European Securities and Markets Authority

ESMA Risk Dashboard

No. 3, 2017

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 The reporting period of this document is 1 March 2017 to 30 June 2017, 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 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. The third-party data used in this publication may be subject to provider-specific disclaimers, especially regarding its ownership, its reuse by non-customers and, in particular, the accuracy, completeness or timeliness of the data provided and the provider's liability related to those. Please consult the websites of the individual data providers, whose names are detailed throughout this report, for more details on these disclaimers.

Please note that for charts related to issuance and outstanding, ESMA changed the source of commercial data across asset classes. In addition, charts on credit quality and CRAs are now constructed on the basis of more refined ESMA proprietary data based on the RADAR reporting tool. For more detailed information on RADAR please see "ESMA's supervision of credit rating agencies, trade repositories and monitoring of third country central counterparties. 2016 annual report and 2017 work programme", published in February 2017. Where data sources have been changed, data differ compared to previous editions of the TRV. These differences generally pertain to the levels of activity, and not to market trends and directions. Our findings and risk analysis are not materially affected by the change in data sources.

European Securities and Markets Authority (ESMA)
Risk Assessment and Economics Department
103, Rue de Grenelle
FR–75007 Paris
risk.analysis@esma.europa.eu

ESMA Risk Dashboard

R.1
Main risks

Risk segments	Risk	Outlook	Risk categories	Risk	Outlook	Risk sources	Outlook
Overall ESMA remit	●	→	Liquidity	●	→	Macroeconomic environment	→
Systemic stress	●	→	Market	●	→	Low interest rate environment	→
Securities markets	●	→	Contagion	●	→	EU sovereign debt markets	→
Investors	●	→	Credit	●	→	Market functioning	→
Infrastructures and services	●	→	Operational	●	↗	Political and event risks	→

Note: Assessment of main risks by risk segments 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.

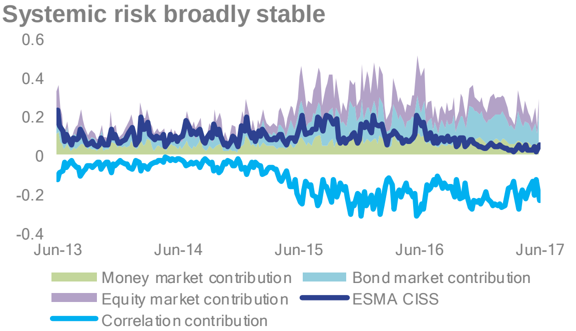
Overall, ESMA's 2Q17 risk assessment remained unchanged from 1Q17. EU financial markets were relatively calm, with stable volatility and increasing equity market prices. EU sovereign bond yields hovered around the higher levels reached in 1Q17. Concerns linked to the potential reactivity to political and geo-political events, excessive risk taking in a low interest rate environment and potential market liquidity shortage linked to event-related risk reversals persisted. Therefore, market and credit risks were kept very high, while liquidity and contagion risks remained high. All previously mentioned risks maintained a stable outlook. Operational risk continued to be elevated, but with an increasing outlook due to Brexit-related operational risk issues and the potential for cyber-attacks. Going forward, we expect the political calendar of the EU including Brexit negotiations, policy developments in the US, and geo-political developments to remain the major risk drivers for 2017.

Risk summary

Risks in the markets under ESMA remit remained at high levels, reflecting very high risk in securities markets and elevated risk for investors, infrastructures and services. Our assessment of the individual risk categories did not change from 1Q17, with **market and credit risk** very high due to the persistently low interest rate environment, continued weaknesses in the EU banking sector and uncertainty over future geopolitical developments. **Liquidity risk** in 2Q17 held its high level, as liquidity pressures were observed in segments of the fund industry and in repo markets. **Contagion risk** remained high, driven by potential for increasing interconnectedness between different segments of financial markets amplified by the low interest rate environment and associated incentives for high risk-taking. **Operational risk** remained elevated, but with a heightened risk outlook reflecting prominent cyber risks, among others. For all other risk categories the risk outlook remained stable, reflecting both an improved macroeconomic environment and the non-materialisation of risk premia reversals following recent monetary policy actions in the US.

Systemic stress eased slightly at the beginning of the reporting period (R.2), with bond markets as the main risk contributor. Risks linked to the macroeconomic environment (GDP, inflation) stabilised, although market uncertainty surrounding potential changes in the European monetary policy stance prevailed. Political events could bring additional uncertainty to financial markets (Brexit negotiations, elections in EU member states, US policy agenda).

R.2
ESMA composite systemic stress indicator
Systemic risk broadly stable



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: EU economic recovery continued in 2Q17, with GDP growth expected across all EU member states. Private consumption, the main growth driver in recent years, is nevertheless set to cool as inflation picks up. Inflation in the EA recently increased and will probably hit higher levels in 2017, mainly due to oil price rises. Investment is expected to continue, growing moderately as wages are climbing only gradually and uncertainties around future policies remain elevated. Significant downside risks for the EU economic growth outlook persist. These risks are linked to global geopolitical events, including the future US policy stance and Brexit negotiations.

Low interest rate environment: ECB and BoE monetary policies remained highly accommodative, not least to mitigate the impact of the UK EU referendum on financial markets. In this context, despite the general increase in sovereign yields since 2H16, which continued in 2Q17, the low interest rate environment and related search-for-yield strategies represented a source of concern. The search for higher returns by EU funds is mirrored in increasing inflows into bond funds with a focus on EMs (EUR 23.5bn) as well as North America (EUR 28.4bn) (R.25). On the other hand, funds investing in government bonds registered net outflows in 2Q17 (R.26). Excessive risk taking and capital misallocation thus remain relevant risk sources in the medium-term outlook.

