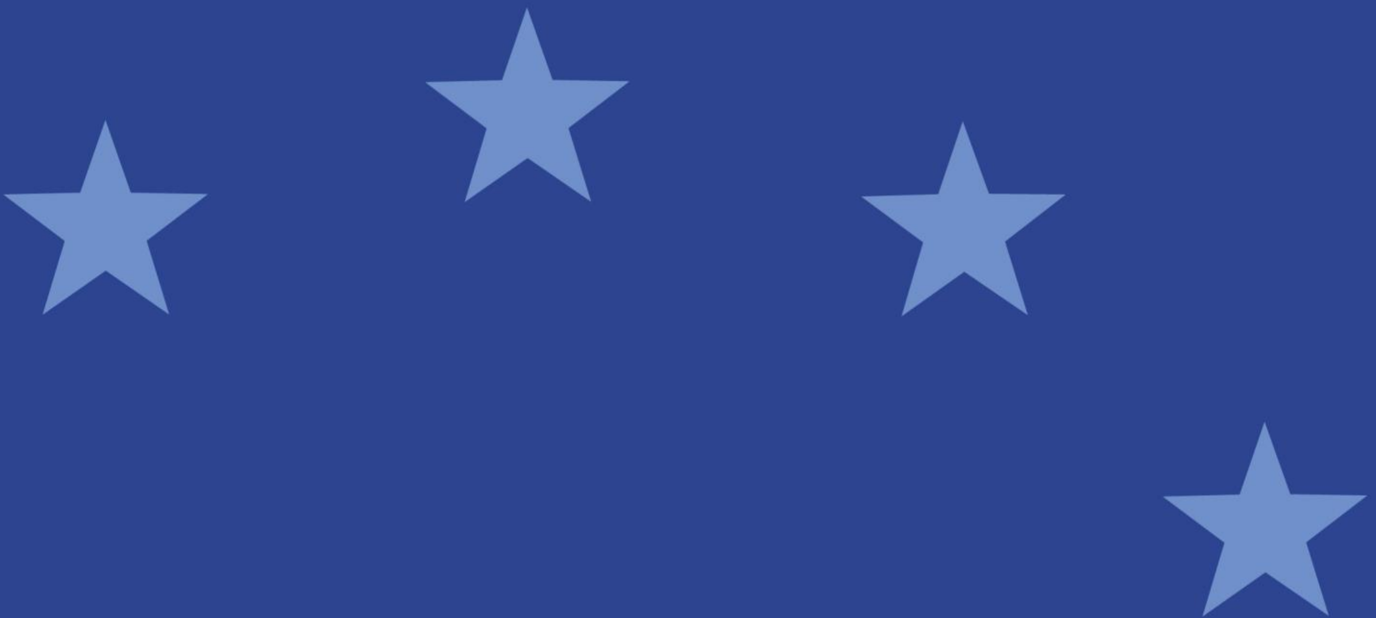
ESMA Risk Dashboard

No. 3, 2013



20 September 2013 | ESMA/2013/1139

ESMA Risk Dashboard, No. 3, 2013

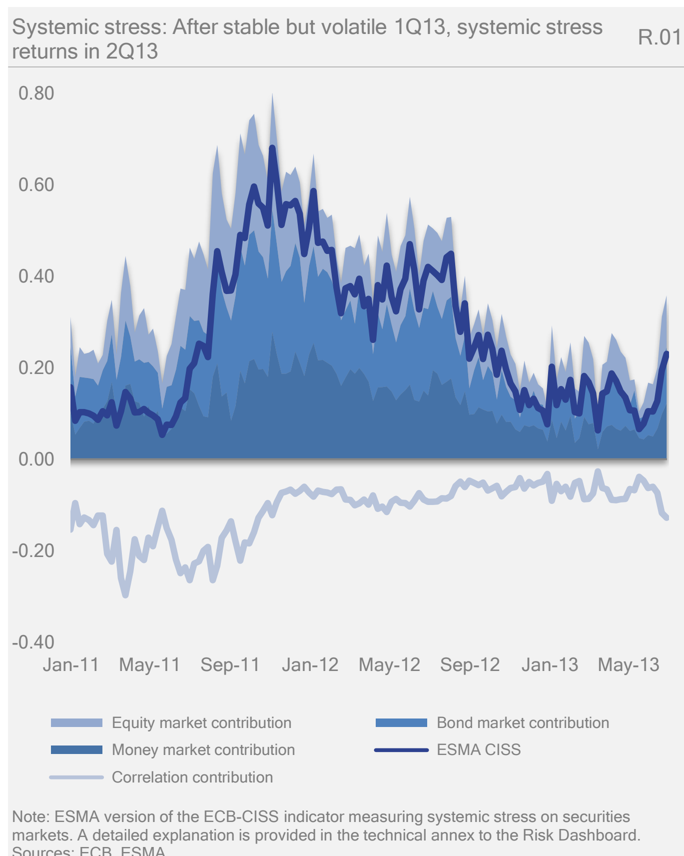
Preparation: Economic Research and Financial Stability Unit

© European Securities and Markets Authority, Paris, 2013. All rights reserved. Brief excerpts may be reproduced or translated provided the source is cited adequately. The reporting period of this Report is 01 April 2013 to 30 June 2013, unless indicated otherwise. Legal reference of this Report: Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC, Article 32 "Assessment of market developments", 1. "The Authority shall monitor and assess market developments in the area of its competence and, where necessary, inform the European Supervisory Authority (European Banking Authority), and the European Supervisory Authority (European Insurance and Occupational Pensions Authority), the ESRB and the European Parliament, the Council and the Commission about the relevant micro-prudential trends, potential risks and vulnerabilities. The Authority shall include in its assessments an economic analysis of the markets in which financial market participants operate, and an assessment of the impact of potential market developments on such financial market participants." The charts and analyses in this report are, fully or in parts, based on data not proprietary to ESMA, including data from commercial data providers and public authorities. ESMA uses these data in good faith and does not take responsibility for their accuracy or completeness. ESMA is committed to constantly improving its data sources and reserves the right to alter data sources at any time.

