esma European Securities and Markets Authority

ESMA Risk Dashboard

No. 4, 2015

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ESMA Risk Dashboard

R.1
Main risks

ESMA business area risks	Risk	Risk categories	Risk	Change	Outlook	Risk sources	Change
Overall ESMA remit	Orange	Liquidity	Orange	→	→	Macroeconomic environment	↗
Systemic stress	Yellow	Market	Red	→	→	Low interest rate environment	→
Securities markets	Red	Contagion	Orange	→	→	EU sovereign debt markets	→
Investors	Yellow	Credit	Red	→	→	Funding patterns	→
Infrastructures and services	Yellow	Operational	Orange	→	→	Market functioning	→

Note: Assessment of main risks by business areas for markets under ESMA remit since last assessment, and outlook for forthcoming quarter. Assessment of main risks by risk categories and sources for markets under ESMA remit since last assessment, and outlook for forthcoming quarter. Risk assessment based on categorisation of the ESA Joint Committee. Colours indicate current risk intensity. Coding: green=potential risk, yellow=elevated risk, orange=high risk, red=very high risk. Upward arrows indicate an increase in risk intensities, downward arrows a decrease, horizontal arrows no change. Change is measured with respect to the previous quarter; the outlook refers to the forthcoming quarter. ESMA risk assessment based on quantitative indicators and analyst judgement.

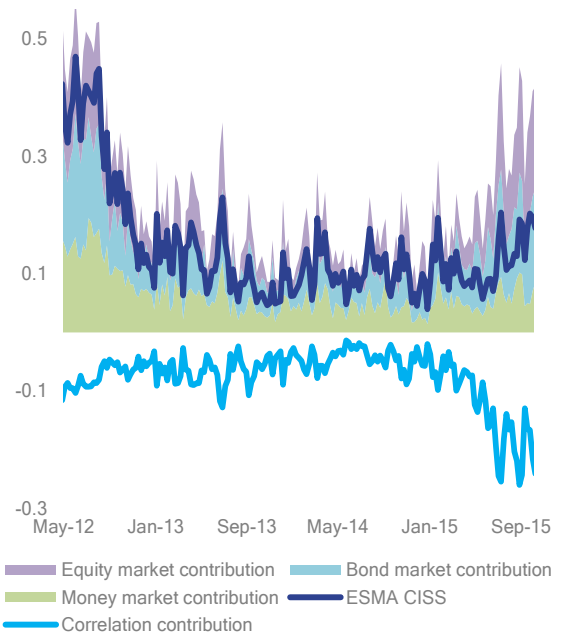
Systemic stress increased in 3Q15, driven by prolonged market uncertainty over sovereign debt in the EU and rising concerns over market developments in emerging markets. A low interest rate environment still prevails in the EU as market developments in currency and commodity markets raised concerns over potential deflationary pressures. The macroeconomic environment saw increased uncertainty over the future monetary policy stance in the EU and in the US. This, together with potentially thin liquidity on some more vulnerable markets could amplify the risk of a reversal in global risk premia.

Risk summary

Risk levels in the markets under ESMA's remit remained high, reflecting elevated risks for investors, infrastructures and services, and the financial system at large. The latter corresponds to our assessment of market risks which we continue to consider as very high, following a lasting build-up in the preceding quarters. Our credit risk assessment remains unchanged at very high levels. Although still at a lower level, liquidity risk is under scrutiny, while contagion and operational risk remain unchanged at high and elevated, respectively. Key risk sources remain the weak economic outlook reinforced by concerns coming from emerging markets, ultra-low interest rates, the fiscal crisis in the euro area, funding patterns, and potential weaknesses in market functioning.

Systemic stress increased at the beginning of 3Q15 from low end-2Q15 levels (R.2). Amid sovereign debt stress in one particular European country and tensions on emerging market equities, the contribution made by equities to the systemic stress indicator was the most important one, followed by bonds. To avoid an overestimation of systemic stress, the composite index corrects for the observed commonality between the different sub-indices composing the indicator.

R.2
Systemic stress indicator
Systemic stress higher and volatile



Note: ESMA version of the ECB-CISS indicator measuring systemic stress in securities markets. It focuses on three financial market segments: equity, bond and money markets, aggregated through standard portfolio theory. It is based on securities market indicators such as volatilities and risk spreads.
Sources: ECB, ESMA.

Risk sources

Macroeconomic environment: Over the reporting period, the main macroeconomic factors were the uncertainty about the future growth strategy in China, its ability to maintain its aggregate demand level, the slowdown in its manufacturing sector activity as well as the potential consequences on other markets, notably emerging ones. This was accompanied by high volatility and significant price drops on equity and commodity markets. Foreign-exchange markets also experienced high volatility. In the EU, macroeconomic conditions were stable, with a slower increase in inflation rates, and the Euro exchange rate still below its long-term average which could potentially foster exports. The monetary support was re-asserted with the continuation of the EUR 1.1tn bond-buying program until September 2016. Economic growth, however, was below expectations, possibly due to continued fiscal uncertainty in the EA.

