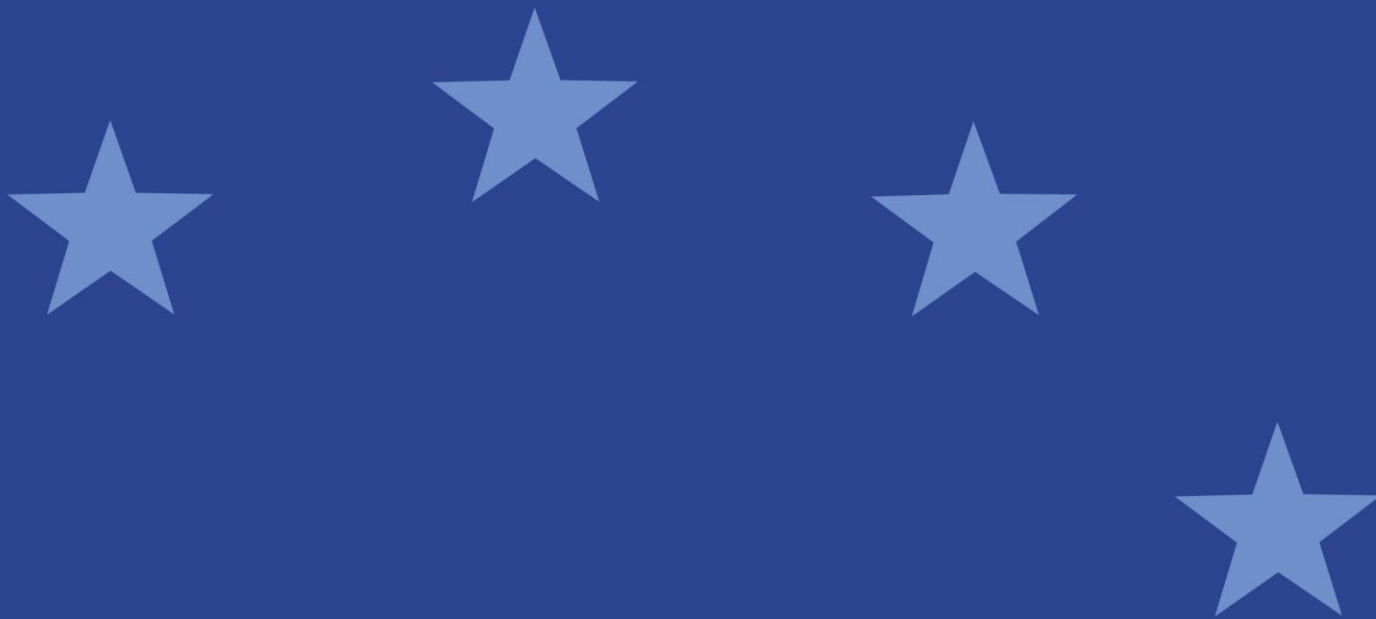




European Securities and
Markets Authority

ESMA Risk Dashboard

No. 1, 2014



ESMA Risk Dashboard, No. 1, 2014

ESMA Economics and Financial Stability Unit

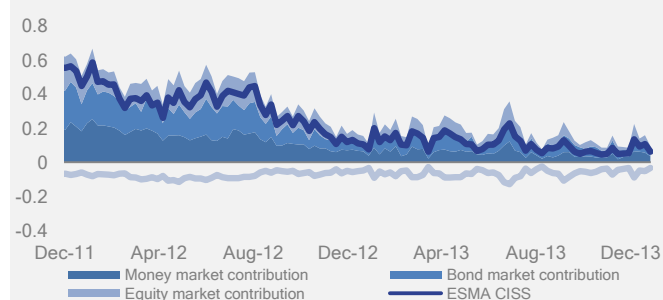
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ESMA Risk Dashboard

Systemic stress: Continued relaxation

R.1



Tensions in EU financial markets further eased during 4Q13. Synthetic stress indicators fell to levels experienced before 2007. This is associated with the combination of improved macroeconomic prospects for some EU economies, easing pressure on EU sovereign debt markets, and continuing monetary policy and liquidity support measures. Risks nevertheless remained high. With regard to market risk, we detect increased signs of search-for-yield behaviour, potentially related to the ongoing low interest-rate environment. This may sustain risky investment strategies and lead to the build-up of growing valuation risks. Liquidity, credit and contagion risks were broadly stable at an elevated level and are expected to remain so in the short run.

Main risks: Sources

R.2

Economic environment	Change since 3Q13
Macroeconomic conditions	➔
Interest-rate environment	➔
Sovereign-bank nexus	➔
Securities markets conditions	
Risks in EU sovereign debt markets	➔
Market clustering	➔
Funding risk	➔
Valuation risk	➔
Market functioning	➔

Note: Assessment of main risk sources under ESMA's 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. Source: ESMA.