European Securities and Markets Authority (ESMA)
Economics and Financial Stability Unit
103, Rue de Grenelle
FR–75007 Paris
Telephone: +33 1 5836 5150
financialstability@esma.europa.eu

ESMA Risk Dashboard

Systemic stress: After stable but volatile 1Q13, systemic stress returns in 2Q13 R.01



Note: ESMA version of the ECB-CISS indicator measuring systemic stress on securities markets. A detailed explanation is provided in the technical annex to the Risk Dashboard.
Sources: ECB, ESMA.

Main risks: Sources R.02

Risk	Change since 1Q13
European sovereign debt crisis	→
Market clustering	→
Funding risk	↗
Low interest rate environment	↗
Market functioning	↗

Note: Assessment of main risk sources_for markets under ESMA remit, change since the last assessment. Upward arrows indicate an increase in the contribution to risks, downward arrows indicate a decrease in the contribution to risks.

Main risks: Categories R.03

Risk category	Systemic risk	Change since 1Q13	Outlook for 3Q13
Liquidity risk	orange	→	→
Market risk	yellow	↗	↗
Contagion risk	orange	→	→
Credit risk	red	→	→

Note: Assessment of main risk categories for markets under ESMA remit since past quarter and outlook for current quarter. Systemic risk assessment based on categorisation of ESA Systemic Risk Heat Map, green=low, yellow=moderate, orange=high, red=very high. Systemic RIsk Heat Map measures current risk intensity. Upward arrows indicate a risk increase, downward arrows indicate a risk decrease.

Systemic risk in EU securities markets remained stable throughout 1Q13, as conditions in equity and bond markets stabilised. In early 2Q13, systemic risks decreased, only to rebound to elevated levels in late 2Q13. Monetary policy support notwithstanding, a combination of unfavourable macroeconomic prospects and adjustments in yield curves, in particular the growth in the international heterogeneity of their levels and the increase in their slopes, kept the underlying sources of market uncertainty in place. Funding risk, the duration of the low interest rate environment and obstacles to orderly market functioning remained important sources of uncertainty for EU financial stability, aggravated by higher market volatility in emerging economies and commodity markets and a weakening global economic outlook. While some partial defragmentation was observed in sovereign debt markets, clustering still remains a source of vulnerability. On this basis, our outlook on liquidity, contagion and credit risks remains unchanged, while market risk was driven up by the ancillary effects of yield curve adjustments, such as increased price volatilities in various market segments and the outflow of funds from EM, and can be expected to continue rising going forward.

Systemic stress: Systemic stress in securities markets started to pick up again in 2Q13, having undergone temporary fluctuations throughout 1Q13 and early 2Q13. Past disturbances in the long-term downward trend are also reflected in increased volatility in systemic risk levels.

EU sovereign debt crisis: The EU sovereign debt crisis continued to weigh on the stability of financial markets. In particular, sovereign yields remained sensitive to economic and political uncertainties in some EU countries, including the need for restructuring in one national banking sector. Other economies have come under closer market scrutiny in recent weeks.

Market clustering: In 2Q13, the clustering of investor risk assessments persisted for individual geographies and markets, reflected in the dispersion and volatility of EU equities and sovereign yields as well as the related liquidity in some markets. Evidence of declustering was observed in sovereign bond markets, where some distressed markets improved. While contributing to domestic stabilisation, capital controls such as were introduced in one Member State can lead to fragmentation and impair the credibility of the EU single financial market. Any further aggravation of market clustering or potential fragmentation of the EU's Single Financial Market, even if limited in territorial and economic dimension, would impact market efficiency.

Funding risk: In 2Q13, activity in most market segments – with the exception of short-term securities – decreased, particularly in money markets and in asset-backed and mortgage-backed securities. The latter markets benefited from the continuing relief stemming the previous year's monetary policy measures and improvements in most EU real estate markets. Low levels of securities issuance, coupled with significant bank redemptions in the next three years (due especially to maturing LTRO funds) and a shortening in debt maturities, imply significant funding risks for the future, when sovereigns, financial institutions, and corporates too need to roll over their debt. As a result, funding risks increased over the last quarter.

