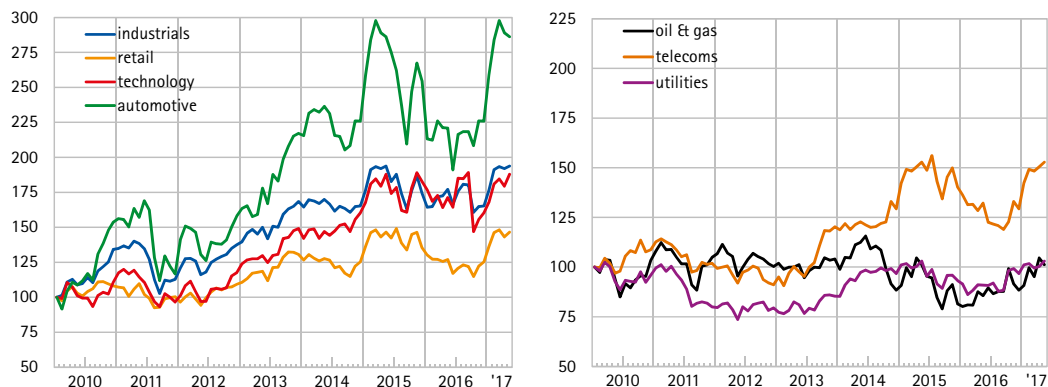
1. Equity markets
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## Non-financial companies

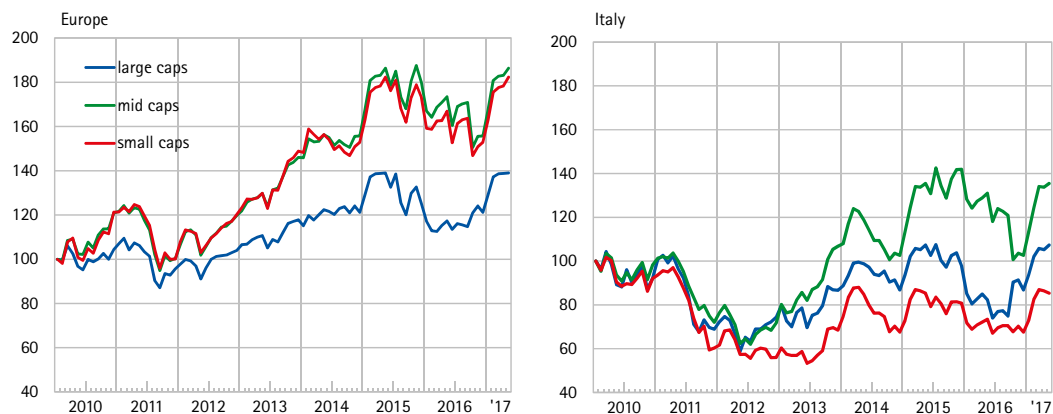
After the volatility experienced over the last two years, in the first months of 2017 stock performances have markedly improved for the main European non-financial sectors. Large caps have continued to underperform mid-caps, with the exception of Italy, displaying a reversed pattern.

**Fig. 3.1 – Relative stock performance of European non-financial listed companies**  
(monthly data; January 2010 – May 2017; January 2010=100)

by sector



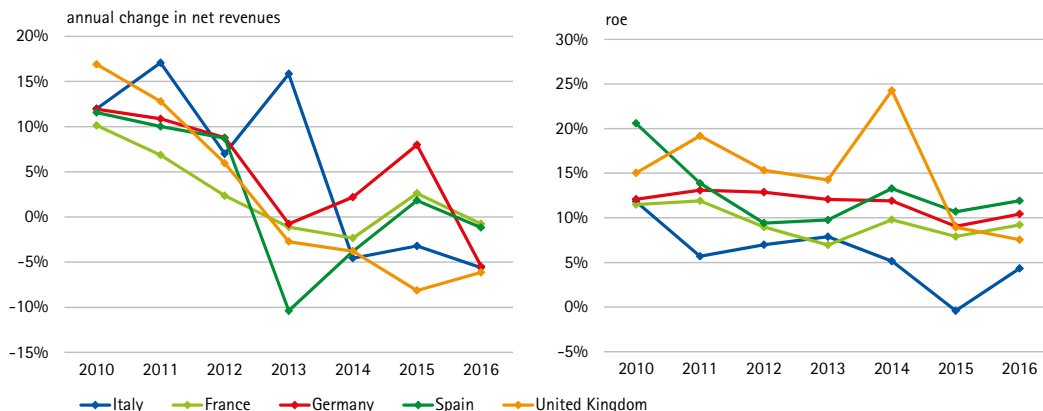
by market capitalisation



Source: Thomson Reuters data for the Stoxx600 (Europe) main sectorial indexes. Mid and small caps are represented by the Stoxx600 (Europe) and the Ftse Italia All Share sub-indices, respectively for European and Italian companies.

In 2016, in spite of the contraction in revenues recorded in the main Eurozone countries, large listed corporates displayed signs of improvement both in profitability ...

**Fig. 3.2 – Profitability and efficiency of major European non-financial listed companies**  
(annualised percentage values)



- cont. -

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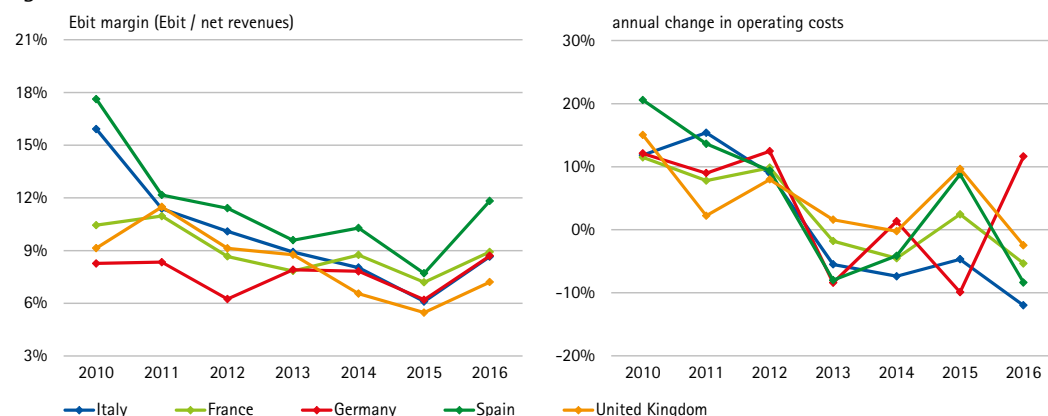
1. Equity markets
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... and, consistently, in the Ebit margins due to the decline in impairment, write-offs and interest rate expenses.

Spanish firms outperformed their competitors in terms of Ebit margins, while interest expenses marked a more pronounced decline in Italy. The massive change in net income of Italian corporates is ascribable to one-off heavy losses posted in 2015 by companies in the oil sector.

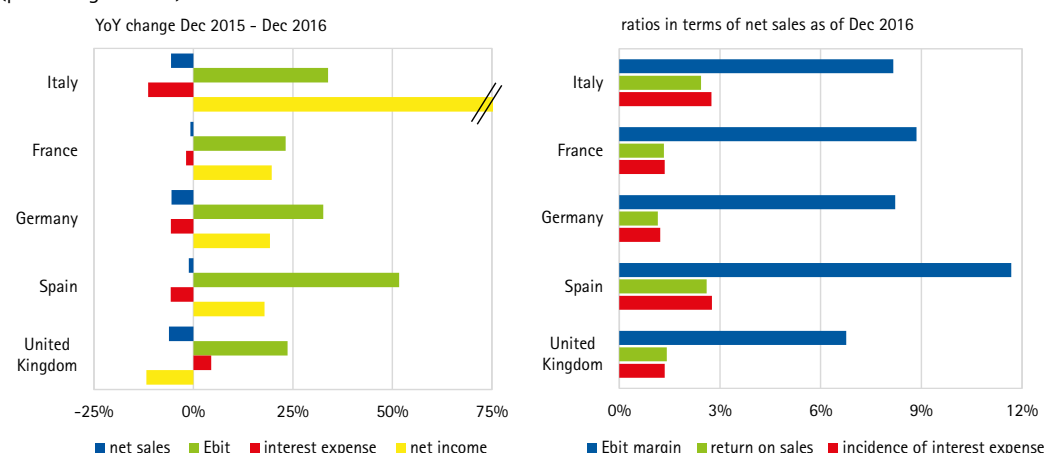
In the Eurozone, the persisting weakness of revenues is mirrored in the relative stability in the percentage of companies reporting net sales below their historical values, ranging from almost 20% in Germany to more than 40% in Italy. However, in Spain and France the proportion of firms recording net loss and/or negative Ebit slumped to zero.

