ESMA Risk Dashboard

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Authorisation: This Report has been reviewed by ESMA's Committee for Economic and Market Analysis (CEMA) and has been approved by the Authority's Board of Supervisors. ESMA thanks the members of CEMA for contributions and valuable comments.

 Cut-off date for data used in this Report is 30 March 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.

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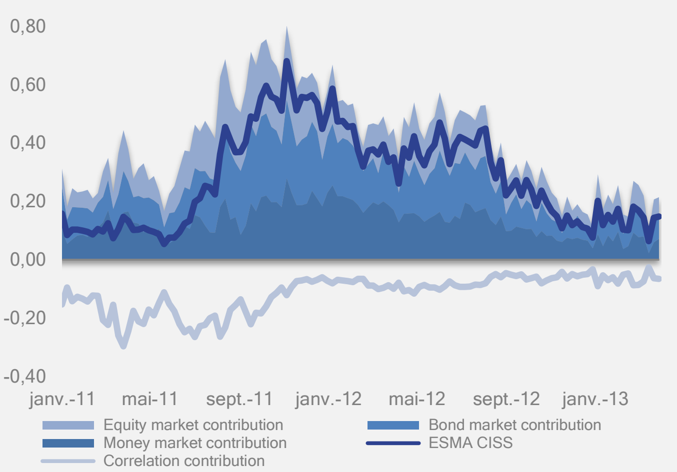
ESMA Risk Dashboard

Systemic stress decreased in 4Q12, constant in 1Q13 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 3Q12
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 a risk increase, downward arrows indicate a risk decrease.

Main risks: Categories R.03

Risk category	Systemic risk	Change since 3Q12	Outlook for 2Q13
Liquidity risk	●	→	→
Market risk	●	↘	→
Contagion risk	●	→	→
Credit risk	●	→	→

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.

The overall level of systemic risk in EU securities markets decreased throughout 4Q12, as conditions in equity and bond markets improved. Since mid-December, systemic risk has remained stable. Notwithstanding monetary policy support, the underlying sources of market uncertainty remain in place. Market clustering and fragmentation, funding risk, the low interest rate environment and obstacles to orderly market functioning remained important sources of uncertainty for EU financial stability. The recent restructuring of one national banking sector underlined the continued prevalence of the sovereign debt and banking crisis as a source of risk. On this basis, our outlook on liquidity, market and contagion risks remains unchanged.

Systemic stress: Aggregate risk in securities markets continued to decline in the last quarter of 2012, but remained constant throughout 1Q13. This development corresponded with temporary irritations of financial markets during the first quarter of 2013.

Among the various risks that ESMA monitors, the following are of particular importance at the current juncture:

EU sovereign debt crisis: In 1Q13, the EU sovereign debt crisis continued to weigh on the stability of financial markets, despite an improvement in 4Q12. In particular, sovereign yields remain reactive to negative signals for some EA countries, notably affecting market participants with significant exposures to sovereigns, such as banks and other institutional investors. Moreover, continued vulnerability in individual Member States may have effects on risk perceptions, possibly leading to significant risk realignments. Recent developments around the restructuring needs for one national banking sector ignited renewed market uncertainty which may prevail for some time. Other economies have come under closer market scrutiny in recent weeks. Outside the EA, the rating downgrade of one key economy added to market uncertainty. In addition, a zero risk weight on sovereign bonds weakens institutional investors' incentives to engage in appropriate risk management.

Market clustering and fragmentation: In 1Q13, the clustering of financial assets in investor risk assessment in the EU single market continued. The dispersion and volatility of sovereign yields provides evidence for this development, as does the implied liquidity on these markets. Further evidence is provided by the asymmetric development of net outstanding volumes of CDS contracts. On the one hand, such market clustering can lower contagion risk as market participants are able to disentangle individual country risks from general factors, further reflecting domestic economic conditions. On the other hand, market clustering potentially increased contagion among countries in the same cluster. This is indicated by higher correlations among distressed sovereigns. Capital controls, as recently introduced in one member state, have contributed to stabilizing financial market conditions in that country. However, capital controls imply conceptual and practical consequences and may damage the confidence in a single market's credibility. Therefore, any further aggravation of market clustering or a potential fragmentation of the EU's Single Financial Market, albeit very limited in territorial and economic reach, should be monitored with caution.