Low interest-rate environment: Recent developments in China as well as on currency and commodity markets revived deflationary pressure fears in the EU, and increased the prospects of a prolonged low interest rate environment. Spillovers from the Chinese market turmoil also further increased the uncertainty around the timing of a US rate rise. As a consequence, despite the noticeably increased volatility, asset valuations were still high in key markets as reflected by above long term average price-earning ratios in the US. In this environment of continued search for yield, potentially low secondary market liquidity could foster the risk of a sudden reversal in global risk premia.

EU sovereign debt markets: Tensions following uncertainties around EU sovereign debt developments heightened at the beginning of 3Q15. The situation improved from August after an agreement on a EUR 85bn plan which enabled a Greek repayment of EUR 3.2bn to the ECB on 20 August. Volatility was high during that period, but spillover effects throughout the rest of the EU were limited. At the beginning of the reporting period, the Hellenic Capital Markets Commission in view of the issuance of a Legislative Act providing for a bank holiday in Greece from the 28th of June 2015 decided to introduce a series of emergency capital market measures including the suspension of trading in all securities, of the redemption of units in mutual funds and of clearing and settlement, and the temporary prohibition of net short positions. While these measures were unprecedented in the EU single financial market in terms of their extent, market reaction to their imposition was limited and no systemically relevant development was observed.

Funding patterns: Following a period of high corporate bond issuance, notably for IG and HY in 2Q15, these markets showed some signs of slowing down. HY issuance was subdued in 3Q15, at EUR 11.9bn, lower than the EUR 26bn issued in 2Q15 or the EUR 17bn issued in 3Q14. IG issuance was also low and issuance of sovereign debt in the EU amounted to EUR 187bn, far lower than the issuance of EUR 258bn in 3Q14. This low issuance activity can be traced back to the sovereign debt discussions occurring at the beginning of 3Q15 and the decline of public sector financial needs in some member states. Nevertheless, a large number of deals in the covered bond primary market led to an increase in the issuance of covered bonds, at EUR 42bn, higher than the EUR 24bn issued over the same period in 2014. For investment funds, leverage ratios remained high together with further increasing volatilities in returns within almost all segments (R.22), especially after the end-of-August Chinese equity market crash. In such a market environment, substantial imbalances may arise, as portfolio rebalancing and liquidity risks remain.

Market functioning: Resilience of market infrastructures remained a key concern, as shown by the longest IT-related closure ever observed on a major US trading venue at the beginning of 3Q15. The 24 August equity crash led to market disturbances; for example, the opening of trading on one major US trading venue was delayed for a large number of stocks. Significant pricing issues occurred for several ETFs, notably in the US. In a different context, the imposition of emergency capital-market measures adopted by Greece and the suspension of key market activities affected trading venues, CCPs, CSDs, investment fund redemptions as well as net short positions and tested the resilience of the infrastructures concerned. However, these measures did not have a critical impact on market functioning and infrastructures in the rest of the EU. Moreover, the lifting of these emergency measures in August 2015 also came without any relevant effects on other EU markets. Nonetheless, the short selling ban was still partially in place at the end of the reporting period due to the continued bank restructuring measures.

Risk categories

Market risk – very high: After a moderate increase at the beginning of 3Q15, EU equity markets dropped in August in the wake of the Chinese stock markets crash. The Shanghai Composite index lost 25% over the reporting period bringing the index back to its February level. During this period, extensive use of "limit-downs" was made (maximum daily price fall of 10% for individual stocks). Volatility, already high at the end of 2Q15, increased further in 3Q15 with uncertainties around the resolution of one member state's public debt negotiations and with spillovers from Chinese equites. Price-earning ratios decreased slightly in the EA with the significant drop in equity prices, although they remained around their historical average (R.5). In EU sovereign-bond markets, yields remained at low levels even though yield compression seems to have come to a halt. Nevertheless, sovereign yields reached very high levels and were volatile in one vulnerable country, only to come back to lower levels halfway through 3Q15 (R.8). Bond-market volatilities ended the reporting period at a high level after having fluctuated during the previous quarter (R.6). These movements were related to concerns over low secondary-market liquidity and EU fiscal developments. Commodity markets also reached multi-year lows with the Brent Crude's price falling by 29% over the reporting period as well as copper and aluminium trading at a 6 year low. Finally, currencies were very volatile especially for countries relying on exports to China as well as in emerging markets.