Low interest rate environment: The prevailing low interest rate environment continues to influence

Main risks: Summary assessment R.04

Risk category	Summary
Liquidity risk	Liquidity risk remained constant and highly dispersed across market segments and regions over the last quarter. The evidence below indicates that recent reactions by policy makers and market participants have reduced liquidity risks in some segments. However, other segments saw liquidity conditions deteriorate.
Market risk	Market risk remained stable in early 2Q13 but experienced a sudden increase in June 2013, driven by rising valuation concerns in equity and bond markets. However, market developments in early 2Q13 were not in line with macroeconomic conditions. Fostered by the low interest rate environment, higher yields in riskier bond market segments attracted strong inflows. Equity markets retained the same level of attraction In late 2Q13, markets partially corrected for their divergence from fundamentals, experiencing portfolio adjustments, price declines and yield increases. The fund industry responded with a risk averse reaction. As markets expect further adjustment, market risk can be expected to continue rising.
Contagion risk	In 2Q13, conditions in the market segments currently most exposed to contagion risks revealed persistent, but reduced clustering, reflected in a reduction in CDS exposures and a weakening perception by investors of divergence in national idiosyncratic risks. Investors deemed the idiosyncratic risks of some vulnerable segments to be lower than in 1Q13. Hence, the potential for contagion between clusters increased, while contagion risks within the distressed cluster abated. All in all, contagion risks have remained unchanged on 1Q13. Markets showed some reaction to the restructuring of one national banking sector despite limited direct cross-border exposures.
Credit risk	In 2Q13, securities markets in the EU witnessed reduced issuance volumes, mainly in asset classes with higher risk and longer maturities. Sovereign debt maturity at issuance continued to fall, in particular for countries with distressed sovereign bond markets. The concentration of outstanding bank debt at shorter maturities persisted. Despite the recent successful refinancing operations by debt issuers, substantive credit risks remain. Overall, credit risks did not increase further but remain at a high level.

Note: Qualitative summary of assessment of main risk categories for markets under ESMA remit.

behavioural patterns in financial markets. While mitigating bank-funding costs, low interest rates result in narrow spreads and can make it more difficult for borrowers to attract investors due to low returns. They also imply a risk of potential distortion in capital allocation and encourage search-for-yield strategies generating inflows into high-yield and, by implication, riskier assets. This is an increasing source of concern as the discrepancy between the reduced risk aversion in financial markets and unfavourable macroeconomic fundamentals increases and feeds back into market stability in the form of misvaluation risks. In addition, an eventual future return to higher interest rates is likely to trigger substantial portfolio readjustment needs as well as corrections in asset prices, thus increasing market uncertainty during the transition period.

Market functioning: ESMA continuously monitors potential structural risks in the markets under its remit. Relevant issues include:

— Benchmarks: In the reporting period, measures were taken by the EU Commission, EBA and ESMA aimed at improving the governance of benchmark systems and ensuring their continuity. At the same time, new concerns emerged over potential oil and currency price manipulations, and withdrawals by submitting banks from interbank interest rate benchmark panels in the EU continued.

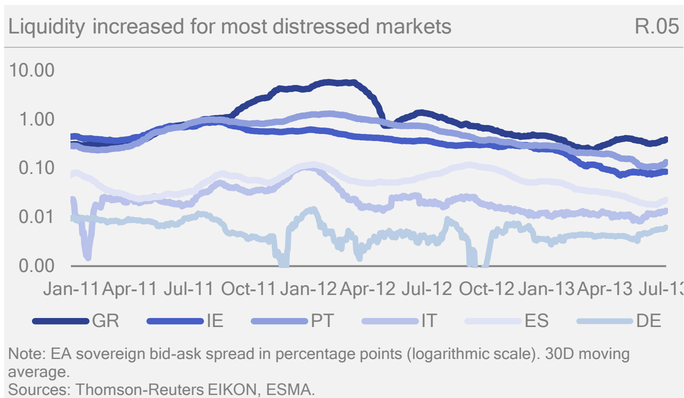
— Shadow banking: Amid subdued securitisation issuance, shadow banking continued its gradual contraction. Leveraging of funds in the securitisation chain remained limited on average. Systemic risks from high degrees of interconnectedness are being kept under surveillance.

— Collateral: Key determinants, such as demand, supply, rehypothecation and changes in asset quality and their potential to impair the efficiency of financial intermediation, are monitored closely by ESMA. Currently, immediate risks to collateral availability are limited.

— Leverage: Even though average leverage ratios remain below pre-crisis levels, the exposure of MMFs, HFs and other fund types to potential liquidity shortages is relevant for systemic risk analysis and therefore remains subject to supervisory attention.

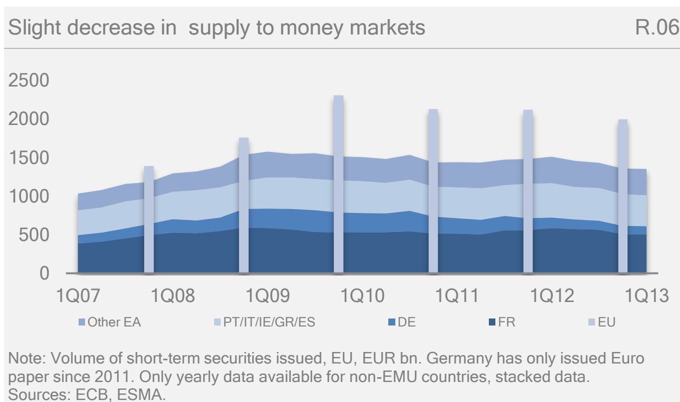
— Interconnectedness: Systemic size and interconnectedness can generate risks in derivative markets, in central clearing and within financial intermediation chains tapping into repo and interbank markets.