Funding risk: In 4Q12 and 1Q13, activity in secured

Main risks: Summary assessment R.04

Risk category	Summary
Liquidity risk	Liquidity risk remained stable over the last two quarters. 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 deterioration in liquidity conditions.
Market risk	In 4Q12 and 1Q13 both equity and bond markets showed signs of relaxation. This is however not in line with recent macroeconomic projections. Most importantly, the higher yields in riskier bond market segments attracted stronger inflows and helped to compensate the risk aversion of investors. Increased investments by the fund industry into EU bond markets delivered an additional sign of confidence. Overall, market risk continued to decrease in 4Q12, but remained stable throughout 1Q13 due to an increase in valuation concerns.
Contagion risk	In 4Q12 and 1Q13, conditions in the market segments currently most exposed to contagion risks revealed a continued trend to clustering, reflected in an asymmetric development of CDS exposures and an increasing perception of idiosyncratic risks by investors. Both effects tend to reduce contagion risks between clusters, but increase the potential for contagion within each group. Investors deemed the idiosyncratic risks of the most vulnerable segments lower than in the previous quarter. Due to this ambivalence, contagion risks had remained unchanged on 3Q12. Nonetheless, markets reacted to the restructuring of one national banking sector, in spite of limited direct cross-border exposures, and their reassessment of risks following policy announcements appears to be ongoing. Notably, the imposition of capital controls and the bail-in of creditors may have an impact on the quality of assets and liabilities as well as the associated demand and supply.
Credit risk	In the last two quarters, securities markets in the EU witnessed increasing issuance volumes, mainly in asset classes with higher risk and longer maturities. This growth in issuance indicates the recovery of the ability to issue debt successfully. 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 and narrowing spreads substantive credit risks remain. In aggregate, credit risk did not increase further and is expected to remain at the current high level.

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

markets started to grow again, while unsecured markets experienced stable growth in higher yield market segments and weak growth in money markets. This development reflected the revival of asset markets except for those characterised by low interest rates and short maturities. In spite of the lasting alleviating effects of last year's ECB measures (OMT, LTRO), low issuance of short-term securities, coupled with significant bank redemptions in the next three years (due especially to maturing LTRO funds) and a decrease in debt maturity may give rise to significant funding risks in the future when financial institutions need to roll over their debt. Refinancing risks are not limited to banks, as corporates and sovereigns will also have significant rollover requirements in the next few years.

Low interest rate environment: In 1Q13, the interest rate environment remained unchanged at low levels. The low interest rate environment, mainly driven by central bank policies, influences behavioural patterns in financial markets. While low interest rates have provided banks with cheap funding, they have made it more difficult for money market funds or borrowers on interbank markets to attract investors due to low returns. In the long run, low interest rates may also imply risks of distortions in capital allocation and foster search-for-yield strategies generating flows into high-yield and, by implication, riskier assets. This may be an increasing source of concern, if the discrepancy between reduction in risk aversion in financial markets and unfavourable macroeconomic fundamentals increases.

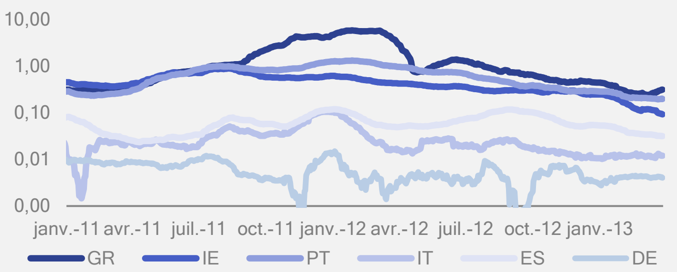
Market functioning: The structural issues associated with the functioning of securities markets discussed in the last Risk Dashboard remain prevalent.

Measures were taken by the EU Commission, EBA and ESMA to address the risks around the reliability of benchmarks in financial markets. As intermediate steps towards a formal framework for benchmarks, the measures aim at ensuring the continuity of reporting panels of interbank interest reference rates, and at developing principles of conduct for financial benchmarks. Meanwhile, concerns over benchmark integrity prevail, and the withdrawal of individual banks from panels in Euribor-EBF revived the debate around system continuity.

A potential scarcity of financial collateral at global and EU levels continues to feed market uncertainty. Increases in secured funding continued in 4Q12 and 1Q13. While no immediate impairment of market functions is to be expected, a lack of collateral has the potential to impair on the efficiency of the shadow banking system.