Liquidity risk – high: In 3Q15, liquidity pressures remained elevated. The equity-illiquidity index remained around its long term average, although rising at the end of the reporting period (R.4). Bid-ask spreads for sovereigns remained broadly stable, yet increasing slightly for more vulnerable countries until the end of August, probably due to the uncertainty around public debt negociations in the EU (R.9). Corporate-bond spreads started to decrease from the level of end 2Q15. However, they increased again in August with rising concerns over emerging market developments, notably in China. Corporate-bond markets, together with securitised-product markets tend to be more vulnerable to liquidity shocks compared to other markets as they lack strong stabilisation mechanisms such as dedicated market makers, or diversified trading provision and investors. Finally, with the exception of real-estate funds, return volatility for funds increased (R. 22), which could exacerbate market liquidity tensions.

Contagion risk – high: Sovereign-market clustering was slightly reduced in 3Q15 compared to the high levels observed during the previous quarter (R.12, R.13). Core countries were nevertheless still highly correlated while one vulnerable country was driving the dispersion. The intra-country correlation between sovereign and corporate bonds was also high in 3Q15, although decreasing towards the end of the reporting period, signalling a lower diversification potential in securities markets. For the hedge-fund sector, intra-sector contagion in between hedge funds remained at low levels, both for funds balancing the sector's performance trend and for those reinforcing it (R.26).

Credit risk – very high: Corporate-debt issuance was subdued in 3Q15 with the exception of covered bonds, and net sovereign-debt issuance was negative in July with increased uncertainty around debt and fiscal sustainability and a higher risk perception in the fixed income market (R.14). Within the fund sector, volatilities started to increase at the beginning of 3Q15 reaching the high levels of the previous quarter while leverage levels remained high. This created concerns, especially in an environment of continued search for yield.

Operational risk – elevated: Operational risk, including technology and conduct risks remains a key concern both within and outside the EU. An IT-related incident forced an important US exchange to halt trading for almost four hours at the beginning of 3Q15. Even if the suspension caused momentary confusion, most trades at the time could be routed to other trading platforms. Although the consequences were limited, this event reasserted concerns over potential technology fragilities in the financial system. Investigations into financial benchmark manipulations are still going on following a landmark settlement in the US.

Securities markets

R.3

Risk summary

Risk level

Risk change from 2Q15

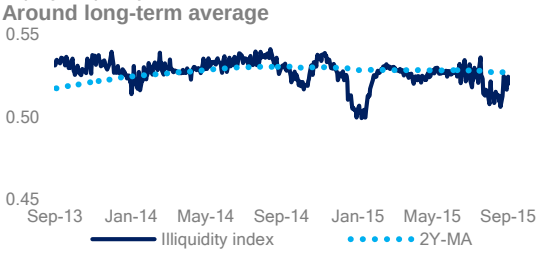
Outlook for 4Q15

Risk drivers

- Low-interest-rate environment and high asset valuations
- Potential spillovers from emerging markets
- EU fiscal and political developments

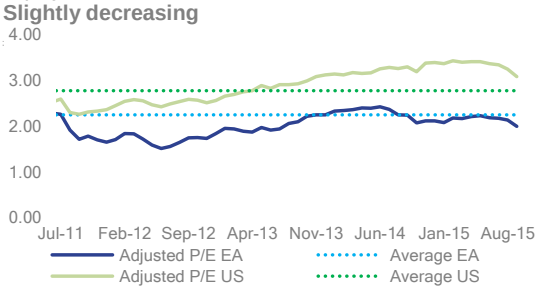
Note: Assessment of main risk categories for markets under ESMA remit since past quarter, and outlook for current quarter. Systemic risk assessment based on categorisation of the ESA Joint Committee. Colours indicate current risk intensity. Coding: green=potential risk, yellow=elevated risk, orange=high risk, red=very high risk. Upward arrows indicate a risk increase, downward arrows a risk decrease. ESMA risk assessment based on quantitative indicators and analyst judgement.

R.4
Equity illiquidity
Around long-term average



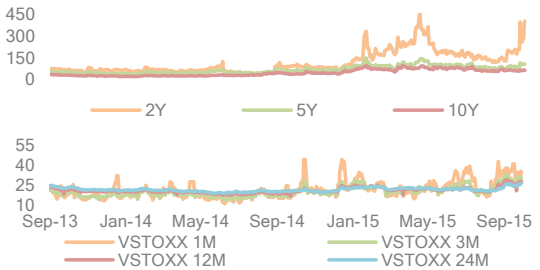
Note: Composite indicator of liquidity in the equity market for the current Eurostoxx 200 constituents, computed by applying the principal component methodology to six input liquidity measures (Amihud illiquidity coefficient, bid-ask spread, Hui-Heubel ratio, turnover value, inverse turnover ratio, MEC). The indicator range is between 0 (higher liquidity) and 1 (lower liquidity).
Sources: Thomson Reuters Datastream, ESMA.