Systemic stress: At the EU level, all components of the systemic stress indicator reached lows in 4Q13, with the ESMA CISS indicator at its 2007 level despite some volatility. Markets were especially responsive to brightening macroeconomic prospects and continued monetary policy support. Even so, the possibility of a sudden risk reassessment should be carefully considered, given the still weak – albeit improving – macroeconomic outlook and the market uncertainty surrounding future economic policies, both fiscal and monetary.

Economic environment

Macroeconomic conditions: The macroeconomic outlook in the EU improved in recent quarters, with the EA as a whole no longer in recession. Activity picked up for several major advanced economies, as policy makers and central banks gave clear indications that they would support the recovery. Nevertheless, significant risks persist. Within the EU, performance remained mixed with some countries still labouring under negative or zero growth and concerns lingering over high unemployment and significant levels of both public and private debt. A combination of the subdued macroeconomic environment and debt servicing pressures is likely to affect profitability for corporates, especially smaller and medium companies in more stressed economies. Outside the EU, emerging economies continued to show signs of weakness, with noticeable capital outflows potentially leading to pressure on wider financial markets. In the US, market speculation persists over the future of monetary support measures, and following the budget standoff in fall 2013 important deliberations on fiscal policy continue into 2014.

Interest-rate environment: Following the announcement that the Federal Reserve would continue its asset purchasing programme, in November the ECB cut its main policy rate to the historically low level of 0.25%. The current period of low interest rates is therefore set to continue. In this environment yield curves in major currencies flattened, reversing the steepening observed in 3Q13. These conditions support markets but increase the risks attendant on future interest-rate hikes. Discreet nominal increases from low interest-rate levels result in large percentage moves, with correspondingly greater tension related to sudden revaluation and increased credit risk for both financial and non-financial corporations.

Main risks: Categories

R.3

Risk category	Systemic risk	Change since 3Q13	Outlook for 1Q14
Liquidity risk	●	➔	➔
Market risk	●	➔	➔
Contagion risk	●	➔	➔
Credit risk	●	➔	➔

Note: Assessment of main risk categories for markets under ESMA's remit since last quarter and outlook for following quarter. Systemic risk assessment based on categorisation of ESMA 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. Source: ESMA.

Main risks: Summary assessment R.4

Category	Summary
Liquidity risk	Market signals of liquidity risk in 4Q13 were mixed. On the one hand, volatility in equity markets decreased further to its lowest levels since the start of the financial crisis. Nor did any major changes take place in liquidity in sovereign bond markets. On the other hand, heterogeneity persisted across regions and market segments. Developments in bond market volatility were mixed, with an increase for shorter maturities and a decrease for longer maturities. Overall, liquidity risk developments should be treated with caution as liquidity support measures remain in place and shifts in yield curves could significantly alter liquidity risks.
Market risk	Market risk, although still high, stabilised in 4Q13. Equity valuations rose in the EU and the US. In Europe price-earnings (PE) ratios remained well below their long-term average, whereas in the US PE ratios remained above their long-term average, leading to future valuation risks. Corporate bond spreads in lower-rated bonds continued to decline, potentially reflecting a shift in risk assessment and continued search-for-yield behaviour on the part of investors. US fund flows were volatile and bond market outflows continued in the US and emerging markets (EM) areas.
Contagion risk	The level of contagion risk in sovereign debt markets remained broadly stable, concentrating on the most vulnerable group of MS. However, the potential for systemic events remained substantial. After a period of high co-movement among sovereigns in 3Q13, in 4Q13 the most vulnerable countries first started to disentangle, possibly signalling a return to the core-periphery clustering in the EU. MS then realigned, and the correlation among sovereigns as well as between sovereign and corporate bonds rose to reach levels close to unity in November. Nevertheless, uncertainty around the Fed's tapering programme prompted a return to higher dispersion at the end of the period.
Credit risk	The assessment of credit risk was broadly unchanged in 4Q13. Although debt issuance was globally subdued in EU, sovereigns and corporates were able to issue debt at longer maturities, taking advantage of the relatively low long-term interest rates. Banks continued orderly reduction of their wholesale funding needs, but a substantial proportion of debt outstanding has to be rolled over in the coming quarters. Since the improvement in conditions relies heavily on buoyant monetary policy measures, a rise in the interest rate could potentially trigger heightened credit risk, especially in countries with high public indebtedness or vulnerable corporate sectors, both non-financials and financials.
Note: Qualitative summary of assessment of main risk categories in markets under ESMA remit.	