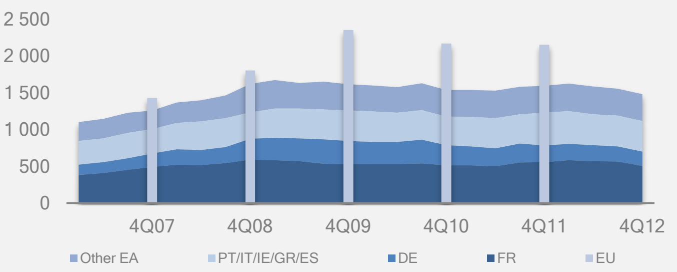
Liquidity risk

Liquidity increased for all markets except DE R.05



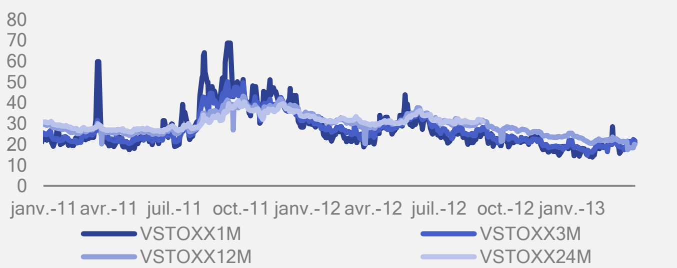
Note: EA sovereign bid-ask spread in percentage points (logarithmic scale). 30D moving average.
Sources: Thomson-Reuters EIKON, ESMA.

Slight decrease in supply to money markets R.06



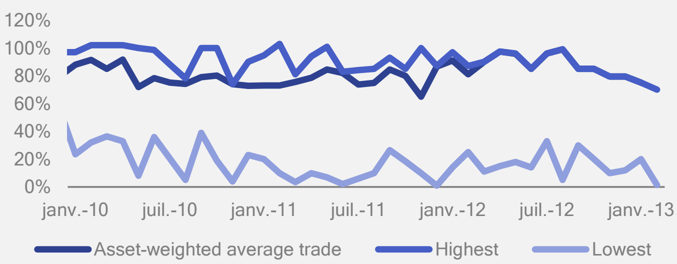
Note: Volume of short-term securities issued, EU, EUR bn. Only yearly data available for non-EA countries, stacked data.
Sources: ECB, ESMA.

Decline in volatility expectations, 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 funds 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 two quarters. 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 deterioration in liquidity conditions.

Sovereign bonds: In 4Q12 and 1Q13 the bid-ask spreads of EA sovereign bonds declined for several key countries, while holding roughly stable or increasing for others. However, there is considerable dispersion in levels across sovereigns. While some countries not using IMF and EU bailout funds still face lower market depth than other EU countries, bid-ask spreads in those markets narrowed in 4Q12 and 1Q13. The reduced volatility of German bid-ask spreads can be considered an important signal of a decline in uncertainty about market liquidity within the EA.

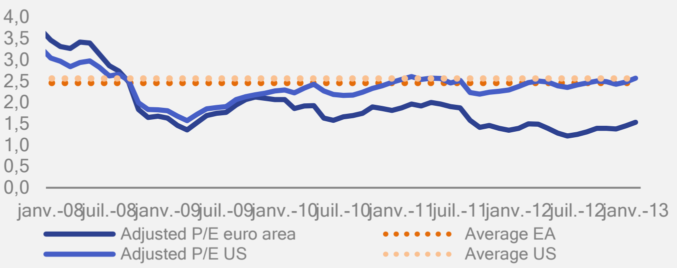
Short-term securities: In 4Q12, the outstanding volume of short-term securities, which is the maximum liquidity available to money markets, continued to decline. In particular, the German market continued to contract, while volumes issued in France, the biggest market for short-term government debt paper in the EU, started to decrease as well. At the same time, the aggregate sovereign debt issuance of all other EA economies stabilised in the last quarter. This also applied to EA members with distressed sovereign debt markets. There is no evidence of a liquidity shortage on money markets in the EA. Taken in conjunction with low interest rates, this indicates that the driving factor for the squeeze in the supply of capital to businesses is not a lack of liquidity, but rather the lack of intermediaries' willingness to extend credit because of the greater perceived risk or low returns.