R.5
Equity valuation
Slightly decreasing



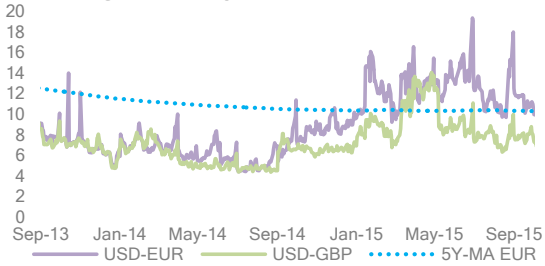
Note: Monthly earnings adjusted for trends and cyclical factors via Kalman filter methodology based on OECD leading indicators; units of standard deviation; averages computed over 8Y.
Sources: Thomson Reuters Datastream, ESMA.

R.6
Financial instruments volatilities
Short term volatilities fluctuating at high levels



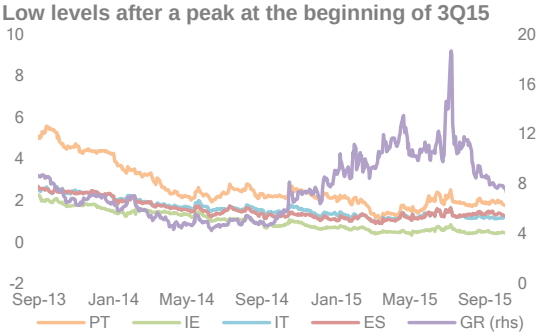
Note: Implied volatilities on 1M forward ICAP Euro-Euribor swaptions measured as price indices. Below, Eurostoxx50 implied volatilities, measured as price indices; %.
Sources: Thomson Reuters Datastream, ESMA.

R.7
Foreign exchange volatilities
Continuing uncertainty



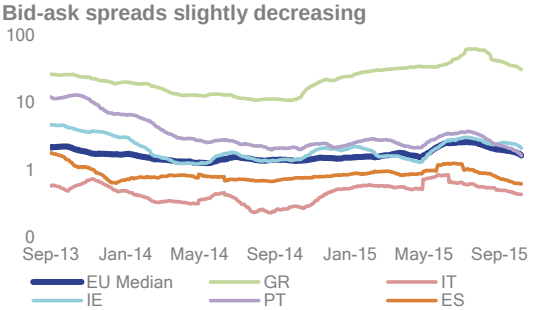
Note: Implied volatilities for continuous options on exchange rates traded in the Chicago Mercantile Exchange. 5Y-MA EUR is the 5 years moving average for the implied volatility for the options on the USD / EUR exchange rate.
Sources: Thomson Reuters Datastream, ESMA.

R.8
Sovereign risk premia
Low levels after a peak at the beginning of 3Q15



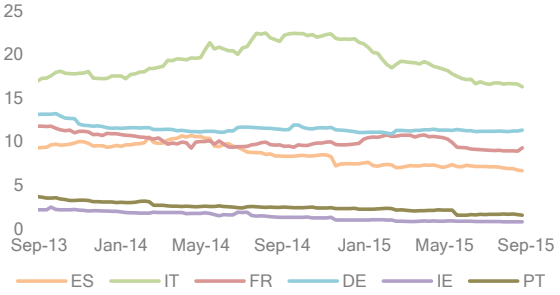
Note: Selected 10Y EA sovereign bond risk premia (vs. DE Bunds), in %.
Sources: Thomson Reuters Datastream, ESMA.

R.9
Sovereign liquidity
Bid-ask spreads slightly decreasing



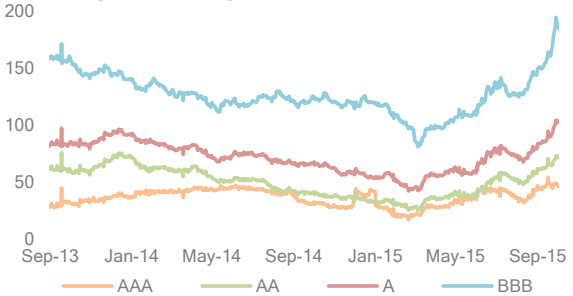
Note: Liquidity measured as difference of ask and bid yields for 10Y sovereign bonds, in basis points. EU median computed using data for 22 countries. Logarithmic scale.
Sources: Bloomberg, ESMA.

