ESMA Risk Dashboard
No. 2, 2020

© European Securities and Markets Authority, Paris, 2020. All rights reserved. Brief excerpts may be reproduced or translated provided the source is cited adequately. The reporting period for this Risk Dashboard is 1 July 2020 to 30 September 2020, unless otherwise indicated. Legal reference for 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 information contained in this publication, including text, charts and data, exclusively serves analytical purposes. It does not provide forecasts or investment advice, nor does it prejudice, preclude or influence in any way past, existing or future regulatory or supervisory obligations by market participants.

The charts and analyses in this report are, fully or in part, 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 their ownership, their reuse by non-customers and, in particular, their accuracy, completeness or timeliness, and the provider’s liability related thereto. Please consult the websites of the individual data providers, whose names are given throughout this report, for more details on these disclaimers. Where third-party data are used to create a chart or table or to undertake an analysis, the third party is identified and credited as the source. In each case, ESMA is cited by default as a source, reflecting any data management or cleaning, processing, matching, analytical, editorial or other adjustments to raw data undertaken.


European Securities and Markets Authority (ESMA)
Risk Analysis and Economics Department
201-203 rue de Bercy
FR-75012 Paris
risk.analysis@esma.europa.eu
ESMA risk assessment

Risk summary
EU financial markets continued their recovery in 3Q20 but remain highly sensitive as the recent volatility spikes around COVID-19 developments and uncertainties around the US election outcomes show. Equity market valuations edged up further, and increasingly show strong geographical and sectoral differentiation. Fixed income markets saw large-scale valuation increases across various segments during 3Q20 with valuations in EM, IG and HY debt indices now higher than pre-crisis. Credit rating downgrades have been slowing in 3Q20 and investment funds recorded inflows across asset classes, especially for bond funds. Taken together, these developments highlight the ongoing risk of decoupling between asset valuations and economic fundamentals. Hence the potential for a sudden reversal in investor’s risk assessment is the key risk we see for EU financial markets currently and we thus maintain our risk assessment. Going forward, we see a prolonged period of risk to institutional and retail investors of further – possibly significant – market corrections and see very high risks across the whole of the ESMA remit. The extent to which these risks will further materialise will critically depend on three drivers: the economic impact of the pandemic, market expectations on monetary and fiscal support measures, and any occurrence of additional external events in an already fragile global environment.

Market assessment

Overall ESMA remit: Markets continued their recovery 3Q20, albeit at a slower pace in equity markets, recovering most if not all losses incurred in 1Q20. These developments highlight the ongoing risk of decoupling between asset valuations and economic fundamentals. ESMA assesses the risks in its overall remit, securities markets, infrastructures and services and in asset management as remaining very high. The same applies to liquidity and market risks, and put a negative outlook on operational, credit, contagion and consumer risks as well as on sovereign and private debt markets. Given the critical role public support measures, in particular by monetary and fiscal authorities, have played in cushioning the economic impact of the pandemic, market perceptions on the sufficiency and sustainability of these measures are set to be important drivers of investment behaviour.

Securities markets: Equity market recovery in the EU slowed in 3Q20, with EU equity prices oscillating around end 2020 levels (+ 0.5% during 3Q20). Market developments show strong geographic and sectoral differentiation. Overall, the Eurostoxx is now around 17% below its mid-February levels with significant variation in market performance across member states, ranging from -7% in DE to -32% in ES. Equity market recovery in other jurisdictions continued in 3Q20, with e.g. valuations in the US around pre-crisis levels. At the end of 3Q20, the S&P 500 stood 0.5% below mid-February levels, amid strong 3Q20 performance (+8.5%). Sectorial performance differences are pointing to potential structural shifts in the economy (technology vs. travel sector); performance of cyclical stocks (e.g. construction, auto, retail) has been picking up whereas performance of financial sector shares remains weak. Bond markets saw a large-scale valuation increase across segments during 3Q20 with valuations of bond indices now above pre-crisis levels for EM (+4.5% since mid-February), IG (+12%) and HY (+16%).