Liquidity risk



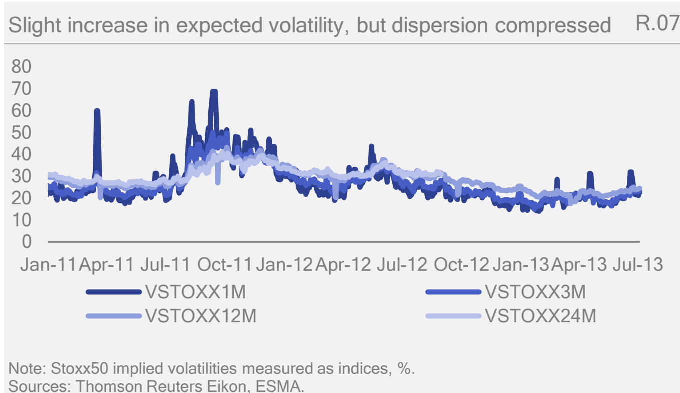
Liquidity increased for most distressed markets R.05

Note: EA sovereign bid-ask spread in percentage points (logarithmic scale). 30D moving average.
Sources: Thomson-Reuters EIKON, ESMA.



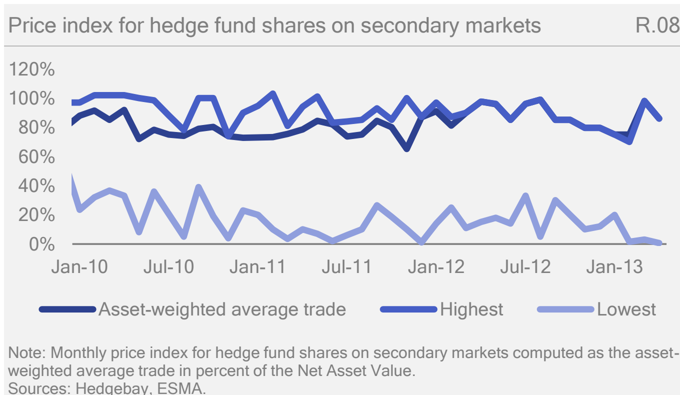
Slight decrease in supply to money markets R.06

Note: Volume of short-term securities issued, EU, EUR bn. Germany has only issued Euro paper since 2011. Only yearly data available for non-EMU countries, stacked data.
Sources: ECB, ESMA.



Slight increase in expected volatility, but dispersion compressed R.07

Note: Stoxx50 implied volatilities measured as indices, %.
Sources: Thomson Reuters Eikon, ESMA.



Price index for hedge fund shares on secondary markets R.08

Note: Monthly price index for hedge fund shares on secondary markets computed as the asset-weighted average trade in percent of the Net Asset Value.
Sources: Hedgebay, ESMA.

Liquidity risk remained constant over the last quarter. Its dispersion across market segments and regions remained high. The evidence below indicates that recent reactions by policy makers and market participants have reduced liquidity risks in some segments. However, other segments experienced a deterioration in liquidity conditions.

Sovereign bonds: In 2Q13 the bid-ask spreads of EA sovereign bonds narrowed for several key countries, while holding roughly stable for others. Spreads increased in at least two countries; there is considerable dispersion in levels across sovereigns. While some countries not using IMF and EU bailout funds continue to face lower market depth than other EU countries, differences in bid-ask spreads between most markets narrowed in 2Q13. In late 2Q13 a general increase in the level of spreads was observed, indicating a readjustment in market expectations for sovereign debt within the EA.

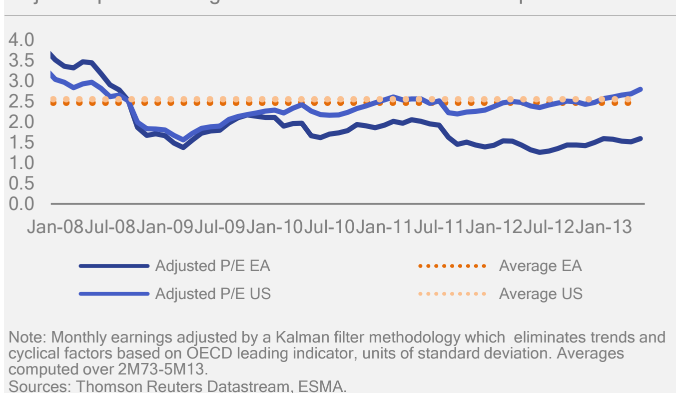
Short-term securities: In 1Q13, the outstanding volume of short-term securities, which constitutes the maximum liquidity available to money markets, exited its 2012 downward trajectory. The increase in issuance volumes was pronounced in some non-distressed EA markets, while debt issuance by distressed EA countries continued to decline. Nevertheless, there is no evidence of a liquidity shortage on money markets in the EU. Taken in conjunction with low interest rates and the slight revival in interbank overnight activity reported elsewhere, this indicates that the factor driving the squeeze in the supply of capital to businesses is not a lack of liquidity, but rather the lack of intermediaries' willingness to provide financing because of the greater perceived risk or low returns.

Volatility: In 2Q13, implied volatilities stabilised at a slightly higher level than in 1Q13. The term structure returned to a regular pattern, while showing some signs of compression in late 2Q13. Previous compressions have occasionally signalled risks ahead. The associated increases in contemporaneous volatilities on equity markets indicate market reactions to recent adverse macroeconomic and political events. The current level of implied volatilities remains comparatively low for the time being.

Liquidity premium: The liquidity premium required by investors to acquire hedge fund shares, which had tracked a rising trend during the last quarter of 2012, fell temporarily in March 2013; and in contrast to the previous quarter, the variability in liquidity premia and their dispersion increased. These effects may signal improved, although still volatile, expectations of hedge funds' future performance by investors. Funds with market directional strategies, which focus on exploiting market trends, continued to underperform relative to other hedge funds. Consequently, hedge fund sector liquidity continues to be affected by market trends and the associated macroeconomic risks.

