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ESMA Risk Dashboard

11 November 2020

ESMA Risk Dashboard
No. 2, 2020

 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.

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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 sectorial 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.

ESMA remit	Level	Outlook	Risk categories	Level	Outlook	Risk drivers	Outlook
Overall ESMA remit			Liquidity			Macroeconomic environment	
Securities markets			Market			Interest-rate environment	
Infrastructures and services			Contagion			Sovereign and private debt markets	
Asset management			Credit			Infrastructure disruptions	
Consumers			Operational			Political and event risks	

Note: Assessment of the main risks by risk segments for markets under ESMA's remit since the last assessment, and outlook for the forthcoming quarter. Assessment of the main risks by risk categories and sources for markets under ESMA's remit since the last assessment, and outlook for the forthcoming quarter. Risk assessment based on categorisation of the European Supervisory Authorities (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 and 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.

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 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 2Q20 levels (+ 0.5% during 3Q20). Market developments show strong geographic and sectorial 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 3Q20 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 28 August 2020 illustrates the importance of valuation issues for illiquid assets and subsequent liquidity risk for investors[1].

Retail investors: The impact of Covid-19 related market movements was visible on the level of complaints in 2Q20 with an increase in complaints related to funds (R.26, R.27). the most common MiFID service associated with complaints in 2Q20 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 2Q20 quarter-to-quarter, and by -8.75% for all 2020 with significant variation across Member States[2]. 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.[3] 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.[4] The low-for-long interest rate environment is also expected to weigh on the profitability and solvency of banks and insurers.[5]

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 3Q20. 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 3Q20. Amid lower market volatility, circuit breaker (CB) usage declined in 3Q20, averaging 81 CB triggered per week over the quarter, against 155 in 2Q20 (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.

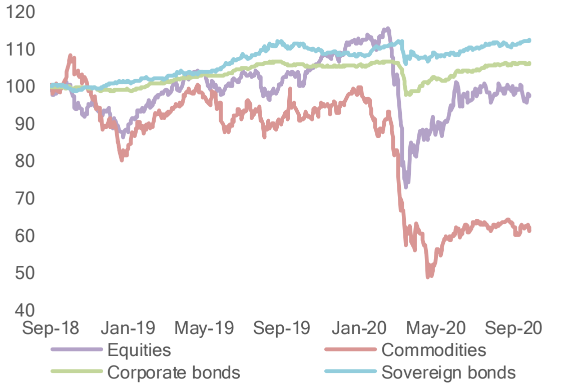
[4] "The Disconnect between Financial Markets and the Real Economy", IMF Special Notes Series on COVID-19, August 26, 2020.

[5] Joint Committee Autumn Risk Report.

Key indicators

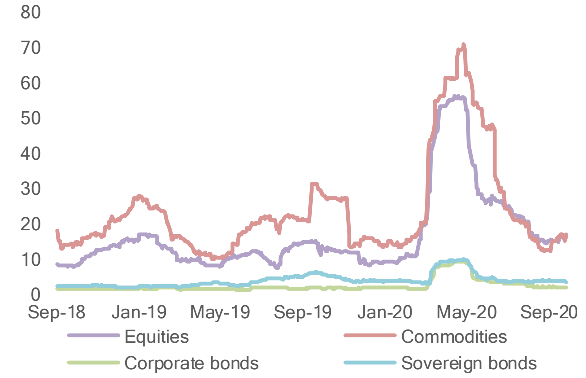
Markets
Securities markets

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



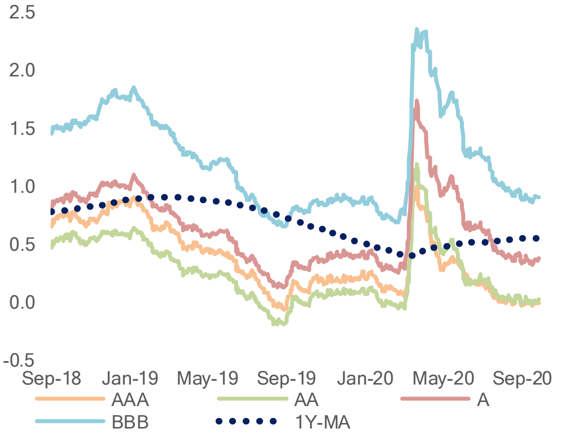
Note: Return indices on EU28 equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities). 01/09/2018=100.
Sources: Refinitiv Datastream, ESMA.

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



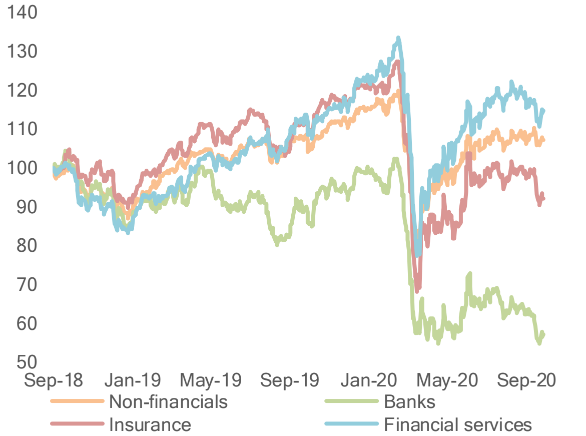
Note: Annualised 40-day volatility of return indices on EU28 equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities), in %.
Sources: Refinitiv Datastream, ESMA.