Infrastructures and services: Trading volumes have come down from levels during the COVID-19 crisis while still remaining slightly above pre COVID-19 crisis levels. The trend of increasing lit market trading on equity markets observed during the crisis continued, with no major incident occurring, and a decrease in the number of circuit breakers triggered on EU trading venues. The central clearing environment also remained steady with initial margins remaining above pre-crisis levels, and despite the default of a non-systemic entity in the gas market at one EU CCP. The March-April market volatilities are now part of the historical data used for margin setting and most EU CCPs updated their modelling parameters to reflect the unprecedented market movements. The level of settlement fails at EU CSDs is at pre-crisis levels for corporate and sovereign bonds and also trending back to lower levels for equities. This is despite a spike in September amid increased volumes on EU equity
markets (R.7). Brexit remains a source of risk although third-country recognitions have been granted to UK CCPs allowing them to continue providing clearing services in the EU.

Asset management: The asset management industry continued to experience inflows post COVID-19 across asset classes, with bond funds standing out. Following price developments for the underlying assets, fund performance also turned positive again across asset classes. Return volatilities receded back to lower levels, although remaining above pre-crisis values. Fund leverage returned to pre-crisis levels in Q3 of 2020 after its peak in April 2020. The use of liquidity management tools (LMTs) declined overall, with redemption restrictions remaining in place for some real estate funds. The suspension of eight funds managed by H2O Asset Management on 13 August 2020 illustrates the importance of valuation issues for illiquid assets and subsequent liquidity risk for investors.

Retail investors: The impact of Covid-19 related market movements was visible on the level of complaints in Q2 2020 with an increase in complaints related to funds (R.26, R.27). The most common MiFID service associated with complaints in Q2 2020 was the execution of orders (74%). The shift from actively to passively managed funds continued, with market shares of passive equity UCITS and ETFs continuing to grow. Environmental, Social and Governance (ESG)-oriented assets such as benchmark equity indices and funds have outperformed their non-ESG peers again during the COVID-19 crisis and after.

Risk drivers

Macroeconomic environment: EU GDP is set to fall by -13.5% in Q2 2020 quarter-to-quarter, and by -8.75% for all 2020 with significant variation across Member States. 2020 GDP forecasts have become slightly less pessimistic at the end of the reporting period; however central scenarios point to GDP levels remaining below pre-crisis levels into 2022. Timing and size of economic recovery depend on containment or worsening of the pandemic and associated policy responses. The resulting uncertainty is likely to continue weighing heavily on the economy and on financial markets.

Interest-rate environment: Monetary policy remains accommodative, aiming directly at supporting the economy. However, the resulting prolonged low for long interest rate environment can continue to result in search for yield behaviour and has in this context been cited as a source for the current decoupling of financial asset prices from their fundamentals. The low-for-long interest rate environment is also expected to weigh on the profitability and solvency of banks and insurers.

Sovereign and private debt markets: Sovereign debt issuance continued to be steady in the first half of 2020 amid rising public financing need light of the COVID-19 fiscal policy responses (R.19), and amid deteriorating credit quality (R.48). Rating downgrades overall have been slowing in Q3 2020. However, downgrades and negative outlooks are still dominating with no discernable cross-country differences (R.51, R.52). On corporate bond markets, yields went down markedly across ratings, however more significantly for lower rated bonds, again indicating decoupling risk. IG and HY bond valuations ended the reporting period 14% and 16% above their pre-crisis levels respectively. Our outlook for sovereign and private debt markets is thus deteriorating.

Infrastructure disruptions: EU infrastructures experienced no major disruption in Q3 2020. Amid lower market volatility, circuit breaker (CB) usage declined in Q3 2020, averaging 81 CB triggered per week over the quarter, against 155 in Q2 2020 (R.54). As digitalisation of financial services accelerated as a consequence of the COVID-19 pandemic, operational resilience continues to be a key concern for corporations and consumers. Cyber-attack risks such as business disruptions or data breaches remain among the most widely cited risk sources in the financial industry. Our outlook for operational risk deteriorates, also in the context of Brexit.