Volatility: In 4Q12 implied volatilities on equity continued to decrease. This trend was interrupted in 1Q13, when implied volatilities stabilised at a constant level and simultaneously experienced reversals in their term structure. The associated increases in contemporaneous volatilities on equity markets indicate the market reactions to recent adverse macroeconomic and political events. However, 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 increased markedly over the last two quarters. Both the variability in liquidity premia as well as their dispersion decreased. These effects reflect the increasingly cautious investor assessment of the risks associated with hedge funds. Funds with market directional strategies, which focus on the exploitation of market trends, continued to underperform relative to other hedge funds in 4Q12 and 1Q13. Hence, market trends and the associated macroeconomic risks contributed to the relative weak recent development of the hedge fund sector's liquidity.

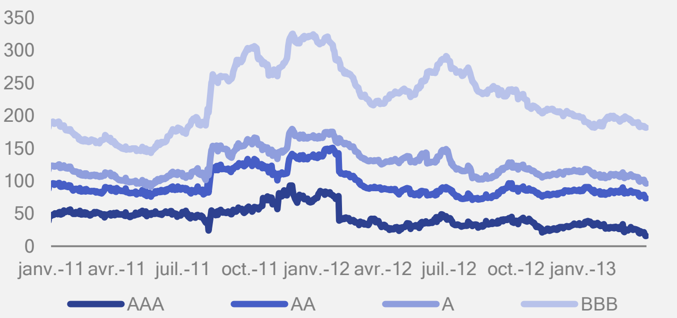
Market risk

Adjusted price-earning ratios for EA and US equities R.09



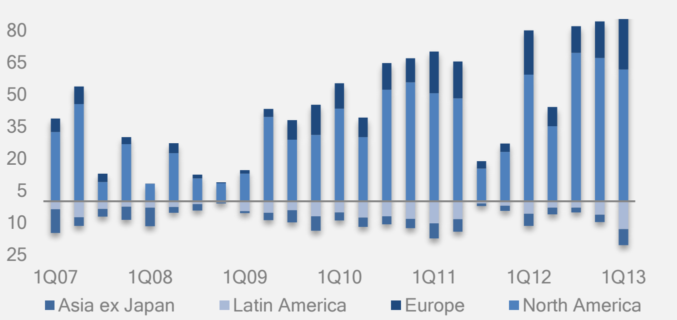
Note: Monthly earnings adjusted by a Kalman filter methodology which eliminates trends and cyclical factors based on OECD leading indicator, units of standard deviation. Averages computed over 2M73-11M12.
Sources: Thomson Reuters Datastream, ESMA.

Recent rise in risk spreads slows again R.10



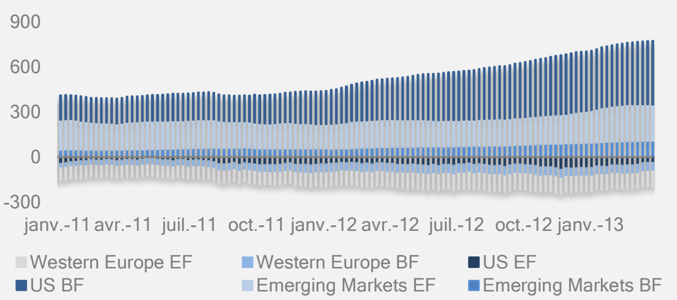
Note: Non financial corporate bond spreads by rating grades, EMU, basis points.
Sources: Thomson Reuters Datastream, ESMA.

High-yield corporate bond issuance 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 netflows into bond and equity funds (BF and EF, respectively) by regional investment focus, USD bn.
Sources: EPFR, ESMA.

In 4Q12 and 1Q13 both equity and bond markets showed signs of relaxation. This, however, is not in line with recent macroeconomic projections. Most importantly, the higher yields in riskier bond market segments attracted stronger inflows also as a consequence of the low interest rate environment and reduced risk aversion. Increased investments by the fund industry into EU bond markets delivered an additional sign of confidence. Overall, market risk continued to decrease in 4Q12, but remained stable in 1Q13 due to valuation concerns.

Equities: Despite a persistent increase since July 2012, the price-earnings ratios of equities in the EA continued to underperform their long-term averages in 4Q12 and 1Q13. Meanwhile, US equities stayed almost flat throughout that period. Hence the gap between EA and US price-earnings ratios started to narrow. In light of the weak macroeconomic environment, recent strong increases in international equity indexes generated concerns regarding potential future valuation risks and the associated contagion dangers.