Fig. 3.2 (cont.)



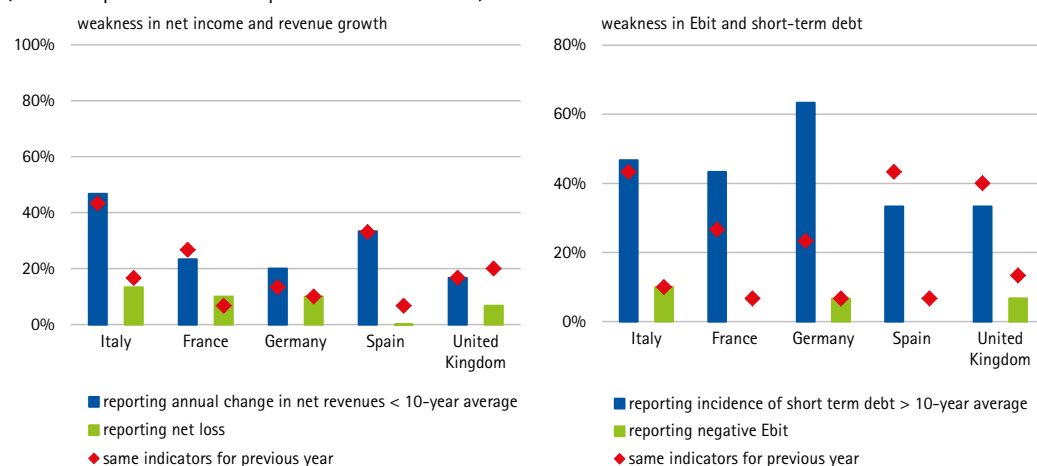
Source: calculations on Bloomberg data for the top 30 non-financial companies by market capitalisation as of end of last calendar year for Italy, France, Germany, Spain and UK. Sample size and constituents may be adjusted to take into account leavers/joiners movements in the top 30 ranking and historical data availability. In a few cases, data might be preliminary or partly estimated.

Fig. 3.3 – Margin analysis for major European non-financial listed companies (percentage values)



Source: calculations on Bloomberg data. In a few cases, data might be preliminary or partly estimated. The return on sales is the ratio between net income and net sales. Relative to end 2015, net income for the sample of Italian large corporates increased by 11,9 times.

Fig. 3.4 – Profit vulnerability of major European non-financial listed companies (% of companies in the sample at the end of 2016)

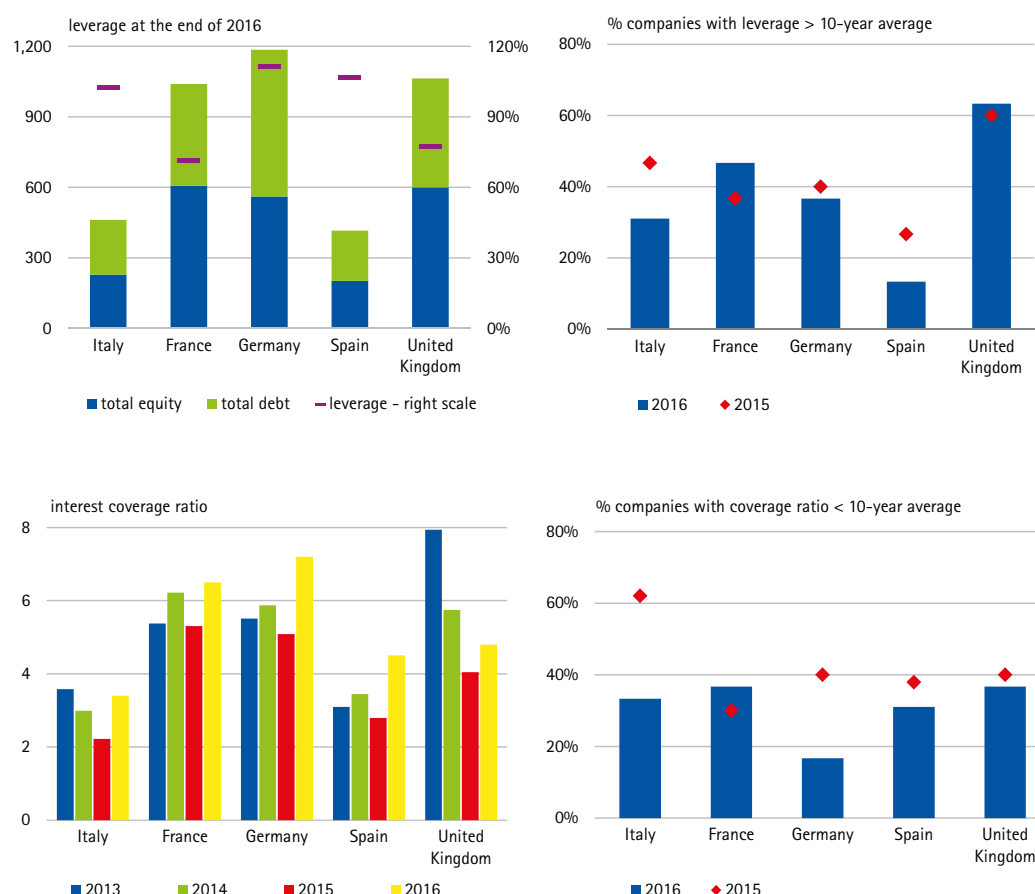


Source: calculations on Bloomberg data. In a few cases, data might be preliminary or partly estimated.

1. Equity markets
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At the end of 2016 Italian and Spanish large corporates showed signs of an improving financial position, as the proportion of firms running leverage above their historical levels has declined and the average interest coverage ratio has aligned with that in other countries.

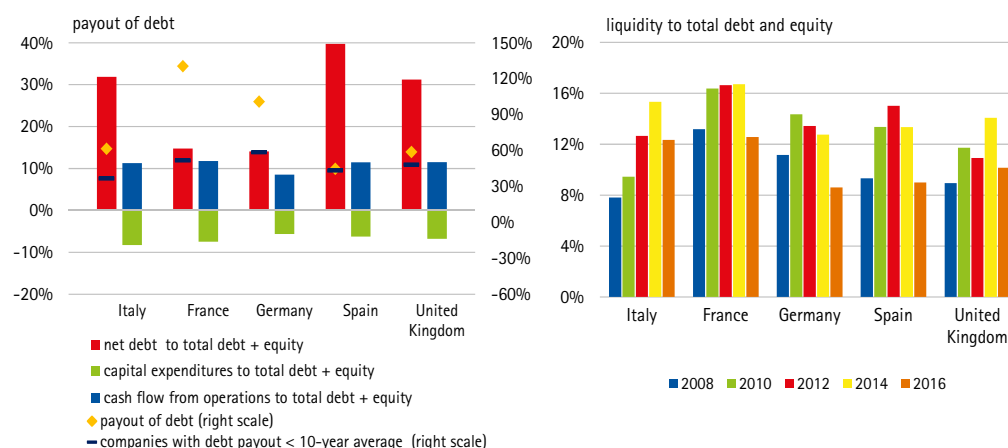
**Fig. 3.5 – Leverage and interest expense coverage of large European non-financial listed companies**  
(amounts in billions of euro)



Source: calculations on Bloomberg data. The leverage is computed as total debt divided by total equity. The interest coverage ratio is computed as Ebit divided by interest expenses. In a few cases, data might be preliminary or partly estimated.

French and German non-financial companies, however, kept displaying the highest level of debt payout ratio, while Italian and French firms held a relatively higher share of liquidity relative to total debt and equity.

**Fig. 3.6 – Payout of debt and liquidity of major European non-financial listed companies**



Source: calculations on Bloomberg data. The payout of debt is the ratio between operating cash flow net of capital expenditure and net debt. Liquidity is calculated as cash plus short-term assets. In a few cases, data might be preliminary or partly estimated.