R.10
CDS volumes
Stable or decreasing



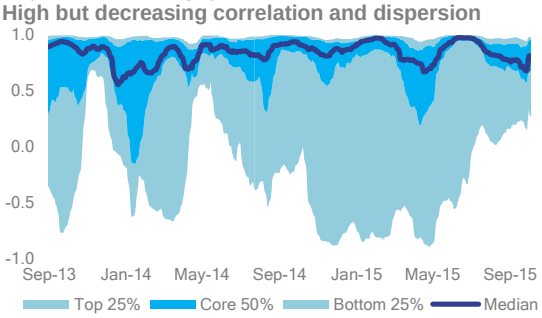
Note: Value of outstanding net notional sovereign CDS for selected countries; USD bn.
Sources: DTCC, ESMA.

R.11
Corporate bond spreads
Increasing for all rating classes



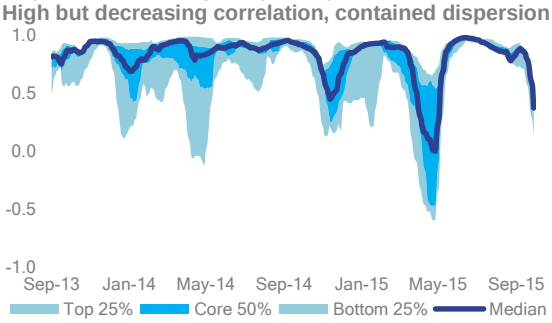
Note: EA non-financial corporate bond spreads by rating between iBoxx non-financial corporate yields and ICAP euro euribor swap rates for different maturities, basis points.
Sources: Thomson Reuters Datastream, ESMA.

R.12
Dispersion in sovereign yield correlation
High but decreasing correlation and dispersion



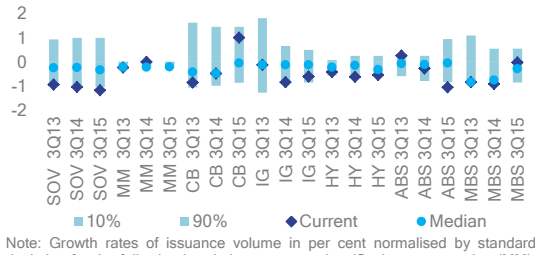
Note: Dispersion of correlations between 10Y DE Bunds and other EU countries' sovereign bond redemption yields over 60D rolling windows.
Sources: Thomson Reuters Datastream, ESMA.

R.13
Dispersion in sovereign-corporate yield correlation.
High but decreasing correlation, contained dispersion



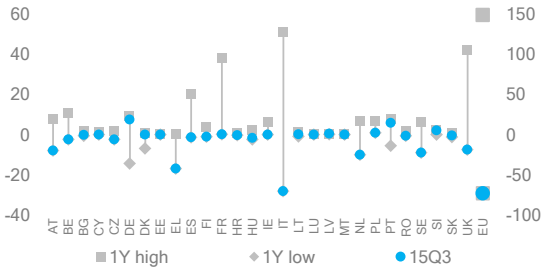
Note: Dispersion of correlation between Barclays Aggregate for corporate and 10Y sovereign bond redemption yields for BE, ES,FI, FR, IT, NL.
Sources: Thomson Reuters Datastream, ESMA.

R.14
Debt issuance
Low issuance for ABS and SOV, high one for CB



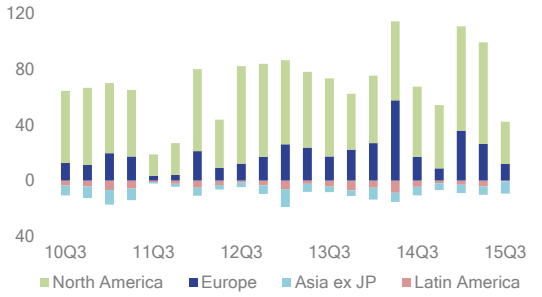
Note: Growth rates of issuance volume in per cent normalised by standard deviation for the following bond classes: sovereign (Sov); money market (MM); covered bonds (CB); investment grade (IG); high-yield (HY); asset backed securities (ABS); mortgage backed securities (MBS). Percentiles computed from 11Q rolling windows. All data include securities with a maturity higher than 18M. Bars denote the range of values between the 10th and 90th percentiles.
Sources: Dealogic, ESMA.

R.15
Sovereign debt issuance
Subdued across countries



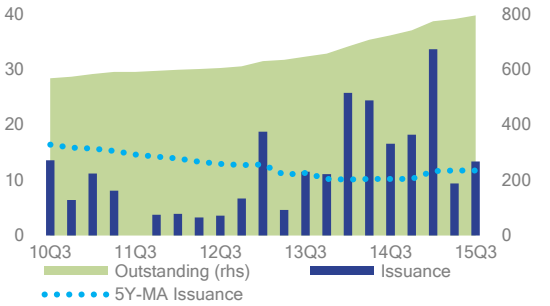
Note: Quartely net issuance of EU sovereign debt by country, EUR bn. Net issuance calculated as the difference between new issuance over the quarter and outstanding debt maturing over the quarter. Highest and lowest quarterly net issuance in the past year are reported. EU total on right-hand scale.
Sources: Dealogic, ESMA.