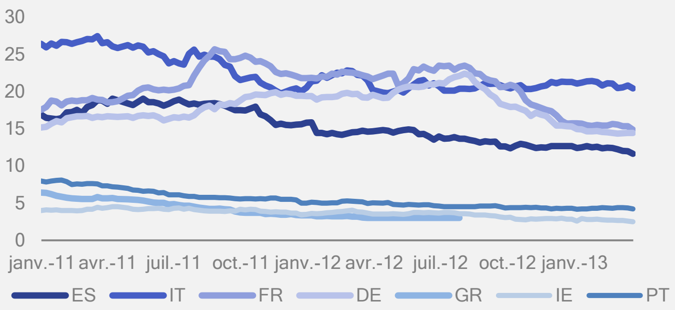
Bond spreads: Bond spreads of investment-grade non-financial corporations in the EA reflect the continuing macroeconomic uncertainty. Risk spreads narrowed moderately over the last two quarters. However, the decline was non-monotonic, especially for higher rating grades. In late 4Q12 and early 1Q13 the trend reversed temporarily, suggesting a return to slightly higher risk aversion. This fluctuation stresses that bond markets remain very sensitive to signals of adverse events or developments. It also corroborates the increased possibility of future risk realignment. Net inflows in Western European bond funds provide evidence of an improvement within this particular market segment.

Bond issuance: Issuance of high-yield corporate bonds remained high throughout 4Q12 and 1Q13, with increases in the EU and slight decreases in North America. The same period was also characterised by a strong increase of issuance in emerging markets, possibly as a result of better macroeconomic performance for the latter group. Since mid-2012 the high volatility in issuance observed throughout the last two years started to fade. This may reflect growing market confidence in recent policy announcements, while the high issuance volume may indicate the revival of investor risk appetite. However, risks related to changes in the current policy stance, especially in developed economies, as well as realignment in risk evaluation may increase instability.

Capital flows of funds: Fund investments concentrated on emerging market bond and equity funds and US bond funds. Nevertheless, driven by the recovery of European asset markets, the trend of outflows from the European fund industry was reversed, with net inflows into bond and equity funds for 4Q12 and 1Q13. However, flows for both fund types remained volatile, fluctuating between negative and positive values. Especially EU funds focused on assets in distressed markets experienced inflows, while the majority of the other markets were characterised by outflows. This trend may be due to the low interest rate environment, mainly driven by central banks' policies, rather than being the result of structural improvements in those economies. Therefore, it should be closely monitored.

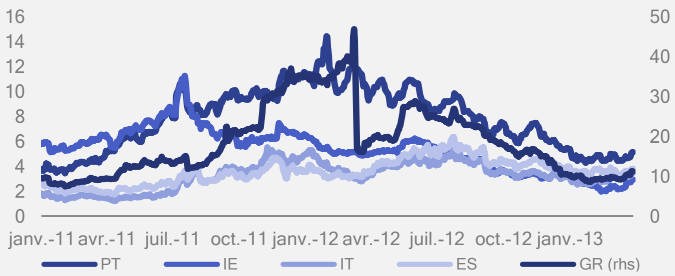
Contagion risk

Oustanding volumes of EU Sovereign CDS decline R.13



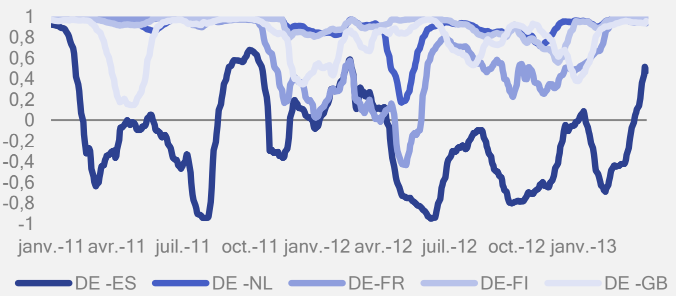
Note: Outstanding net notional amounts, USD bn.
Sources: Thomson Reuters Eikon, ESMA.

Sovereign risk premia improved, but remain high R.14



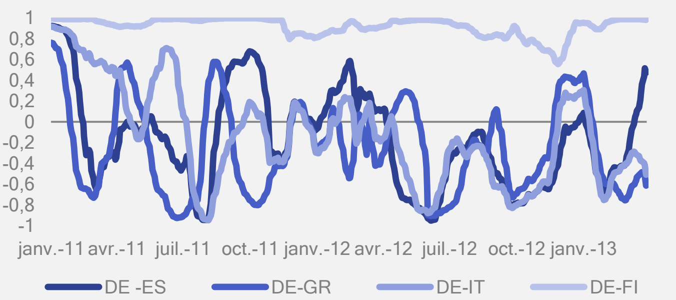
Note: Selected 10Y euro sov. bond risk premia (vs. German bond), percentage points.
Sources: Thomson Reuters Datastream, ESMA .