Political and event risk: As the likelihood of a trade deal being agreed before the end of the year is limited, the EU and UK are again facing significant potential disruptions towards the end of the year. Nevertheless, the risk of a cliff edge effect in the financial sector is low as market participants should have put in place the necessary contingency plans where their business is affected by the UK leaving the single market at the end of the year. In the area of centralised clearing, UK CCPs will be recognised as third country CCPs (TC-CCPs) eligible to provide their services in the EU, after the end of the transition period. Geopolitical tensions outside and within the EU are still present with a continued potential impact on investors and financial stability going forward.

---

1 A side pocket was created for each of the seven UCITS fund concerned, holding the “private” assets facing valuation uncertainties and remaining suspended. Other assets were transferred to mirror funds that reopened on 13 October.
2 European Commission, European Economic Forecast, Summer 2020.
3 OECD Interim Economic Outlook.
5 Joint Committee Autumn Risk Report.
Key indicators

Markets
Securities markets

R.1
Market performance
Back to end-19 levels for EQ and bonds

R.2
Market volatilities
Volatilities back to pre-crisis levels

R.3
Corporate bond yields by ratings
Reduced yields across ratings

R.4
Equity prices
Stable in 3Q except banks and insurers

Note: Return indices on EU28 equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities), 01/09/2018=100.
Sources: Refinitiv Datastream, ESMA.

Note: Annualised 40-day volatility of return indices on EU28 equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities), in %.
Sources: Refinitiv Datastream, ESMA.

Note: ICE BofAML EA corporate bond redemption yields by rating, in %.
1Y-MA=one-year moving average of all indices.
Sources: Refinitiv Datastream, ESMA.

Note: STOXX Europe 600 equity total return indices. 01/09/2018=100.
Sources: Refinitiv Datastream, ESMA.
Markets

Infrastructures and services

R.5
Sovereign 10Y yields
Reduced yields and spreads

Note: Yields on 10Y sovereign bonds, selected countries, in %. 1Y-MA=one-year moving average of EA 10Y bond indices computed by Datastream.
Sources: Refinitiv Datastream, ESMA.

R.6
Price earning ratios
Valuations above long-term averages

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.7
Settlement fails
Still high level for EQ, with peak in September

Note: Share of failed settlement instructions in the EU27, 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.

R.8
€STR rate and volumes
Continuing smooth transition

Note: €STR rates at 25th, 50th and 75th percentile of volume, in %, and monthly volumes, EUR tn. Pre-€STR rates and volumes prior to 01/10/2019.
Sources: ECB, ESMA.
**R.9**

IRS referencing EONIA and Euribor by maturity

Still significant amounts outstanding

Note: Gross notional amount of IRD outstanding referencing EONIA and EURIBOR, as of 4 September 2020.
Sources: TRs, ESMA.

**R.10**

Initial Margins held at EU CCPs

Decrease, but higher than pre-crisis levels

Note: Initial margin required as well as additional margin posted by EU CCP, in EUR bn.
Sources: Clarus Financial Technology, CPMI-IOSCO PQD, ESMA.

**R.11**

CCP Margin breaches

Driven by 1Q20 COVID-19 market stress

Note: Average and maximum margin breach size over the past 12 month at selected EU CCPs, as a percentage of the total margin held, as of 30 June 2020.
Sources: Clarus Financial Technology, PQD, ESMA.
Markets

Asset management

R.12
Global investment funds
Outflows across types and 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: REFINITY Lipper, ESMA

R.13
Fund performance
Positive for EQ

Note: EU-domiciled investment funds’ annual average monthly returns, asset weighted, in %.
Sources: Thomson Reuters Lipper, ESMA.

R.14
Assets by fund type
Growth trend resumed across fund industry

Note: AuM of EA funds by fund type, EUR tn.
Sources: ECB, ESMA.