EU sovereign debt markets: In 2Q17 ten-year EU sovereign bond yields floated around the higher levels reached in 1Q17, yet with significant differences across countries. Ten-year sovereign bond spreads versus DE Bund narrowed slightly in 2Q17, with one peripheral country seeing a significant reduction from 3.6% end-1Q17 to 2.5% at the end of the reporting period. Market liquidity improved on 2H16, but signs of uncertainty remained. These were reflected in bid-ask spreads and developments in the ESMA composite liquidity index (R.10, R.11), which were seen to increase a little in May.

Market functioning: No significant disruptions were observed in the functioning of EU markets. Central clearing remained at a high level following entry into force of the first clearing obligation on G4 currency IRS in 2016 and on Index Credit Default Swaps on 9 February 2017. Both settlement activity and settlement fail rates increased following the T2S migration of one big Member State's market in February. The approach to the final migration wave to T2S in September 2017 is related to expectations of an increase in the volumes on this settlement platform, which contributes to the integration of post-trade processes across participating EU markets. Finally, cyber risk is increasingly becoming a key concern for financial markets institutions, both with respect to their business continuity and the integrity of proprietary data, as illustrated by recent global ransomware attacks. Financial market infrastructures (FMIs) such as trading venues, CSDs, TRs and CCPs are becoming ever more central to the financial system. But their size and centrality, as well as their exposure to information technology, render these infrastructures particularly vulnerable to cyber attacks.

Political and event risk: Conclusion of the French presidential elections, a source of significant market nervousness in the run-up, triggered benign equity and bond market reactions. Similarly, immediate market impacts of the British parliamentary elections were limited and concentrated on UK equity markets and the GBP exchange rate. Brexit negotiations are among the most prominent sources of political risk to the EU single market. They create substantial uncertainty over the future economic outlook and EU institutional arrangements, with key aspects to be negotiated over the coming months and possibly years. News flows and announcements may continue to intensify political and event risk, increasing uncertainty and sparking greater asset price volatility in EU markets. This was reinforced by the uncertainty over the US political agenda in key policy areas, including potential fiscal stimuli and financial regulation, and broader geopolitical developments.

Risk categories

Market risk – very high, outlook stable: In 2Q17 EU equity market prices continued to increase, e.g. for banks (+3.9%), financials excl. banks (+5.6%) and insurance (+2.8%). Nevertheless, these developments were less pronounced than in the US, as mirrored by the dynamics of the P/E ratios (R.5). Implied volatilities remained at a low level. The GBP exchange rate implied volatility decreased throughout 2Q17 following a peak in January, notwithstanding the significant drop in the GBP exchange rate on April 9 (1.5% on average against EUR and USD). In an environment of high political uncertainty, with past elections and their unclear consequences as well as elections in some EU member states in 2017, markets are still prone to strong reactions and are expected to remain so during the coming months.

Liquidity risk – high, outlook stable: Liquidity in equity markets remained around its long-term average levels, with the ESMA composite equity illiquidity indicator deteriorating in May but reverting in June (R.4). On corporate bond markets an improvement in market liquidity was observed as the bid-ask spread and the Amihud indicator[1] edged down slightly compared to end-1Q17 (R.16). The sharp drop in repo rates observed at the end of 2016, documented by ESMA in earlier publications[2], resulted in greater dispersion between the scarcity premia on bonds in very high demand (the highest percentiles of the distribution) and the median premium. This dispersion was then reduced in 2Q17, though remaining at comparatively high levels (R.14). In addition to the cost they impose on repo market participants, repo market price dislocations can also lead to financial instability. They contribute to liquidity risk, volatile funding costs, and reduced market confidence. High dispersion levels reflect potential shortages of high-quality collateral and may endanger financial stability by increasing liquidity risk and volatility in funding costs and reducing overall market confidence.[3] In 2Q17, sovereign bond market liquidity picked up from 4Q16 but was slightly less than 1Q17, as illustrated by the increase in bid-ask spreads (R.10) and in the ESMA composite sovereign bond liquidity index (R.11).

Contagion risk – high, stable outlook: In sovereign bond markets the correlation between German and other EU countries' ten-year bond yields decreased further in 2Q17. Dispersion increased across member states versus end-1Q17 levels, with uneven behaviour within the same group, namely core and peripheral countries. One peripheral country's sovereign bond market drove the bottom 25% dispersion (R.19). Intra-sectoral fund interconnectedness for MMFs and HFs decreased in 1Q17 (R.29, R.32). However, concerns over banking sector balance sheet issues and their potential contagion for other sectors, such as insurances and pensions or funds, are still present.

Credit risk – very high, outlook stable: In 2Q17, EU corporate bond spreads remained around their 4Q16 levels. Covered bond spreads, having also ticked up at the end of 2016, reversed slowly toward lower levels and remained stable throughout the reporting period (R.18). The significant net inflows for EU bond funds whose assets concentrate on emerging, corporate, high-yields or mixed strategies seemed to confirm search for higher returns within the persistently low interest rate environment. Flows into funds focusing on emerging economies approximated EUR 24bn while HY funds' flows stood at around EUR 10bn (R.26). In contrast, flows into funds focusing mainly on government bonds continued to decline. The credit quality of outstanding corporate bond debt deteriorated, with the share of corporate bonds rated AA or higher declined to 22%, in 2Q17, while the share of BBB-rated bonds increased from 22% to 25% (R.17). Refinancing requirements for financials over the medium to long run (from 3Q17 to 3Q18) were lower than last year (R.23). Concerns remain at a more global level, also in relation to high corporate and public debt levels.[4]