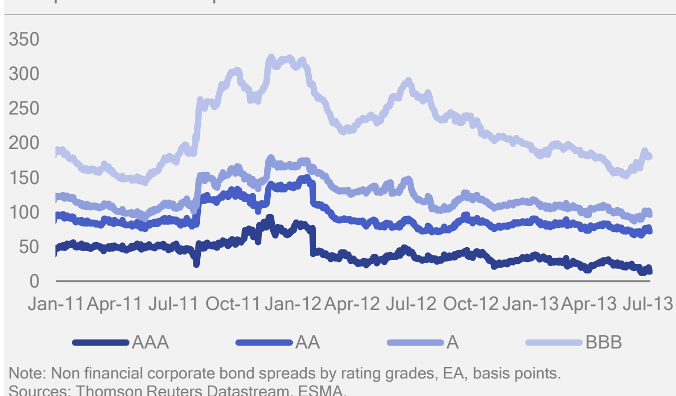
Market risk

Adjusted price-earnings ratios for euro area and US equities R.09



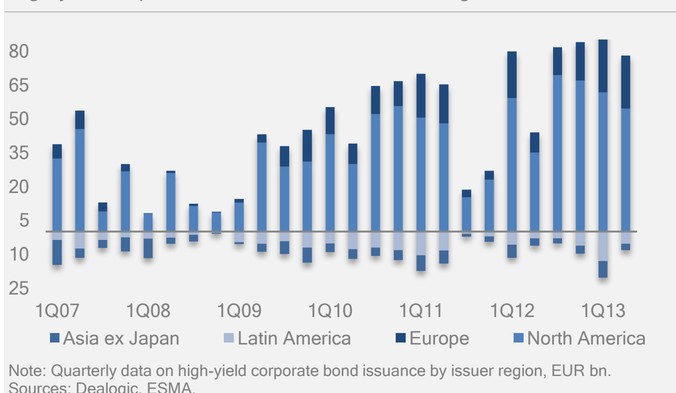
Note: Monthly earnings adjusted by a Kalman filter methodology which eliminates trends and cyclical factors based on OECD leading indicator, units of standard deviation. Averages computed over 2M73-5M13.
Sources: Thomson Reuters Datastream, ESMA.

Compression in risk spreads reversed in late 2Q13 R.10



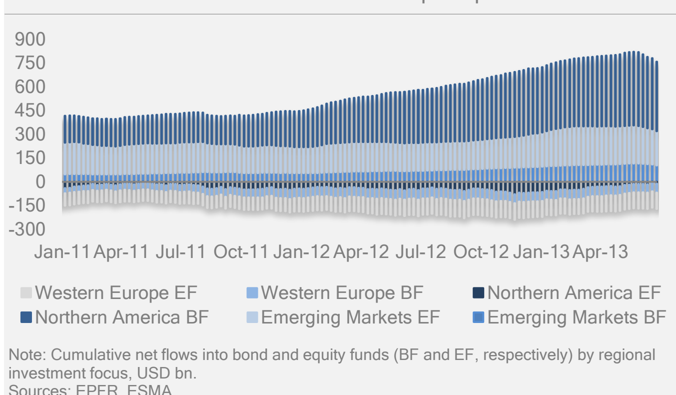
Note: Non financial corporate bond spreads by rating grades, EA, basis points.
Sources: Thomson Reuters Datastream, ESMA.

High-yield corporate bond issuance remained high R.11



Note: Quarterly data on high-yield corporate bond issuance by issuer region, EUR bn.
Sources: Dealogic, ESMA.

Investments into funds follow investors' risk perceptions R.12



Note: Cumulative net flows into bond and equity funds (BF and EF, respectively) by regional investment focus, USD bn.
Sources: EPFR, ESMA.

Market risk held steady in early 2Q13 but suffered a sudden setback in June 2013 fuelled by rising valuation concerns in equity and bond markets. Bolstered by the low interest rate environment, higher yields in riskier bond market segments attracted strong inflows. Equity markets also remained attractive within the quarter. In late 2Q13, markets partially corrected for their divergence from fundamentals, undergoing portfolio adjustments, price declines and yield increases. The fund industry reacted with caution. As markets expect further adjustment, market risk can be expected to continue rising going forward.

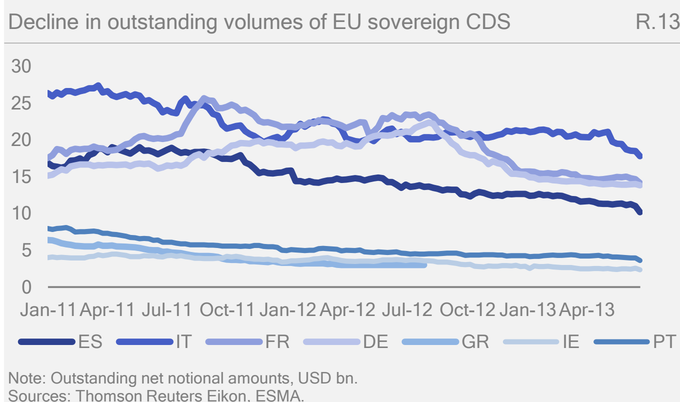
Equities: Since early 1Q13, the previously positive trend in the price-earnings ratios of equities within the EA levelled, leaving them well below their long-term average. US equities increased slightly throughout that period, finally surpassing their long-term average. Hence the gap between EA and US price-earnings ratios started to widen again. In the weak macroeconomic environment, the past increase and recent volatility in international equity indexes generated growing concern over potential valuation risks and the associated contagion dangers. Given that in recent years the average price-earnings ratio has undergone structural downward correction, these concerns also hold for Europe.