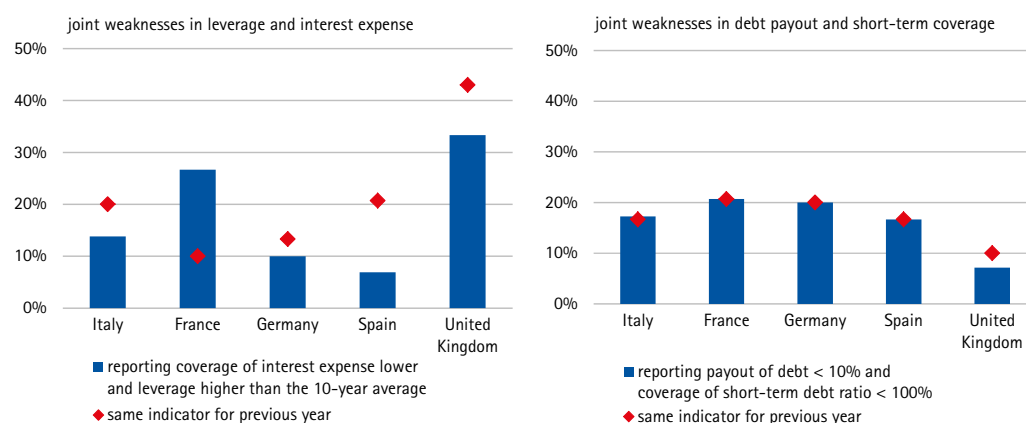
1. Equity markets
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Overall, financial soundness of most large corporates displayed some sort of improvement, with the notable exception of France, where the proportion of firms with lowered coverage ratio and increased leverage was on the rise at the end of 2016.

Perceived credit quality of Italian corporates, as measured by CDS prices, has continued to be relatively aligned with that of their European peers since 2015. While CDS prices stood stable over the last months ...

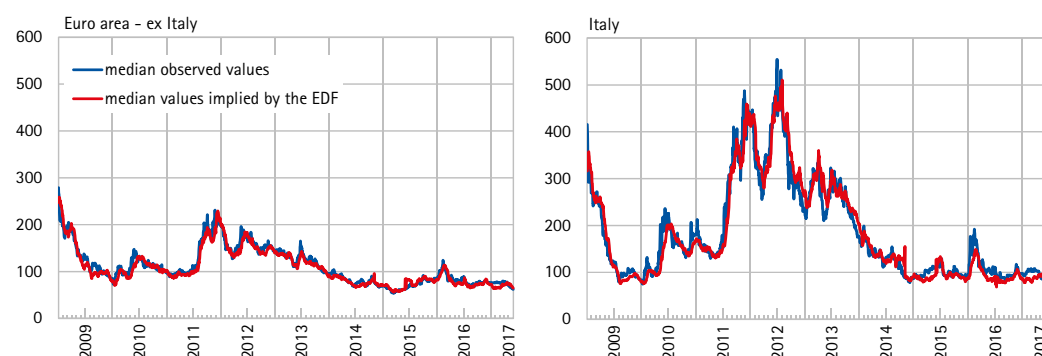
... market implied ratings followed a heterogeneous behaviour (depending on the underlying security market), although almost all stood above the official rating.

**Fig. 3.7 – Financial vulnerability of major European non-financial listed companies**  
(share of companies in the sample at the end of 2016)



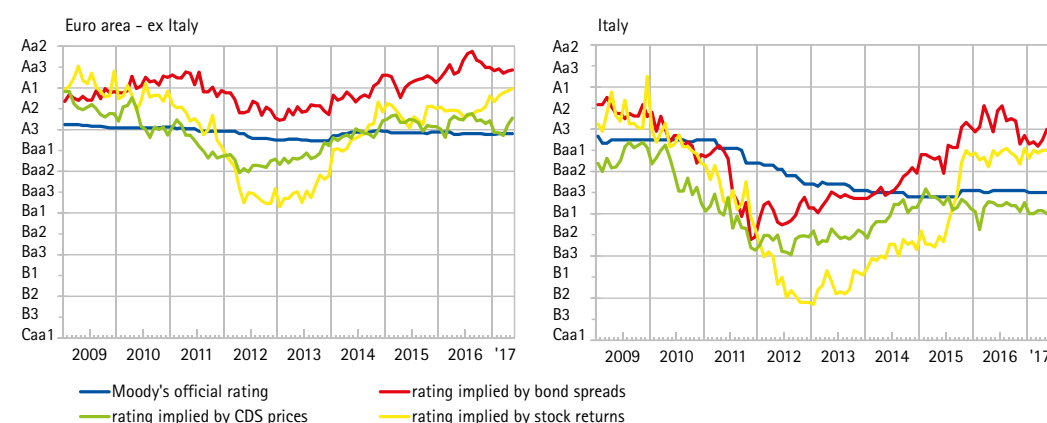
Source: calculations on Bloomberg data. In a few cases, data might be preliminary or partly estimated.

**Fig. 3.8 – Prices of 5-year CDS observed and implied by the expected default frequencies (EDF) for euro area non-financial firms**  
(basis points; daily data; 01/01/2009 – 31/05/2017)



Source: calculations on Thomson Reuters Datastream and Moody's Credit Edge data. The sample includes listed firms in the euro area, which belong to Thomson Reuters corporate CDS indexes and under Moody's rating and of 8 Italian non-financial listed firms.

**Fig. 3.9 – Official and market implied ratings for euro area non-financial firms**  
(monthly data; January 2009 – May 2017)



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.

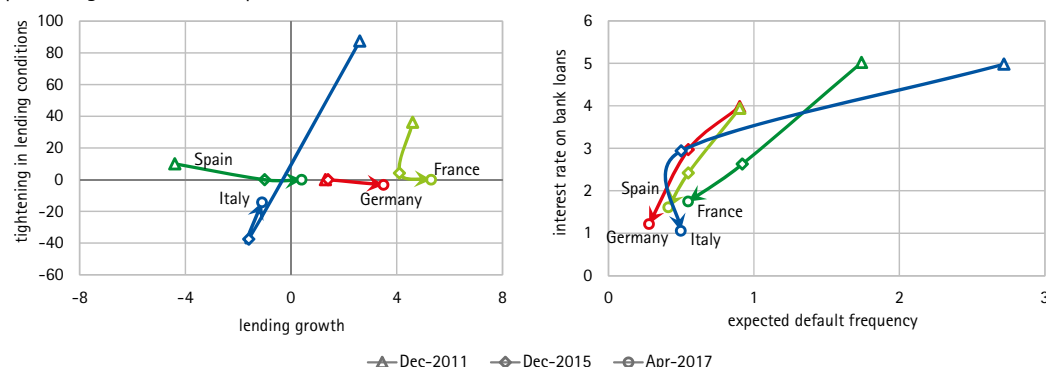
1. Equity markets
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In the first quarter of 2017, credit standards for non-financial companies have remained fairly unchanged across the Eurozone, with Italy closing the gap in terms of lending conditions but still recording a contraction in lending. Overall, large corporates have begun to show some signs of convergence across countries in terms of both expected default frequencies and ...

... interest rates paid on bank loans, which have declined further in the first months of 2017 for both large and mid-size firms.

Since last year, demand for bank loan has fallen in Italy, while rising in Germany and Spain. A reported decline in financing needs for fixed investments is among the main drivers explaining the recent developments in Italy.

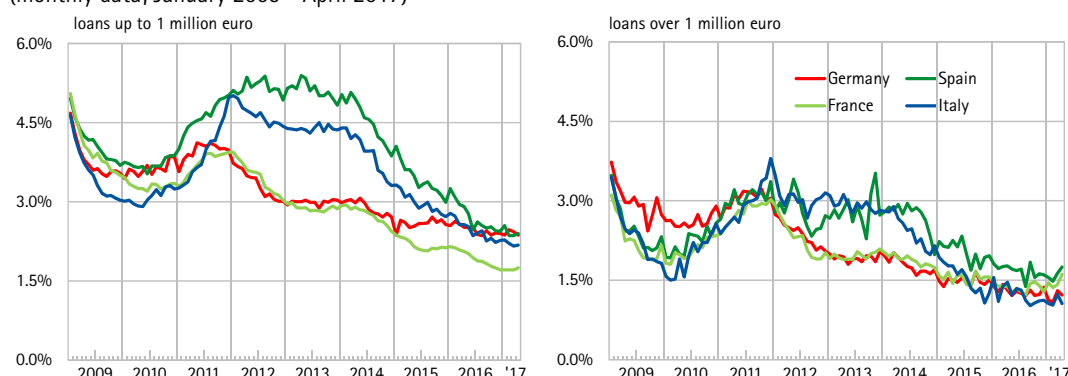
**Fig. 3.10 – Trends in bank lending to non-financial companies and expected default frequencies in main euro area countries**  
(percentage values as of April 2017)



Source: 'ECB Bank lending survey' and Moody's Credit Edge data. Tightening in lending conditions is represented by the net percentage of banks reporting a tightening minus the banks reporting an easing in credit standards for enterprises (for France the data are weighted according to each bank's share in total loan outstanding). Lending conditions data have a time horizon backward looking three months. Lending growth is the annual growth rate of bank loans to non-financial companies. Corporate EDF (one year) are the average of the 25<sup>th</sup>, 50<sup>th</sup> and 75<sup>th</sup> percentiles; the sample comprises publicly traded firms.