Distressed markets decoupled from other EU economies R.15



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

Markets with sovereign stress move together R.16



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

In 4Q12 and 1Q13, conditions in the market segments currently most exposed to contagion risks revealed a continued trend to clustering, reflected in an asymmetric development of CDS exposures and an increasing perception of idiosyncratic risks by investors. Both effects tend to reduce contagion risks between clusters, but increase the potential for contagion within each group. Investors deemed the idiosyncratic risks of the most vulnerable segments lower than in 3Q12. Contagion risks have remained unchanged compared to 3Q12. Markets reacted to the restructuring of one national banking sector, in spite of limited direct cross-border exposures. The reassessment of risks, mainly following policy announcements, indicates an increase in investor caution. In this respect, the imposition of capital controls and the bail-in of creditors may have an impact on the assessment of asset quality as well as the demand for and the supply of assets.

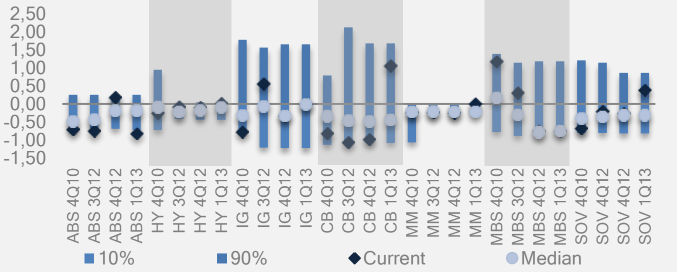
Sovereign CDS: In 4Q12 and 1Q13 outstanding CDS net notional amounts stabilised or increased for some EA countries exposed to sovereign risk. Outstanding net notionals decreased substantially for some EA countries not associated with high sovereign risks. This divergence reflects the stronger clustering of individual sovereign bond markets, a lower demand for sovereign debt protection in non-distressed markets and a revived inclination of CDS issuers to accept the risks associated with the provision of insurance that exposes them to sovereign debt of distressed markets. Taking into account the tendency for reduced bank participation in non-domestic sovereign bond markets, the contagion risks to which the remaining international counterparties are exposed increased for most markets characterised by high sovereign risk.

Sovereign risk premia: In the past two quarters, sovereign risk spreads in several EA countries exposed to debt problems narrowed significantly. Recently, this trend was reversed, with a brief intermezzo, as sovereign risk spreads for all observed countries started to widen again. Hence, the sensitivity of investors to negative news remains high.

Yield correlation: Correlations between the yields on ten-year sovereign benchmark bonds for European economies indicate an increasing 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. Nevertheless, the risk of contagion remains high within the group of countries exposed to sovereign debt problems. The predominantly negative correlation pattern between distressed sovereign debt markets and other EU markets indicates that investors are increasingly treating the two types of sovereign debt as substitutes in their portfolios. As a result, the issuance of new debt has become more challenging for individual sovereign issuers. The associated reduction in maturities implies more frequent roll-overs for the future. Hence, sovereign issuers exposed to distressed markets face the need to attract investors in the future and thus are likely to contribute to elevated future yields. In late 1Q13, the heterogeneity between distressed markets increased, suggesting a differentiation in the risk profiles of individual distressed countries.