Market functioning: Risk summary R.5

Risk	Summary
Bench-marks	Panel withdrawals appeared to have come to a halt, although concerns over the stability of benchmarks remained. There was also growing unease surrounding potential forex manipulation, and the discontinuation of a non-EU equity benchmark showed that benchmarks remain vulnerable to operational risks.
Market infra-structures	As in previous quarters, the operational stability of market trading venues and systems was tested on several occasions in 4Q13. The risk of cyber-attacks recently moved to the forefront with a US exercise illustrating the vulnerability of market infrastructures to this type of threat.
Shadow banking	The shadow banking system expanded slightly, although some specific segments continued their gradual contraction, with securitisation issuance at an all-time low and leverage ratios in the non-bank financial sector staying below pre-crisis levels. On the other hand, we observe renewed market interest in instruments based on loans, such as CLOs, in the context of search-for-yield strategies. Exposure of MMFs, Hedge Funds (HF) and other fund types to credit and funding risk remained a concern. Systemic risks from high degrees of interconnectedness, credit risk concentration, and liquidity flows remain under surveillance.
Note: Qualitative summary of assessment of main risks to the functioning of markets under ESMA remit.	

Sovereign-bank nexus: Macroeconomic conditions improved, mitigating immediate risks to some Member States of a deterioration in fiscal or banking sector conditions. Monetary conditions alleviated pressures on sovereigns and banks, enabling the former to reduce fiscal imbalances and giving the latter time to adjust their balance sheets. Nevertheless, uncertainties around weak long-term economic prospects and the slow pace of structural reform in some countries remain. This may increase tensions, considering the sizeable potential effects on the banking system. Notwithstanding recent reductions, domestic sovereign debt holdings by EU banks are still significant in several economies.

Conditions in securities markets

Risks in EU sovereign debt markets: Spreads on vulnerable EU sovereigns' 10Y bonds relative to Bunds generally remained within the range observed in the first three quarters of 2013 and were back at the low levels observed in 1Q13 and early-2011. Spreads for the most vulnerable sovereigns at the longer end of the curve continued to converge. One vulnerable sovereign, however, exhibited higher volatility from the beginning of 3Q13. Within this broad harmonisation of spreads to levels not witnessed since early 2011, investors therefore remained vigilant vis-à-vis risks in vulnerable Member States.

Market clustering: Sovereigns and corporates show potential signs of re-clustering, with stronger correlation of yields within groups of countries and weaker correlation between groups. A comparable, albeit less pronounced, development is apparent between corporate and sovereign bonds. In particular, the 25% most vulnerable sovereigns tend to be less correlated with their corporate bonds than the top 75% countries.

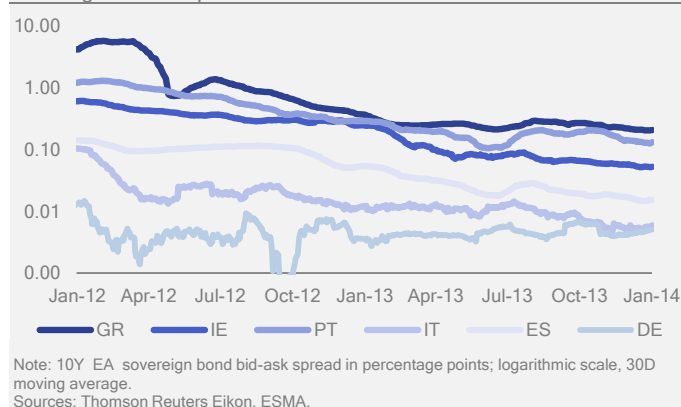
Funding risk: Evidence on funding risk was mixed. On the one hand debt issuance was subdued in the EU. On the other, sovereigns and banks were able to issue debt at longer maturities in 4Q13, taking advantage of the relatively low long-term interest rates. Although banks continued to deleverage, their future funding needs remain fairly high and a substantial fraction of debt outstanding has to be rolled over in the coming quarters.

Valuation risk: The low interest rate environment continued to steer market behaviour, fostering search-for-yield strategies. Equity markets performed strongly, and both corporate and covered bond spreads tightened at the lower end of the investment grade spectrum. These developments may potentially lead to asset overvaluation and expose investors to the risk of sudden re-pricing and divestment from some asset classes. Search-for-yield behaviour may also incentivise financial innovation and investment in less standardised products (i.e. loan funds). Whilst this can be beneficial to the economy, it may channel investment into risky or leveraged asset classes.

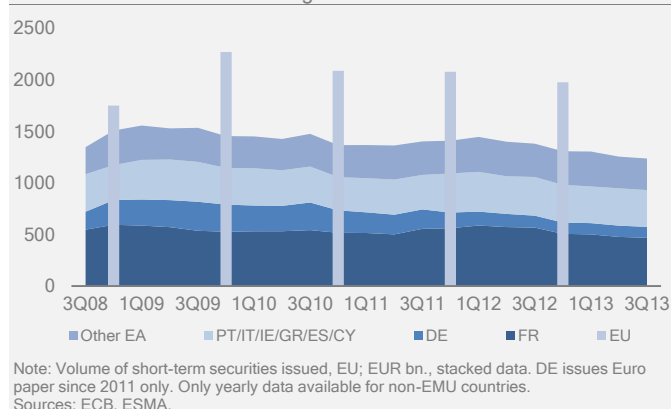
Market functioning: Key structural issues that may become relevant to EU financial markets' stability relate to benchmarks, market infrastructures and shadow banking. For a summary risk assessment see textbox R.5.