**Fig. 3.11 – Interest rates on bank loans to non-financial corporations in major euro area countries**

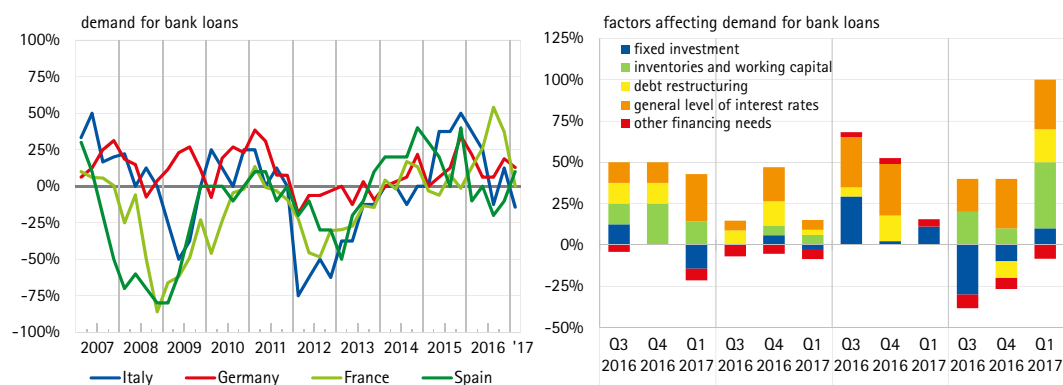
(monthly data; January 2009 - April 2017)



Source: ECB; interest rates on new loans.

**Fig. 3.12 – Demand for bank loans from non-financial corporations in main euro area countries**

(quarterly data at Q1 2017)



Source: ECB Bank lending survey. The demand for bank loans is defined as the net percentage of banks reporting an increase in demand. Demand factors are defined as the percentage of banks reporting an increase in demand for a given factor minus the percentage reporting a decrease. 'Other financing needs' are the unweighted average of 'internal financing', 'loans from other banks', 'loans from non-banks', 'debt securities issuance', 'equity issuance' and 'mergers/acquisitions and corporate restructuring'.

1. Equity markets
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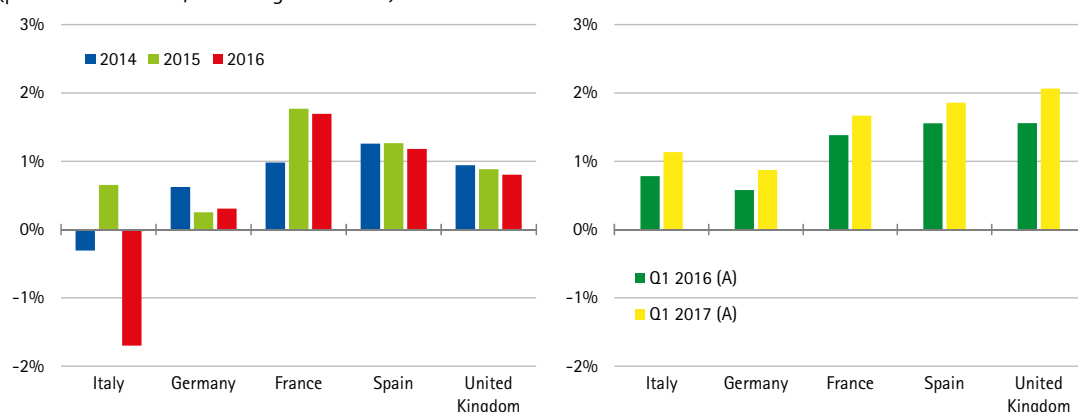
## Banks

After marking a substantial stability over the last two years, in the first quarter of 2017 profitability relative to RWAs of the main European banks has improved (compared to the same period of 2016). Italian banks have shown a different dynamics, due to a significant increase in credit write-offs (in the wake of the sale of bad loans), which, ...

... coupled with a rise in operating expenses, resulted in a large drop in 2016 profits before taxes. As a consequence, efficiency of Italian banks has deteriorated too, with the cost-to-income ratio hitting 80% at the end of year.

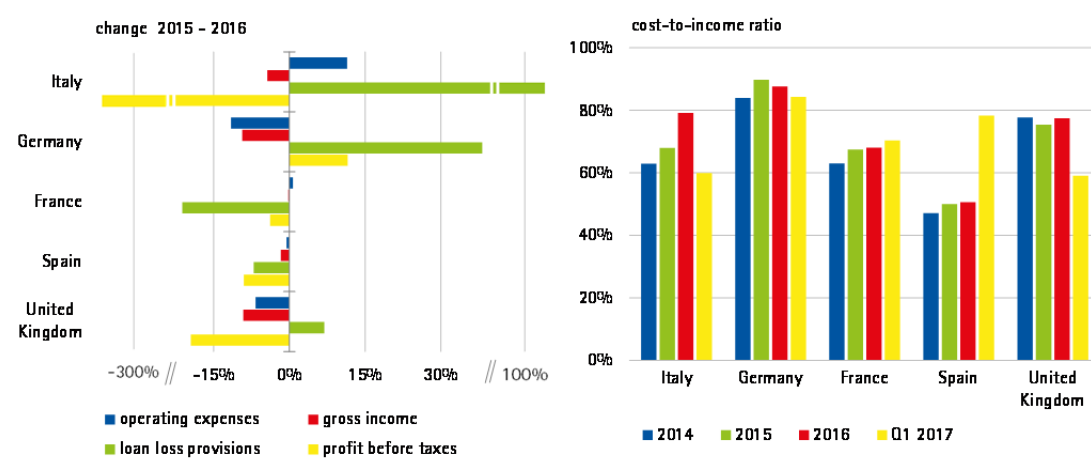
In Germany, France and the UK profitability has come from the less stable sources of revenues, while traditional sources of income (i.e. interest and fees margins) have generally declined in all countries.

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



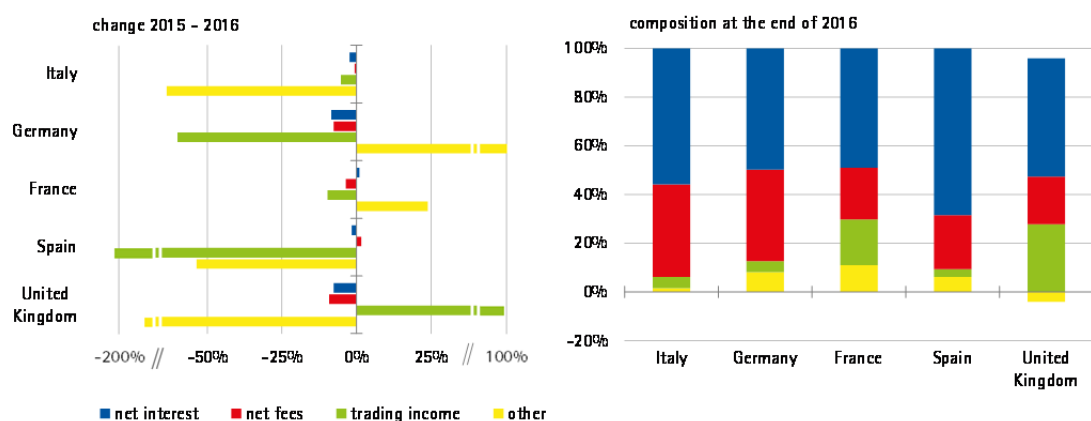
Source: calculations on data from consolidated annual and interim reports of main listed European banks (23 groups). The profit before taxes is calculated excluding goodwill impairment. Quarterly figures are annualised and partly estimated.

**Fig. 4.2 – Change in efficiency and profitability of main listed European banks**



Source: calculations on data from consolidated annual and interim reports of main listed European banks (23 groups). Quarterly figures are annualised and partly estimated.

**Fig. 4.3 – Change in revenues and composition of revenues of main listed European banks**



Source: calculations on data from consolidated annual and interim reports of main listed European banks (23 groups). Quarterly figures are annualised and partly estimated.