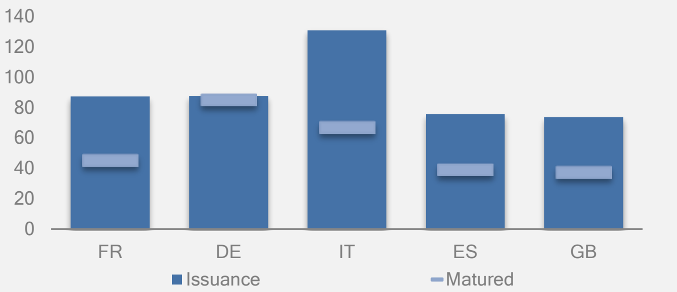
Credit risk

Issuance growth increased or stable except for IG bonds and MBS R.17



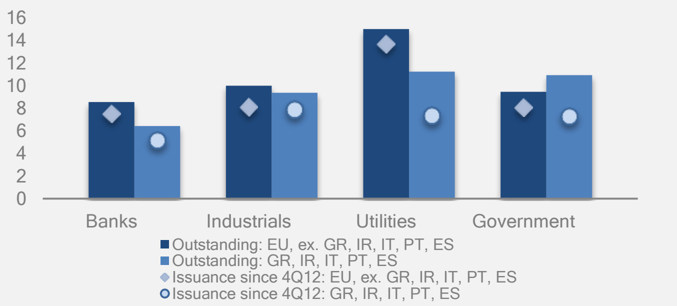
Note: Growth rates of issuance volume in percentage normalised by standard deviation for different bond classes. Computations over a rolling window of 11 quarters. All data include securities with a maturity higher than 18 months. Bars denote the range of values between the 10% and 90% percentiles.
Sources: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

Sovereign stake on additional debt since 4Q12 R.18



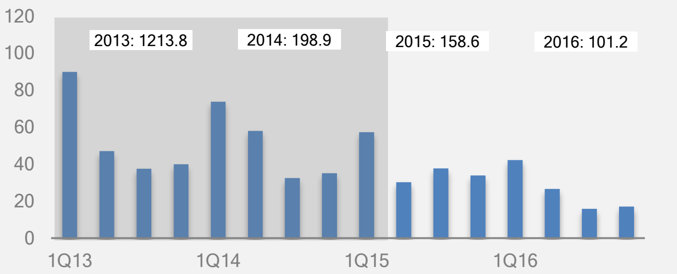
Note: Amounts of issued and matured public debt, selected EU sovereigns, EUR bn, since 4Q12.
Sources: Dealogic, ESMA.

Debt maturities continue to decline R.19



Note: Maturities of previous and new debt (YTD) by sectors, EU, years.
Sources: Dealogic, ESMA.

Future EA banks redemptions imply high refinancing needs R.20



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

In 4Q12 and 1Q13, securities markets in the EU witnessed increasing issuance volumes, mainly in asset classes with higher risk and longer maturities. This growth in issuance indicates a recovery of the ability to issue debt successfully. 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 and narrowing spreads substantive credit risks remain. Overall, credit risks did not increase further.

Issuance: In 4Q12 and 1Q13, on average, the growth of issuance of securities with a maturity of more than 18 months in the EU increased or remained stable in most market segments. A decrease in issuance of investment grade bonds and mortgage backed securities were the exceptions. Thus, the capacity for successful debt issuance appears to be slightly stronger than in previous quarters. The concentration of increased issuance in market segments with higher risk classes while issuance in liquid asset classes has remained stable may be a consequence of search-for-yield strategies. The still elevated level in non-financial corporate spreads observed in 4Q12 and 1Q13 (see R.10) corroborates this interpretation.

Refinancing: The main sovereign issuers have continued to roll over maturing debt. Issuers facing distressed bond markets used the improved market conditions to issue additional debt. The maturity of debt newly issued by sovereigns of economies in distress continued to decrease (see R.19). As a result, in the medium-term, funding risks persist, especially if the supply of funds to those markets remains low.

Maturities: The trend of issuance of new securities featuring a lower average maturity than current outstanding debt, on a non-volume-adjusted basis, persists, being more pronounced among EU countries directly exposed to high sovereign risk. In particular, issuers normally characterised by longer maturities shortened the maturity of their newly issued securities. One of the strongest reductions in maturity was observed for sovereign debt issuance in distressed market segments. At the same time, since debt turnover has risen, the amount of postponed credit risk has increased. Moreover, an additional contagion channel may stem from the common trend in the EU banking sector in engaging in uniform maturity reductions.

Bank redemptions: The maturing debt needing to be refinanced by private EA banks by the end of 2016 fell since 3Q12 from EUR 864bn to EUR 583bn. Of this total EUR 380bn needs to be refinanced by 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. As of end of March 2013, the ECB announced additional repayment of EUR 1.9bn of three-year LTRO liquidity, bringing the volume of repayments up to EUR 238bn Hence additional financing requirements of EUR 781bn push up European banks' refinancing needs to roughly EUR 1.1tn between late 2Q13 and 1Q15, implying the future credit risk remains substantial for Europe's banking sector. However, factors such as deleveraging and restructuring processes as well as the downsizing of the banking industry may reduce banks' funding needs.

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