Bond spreads: Investment-grade non-financial corporate bond spreads in the EA reflect the continuing macroeconomic uncertainty. In 2Q13, after initial increases in April, risk spreads narrowed for lower rating grades. On the other hand, spreads on bonds with higher rating grades experienced a volatile increase in 2Q13. These fluctuations show that bond markets remain very sensitive to signs of adverse events or developments, especially those at the more risky end. This also underpins the increased possibility of future risk realignment. Nonetheless, for 2Q13 net inflows into Western European bond funds offer evidence of improvement within this particular market segment.

Bond issuance: High-yield corporate bond issuance remained strong throughout 2Q13, with increases in the EU and slight decreases in North America. This period was also characterised by positive, albeit weak issuance in emerging markets, possibly as a result of more moderate macroeconomic performance in the latter group. Since mid-2012 the extreme volatility in issuance observed during the last two years has started to fade. This may reflect market confidence in policy continuity, while the high issuance volume may indicate the revival of investor risk appetite. Still, risks related to changes in yield curves, especially in developed economies, and realignment in risk evaluation may heighten instability and add to valuation concerns.

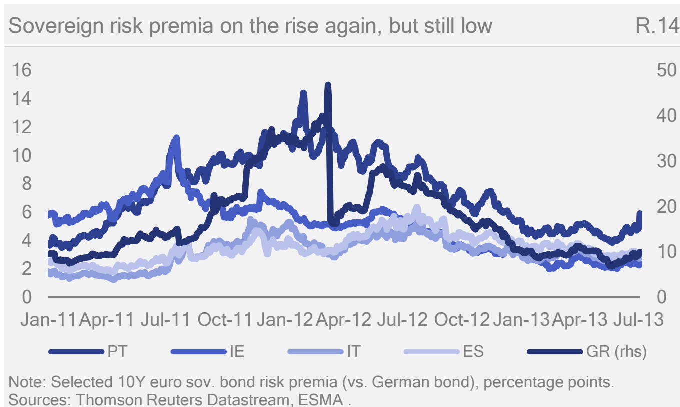
Flows of funds: Fund investments in 2Q13 concentrated on US equity funds and EU bond funds. However, net flows for both fund types remained volatile, fluctuating between negative and positive values. Owing to market fluctuations and political uncertainties, emerging market funds and US bond funds suffered massive outflows in 2Q13. EU funds focusing on assets in distressed markets experienced inflows, albeit on a smaller scale than in 1Q13, while the majority of the other markets saw capital withdrawn. This trend may be due to the low interest rate environment rather than resulting from structural improvements in those economies. If so, it heightens valuation risks and should be closely monitored.

Contagion risk



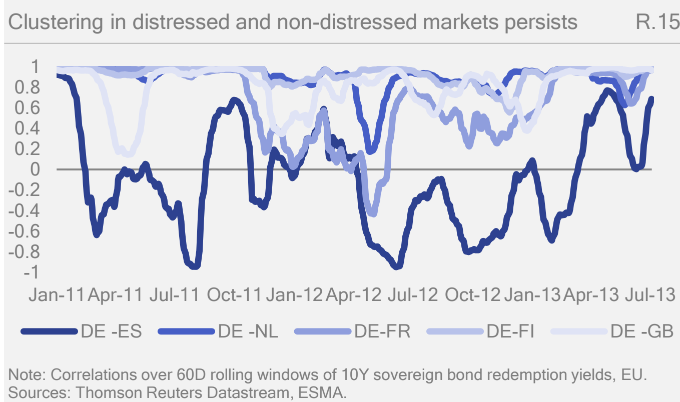
Decline in outstanding volumes of EU sovereign CDS R.13

Note: Outstanding net notional amounts, USD bn.
Sources: Thomson Reuters Eikon, ESMA.



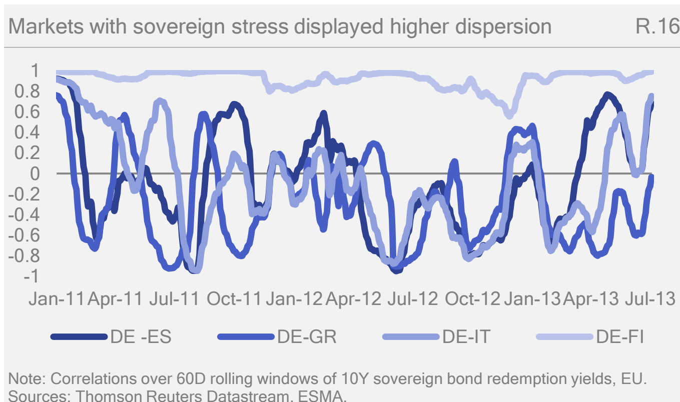
Sovereign risk premia on the rise again, but still low R.14

Note: Selected 10Y euro sov. bond risk premia (vs. German bond), percentage points.
Sources: Thomson Reuters Datastream, ESMA .