R.16
HY issuance
Low in 3Q15



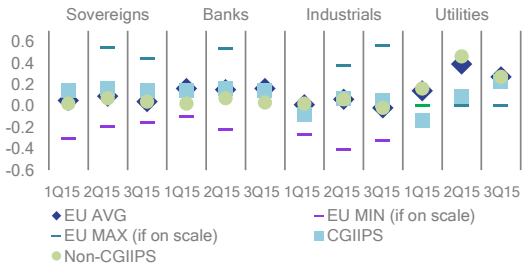
Note: Quarterly data on high-yield corporate bond issuance by region of issue; EUR bn.
Sources: Dealogic, ESMA.

R.17
Hybrid capital issuance and outstanding
Around its long term average



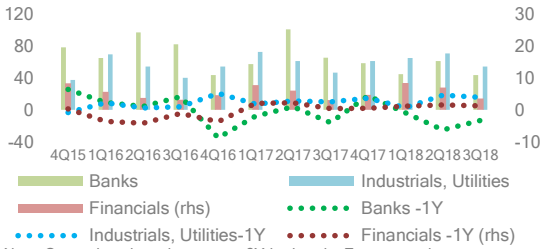
Note: Outstanding amount computed as the cumulated sum of previously issued debt minus the cumulated matured debt prior to reference date. EUR bn.
Sources: Dealogic, ESMA.

R.18
Debt maturity
Stable or lengthened maturity profiles



Note: Quarterly change in maturity of outstanding debt by sector and country groups in the EU, years. CGIIPS include CY, GR, IT, IE, PT and ES. Min and Max may not be displayed where they are out of the scale provided in the graph.
Sources: Dealogic, ESMA.

R.19
Debt redemption profile
Stable medium-long term redemption profiles



Note: Quarterly redemptions over a 3Y-horizon by European private corporates (banks, non-bank financials, and industrials and utilities), current and change over last year (dotted lines), EUR bn. Excluding bank redemptions to central banks.
Sources: Dealogic, ESMA.

Investors

R.20

Risk summary

Risk level

Risk change from 2Q15

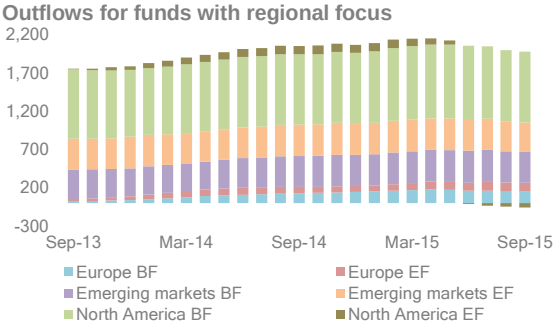
Outlook for 4Q15

Risk drivers

- Role of asset managers in capital markets increases
- Unchanged risk outlook as risk aversion is low and search for yield strategies sustained
- High leverage and return volatilities across fund types

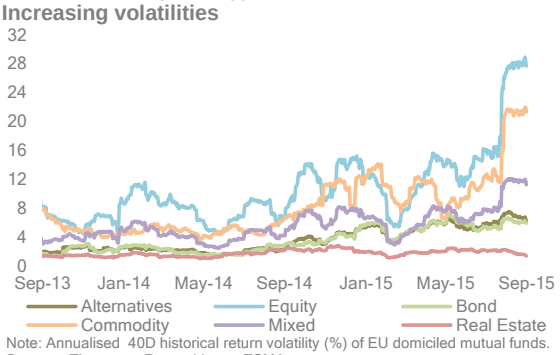
Note: Assessment of main risk categories for markets under ESMA remit since past quarter, and outlook for current quarter. Systemic risk assessment based on categorisation of the ESA Joint Committee. Colours indicate current risk intensity. Coding: green=potential risk, yellow=elevated risk, orange=high risk, red=very high risk. Upward arrows indicate a risk increase, downward arrows a risk decrease. ESMA risk assessment based on quantitative indicators and analyst judgement.

R.21
Cumulative investment fund flows
Outflows for funds with regional focus



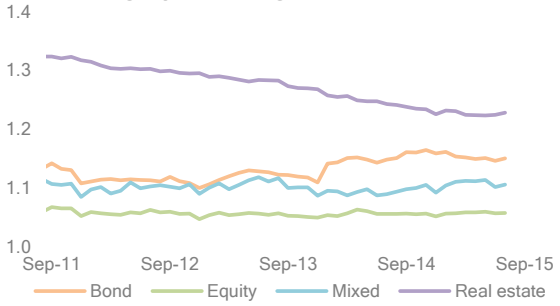
Note: Cumulative net flows into bond and equity funds (BF and EF) over time since 2004 by regional investment focus, EUR bn.
Sources: Thomson Reuters Lipper, ESMA.