Operational risk – elevated, negative outlook: Technology and conduct risks remained a key concern both within and outside the EU. No major trading disruptions were observed on EU financial markets in 2017, though a significant number of circuit breakers were triggered on EU equity markets on days of high market activity, such as the day following the first round of the French elections. The absence of spikes in quotes submission confirms the improved reliability and quality of Euribor, underlining the importance of sound and well-managed financial benchmarks (R.39). Even though the operational risk assessment remained unchanged, the risk outlook is negative. Concerns are deepening against the background of rising cyber-risk, uncertainty related to Brexit negotiations and unexpected difficulties in strengthening the transactions base of major interbank offered rates. Moreover, the rapid growth of FinTech and related effects on the financial sector are monitored by regulators.[5] In effect, FinTech influences changes in business models and opens new business opportunities, yet it may also raise concerns related to data privacy issues, vulnerability to cyber-crime and associated legal issues.

[1] The Amihud illiquidity ratio is a widely used measure of stock market illiquidity and evaluates the price impact of trading. It is calculated as the daily ratio of absolute stock returns to its volume, averaged over the chosen period. A smaller value of the coefficient means lower price impact and thus higher liquidity.

[2] For example see ESMA TRV No.1 2017.

[3] For more details on high-quality collateral scarcity, see Box 12 in ESMA TRV No.2 2017, Securities.

[4] International Monetary Fund, "Fiscal Monitor April 2017".

[5] ESMA response to Commission Consultation on Fintech", June 2017.

Securities markets

R.3

Risk summary

Risk level

Risk change from 1Q17

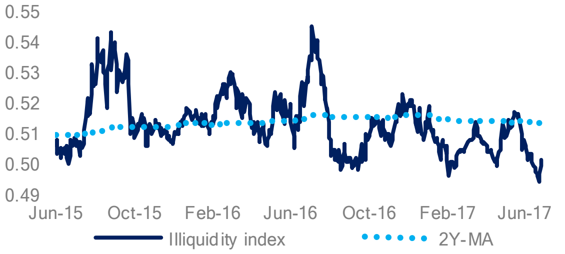
Outlook for 3Q17

Risk drivers

– Asset re-valuation and risk re-assessment
– Low interest rate environment and excessive risk taking
– Geo-political and event risks
– Potential scarcity of collateral

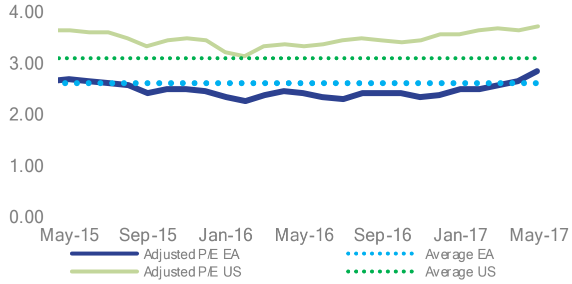
Note: Assessment of main risk categories for markets under ESMA remit since past quarter, and outlook for forthcoming quarter. Systemic risk assessment based on categorisation of the ESA Joint Committee. Colours indicate current risk intensity. Coding: green=potential risk, yellow=elevated risk, orange=high 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
ESMA composite liquidity index
Increased liquidity in June



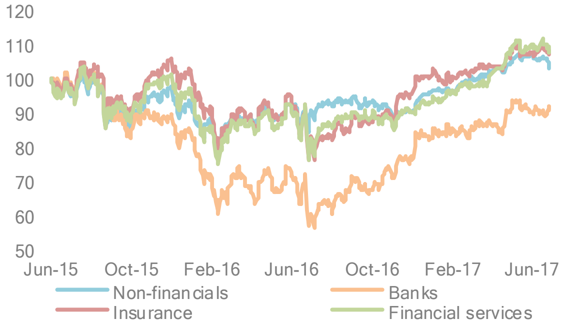
Note: Composite indicator of illiquidity in the equity market for the current Eurostoxx 200 constituents, computed by applying the principal component methodology to six input liquidity measures (Amihud illiquidity coefficient, bid-ask spread, Hui-Heubel ratio, turnover value, inverse turnover ratio,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

R.5
Equity valuation
Long-term average in the EA reached



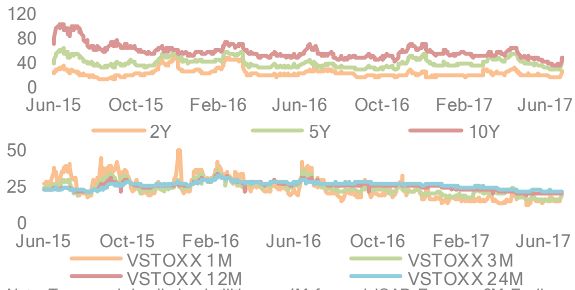
Note: Monthly earnings adjusted for trends and cyclical factors via Kalman filter methodology based on OECD leading indicators; units of standard deviation; averages computed from 8Y. Data available until the end of May 2017.
Sources: Thomson Reuters Datastream, ESMA.

R.6
Equity prices
Slight decrease end-2Q17



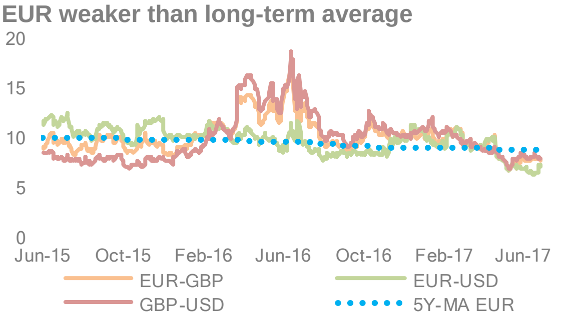
Note: STOXX Europe 600 equity total return indices. 01/06/2015=100.
Sources: Thomson Reuters Datastream, ESMA.

R.7
Financial instruments volatilities
Stable volatility



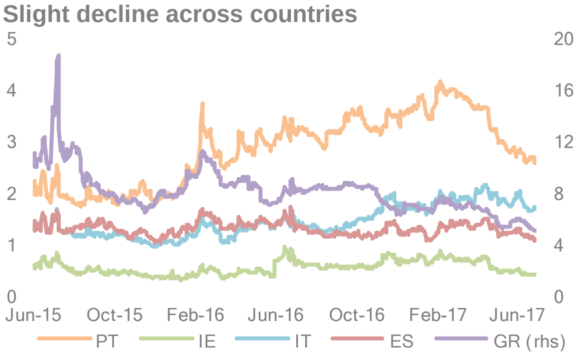
Note: Top panel: implied volatilities on 1M forward ICAP Euro vs. 6M Euribor swaptions based on the Normal volatility model, in bp; low panel: Euro Stoxx 50 implied volatilities, measured as price indices, in %.
Sources: Bloomberg, Thomson Reuters Datastream, ESMA.

R.8
Exchange rate volatilities
EUR weaker than long-term average



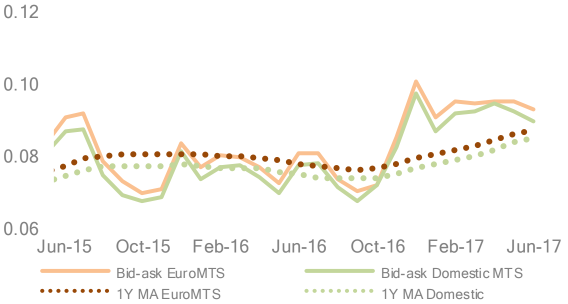
Note: Implied volatilities for 3M options on exchange rates. 5Y-MA EUR is the five-year moving average of the implied volatility for 3M options on EUR-USD exchange rate.
Sources: Bloomberg, ESMA.

R.9
Sovereign risk premia
Slight decline across countries



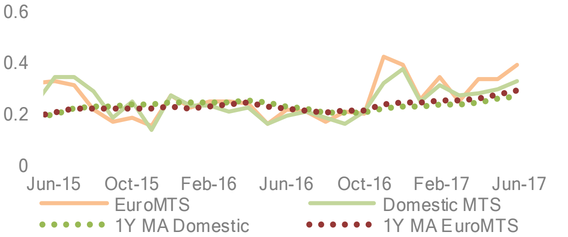
Note: Selected 10Y EA sovereign bond risk premia (vs. DE Bunds), in %.
Sources: Thomson Reuters Datastream, ESMA.

R.10
Sovereign bond liquidity – bid-ask spreads
Better since end-2016



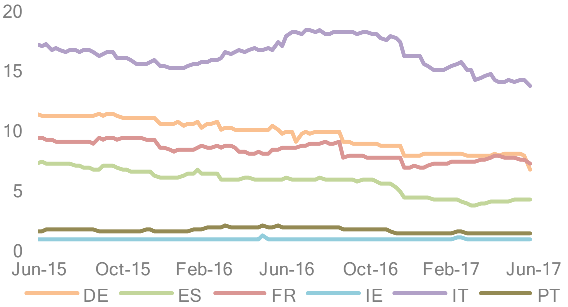
Note: Bid-ask spread as average bid-ask spread over one month across ten EU markets, Domestic and Euro MTS, in %. 1Y MA = one-year moving average.
Sources: MTS, ESMA.

R.11
ESMA composite sovereign bond liquidity index
Improved for domestic MTS



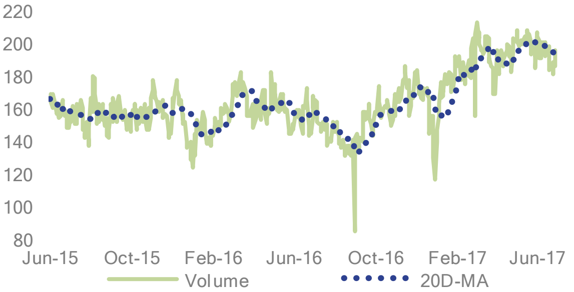
Note:Composite indicator of market liquidity in the sovereign bond market for the domestic and Euro MTS platforms, computed by applying the principal component methodology to four input liquidity measures (Amihud illiquidity coefficient, Bid-ask spread, Roll illiquidity measure and Turnover). 1Y MA = one-year moving average. The indicator range is between 0 (higher liquidity) and 1 (lower liquidity).
Sources: MTS, ESMA.

R.12
Sovereign CDS volumes
Stable or decreasing



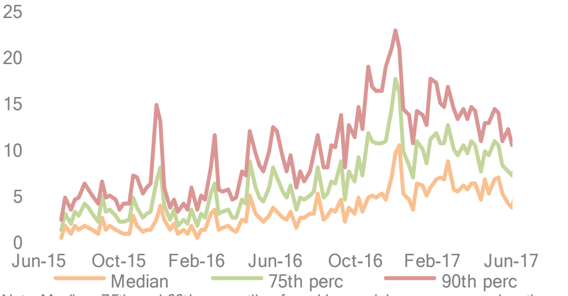
Note: Value of outstanding net notional sovereign CDS for selected countries; USD bn.
Sources: DTCC, ESMA.

R.13
Sovereign repo volumes
Elevated volumes



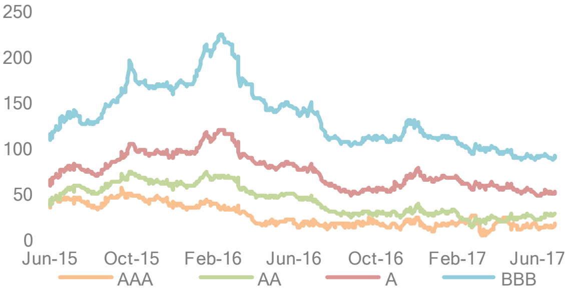
Note: 20D-MA of specific and general collateral transaction volumes executed through CCPs in eight sovereign EUR repo markets (AT, BE, DE, FI, FR, IT and NL), EUR bn. Index volumes filter out atypical transactions.
Sources: RepoFunds Rate, ESMA.

R.14
Repo markets specialness
Reduced dispersion, though still at high levels



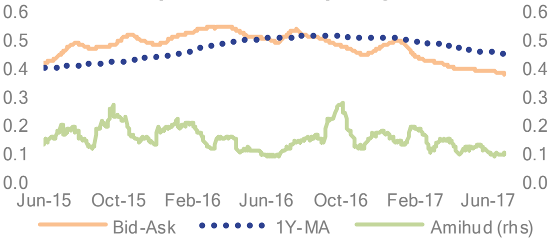
Note: Median, 75th and 90th percentile of weekly specialness, measured as the difference between general collateral and special collateral repo rates on government bonds in selected countries.
Sources: RepoFunds Rate, ESMA.

R.15
Corporate bond spreads
Broadly stable in 2Q17



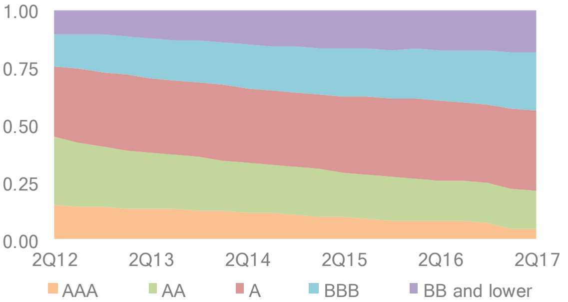
Note: EA non-financial corporate bond spreads by rating between iBoxx non-financial corporate yields and ICAP Euro Euribor swap rates for maturities from 5 to 7 years, basis points.
Sources: Thomson Reuters Datastream, ESMA.

R.16
Corporate bond bid-ask spreads and Amihud indicator
Enhanced corporate bond liquidity



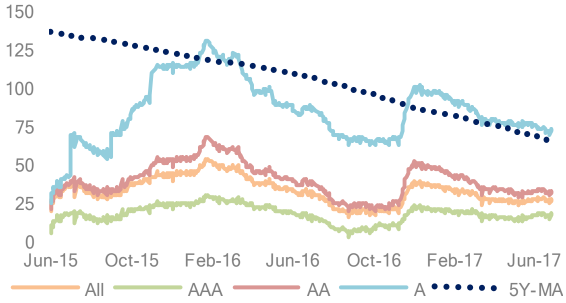
Note: EUR Markit iBoxx corporate bond index bid-ask spread, in %, computed as a one-month moving average of the iBoxx components in the current composition. 1Y-MA=one-year moving average of the bid-ask spread. Amihud liquidity coefficient index between 0 and 1. Highest value indicates less liquidity.
Sources: IHS Markit, ESMA.

R.17
Outstanding long term corporate debt
Increased share of BBB and lower



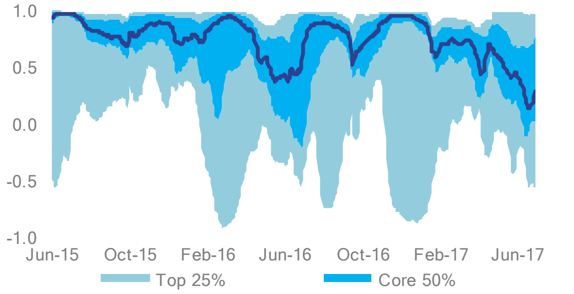
Note: Outstanding amount of corporate bonds as of issuance date by rating category, in % of the total.
Sources: Thomson Reuters Eikon, ESMA.

R.18
Covered bond spreads
Decrease in 2017



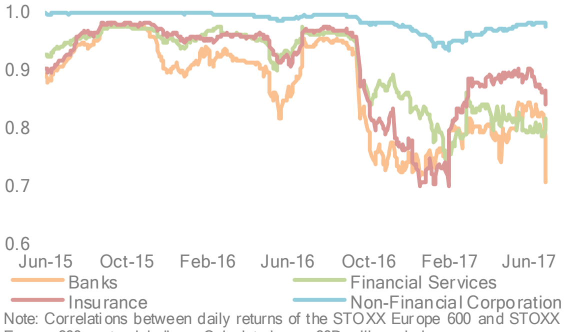
Note: Asset swap spreads based on iBoxx covered bond indices, basis points. 5Y-MA=five-year moving average of all bonds.
Sources: Thomson Reuters Datastream, ESMA.

R.19
Dispersion in sovereign yield correlation
Increased dispersion, lower correlation



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.20
Sectoral equity indices correlation
Lower correlation for banking sector

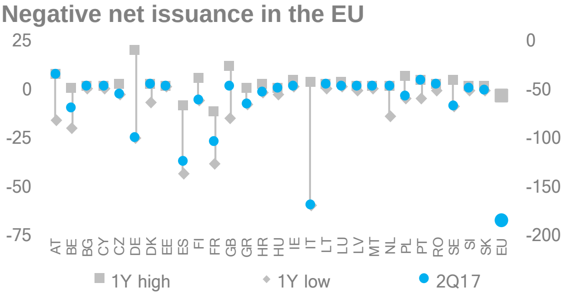


Note: Correlations between daily returns of the STOXX Europe 600 and STOXX Europe 600 sectoral indices. Calculated over 60D rolling windows
Sources: Thomson Reuters Datastream, ESMA.

R.21
Debt issuance growth
Issuance growth negative for sovereigns

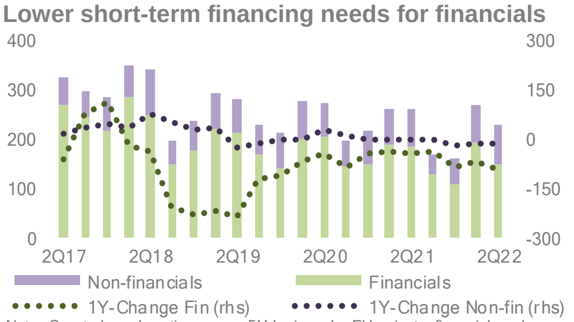
Note: Growth rates of issuance volume, in %, normalised by standard deviation for the following bond classes, following Eikon classification: securitised (SEC); high-yield (HY); investment grade (IG); covered bonds (CB); money market (MM); sovereign (SOV). Percentiles computed from 12Q rolling window. All data include securities with a maturity higher than 18M, except for MM (maturity less than 12M). Bars denote the range of values between the 10th and 90th percentiles. Missing diamond indicates no issuance for previous quarter.
Sources: Thomsons Reuters Eikon, ESMA.

R.22
Net sovereign debt issuance
Negative net issuance in the EU



Note: Quarterly 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: Thomson Reuters Eikon, ESMA.

R.23
Debt redemption profile
Lower short-term financing needs for financials



Note: Quarterly redemptions over 5Y-horizon by EU private financial and non-financials corporates, EUR bn. 1Y-Change=difference between the sum of this year's (four last quarters) and last year's (8th to 5th last quarters) redemptions.
Sources: Thomson Reuters EIKON, ESMA.

Investors

R.24

Risk summary

Risk level

Risk change from 1Q17

Outlook for 3Q17

Risk drivers

– Sustained search-for-yield

– Asset re-valuation and risk re-assessment

– Correlation in asset prices

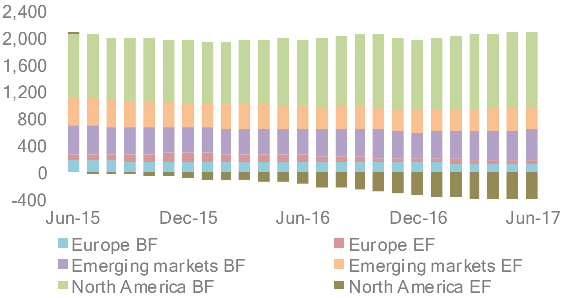
– Continued inflow into EU fund industry and potential event-related reversals

Note: Assessment of main risk categories for markets under ESMA remit since past quarter, and outlook for forthcoming 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.25

Cumulative global investment fund flows

Inflows for funds focusing on bonds and EMs

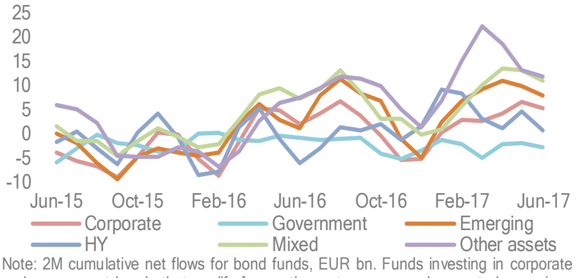


Note: Cumulative net flows into bond and equity funds (BF and EF) over time since 2004 by regional investment focus, EUR bn.
Sources: Thomson Reuters Lipper, ESMA.

R.26

EU bond fund net flows

High for funds with emerging and mixed focus

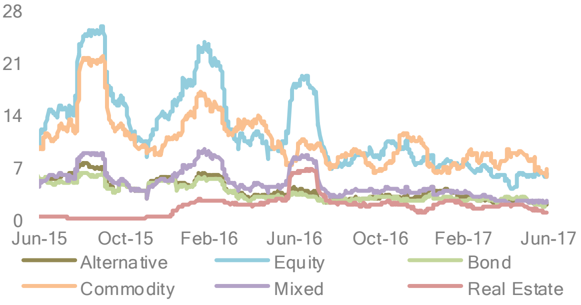


Note: 2M cumulative net flows for bond funds, EUR bn. Funds investing in corporate and government bonds that qualify for another category are only reported once (e.g. funds investing in emerging government bonds will be reported as emerging; funds investing in HY corporate bonds will be reported as HY).
Sources: Thomson Reuters Lipper, ESMA.

R.27

RoR volatilities by fund type

Broadly stable volatilities

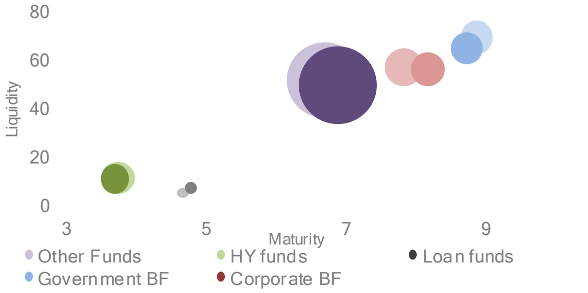


Note: Annualised 40D historical return volatility of EU domiciled mutual funds, in %.
Sources: Thomson Reuters Lipper, ESMA.

R.28

Liquidity risk profile of EU bond funds

Stable liquidity and mixed maturity changes

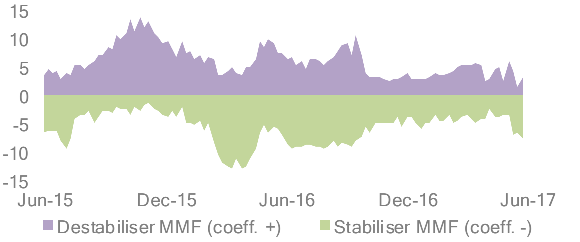


Note: Fund type reported according to the average liquidity ratio, in % (Y-axis), the effective average maturity of assets (X-axis) and size. Each series is reported for 2 years, i.e. 2016 (bright colours) and 2017 (dark colours).
Sources: Thomson Reuters Lipper, ESMA.

R.29

Money market fund interconnectedness

Stabiliser MMFs have slightly stronger impact

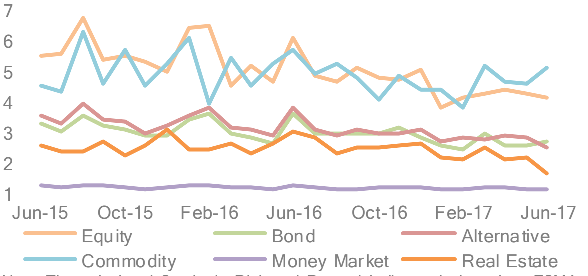


Note: Systemic stress indicator based on products of fractions of regressions with positive (negative) estimated coefficients for individual fund returns' impact on the mean sector return and respective estimators. Coefficients stem from VEC models regressing individual fund returns and moments of the entire industry's return distribution on lags and general financial market indices. Measures aggregated across individual regressions.
Sources: Thomson Reuters Lipper, Thomson Reuter Datastream, ECB, ESMA.

R.30

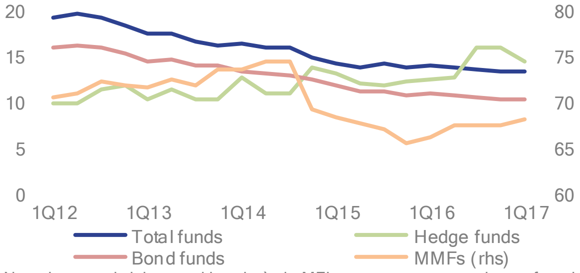
Retail fund synthetic risk and reward indicator

Decreasing for all but bond and commodity funds



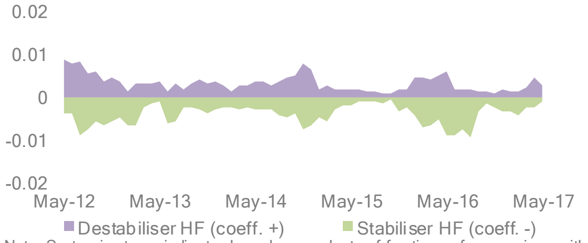
Note: The calculated Synthetic Risk and Reward Indicator is based on ESMA SRRI guidelines. It is computed via a simple 5-year annualised volatility measure which is then translated into categories 1-7 (with 7 representing higher levels of volatility).
Sources: Thomson Reuters Lipper, ESMA.

R.31
Financial market interconnectedness
Increase for MMFs



Note: Loan and debt securities vis-à-vis MFI counterparts, as a share of total assets. EA investment funds and MMFs, in %. Total funds includes: bond funds, equity funds, mixed funds, real estate funds, hedge funds, MMFs and other non-MMFs investment funds.
Sources: ECB, ESMA.

R.32
Hedge fund interconnectedness
Low intra-sector interconnectedness



Note: Systemic stress indicator based on products of fractions of regressions with positive (negative) estimated coefficients for individual fund returns' 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 market indices. Measures aggregated across individual regressions.
Sources: Barclayhedge, Eurekahedge, TASS, HFR, ESMA.

Infrastructures and services

R.33

Risk summary

Risk level

Risk change from 1Q17

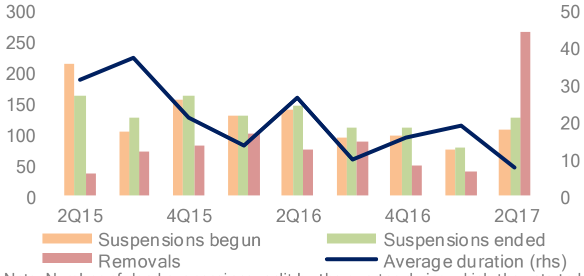
Outlook for 3Q17

Risk drivers

– Operational risks, including cyber risks
– Conduct risk, including intentional or accidental behaviour by individuals, market abuse
– Systemic relevance, interconnectedness between infrastructures or financial activities, system substitutability