Clustering in distressed and non-distressed markets persists R.15

Note: Correlations over 60D rolling windows of 10Y sovereign bond redemption yields, EU.
Sources: Thomson Reuters Datastream, ESMA.



Markets with sovereign stress displayed higher dispersion R.16

Note: Correlations over 60D rolling windows of 10Y sovereign bond redemption yields, EU.
Sources: Thomson Reuters Datastream, ESMA.

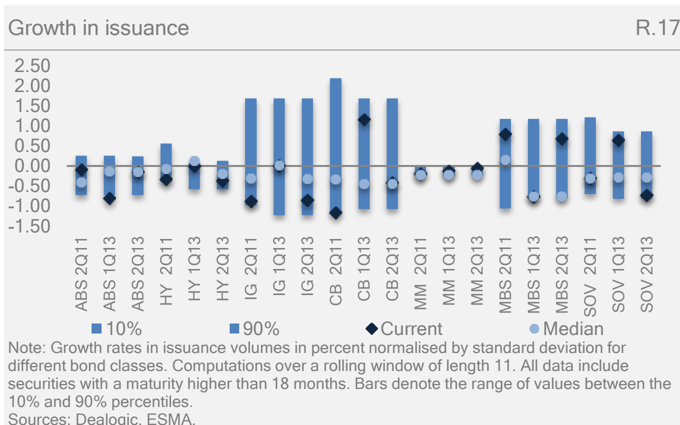
In 2Q13, conditions in the market segments currently most exposed to contagion risks revealed persistent but reduced clustering, reflected in a decline in CDS exposures and waning perception of divergence in national idiosyncratic risks by investors. Investors assessed the idiosyncratic risks of some vulnerable segments lower than in 1Q13, weakening the ability to distinguish between different sovereign debt issuers. Hence the potential for contagion between clusters increased, while contagion risks within the distressed cluster eased. Overall, contagion risks have remained unchanged on 1Q13. Market reaction to the restructuring of one national banking sector was restrained amid limited direct cross-border exposures.

Sovereign CDS: In 2Q13, outstanding CDS net notional amounts decreased for most EA countries exposed to elevated sovereign risk and stabilized for some EA countries not associated with high sovereign risk. This development reflects the reduced clustering of individual sovereign bond markets, lower demand for sovereign debt protection in distressed markets and less inclination on the part of CDS sellers to accept the risks associated with providing insurance that exposes them to sovereign debt of distressed markets. Taking into account the tendency towards reduced bank participation in non-domestic sovereign bond markets, the contagion risks to which international counterparties are exposed increased for most markets characterised by high sovereign risk.

Sovereign risk premia: In 2Q13 sovereign risk spreads in several EA countries exposed to debt problems initially continued to narrow, before starting to increase again in May 2013. This corresponded to a temporary change in the correlations observed between some of the underlying yields. However, this contraction is neither uniform across countries nor monotonous throughout time. In particular, sovereign risk spreads for all the countries observed began to widen at the end of 1Q13 in response to the stress events characterising one national banking system. Investors remain highly sensitive to any adverse news.

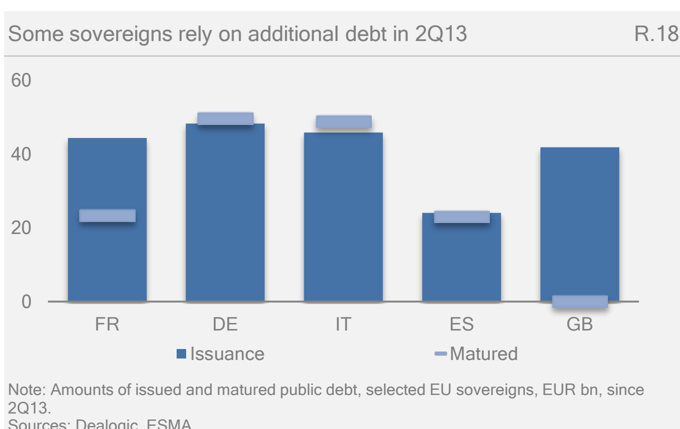
Yield correlation: Correlations between the yields on ten-year sovereign benchmark bonds for European economies continue to indicate a clustering of sovereign bond markets in Europe, separating distressed from non-distressed countries. While this market clustering is a cause for concern from a single market perspective, it also mitigates contagion risk as investors are increasingly using diverging risk levels to distinguish categories of sovereign debt in the EU. However, in late 1Q13, the heterogeneity between distressed markets increased, suggesting a differentiation in the risk profiles of individual distressed countries, some of which witnessed a trend reversal from negative to positive correlation patterns with non-distressed EU markets. This signalled high sensitivity of clustering to general market trends but was also in line with the successful roll-over of debt for some individual sovereign issuers. However, shorter maturities imply more frequent roll-overs, an associated increase in funding needs and potential future upward pressures on yields.