R.22
RoR volatilities by fund type
Increasing volatilities



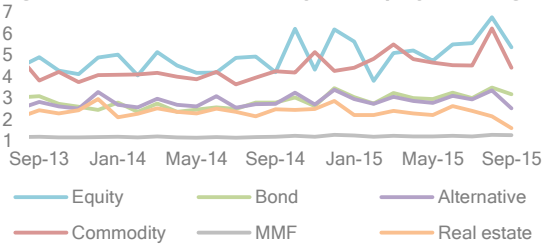
Note: Annualised 40D historical return volatility (%) of EU domiciled mutual funds.
Sources: Thompson Reuter Lipper, ESMA.

R.23
Leverage by fund type excluding HFs
Stable or slightly increasing



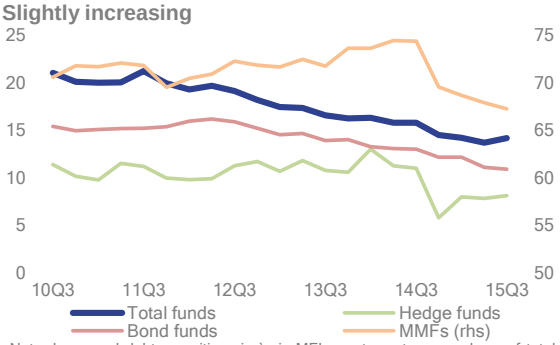
Note: EA Investment funds' leverage by fund type computed as the AuM/NAV ratio.
Sources: ECB, ESMA.

R.24
Retail funds synthetic risk and reward indicator
Highest risks in the commodity and equity fund segments



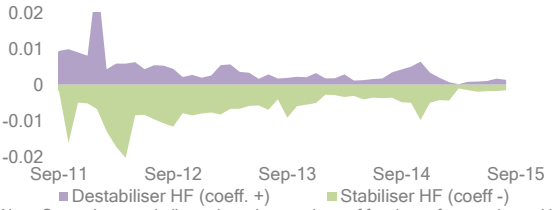
Note:The calculated Synthetic Risk and Reward Indicator is based on ESMA SRRI guidelines. It is computed via a simple 5 year annualised volatility measure which is then translated into categories 1-7 (with 7 representing higher levels of volatility).
Sources:Thomson Reuters Lipper, ESMA.

R.25
Financial market interconnectedness
Slightly increasing



Note: Loan and debt securities vis-à-vis MFI counterparts, as a share of total assets. EA investment funds and MMFs, in %.
Sources: ECB, ESMA.

R.26
Hedge fund interconnectedness
Low levels of interconnectedness



Note: Systemic stress indicator based on products of fractions of regressions with positive (negative) estimated coeffcient individual fund return's impact on average return of sector significant at 99% level and respective average estimators. Coefficients stem from VAR models regressing individual fund returns on lags and general financial markets indices. Measures aggregated across individual regressions. Destabiliser HF (Stabiliser HF) is the fraction of EU hedge funds having a positive (negative) impact on hedge-fund industry returns. Data until September 2015.
Sources: Barclayhedge, Eurekahedge, TASS, HFR, ESMA.

Infrastructures and services

R.27

Risk summary

Risk level

Risk change from 2Q15

Outlook for 4Q15

Risk drivers

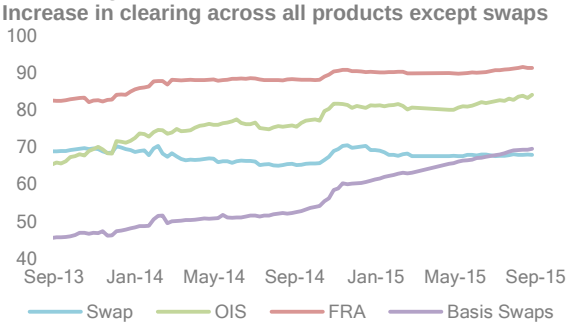
– Operational risks, including system outages, interruption of services, cyber-attacks

– Conduct risk, including intentional or accidental behaviour by individuals, market abuse

– Systemic relevance of individual operations, including size, market share, complexity of operations, interconnectedness with other infrastructures or financial activities and entities, substitutability of systems

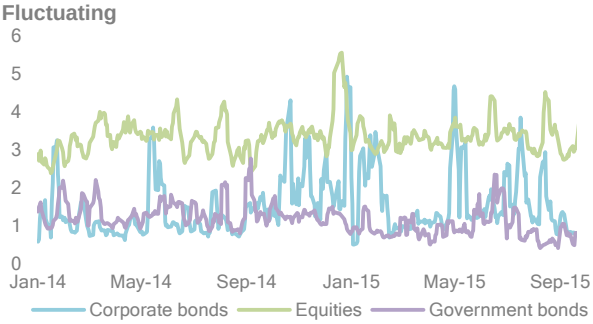
Note: Assessment of main risk categories for markets under ESMA remit since past quarter, and outlook for current quarter. Systemic risk assessment based on categorisation of the ESA Joint Committee. Colours indicate current risk intensity. Coding: green=potential risk, yellow=elevated risk, orange=high risk, red=very high risk. Upward arrows indicate a risk increase, downward arrows a risk decrease. ESMA risk assessment based on quantitative indicators and analyst judgement.