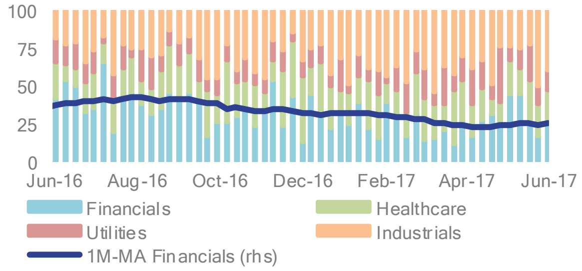
Note: Assessment of main risk categories for markets under ESMA remit since past quarter, and outlook for forthcoming quarter. Systemic risk assessment based on categorisation of the ESA Joint Committee. Colours indicate current risk intensity. Coding: green=potential risk, yellow=elevated risk, orange=high 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.34
Trading suspensions – lifecycle and removals
Longer suspensions on average in 2Q17



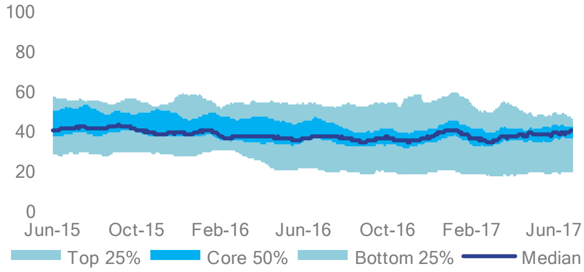
Note: Number of dead suspensions, split by the quarter during which they started and ended, and removals of financial instruments traded on EEA trading venues. Average duration of dead suspensions, in days, computed as the mean of the difference between the end-of-quarter date and the start date.
Sources: ESMA Registers.

R.35
Circuit breaker trigger events by sector
No major market events



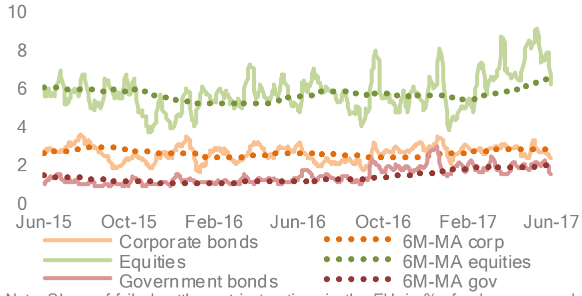
Note: Percentage of circuit breaker trigger events by economic sector. Results displayed as weekly aggregates.The analysis is based on a sample of 10,000 securities, including all constituents of the STOXX Europe 200 Large/Mid/Small caps and a large sample of ETFs tracking the STOXX index or sub-index.
Sources: Morningstar Real-Time Data, ESMA.

R.36
Equity market concentration
Concentration slightly lower



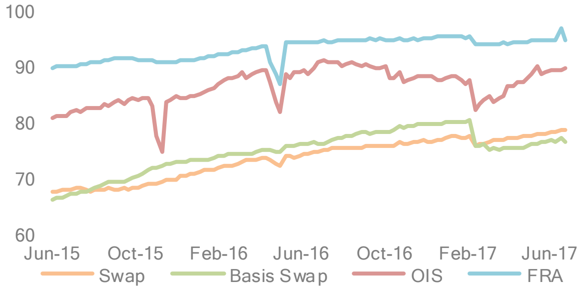
Note: Concentration of notional value of equity trading by national indices computed as a 1M-MA of the Herfindahl-Hirschman Index, in %. Indices included are FTSE100, CAC40, DAX, FTSE MIB, IBEX35, AEX, OMXS30, BEL20, OMXC20, OMXH25, PSI20, ATX.
Sources: BATS, ESMA.

R.37
Settlement fails
Increase for equity and corporate bonds in 2Q17



Note: Share of failed settlement instructions in the EU, in % of value, one-week moving averages. 6M-MA=six-month moving average. Free-of-payment transactions not considered.
Sources: National Competent Authorities, ESMA.

R.38
IRS CCP clearing
OIS and swaps back to pre-March drop levels

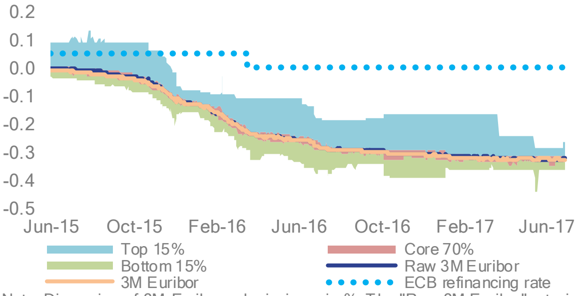


Note: OTC interest rate derivatives cleared by CCPs captured by Dealer vs. CCP positions, in % of total notional amount. Spikes due to short-term movements in non-cleared positions.
Sources: DTCC, ESMA.

R.39
Euribor – Dispersion in contributions
Decline in 2Q17

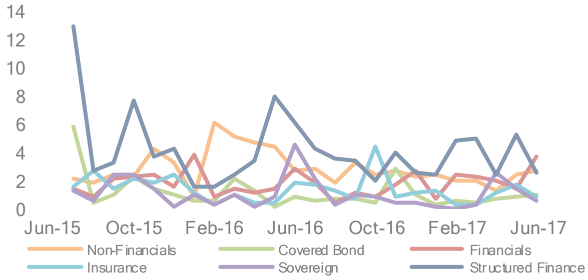
Note: Normalised difference in percentage points between the highest contribution submitted by panel banks and the corresponding Euribor rate. The chart shows the maximum difference across the 8 Euribor tenors.
Sources: European Money Markets Institute, ESMA.

R.40
Euribor – Dispersion of submission levels
Decrease in the top 15%



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: European Money Markets Institute, ESMA.

R.41
Rating changes
Increasing volatility for financials



Note: Volatility of ratings by all credit rating agencies, excluding CERVED and ICAP, by asset class computed as number of rating changes over number of outstanding ratings.
Sources: RADAR, ESMA.

European Securities and Markets Authority