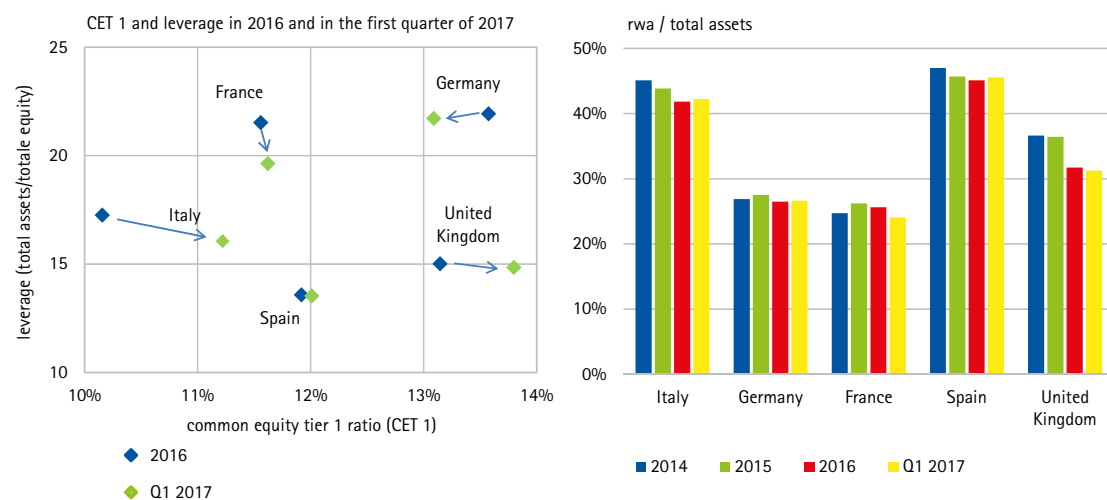
1. Equity markets
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In the first months of 2017, after the slump to 10% driven by large credit write-offs, the common equity tier 1 ratio (CET1) of Italian banks has recovered by more than one percentage point (following the large amount of capital raised by one major institution). Italy is now almost in line with the main French and Spanish peers, which in turn keep lagging behind German and English banks.

The 2016 decline in average profitability, efficiency and capital adequacy ratios of the Italian major groups is ascribable to a few credit institutions, with the remaining large banks displaying substantially stable records.

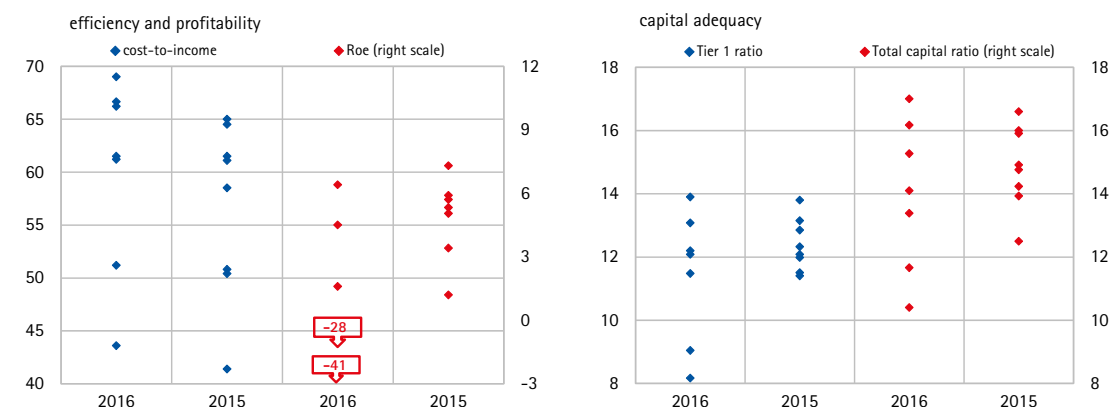
Consistently with their business models, the largest Italian and Spanish banks keep holding a lower percentage of their total assets in financial assets and are far less exposed to derivatives than their European peers do.

**Fig. 4.4 – Capital adequacy and leverage of main listed European banks**



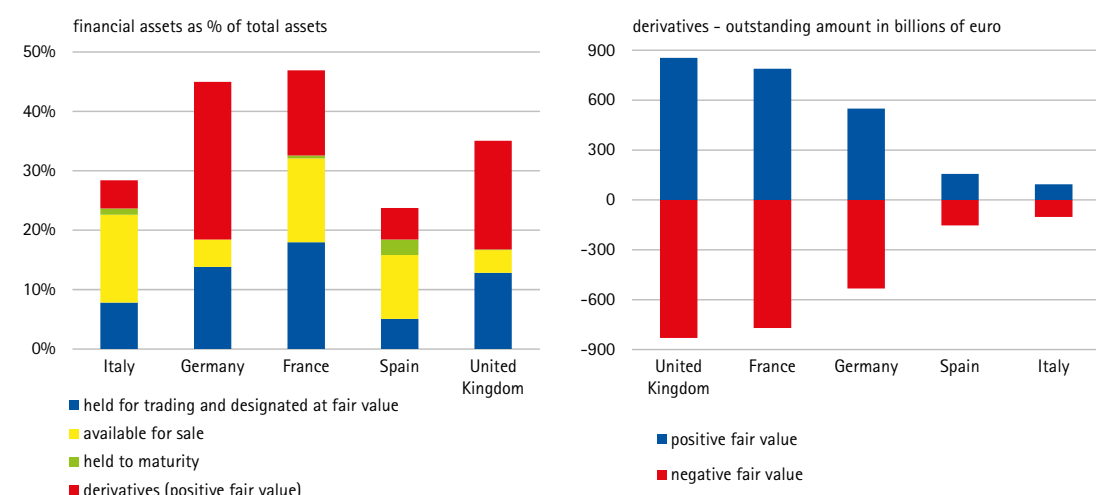
Source: calculations on data from consolidated annual and interim reports of main listed European banks (24 groups). Quarterly figures are partly estimated.

**Fig. 4.5 – Income and solvency ratios of major Italian banking groups**



Source: calculations on data from consolidated annual and interim reports of the 8 largest groups.

**Fig. 4.6 – Financial assets and derivatives of main listed European banks**  
(figures at the end of 2016)



Source: calculations on data from consolidated annual reports of main listed European banks (23 groups).

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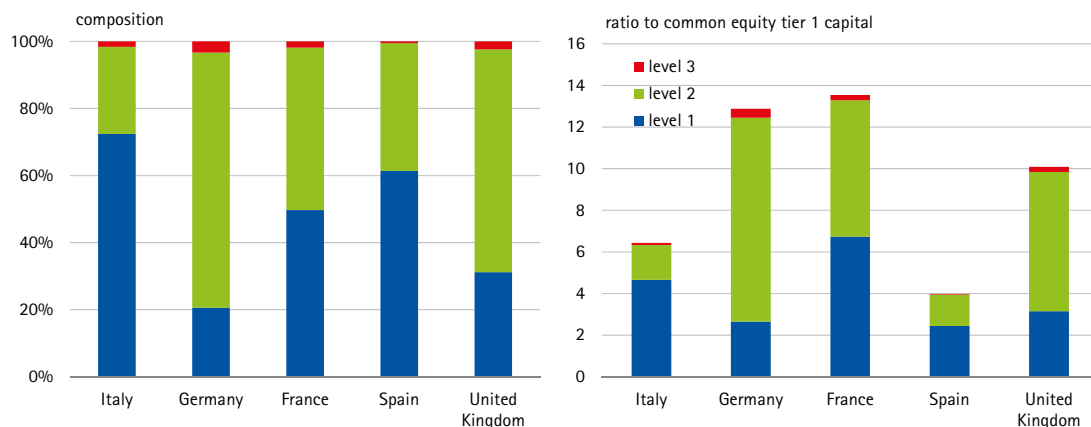
1. Equity markets
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In detail, German, English and French banks display a significant exposure to the most illiquid and complex financial assets (so called level 2 and level 3), whose weight on common equity tier 1 capital ranges from 7 to 10.

Italian banks keep displaying challenging credit quality metrics, with the share of bad loans on total loans still way above their European peers although decreasing in net terms as a consequence of the large credit write-off made at the end of 2016.