R.15
Rate of return volatilities by fund type
Still relatively high for EQ and CO

Note: Annualised 40D historical return volatility of EU domiciled mutual funds, in %.
Sources: Thomson Reuters Lipper, ESMA.
R.16
Leverage by fund type

Increased leverage during crisis

Note: Leverage of EA investment funds by fund type computed as the AuM/NAV ratio.
Sources: ECB, ESMA.

R.17
EU bond fund net flows

Net inflows for all types of bond funds

Note: Two-month 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 reported as Emerging; funds investing in HY corporate bonds reported as HY.
Sources: Thomson Reuters Lipper, ESMA.

R.18
Bond funds credit risks

Better credit quality for HY in 3Q20

Note: Average credit quality (S&P ratings; 1= AAA; 4= BBB; 10 = D).
Sources: Thomson Reuters Lipper, ESMA.

R.19
Bond funds’ maturity and liquidity profile

Stable maturity and liquidity profiles

Note: Effective average maturity of fund assets in years; ESMA liquidity ratio (rhs, in reverse order).
Sources: Thomson Reuters Lipper, ESMA.

R.20
MMF assets and leverage

Increasing size, but lower leverage in 2Q20

Note: NAV and AuM of EA MMFs, EUR bn. Leverage computed as the AuM/NAV ratio. 5Y-MA=five-year moving average of the leverage ratio.
Sources: ECB, ESMA.

R.21
MMF liquidity and maturity

Increasing MMF liquidity

Note: Weighted average maturity (WAM) of EU prime MMFs, in days. Aggregation carried out using individual MMF data weighted by AuM.
Sources: Fitch Ratings, ESMA.
ETF NAV by asset type
NAV increasing for all types of ETFs

Note: NAV of EU ETFs by asset type, EUR bn. Sources: Refinitiv Lipper, ESMA.

ETF net flows by domicile
Inflows in EU and US

Note: ETF net flows by domicile, in % of NAV. Sources: Refinitiv Lipper, ESMA.

Markets
Consumers

EA households’ net acquisition of financial assets
Increased acquisition of financial assets in 2Q

Note: Net acquisition of financial assets and net incurrence of liabilities for EA households as a share of their gross disposable income adjusted for changes in pension entitlements, based on a one-year rolling period, in %. IF shares=investment fund shares. Other financial assets=insurance technical reserves, financial derivatives, loans granted and other accounts receivable. Net financial flows=Net household lending (positive values) or borrowing (negative values) to/from sectoral financial accounts. Liabilities multiplied by -1 to present as outflows. Sources: ECB, ESMA.

Investor sentiment
Still low but with higher expectations

Note: Sentix Sentiment Indicators for the EA retail and institutional investors on a ten-year horizon. The zero benchmark is a risk-neutral position. Sources: Refinitiv Datastream, ESMA.
Complaints by cause

Increase in complaints after Covid

Note: Share of complaints for quarterly-reporting NCAs (n=14) received direct from consumers and via firms recorded as associated with a given MiFID service, excluding complaints with no such category recorded, all reporting channels, %. "Total with MiFID service reported"=Total complaints received via these reporting channels recorded as associated with a MiFID service.

Risk categories

Liquidity risk

Composite equity liquidity index

Spike in July, return to low levels after

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, Hui-Heubel 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

Sovereign bond liquidity dispersion

Liquidity improved, although still high dispersion

Note: Dispersion of liquidity measured as median across countries of the bid-ask yields difference for 10Y sovereign bonds, in bps. 20 EU27 countries are included.
**R.30**  
Corporate bond liquidity  
**Bid-ask spreads remaining high**

![Graph showing bid-ask spreads for corporate bonds](image)  
**Note:** bid-ask spread, in %, computed as 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.31**  
Bond futures liquidity  
**Liquidity improving to pre-crisis levels**

![Graph showing bond futures liquidity](image)  
**Note:** One-month moving averages of the Hui-Heubel illiquidity indicator for selected 10Y sovereign bond futures, in %.  
Sources: Refinitiv Datastream, ESMA.