R.28
IRS clearing
Increase in clearing across all products except swaps



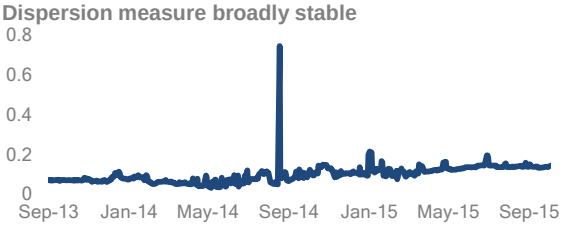
Note: OTC interest rate derivatives cleared by CCPs, % ot total notional amount.
Sources: DTCC, ESMA.

R.29
Settlement fails
Fluctuating



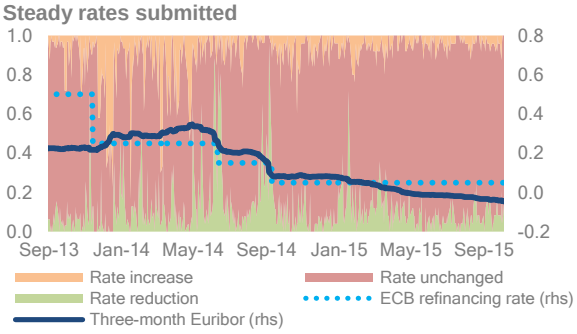
Note: Share of failed settlement instructions in EU; % of value, 5D-MA. Free-of-payment transactions not considered.
Sources: National Competent Authorities, ESMA.

R.30
Euribor – Dispersion
Dispersion measure broadly stable



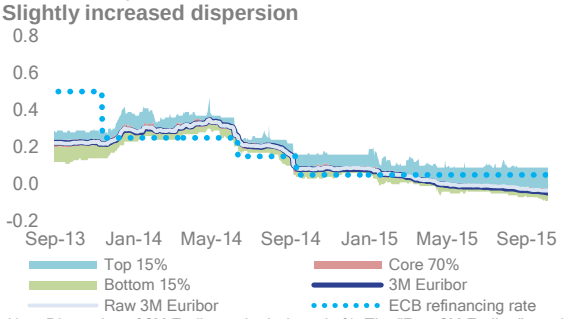
Note: Normalised difference in percentage points between the highest contribution submitted by panel banks and the corresponding Euribor rate. The chart shows the maximum difference across the 8 Euribor tenors. The increase since 2013 is linked to technical factors such as low Euribor rates. The spike in August 2014 reflects the fact that two panel banks submitted respectively a quote for the two-week tenor which was 7 times higher than Euribor and a quote for the 1M tenor which was 10 times higher than Euribor.
Sources: Euribor-EBF, ESMA.

R.31
Euribor – Variation in daily changes
Steady rates submitted



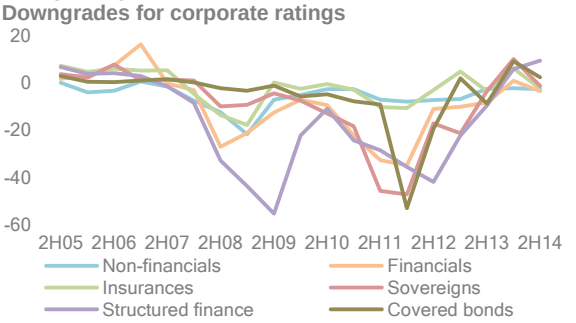
Note: Number of banks changing their three-month Euribor submission from day to day, %.
Sources: Euribor-EBF, ESMA.

R.32
Euribor – Dispersion of submission levels
Slightly increased dispersion



Note:Dispersion of 3M Euribor submissions, in %. The "Raw 3M Euribor" rate is calculated without trimming the top and bottom submissions of the panel for the 3M Euribor.
Sources: Euribor-EBF, ESMA.

R.33
Rating changes
Downgrades for corporate ratings



Note: Drift of ratings from all credit rating agencies by asset class computed as percentage number of upgrades minus percentage number of downgrades, %.
Sources: CEREP, ESMA.

esma European Securities and Markets Authority