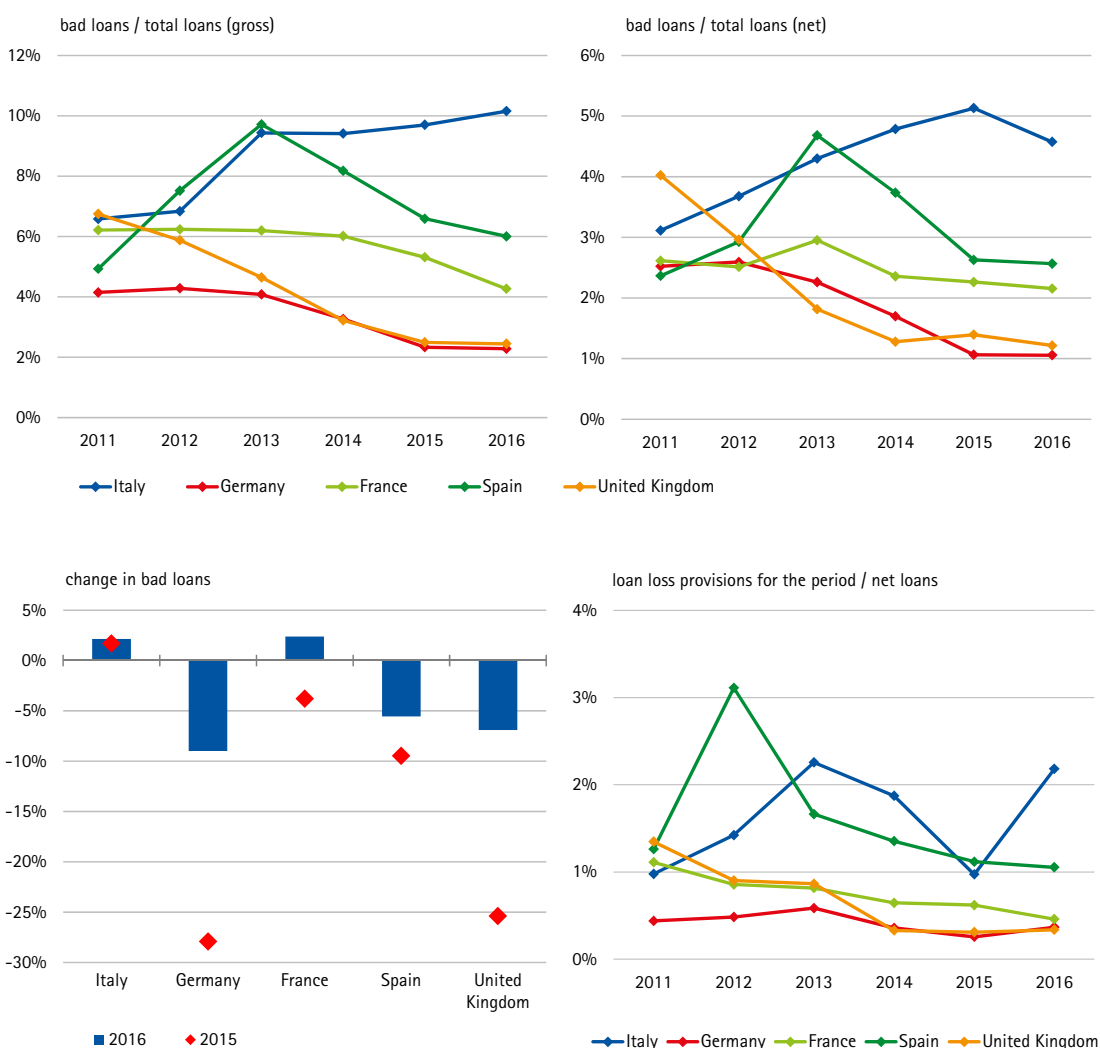
Over the last two years the stock of gross bad loans have substantially levelled off, while in 2016 doubling loan-loss provisions resulted from banks' cleaning up of their balance sheets.

**Fig. 4.7 – Fair value hierarchy of financial assets of main listed European banks**  
(figures at the end of 2016)



Source: calculations on data from consolidated annual reports of main listed European banks (23 groups).

**Fig. 4.8 – Credit quality of main listed European banks**

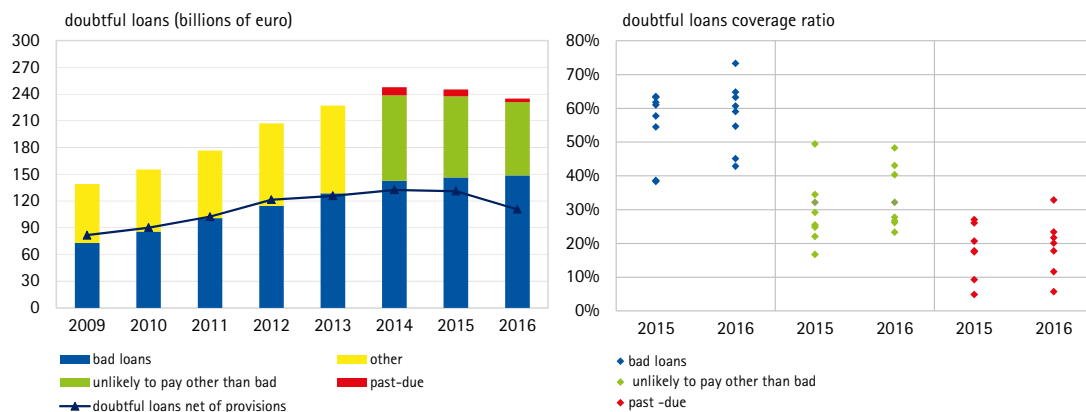


Source: calculations on data from consolidated annual and interim reports of main listed European banks (24 groups). The figures are partly estimated.

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Moreover, over the last year the overall stock of non-performing loans of major Italian banking groups has declined, mainly because of the reduction in the exposures classified as unlikely to pay.

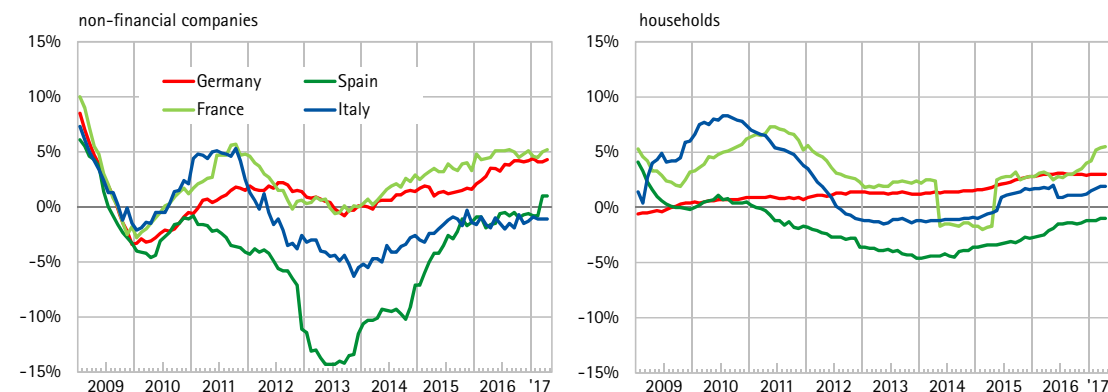
**Fig. 4.9 – Credit quality of major Italian banking groups**



Source: calculations on data from consolidated annual and interim reports of the 8 largest groups. The half-yearly figures are annualised. Starting from the first quarter of 2015 the classification of loans into risk classes was updated in order to reflect the changes provided in Bank of Italy Circular 272 (see also section A.2 Accounting Policies of Explanatory Notes); this update adjusts the previous classification instructions to the definition of "Non-Performing Exposure" (NPE) introduced by the European banking authority (EBA) through the issue of EBA/ITS /2013/03/rev1 24/7/2014. The total volume of loans classified in the previous categories that made up the perimeter of impaired loans as at December 31, 2014 (Bad Loans, Doubtful, Restructured, Past-due) were reallocated to new risk classes (Bad Loans, Unlikely to pay other than bad, Past-due).

Italian banks' lending capacity seems to be still affected by their credit quality, as shown by the persistently negative dynamics of loans to non-financial firms. However, credit to households has kept growing since 2015 (in line with France and Germany), ...

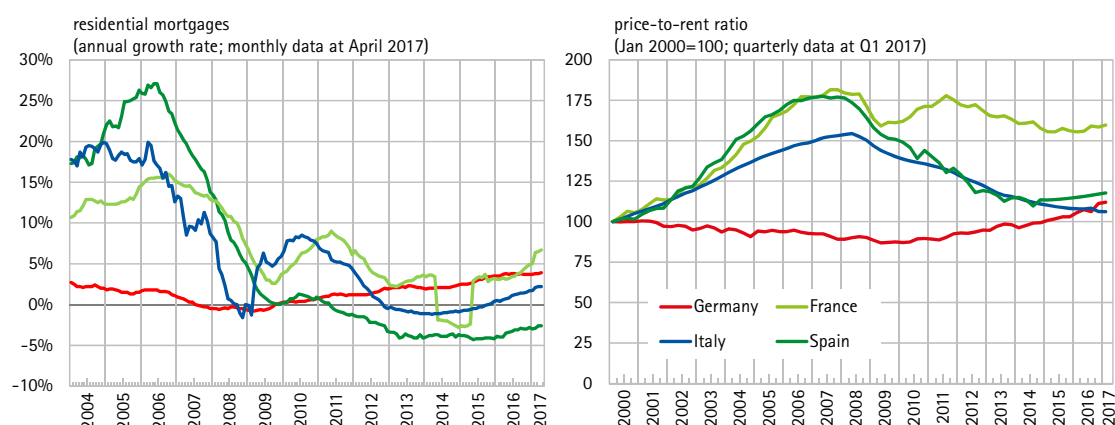
**Fig. 4.10 – Annual growth rate of bank loans in main euro area countries**  
(monthly data; January 2009 – April 2017)



Source: ECB.