Liquidity risk

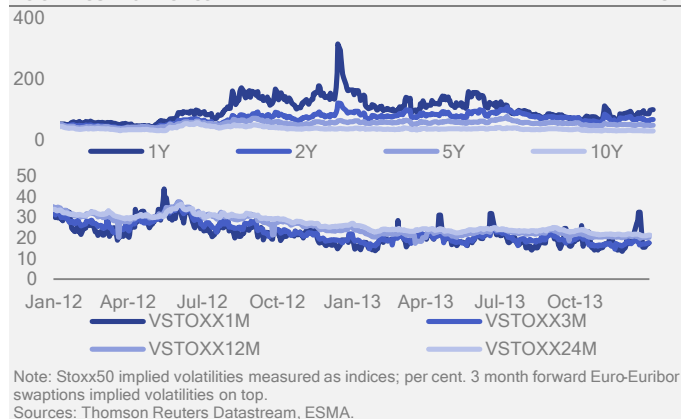
Sovereign bid-ask spreads: Small decrease R.6



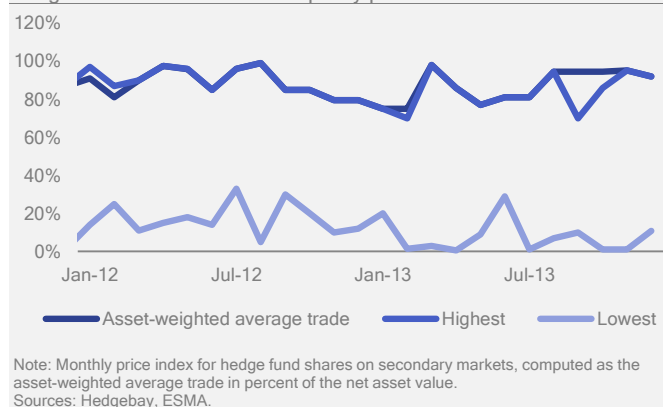
Short-term issuance: Continuing decline R.7



Volatilities: Further calm R.8



Hedge fund shares: Reduced liquidity premia R.9



Market signals of liquidity risk in 4Q13 were mixed. On the one hand, volatility in equity markets decreased further to its lowest levels since the start of the financial crisis. Nor did any major changes take place in liquidity in sovereign bond markets. On the other hand, heterogeneity persisted across regions and market segments. Developments in bond market volatility were mixed, with an increase for shorter maturities and a decrease for longer maturities. Overall, liquidity risk developments should be treated with caution as liquidity support measures remain in place and shifts in yield curves could significantly alter liquidity risks.

Sovereign bond bid-ask spreads: Bid-ask spreads for EA sovereign 10Y bonds decreased slightly compared to 3Q13 levels with no major movements within the quarter. Spread developments were comparable across all markets. However, liquidity conditions remained mixed across markets, reflecting country-specific differences.

Short-term issuance: Issuance of short-term debt declined in both non-distressed and distressed economies. The reduction in the volumes of short-term securities outstanding continued in 3Q13 (latest data available), with outstandings at their lowest levels for the past two years. As overall levels of government debt in the EA continue to rise, the ongoing reduction in short-term debt issuance could indicate that issuers are able to use the low interest rate environment to extend maturity profiles. This observation is also consistent with an easing in funding conditions.

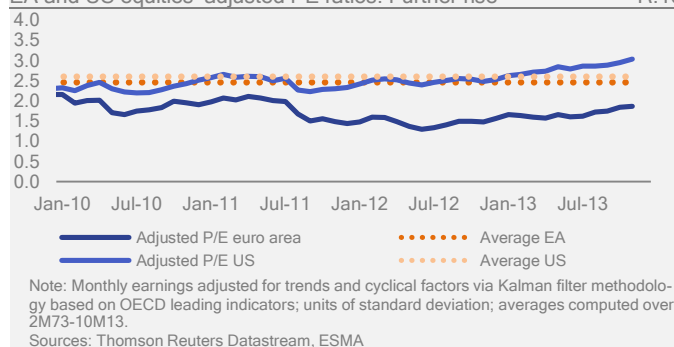
Bond volatility: After a marked fall in 3Q13, bond volatility initially continued to decrease in 4Q13, the decline being less pronounced at the shorter end of the spectrum. But from the end of October the trend started to differ between shorter and longer maturities. A sharp increase in volatility characterised the short end of the curve, whereas for longer maturities it remained broadly stable. Overall, one-year volatility rose by around 35 percentage points, whereas volatility for longer maturities decreased (e.g. two-year volatility decreased by eight percentage points and ten-year volatility increased by around 17 percentage points).