Credit risk



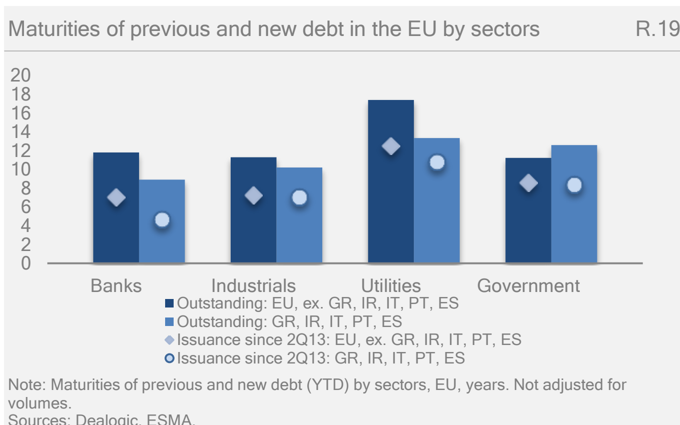
Growth in issuance R.17

Note: Growth rates in issuance volumes in percent normalised by standard deviation for different bond classes. Computations over a rolling window of length 11. All data include securities with a maturity higher than 18 months. Bars denote the range of values between the 10% and 90% percentiles.
Sources: Dealogic, ESMA.



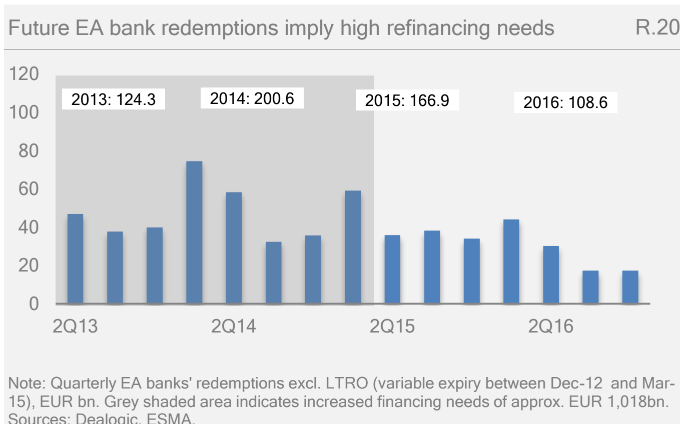
Some sovereigns rely on additional debt in 2Q13 R.18

Note: Amounts of issued and matured public debt, selected EU sovereigns, EUR bn, since 2Q13.
Sources: Dealogic, ESMA.



Maturities of previous and new debt in the EU by sectors R.19

Note: Maturities of previous and new debt (YTD) by sectors, EU, years. Not adjusted for volumes.
Sources: Dealogic, ESMA.



Future EA bank redemptions imply high refinancing needs R.20

Note: Quarterly EA banks' redemptions excl. LTRO (variable expiry between Dec-12 and Mar-15), EUR bn. Grey shaded area indicates increased financing needs of approx. EUR 1,018bn.
Sources: Dealogic, ESMA.

In 2Q13, securities markets in the EU witnessed reduced issuance volumes, mainly in asset classes with higher risk and longer maturities. Sovereign debt maturity at issuance continued to fall, in particular for countries with distressed sovereign bond markets. The concentration of outstanding bank debt at shorter maturities persisted. Despite recent successful refinancing operations by debt issuers, substantial credit risks remain. Overall, credit risks did not increase further but remain at a high level.

Issuance: On average in early 2Q13, the growth in issuance of securities with a maturity of more than 18 months in the EU slowed in most market segments compared to 1Q13. Exceptions were increases in issuance of money market papers and mortgage and asset backed securities. Except for covered bonds and money market papers, the declining trends also apply in the longer run, as a comparison with 2Q11 figures shows. The capacity for successful debt issuance thus appears to be weaker than in previous quarters. The concentration of issuing in market segments shunned over the last few quarters reflects successful policy interventions to stabilise those segments, as well as improved fundamentals in the markets for underlyings. Crisis-related distortions between market segments appear to have partially abated. The renewed increase in non-financial corporate spreads observed in 2Q13 (see R.10) corroborates the signs of a reduction in issuance.

Refinancing: The main sovereign issuers have continued to use the improved market conditions to roll over their debt. The maturity of debt newly issued by sovereigns of economies in distress continued to shorten and is now similar to the shorter maturity profiles typically seen in non-distressed economies (see R.19). As a result, funding risks persist in the medium term, especially if the supply of funds to these markets remains low.

Maturities: The trend towards issuing new securities featuring a lower average maturity than current outstanding debt persists in most sectors, being more pronounced among EU countries not directly exposed to high sovereign risk. In particular, issuers traditionally emitting at longer maturities shortened the maturity of their new issues. Deviating from the general trend, sovereign debt issuance in distressed markets also saw a reduction in maturity. At the same time, with debt turnover still high, credit risk has increased. Moreover, the trend common in the EU banking sector to engage in uniform maturity reductions may be a source of additional contagion.

Bank redemptions: The maturing debt needing to be refinanced by private EA banks by the end of 2016 fell from EUR 685bn in 1Q13 to EUR 591bn. Of this total EUR 384bn needs to be refinanced by the end of 1Q15. These refinancing requirements do not include obligations to central banks, which are usually in the form of short-term debt. However, the three-year LTRO facilities provided by the ECB in December 2011 (EUR 489bn) and March 2012 (EUR 530bn) both have a maturity of three years, with early repayment possible any time after one year. For 2Q13 the ECB reported additional repayments of EUR 37bn of three-year LTRO liquidity, bringing the volume of repayments up to 274bn The remaining LTRO repayments of EUR 744bn outstanding push up European banks' refinancing needs to roughly EUR 1.1tn between late 2Q13 and 1Q15, implying that the future credit risk for Europe's banking sector remains substantial. However, factors such as deleveraging and restructuring processes, as well as the downsizing of the banking industry, may reduce banks' funding needs.

esma
European Securities and
Markets Authority