... with residential mortgages increasing, vis-à-vis the declining pattern of house prices, while ...

**Fig. 4.11 – Residential mortgages and house prices and in main euro area countries**



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

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2017

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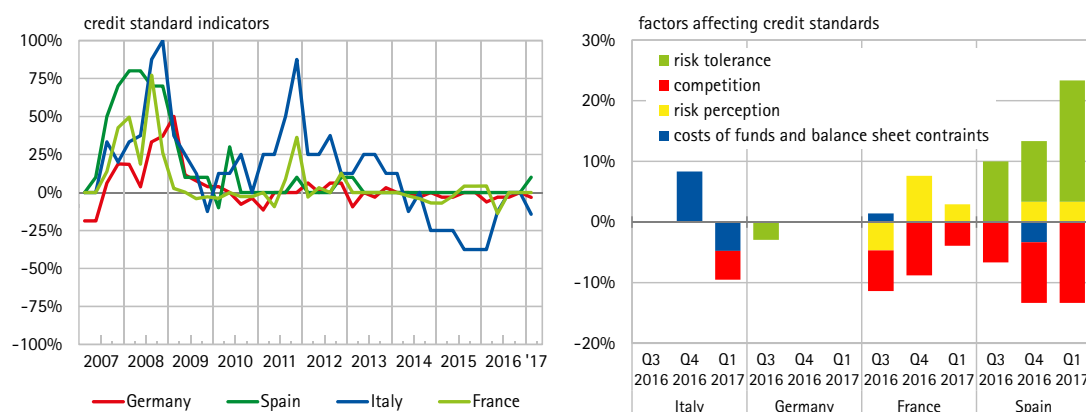
... credit standards on firm loans have been eased over the last 18 months (mainly due to competitive pressure and lessened concerns about funding costs and balance sheet constraints).

Holdings of domestic sovereign bonds relative to total assets remain very high for Italian and Spanish banks (10% and 8% respectively), although shrinking since the launch of QE in March 2015.

However, the recent widening of Target 2 imbalances shows that net sellers of sovereign bonds in the ECB asset purchase programme were mainly institutions not resident in Italy and Spain.

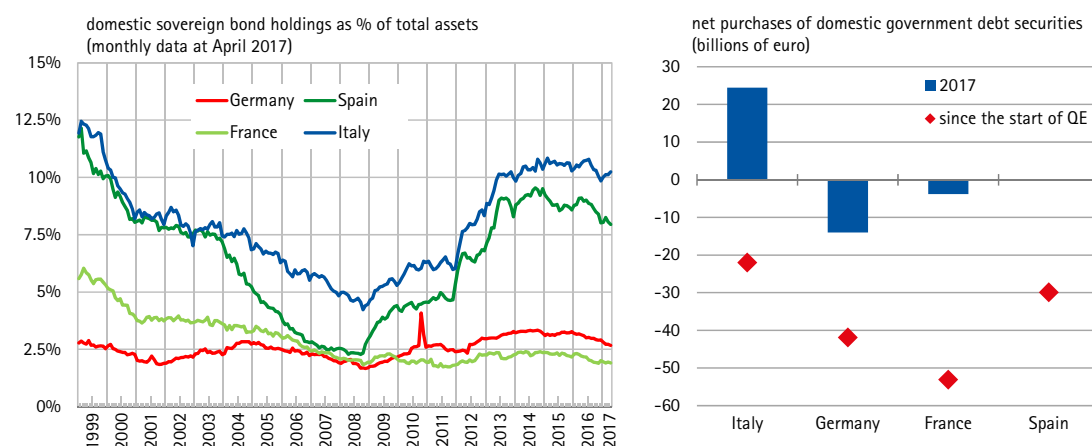
**Fig. 4.12 – Credit standards of supply of bank loans to non-financial companies in main euro area countries**

(quarterly data at Q1 2017)



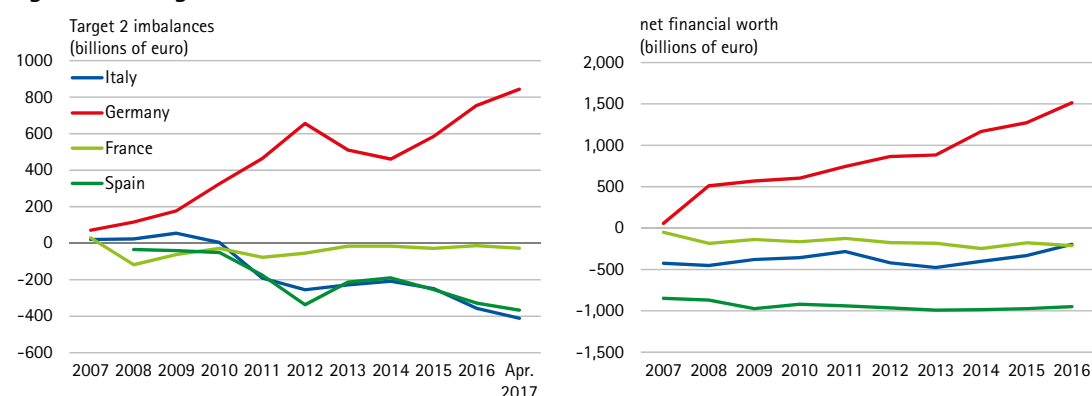
Source: ECB, 'Bank lending survey'. The credit standard indicator is the net percentage of banks reporting a tightening in credit standards (for France net percentages are weighted based on the amounts outstanding of loans of the individual banks in the sample). Factors are defined as the difference between the percentage of banks reporting that the given factor contributed to a tightening and the percentage reporting that it contributed to an easing. 'Cost of funds and balance sheet constraints' is calculated as the unweighted average of 'capital position', 'access to market financing' and 'liquidity position'; 'risk perception' is calculated as the unweighted average of 'expectations regarding general economic activity', 'industry-specific risk' and 'risk on collateral demanded'; 'competition' is calculated as the unweighted average of 'bank competition', 'non-bank competition' and 'competition by market financing'.

**Fig. 4.13 – Banks' exposures to domestic sovereign bonds in the main European countries**



Source: calculations on ECB data.

**Fig. 4.14 – Target 2 imbalances and net financial worth for main euro area countries**



Source: calculations on ECB data.

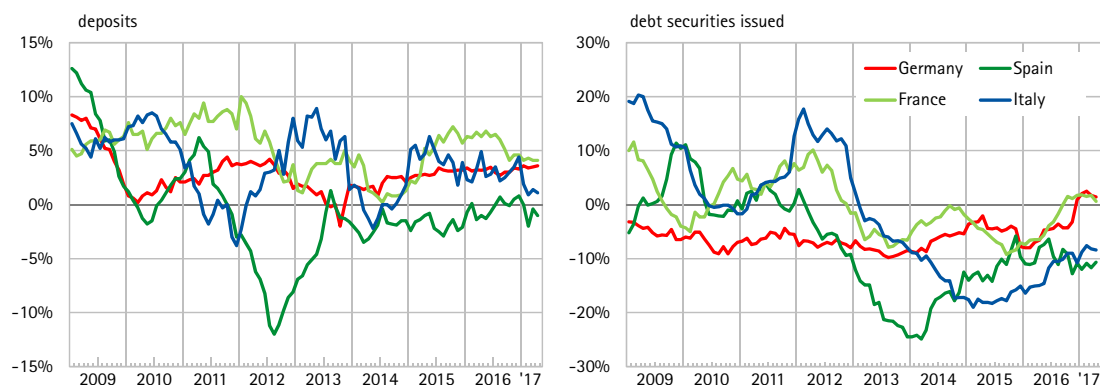


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As for bank funding, deposit growth has levelled off at a positive rate in the main Eurozone countries (apart from Spain), whereas issuance of debt securities has kept declining.