**R.32**  
Sovereign repo volumes  
**Slight increase in July**

![Graph showing sovereign repo volumes](image)  
**Note:** Repo transaction volumes executed through CCPs in 7 sovereign EA repo markets (AT, BE, DE, FI, FR, IT and NL), EUR bn.  
Sources: RepoFunds Rate, ESMA.

**R.33**  
Repo market specialness  
**Multi-year lows in specialness**

![Graph showing repo market specialness](image)  
**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.
Risk categories

Market risk

R.34
Economic policy uncertainty
Still high level of uncertainty

R.35
Financial instrument volatilities
Still above pre-crisis levels

R.36
Exchange rates
EUR appreciating against USD, JPY, EM

R.37
Exchange rate volatilities
Spike for EUR-GBP

Note: Economic Policy Uncertainty Index (EPU), developed by Baker et al. (www.policyuncertainty.com), based on the frequency of articles in European newspapers that contain the following triple: “economic” or “economy”, “uncertain” or “uncertainty” and one or more policy-relevant terms. Global aggregation based on PPP-adjusted GDP weights. Implied volatility of EURO STOXX 50 (VSTOXX) monthly average, on the right-hand side.
Sources: Baker, Bloom, and Davis 2015; Refinitiv Datastream, ESMA.

Note: Spot exchange rates to Euro. Emerging is a weighted average (2016 GDP) of spot exchange rates for CNY, BRL, RUB, INR, MXN, IDR and TRY. 01/09/2018=100. Increases in value represent an appreciation of EUR. 1Y-MA USD=one-year moving average of the USD exchange rate.
Sources: ECB, IMF, ESMA.

Note: Implied volatilities for 3M options on exchange rates, in %. 1Y-MA USD (resp. 1Y-MA GBP) is the one-year moving average of the implied volatility for 3M options on EUR-USD (resp. EUR-GBP) exchange rate.
Sources: Refinitiv Eikon, ESMA.
Risk categories

Contagion risk

R.38
Composite systemic stress indicator
Decrease, but remaining above pre-crisis level

R.39
Sectoral equity indices correlation
Differentiation across sectors

R.40
Equity market concentration
Decreased concentration

R.41
Dispersion in sovereign yield correlation
High co-movement across countries

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

Note: Concentration of notional value of equity trading by national indices computed as a 1M-MA of the Herfindahl-Hirschman Index, in %. Cboe indices included are AT 20, BE 20, DE 30, DK 25, ES 35, FI 25, FR 40, IE 20, IT 40, NL 25, PT 20, SE 30 and UK 100. Sources: Cboe, ESMA.
Risk categories

Credit risk

R.42
Financial market interconnectedness
Back at end-19 levels, drop for MMFs

R.43
Sovereign risk premia
Low risk premia

R.44
Sovereign CDS spreads
Continued decline in 3Q20
Corporate issuer downgrades

Downgrades still dominating

Note: Number of EU27+UK corporate issuers with at least one bond downgraded, and rate downgraded corporate issues over upgrades and downgrades (rhs)
Sources: ESMA, RADAR

Ratings outlook by rating

Corporate ratings’ outlook negatively skewed

Note: Corporate non financial instruments (ISINs) with outlook rated by the Big 5 (Fitch, Moody’s, S&P, Scope and DBRS) by category value over the total ratings per category value
Sources: RADAR, ESMA. Cut-off date: 08/10/2020.

Risk categories

Operational risk

Circuit-breaker trigger events by sector

High share of basic mat. and health care

Note: Percentage of circuit-breaker trigger events by economic sector registered on 34 EEA31 trading venues for all constituents of the STOXX Europe LargeMidSmall 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.

Circuit-breaker trigger events by market capitalisation

Back to pre-crisis levels

Note: Number of daily circuit-breaker trigger events by type of financial instrument and by market cap registered on 34 EEA31 trading venues for all constituents of the STOXX Europe LargeMidSmall 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.55
Trading system capacity proxy

Back to lower trading volumes, spike in July

Note: Daily and 3M-MA of trading volumes of 34 EEA21 trading venues for all constituents of the STOXX Europe LargeMid/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 %.
Sources: Morningstar Real-Time Data, ESMA.