Equity volatility: Implied equity volatility increased slightly at the beginning of 4Q13 but then declined compared to the levels observed in 3Q13. The initial increase reflected concerns over the US debt ceiling standoff. However, peak volatility remained below the levels during spikes before 4Q13. The reduction in volatility was observed across the shorter and longer end of the spectrum. For example one-month implied volatility decreased from 19.7% to 17.4% and two-year implied volatility from 23.3% to 21.3%. In a historical context, implied short-term and long-term volatilities in 4Q13 were at their lowest levels since the start of the crisis.

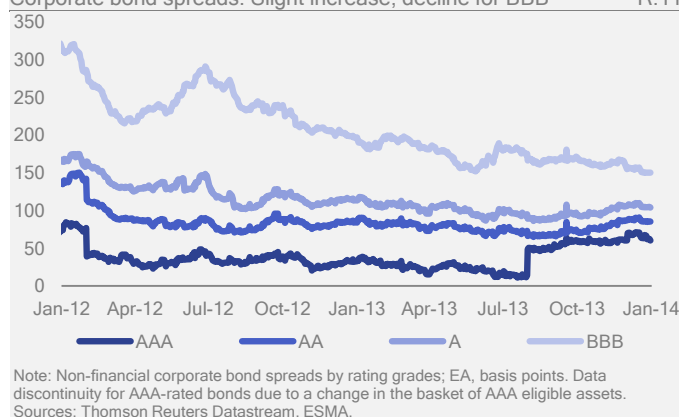
Hedge fund shares' liquidity premia: In 4Q13, hedge fund secondary market liquidity discount remained broadly stable, with the average discount to NAV at 92%, a level higher than mid-2013, signalling investors' expectations of higher performance for hedge funds. The market, however, is still characterised by significant volatility: during 4Q13 the lowest and highest trades on the market were recorded, respectively, at 1% and 95%, possibly signalling market uncertainties regarding future macroeconomic trends and the possibility of policy interventions affecting liquidity.

Market risk

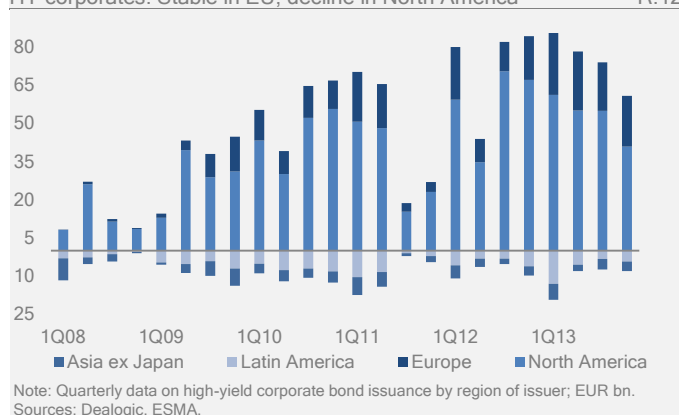
EA and US equities' adjusted PE ratios: Further rise R.10



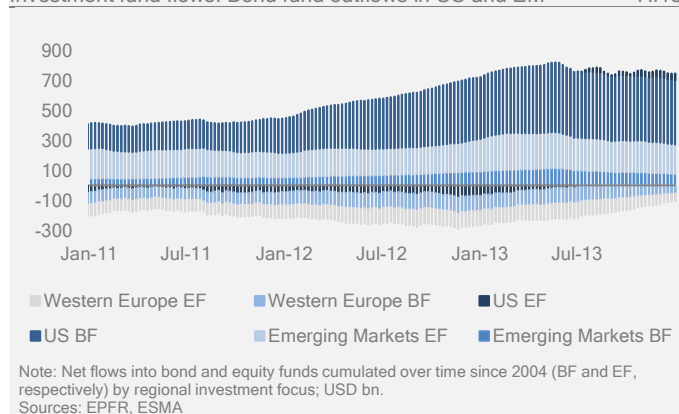
Corporate bond spreads: Slight increase, decline for BBB R.11



HY corporates: Stable in EU, decline in North America R.12



Investment fund flows: Bond fund outflows in US and EM R.13



Market risk, although still high, stabilised in 4Q13. Equity valuations rose in the EU and the US. In Europe price-earnings (PE) ratios remained well below their long-term average, whereas in the US PE ratios remained above their long-term average, leading to future valuation risks. Corporate bond spreads in lower-rated bonds continued to decline, potentially reflecting a shift in risk assessment and continued search-for-yield behaviour on the part of investors. US fund flows were volatile and bond market outflows continued in the US and emerging markets (EM) areas.

Equity price-earnings ratios: EA equity price-earnings (PE) ratios rose, although remained well below their long-term average. This contrasts with the US, where price-earnings ratios also continued to rise but remained above their long-term average. As the measure is based on an EA stock index, it may fail to capture heterogeneity in markets across the EA, which was reflected in the continued increase in dispersion of national equity price indices. Countries in the bottom 25% lost ground slightly, whereas the top 75% national equity price indices saw their gains increase.

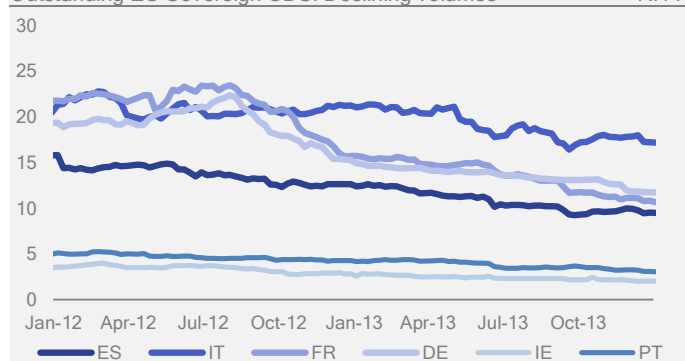
Corporate bond spreads: Bond spreads for investment-grade non-financial corporations in the EA increased slightly in 4Q13, except for a slight decline in spreads for BBB-rated corporations. The previous 3Q13 jump in AAA-rated bond spreads is mainly due to a change in the duration composition of the underlying basket used for the yield calculation. Overall, spreads were still slightly higher versus their pre-crisis levels, although well below the levels observed during the crisis. It is worth noting that over the last two years spreads in lower-rated corporate bonds narrowed comparatively more than spreads in higher-rated bonds. This may be due to a lower perception of risk or a perceived improvement in the economic outlook for large corporates. It may, however, also indicate a potential shift to riskier investments in the search for yield prompted by the low interest rate environment. Since the beginning of 2012 the difference in spreads between BBB-rated and AA-rated corporate bonds narrowed from around 180bps to around 65bps. The difference in spreads between BBB-rated and AAA-rated corporates narrowed from around 240bps at the beginning of 2012 to around 90bps.

High-yield corporate bond issuance: In 4Q13, HY corporate bond issuance again declined in North America, but remained broadly stable in the EU, Latin America and Asia.

Investment fund flows: In 4Q13 EU equity and bond funds saw net inflows. Lower perceived pressure from the EU sovereign debt crisis and positive news on the economic environment in a number of EU countries may have made EU funds appear more attractive. Fund flows were extremely volatile in the US, presumably because of uncertainty related to the debt ceiling standoff. After an agreement had been negotiated, there were high inflows into US equity funds. For US bond funds, post-agreement inflows were temporary, followed by large outflows towards the end of 4Q13. For EM, outflows from bond funds continued. EM equity fund flows were volatile, with initial inflows reversed later in 4Q13, leading to a net outflow.

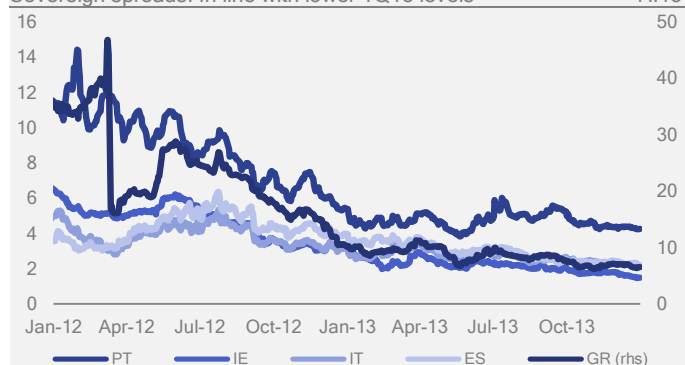
Contagion risk

Outstanding EU Sovereign CDS: Declining volumes R.14



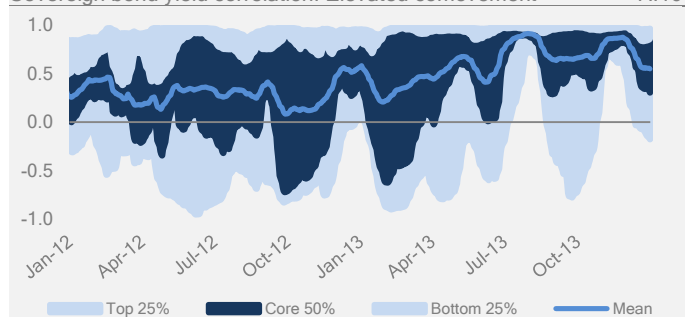
Note: Outstanding net notional amounts for selected countries; USD bn.
Sources: Thomson Reuters Eikon, ESMA.

Sovereign spreads: In line with lower 1Q13 levels R.15



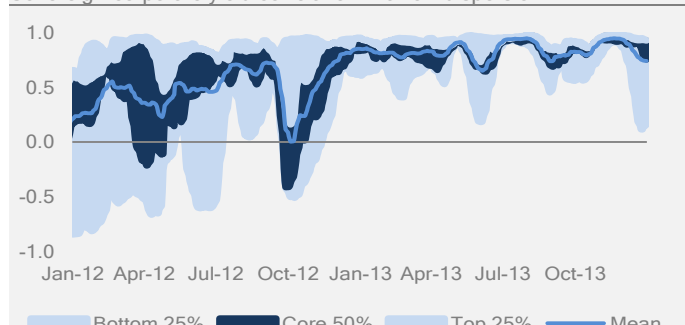
Note: Selected 10Y EA sovereign bond risk premia (vs. DE Bunds); percentage points.
Sources: Thomson Reuters Datastream, ESMA.

Sovereign bond yield correlation: Elevated comovement R.16



Note: Dispersion of the correlations over 60D rolling windows of 10Y DE Bunds and other EU countries' sovereign bond redemption yields.
Sources: Thomson Reuters Datastream, ESMA.

Sovereign-corporate yield correlation: Narrow dispersion R.17



Note: Dispersion of the correlation between Barclays Aggregate for corporate and 10Y sovereign bond redemption yields for BE, FI, FR, IT, NL, PT.
Source: Thomson Reuters Datastream, ESMA.

The level of contagion risk in sovereign debt markets remained broadly stable, concentrating on the most vulnerable group of MS. However, the potential for systemic events remained substantial. After a period of high comovement among sovereigns in 3Q13, in 4Q13 the most vulnerable countries first started to disentangle, possibly signalling a return to the core-periphery clustering in the EU. MS then realigned, and the correlation among sovereigns as well as between sovereign and corporate bonds rose to reach levels close to unity in November. Nevertheless, uncertainty around the Fed's tapering programme prompted a return to higher dispersion at the end of the period.

Outstanding EU sovereign CDS: The reduction in net notional outstanding CDS volumes seemed to have come to a halt in 3Q13, stabilising or slightly rebounding in 4Q13. In the case of one larger and more vulnerable sovereign the volume ticked up more distinctly. This may reflect less use of portfolio compression among market participants due to higher central CDS clearing in the context of the new regulatory environment in derivative markets – possibly confirmed by the fact that CDS market activity did not decline over the period.

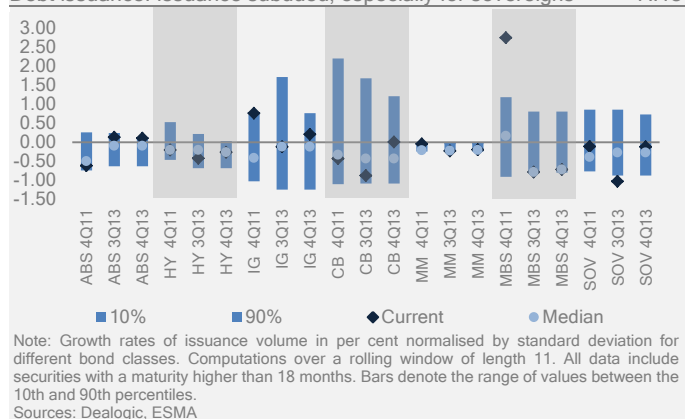
Sovereign spreads: Spreads on vulnerable EU sovereigns' 10Y bonds relative to Bunds generally remained within the range observed in the first three quarters of 2013, reverting to the low levels observed in 1Q13 and early 2011. Spreads for most vulnerable sovereigns at the longer end of the curve continued to converge. One vulnerable sovereign, however, exhibited higher volatility from the beginning of 3Q13. Within this broad harmonisation of spreads to levels not witnessed since early -2011, investors did, however, remain vigilant vis-à-vis risks in vulnerable MS.

Sovereign bond yield correlation: Having peaked at the beginning of 3Q13, coming close to parity at times, correlations between Bunds and other EU 10Y sovereigns broadly remained above the relatively high levels seen in 2Q13. During 4Q13, yield correlation seemed to signal a return to the market behaviour seen in the first half of 2013, when the top 75% countries displayed high comovement with Bunds and the 25% most vulnerable sovereigns showed negative correlation, potentially signalling market reclustering. The only exception is November, when countries somehow realigned around the ECB's rate cut. These developments seem to have been driven mainly by monetary policy, specifically the rate cut by the ECB and uncertainty over Fed tapering in December.

Sovereign-corporate yield correlation: On average, in 4Q13 correlations between the yields on selected 10Y benchmark EA sovereign bonds and respective corporate bonds followed the trend characteristic of sovereigns, albeit less markedly. Having approached unity in 3Q13, they started to diverge at the end of the quarter and the beginning of 4Q13, with the bottom 25% sovereigns less correlated to their corporate bonds than core countries. In November, sovereign-corporate bond correlation climbed back to its 2013 highs, close to unity. Market clustering resurfaced in December, with the bottom 25% countries poorly correlated to the others amid uncertainties around the Fed's tapering programme.

Credit risk

Debt issuance: Issuance subdued, especially for sovereigns R.18



The assessment of credit risk was broadly unchanged in 4Q13. Although debt issuance was globally subdued in EU, sovereigns and corporates were able to issue debt at longer maturities, taking advantage of the relatively low long-term interest rates. Banks continued orderly reduction of their wholesale funding needs, but a substantial proportion of debt outstanding has to be rolled over in the coming quarters. Since the improvement in conditions relies heavily on buoyant monetary policy measures, a rise in the interest rate could potentially trigger heightened credit risk, especially in countries with high public indebtedness or vulnerable corporate sectors, both non-financials and financials.

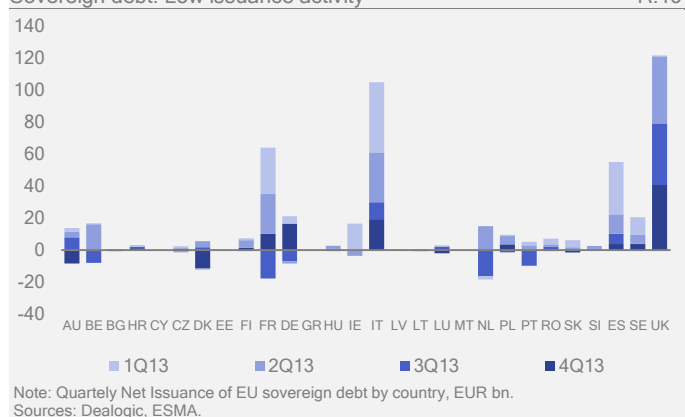
Debt securities issuance: The overall issuance of debt securities with maturities of more than 18 months recovered slightly in 4Q13 after two quarters of decline. However, this may differ across market segments. Sovereign debt issuance clawed its way back from its historical 3Q13 low but remained subdued. In the corporate sector, the rebound was more pronounced for investment-grade than for high-yield bonds, while the former still represent the majority of new issues. Finally, the downward trend observed in 3Q13 for all types of collateralised issues was partially reversed. Issues of ABS and covered bonds more than compensated the decline in MBS, which seems to indicate that financial institutions are able to meet their external financing needs.

Net sovereign debt issuance: As a result of reduced issuance activity, some countries recorded a negative balance between new and maturing debt in 4Q13. Overall net issuance was thus also negative in the EU for the second consecutive quarter.

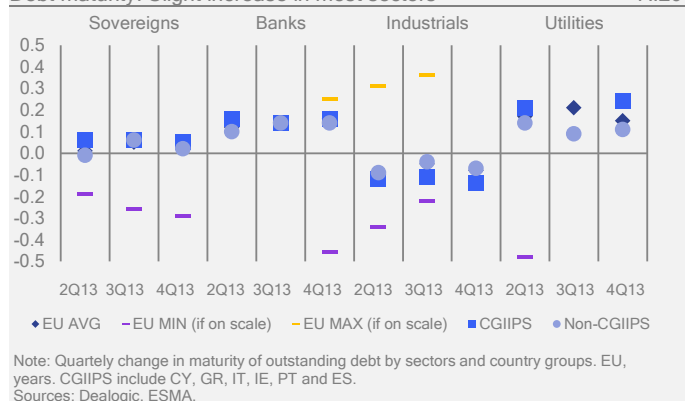
Debt maturity: The average maturity of outstanding sovereign debt increased slightly in 4Q13. Although the volume of issues was reduced in absolute terms, some countries issued securities with an increased maturity compared to the previous quarter, possibly taking advantage of the relatively low long-term interest rates. Other countries, however, may still have had difficulty issuing longer-term securities. The average maturity of bank debt has been increasing for several quarters now, although banks in one country experienced a serious drop in 4Q13. This may create future short-term funding pressures, which can be exacerbated in a subdued macroeconomic environment.

Debt redemption profile: The outstanding debt of financials, other than banks, and corporates maturing during the next two years increased by 2.7% on average compared with 4Q12. In contrast, the total outstanding bank debt maturing in the same period decreased by 2.4%. The bank debt redemption profile also indicates that without new issuance wholesale short-term funding may be reduced significantly by the end of 2014. Banks' figures, however do not include longer-term refinancing operations (LTRO) provided by the ECB in December 2011 (EUR 489bn) and March 2012 (EUR 530bn). For 4Q13, the ECB reported early repayment of EUR 93.41bn, bringing the remaining LTRO balance down to EUR 610bn. These operations are to be repaid before the end of 1Q15, in addition to the EUR 449bn of wholesale funding that matures before that date. Although the banks do have time to close this funding gap, it is nonetheless substantial.

Sovereign debt: Low issuance activity R.19



Debt maturity: Slight increase in most sectors R.20



Debt profile: Reduction in total bank debt outstanding R.21