**Fig. 4.15 – Annual growth rate of banks' deposits and debt securities issued in main euro area countries**

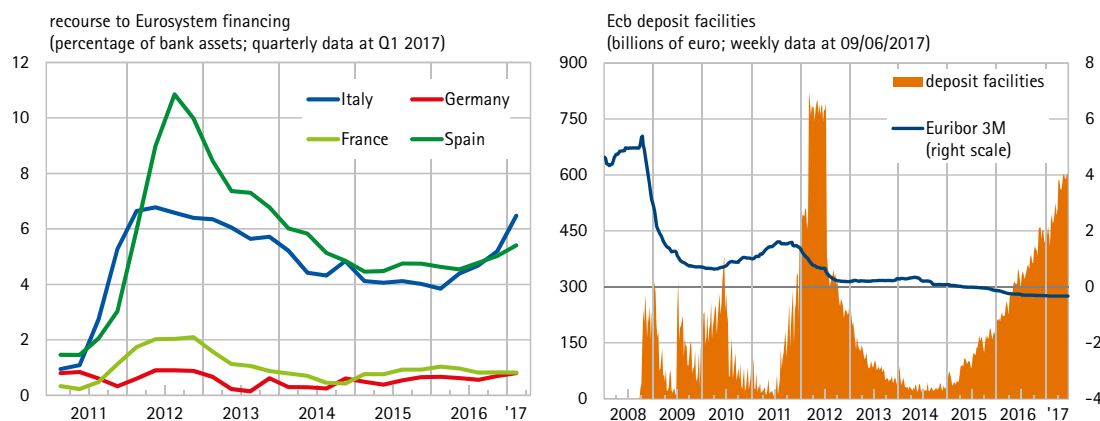
(monthly data; January 2009 – April 2017)



Source: ECB.

In the first quarter of 2017 the reliance of credit institutions on Eurosystem refinancing turned to rise in Italy and Spain, reaching respectively 7% and 5% of banks' total assets, due to a large recourse to the second series of TLTRO launched in March 2016.

**Fig. 4.16 – Reliance on Eurosystem funding by credit institutions of main euro area countries and ECB deposit facility**

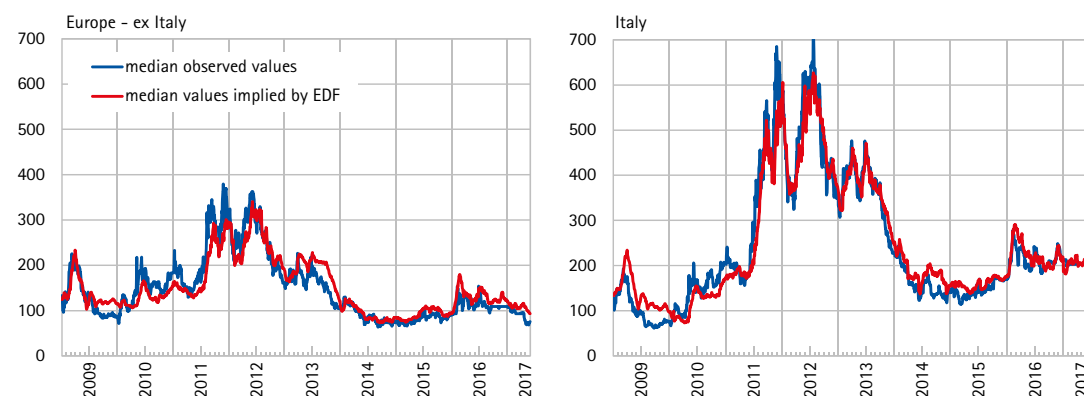


Source: calculations on ECB and national central banks data.

Divergences in banks' profitability and credit quality across Europe contribute to the persisting discrepancies in banks' perceived risk. In detail, over the first months of 2017 CDS prices have touched their lowest record since 2015 for European credit institutions, while levelling off at twice as much for Italian banks.

**Fig. 4.17 – Average 5-year CDS prices observed and implied by the expected default frequencies (EDF) for main listed European banks**

(basis points; daily data; 01/01/2009 – 31/05/2017)



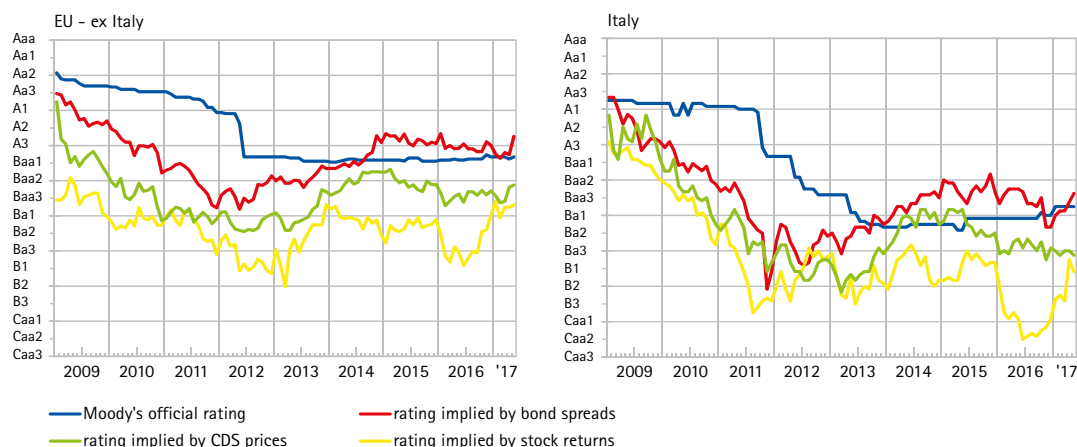
Source: calculations on Thomson Reuters Datastream and Moody's Credit Edge data for main listed groups (6 for Italy and 15 for Europe).



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CDS and stock return implied ratings, although increasing, have continued to lie below the official ratings across all European countries.

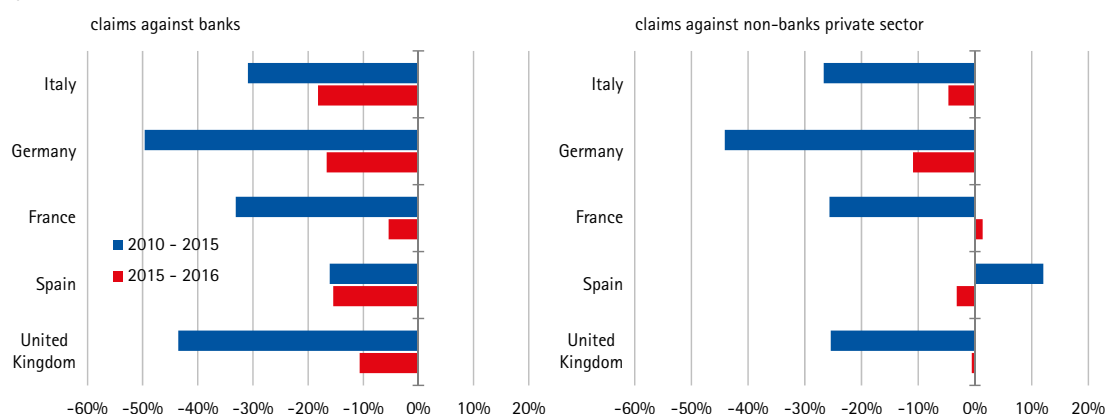
**Fig. 4.18 – Official and market implied rating for main listed European banks**  
(monthly data; January 2009 – May 2017)



Source: calculations on Moody's Implied Rating data. We report the average values for main listed European banks (23 groups).

Since 2010 a significant contraction has been detected both in European banks' international activity, as measured by total foreign claims, and ...

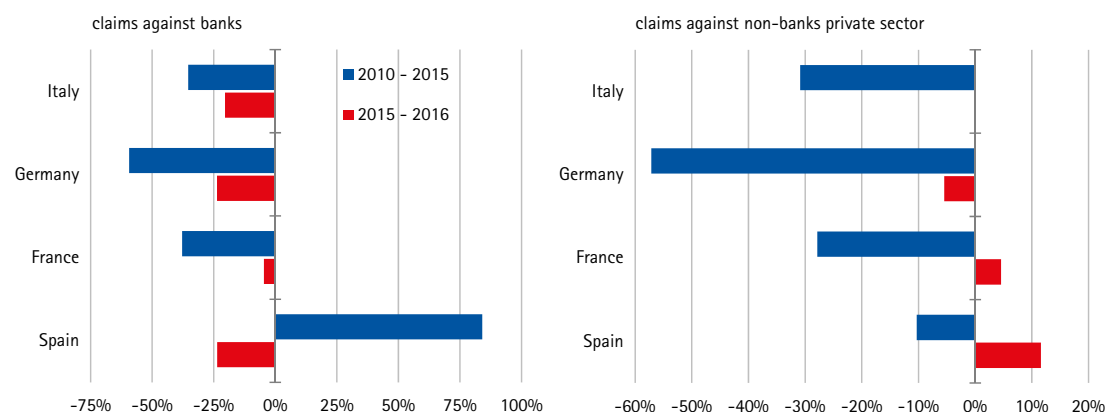
**Fig. 4.19 – Banks' foreign claims to the private sector in the main European countries**  
(percentage changes)



Source: calculations on Bank for International Settlements and ECB data.

... in the euro area financial integration, as tracked by the declining trend in intra-Eurozone banks' exposures.

**Fig. 4.20 – Banks' intra-Eurozone foreign claims to the private sector in the main euro area countries**  
(percentage changes)



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 available are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain.