The risk landscape in 3Q19 was dominated by deteriorating economic fundamentals, continued uncertainty around Brexit, US-China trade tensions and geopolitical risk. Markets remain sensitive to related events and news flow. Risks in markets under ESMA’s remit remained high, particularly in securities markets, where high asset valuations and search-for-yield prevail. Credit risk continues to be elevated, with deteriorating corporate debt quality and the growing share of BBB-rated debt. Looking ahead, a weakening economic outlook and further uncertainty over global trade negotiations and Brexit remain key risk drivers.

**Risk sources**

**Systemic stress:** Systemic stress stayed at moderate levels, with a slight increase in the composite ESMA indicator in September, mainly driven by equities.

**Macroeconomic environment:** Economic conditions have deteriorated lately in the EU28 and globally. The European Commission expects more subdued growth and muted inflation going forward while IMF forecasts for global growth have been further revised downwards.¹

**Interest-rate environment:** Markets expect a continuation of the accommodative monetary policies for the time being. The low-for-long environment bears the risk of translating into search-for-yield behaviour, asset price misvaluation and capital misallocation. High equity valuations (R.4) as well as compressed spreads (R.8-R.14) support this view. In 3Q19, the ECB lowered its deposit rate further into negative territory by 10bps to -0.5% and expects key rates to remain unchanged or to fall in the short-to-medium term. Its asset purchase program will also be restarted in November 2019. In the US, the Federal Reserve also lowered its target federal funds rate to a range of 1.50 to 1.75%.

**EU28 sovereign debt markets:** Sovereign yields continue to compress along the yield curve and across issuers. As of September, ten EU28 countries had negative ten-year sovereign yields, with DE ten-year benchmark bond yield at -0.57% at the end of 3Q19. The difference in yields between the DE and GR ten-year yield stood at around 200 bps in September, its lowest level since the start of the 2011 EU sovereign crisis. Sovereign bond market liquidity decreased slightly during 3Q19 (R.9-R.10).

**Market functioning:** Risks from a disorderly UK exit from the EU have reduced significantly with the recent progress on a withdrawal agreement and the renewed extension of the exit deadline to 31 January 2020. A no-deal risk, nevertheless, continues to exist, and ESMA has in the past

taken important steps to reassure markets and limit operational uncertainties, for example with the recognition decisions for the UK CSD and UK CCPs. Despite the continuing uncertainty surrounding the Brexit outcome, trading conditions in European financial markets have been orderly throughout as shown by the number of circuit breakers that has been stable over the period. The transition from the existing Inter-bank offer-rates (IBORs) to the new risk-free rates raises risks associated with the replacement of the reference rate or the introduction of fallback rates in existing financial products and derivative contracts for both banks and counterparties. The first publication of €STR on 2 October was not followed by any discontinuity in interbank or IRS derivative volumes. While ESMA will keep monitoring developments with respect to €STR and other benchmarks, the transition to the new risk-free rates has gradually started without major disruption.

**Political and event risk:** Political and event risks remain the main source of risks for EU28 financial markets. Brexit discussions continued in 3Q19 with muted market reactions on securities, investment fund and FX markets to negotiation events. Trade tensions between the US and China have been and are set to remain a major source of volatility and market risk, especially on equity markets where China is now becoming the biggest source of volatility spill-over in the US and in the EU28. Other geopolitical events weighed on markets, for example the attacks on production facilities in Saudi Arabia and the subsequent temporary spike in oil prices. More generally, increased tensions in the Middle-East and potentially higher oil prices over the long run raise concerns over the impact of an oil price increase on global economic activity.

**Risk categories**

**Market risk – very high, outlook stable:** EU28 equity markets were characterised by a price fall at the beginning of August in reaction to fears of an intensification of U.S.-China trade war, against the backdrop of a global economic slowdown. Volatility measures, such as the VIX (in the US) and VSTOXX (in the EA), remained slightly above their long-term average, at around 20% in 3Q19. Corporate bond spreads remained tight in a sign of continued search-for-yield, while the share of EA bond market trading with negative yields continued to increase. Oil prices spiked temporarily by almost 20% on 16 September 2019, and USD secured money markets experienced a funding squeeze forcing the Fed to step in, in a sign of simmering market tensions highlighting the scope for abrupt changes in investor sentiment. No spillover to European repo markets was observed with collateral scarcity premiums remaining at low levels (R.13).

**Liquidity risk – high, outlook stable:** Equity markets were subject to temporary illiquidity spikes related to equity price falls at the beginning of August (R.3). Similarly, illiquidity on sovereign bond markets increased in August (R.10). Corporate bond bid-ask spreads and the Amihud illiquidity indicator increased slightly over most of the quarter only to drop towards the end. (R.16). On the other hand, the scarcity premia on EA government bond collateral remained low compared to end-2018 (R.14) and the average trading volumes in sovereign repos increased (R.13), signalling better conditions for short-term liquidity provision. For funds, search for yield may explain a decline of liquid securities holdings in fund’s portfolio over recent years, especially for corporate bond funds.

**Contagion risk – high, stable outlook:** No spillover to EU28 money markets was observed following the USD secured money markets’ a funding squeeze already mentioned in the market risk section. Correlation between sovereign bond yields is now close to 1. This indicates first that most sovereign yields now react to the same market-wide sources of movements, and second that the risk of a country level fiscal shock that could spread to other EU28 countries currently seems less prominent (R.18). Investment fund interconnectedness with more traditional banking activities, in particular for MMFs and hedge funds, remained at a high level (R.39).

**Credit risk – high, stable outlook:** Credit risk remains high, with continued corporate bond spread compression (spread between BBB and AAA rated bond yields at 66bps). Corporate bond credit quality continued to deteriorate as issuance of new corporate bonds continues to be concentrated in lower-rated segments (R.16). The share of BBB-rated debt at the low end of the investment-grade scale and at risk of being downgraded to non-investment grade continued to be high. This can lead to risks of ‘fallen angel’ driven shocks, i.e. adverse market impacts following sales of bonds downgraded to non-investment grade.

**Operational risk – elevated, stable outlook:** Brexit remains a source of concern for operational risk until full clarity about terms and timeline of a Brexit deal and longer term relationship with the UK is achieved. As such, the need for contingency planning and assurance of business continuity both for financial institutions and supervisors remains. Regarding cyber risks, concerns are expected to intensify in the medium to long term, especially with respect to business continuity and the integrity of proprietary data as financial data breaches are increasingly frequent in comparison to breaches in other sectors (R.33).
Securities markets

R.2 Risk summary

Risk level
Risk change from 2Q19
Outlook for 4Q19

Risk drivers

- Political risk
- Geopolitical and event risks, esp. trade tensions
- Asset revaluation and risk re-assessment
- Low-for-long interest rate environment and excessive risk taking
- Deteriorating economic fundamentals and sector outlooks

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 judgment.

R.3 ESMA composite equity liquidity index

Subject to illiquidity spikes

Note: Composite indicator of illiquidity in the equity market for the current STOXX Europe Large 200 constituents, computed by applying the principal component methodology to six input liquidity measures (Amihud illiquidity coefficient, bid-ask spread, Hau-Heahul ratio, turnover value, inverse turnover ratio and market efficiency coefficient). The indicator range is between 0 (higher liquidity) and 1 (lower liquidity). Sources: Refinitiv Datastream, ESMA.

R.4 Equity valuation

Still higher than long-term average

Note: Price-earning ratios based on average inflation-adjusted earnings from the previous 10 years (cyclically adjusted price-earning ratios). Averages computed from the most recent data point up to 10 years before. Sources: Refinitiv Datastream, ESMA.

R.5 Financial instrument volatilities

Volatilities spike around trade announcements

Note: Top panel: implied volatilities on one-month Euro-Euribor, UK Pound Sterling-GBP Libor and US Dollar-USD Libor swaptions measured as price indices, in %. Bottom panel: EURO STOXX 50 implied volatilities, measured as price indices, in %. Sources: Refinitiv EIKON, Refinitiv Datastream, ESMA.

R.6 Sovereign risk premia

Yield compression

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

Note: STOXX Europe 600 equity total return indices. 01/06/2017=100.
Sources: Refinitiv Datastream, ESMA.

Note: Early 3Q19 drop, markets recovered since 4Q19.
Sources: Refinitiv Datastream, ESMA.

Note: STOXX Europe 600 equity total return indices. 01/06/2017=100.
Sources: Refinitiv Datastream, ESMA.

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Sources: Refinitiv Datastream, ESMA.

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Sources: Refinitiv Datastream, ESMA.

Note: Top panel: implied volatilities on one-month Euro-Euribor, UK Pound Sterling-GBP Libor and US Dollar-USD Libor swaptions measured as price indices, in %. Bottom panel: EURO STOXX 50 implied volatilities, measured as price indices, in %. Sources: Refinitiv EIKON, Refinitiv Datastream, ESMA.

Note: Selected 10Y EA sovereign bond risk premia (vs. DE Bunds), in %. Sources: Refinitiv Datastream, ESMA.
Sovereign bond bid-ask spreads

Bid-ask spread spikes in August

Note: Bid-ask spread as weighted average of bid-ask spreads throughout a month-weighted by trading volume across 10 EU domestic markets (AT, BE, DE, ES, FI, FR, IE, IT, NL and PT) and Euro MTS, in bps.
Sources: MTS, ESMA.

Sovereign CDS volumes

Stable or increasing

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

Repo market specialness

Scarcity premia remaining at low levels

Note: Median, 75th and 90th percentiles 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.

Corporate bond bid-ask spreads and Amihud indicator

Slightly increasing for most 3Q19

Note: Markit iBoxx EUR 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 illiquidity coefficient index between 0 and 1. Higher value indicates less liquidity.
Sources: IHS Markit, ESMA.

Long term corporate debt outstanding

Increased share of BBB and lower

Note: Outstanding amount of corporate bonds in the EU28 as of issuance date by rating category, in % of the total.
Sources: Refinitiv Eikon, ESMA.
R.17 Covered bond spreads

**Further spread compression**

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

R.18 Dispersion in sovereign yield correlation

**Very high correlations**

Note: Dispersion of correlations between 10Y DE Bunds and other EU28 countries’ sovereign bond redemption yields over 60D rolling windows. Sources: Refinitiv Datastream, ESMA.

R.19 Sectoral equity indices correlation

**Slightly increasing correlation for banks over 3Q**

Note: Correlations between daily returns of the STOXX Europe 600 sector indices. Calculated over 60D rolling windows. Sources: Refinitiv Datastream, ESMA.

R.21 Net sovereign debt issuance

**Negative net issuance in the EU28**

Note: Quarterly net issuance of EU28 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: Refinitiv EIKON, ESMA.

R.22 Debt redemption profile

**Higher short-term financing needs for financials**

Note: Quarterly redemptions over 5Y-horizon by EU28 private financial and non-financial corporates, EUR bn. 1Y-change=change between the sum of this year’s (four last quarters) and last year’s (8th to 6th last quarters) redemptions. Sources: Refinitiv EIKON, ESMA.
Infrastructures and services

R.23
Risk summary

Risk level

Risk change from 2Q19

Outlook for 4Q19

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=low risk, yellow=moderate 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 judgment.

R.24
Complaints indicator by rationale

Less complaints in 2Q19

R.25
Complaints indicator by instrument

Increase in CFD complaints

Note: Complaints for quarterly-reporting NCAs (n=17) by financial instrument type, %, and total number. Debt securities include money market instruments. *SRP=Structured retail products.

R.26
Circuit-breaker-trigger events by sector

No sectoral pattern

Note: Percentage of circuit-breaker trigger events by economic sector registered on 34 EEA trading venues for all constituents of the STOXX Europe Large/Mid/Small 200 and a large sample of ETFs tracking these indices or some of their subindices. Results displayed as weekly aggregates. Sources: Morningstar Real-Time Data, ESMA.

R.27
Circuit-breaker occurrences by market capitalisation

Low number of CBs triggered in 3Q19

Note: Number of daily circuit-breaker trigger events by type of financial instrument and by market cap registered on 34 EEA trading venues for all constituents of the STOXX Europe Large/Mid/Small 200 and a large sample of ETFs tracking these indices or some of their subindices. Results displayed as weekly aggregates. Sources: Morningstar Real-Time Data, ESMA.

R.28
Trading system capacity proxy

No capacity shortage on EU28 trading venues

Note: Daily and 3M-MA of trading volume registered on 34 EEA trading venues for all constituents of the STOXX Europe Large/Mid/Small 200 and a large sample of ETFs tracking these indices or some of their subindices, in EUR bn. Capacity computed as the average across trading venues of the ratio of daily trading volume over maximum volume observed since 31/03/2016, in %.

R.29
Equity market concentration

Increase at end of 3Q19

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 AEX, ATX, BEL20, CAC 40, DAX, FTSE 100, FTSE MIB, IBEX 35, OMXC 20, OMXH25, OMXS30, PS20.

Sources: Cboe, ESMA.
**ESMA Risk Dashboard**

**Settlement fails**

*Settlement fail rates below longer-term trend*

![Graph showing settlement fail rates](image)

Note: Share of failed settlement instructions in the EU28, in % of value, one-week moving averages. Jump in December 2018 due to a single transaction of EUR 500 bn instructed on 10 December with settlement requested on the same day, which was finally cancelled on 18 December.
Sources: National Competent Authorities, ESMA.

**Ratings drift by asset class**

*Slower upward rating drift except non-financials*

![Graph showing rating drift](image)

Note: 3 month moving average of net change in ratings from all credit rating agencies, excluding CERVED and ICAP, by asset class computed as a percentage number of upgrades minus percentage number of downgrades over number of outstanding ratings.
Sources: RADAR, ESMA.

**Financial services data breaches**

*High risk for financials persists*

![Graph showing data breaches](image)

Note: Estimated number of data breaches, financial services only, worldwide, by type. Breaches in financial services sector as % of total data breaches across all sectors on right-hand scale.
Sources: Gemalto Breach Level Index, ESMA.
Asset Management

R.34
Risk summary

Risk level
Risk change from Q2 2019
Outlook for Q4 2019

Risk drivers

- Asset re-valuation and risk re-assessment
- Uncertainty on economic outlook and political developments in EU
- Correlation in asset prices
- Search-for-yield behaviour leading to investments in less liquid assets

Note: Assessment of main risk categories for markets under ESMA remit since previous 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=moderate 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 judgment.

R.35
Cumulative global investment fund
Rebalancing between equity and bond funds

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

R.36
EU bond fund net flows
Reversal in mixed bond fund flows end Q3 2019

Note: Net flows for bond funds, in %. Funds investing in corporate and government bonds that qualify for another category, emerging government bonds reported as Emerging; funds investing in HY corporate bonds reported as HY). Sources: Refinitiv Lipper, ESMA.

R.37
RoR volatilities by fund type
Followed underlying EQ and commodity volatility

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

R.38
Liquidity risk profile of EU28 bond funds
Stable liquidity and mixed maturity changes

Note: Fund types are reported according to their average liquidity ratios, as a percentage (Y-axis), the effective average maturity of their assets (X-axis) and their size. Each series is reported for 2 years, i.e. 2017 (bright colours) and 2018 (dark colours). Sources: Thomson Reuters Lipper, ESMA.

R.39
Financial market interconnectedness
Stable for all but MMFs

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

R.40
Retail fund synthetic risk and reward indicator
Up for equity and commodity funds

Note: The calculated synthetic risk and reward indicator (SSRI) 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 highest levels of volatility). Sources: Refinitiv Lipper, ESMA.