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



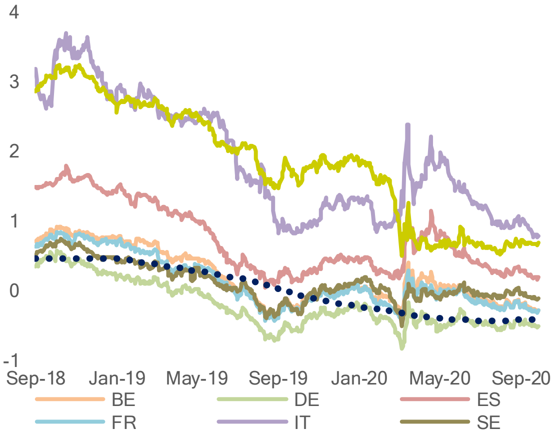
Note: : ICE BofAML EA corporate bond redemption yields by rating, in %. 1Y-MA=one-year moving average of all indices.
Sources: Refinitiv Datastream, ESMA.

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



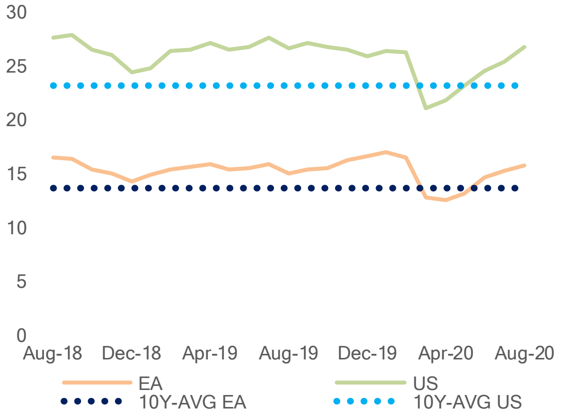
Note: STOXX Europe 600 equity total return indices. 01/09/2018=100.
Sources: Refinitiv Datastream, ESMA.

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

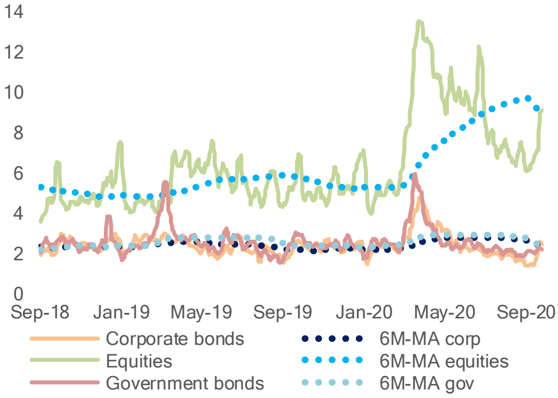


Note: Price-earning ratios based on average inflation-adjusted earnings from the previous 10 years (cyclically-adjusted price-earning ratios). Averages computed from the most recent data point up to 10 years before.
Sources: Refinitiv Datastream, ESMA.

Markets

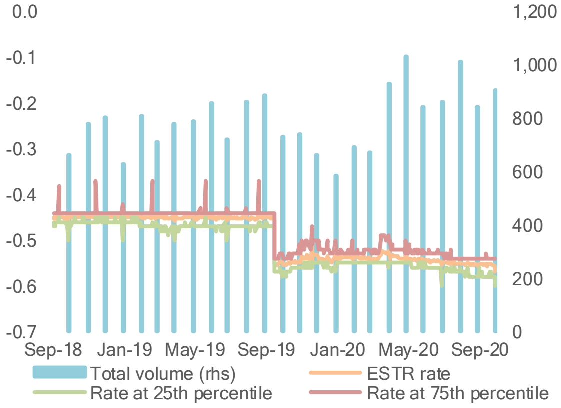
Infrastructures and services

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



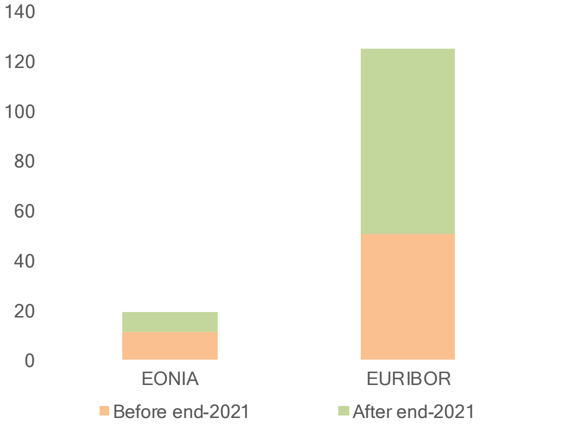
Note: Share of failed settlement instructions in the EU27, in % of value, one-week moving averages. Jump in December 2018 due to a single transaction of EUR 500 bn instructed on 10 December with settlement requested on the same day, which was finally cancelled on 18 December.
Sources: National Competent Authorities, ESMA.

R.8
€STR rate and volumes
Continuing smooth transition



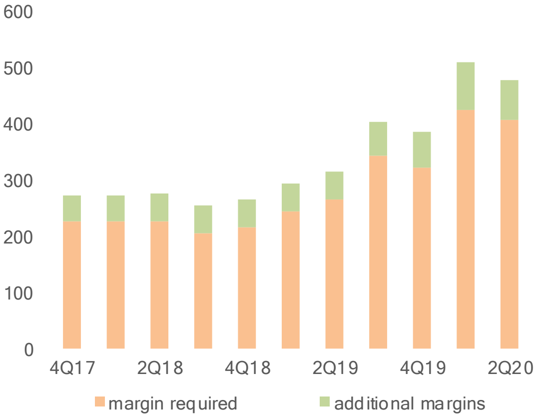
Note: €STR rates at 25th, 50th and 75th percentile of volume, in %, and monthly volumes, EUR tn. Pre-€STR rates and volumes prior to 01/10/2019.
Sources: ECB, ESMA.

R.9
IRS referencing EONIA and Euribor by maturity
Still significant amounts outstanding



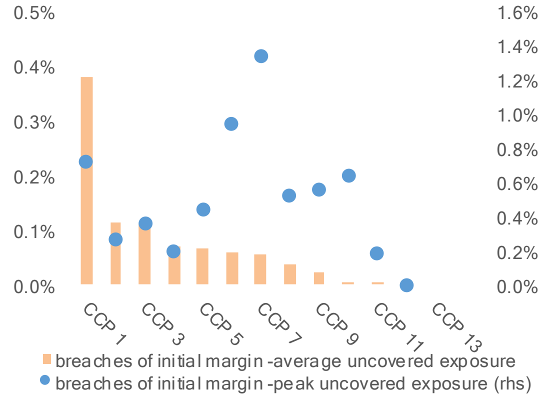
Note: Gross notional amount of IRD outstanding refercing EONIA and EURIBOR, as of 4 September 2020.
Sources: TRs, ESMA.

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.

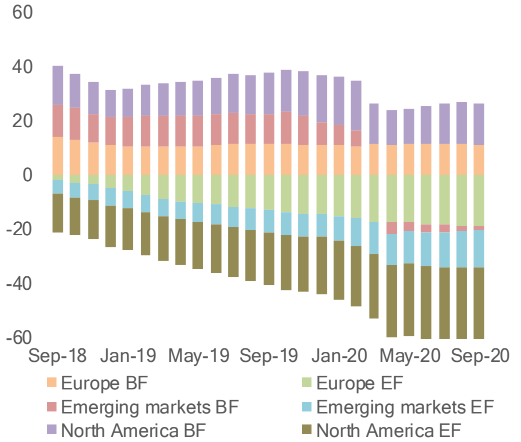
Markets

Asset management

R.12

Global investment funds

Outflows across types and regional focus

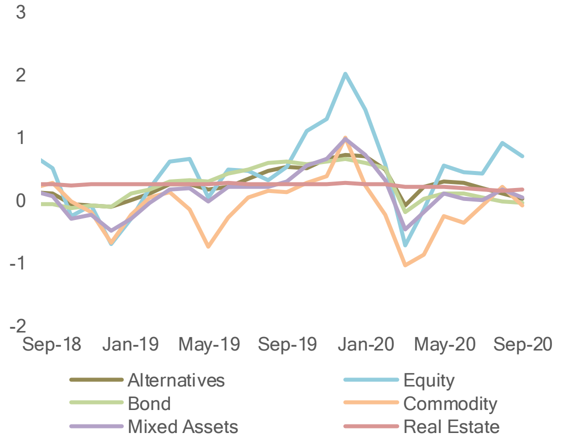


cNote: Cumulative net flows into bond and equity funds (BF and EF) over time since 2004 by regional investment focus, EUR bn.
Sources: REFINITIV Lipper, ESMA

R.13

Fund performance

Positive for EQ

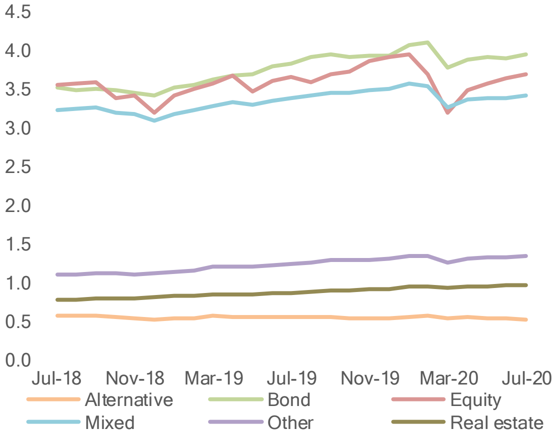


Note: EU-domiciled investment funds' annual average monthly returns, asset weighted, in %.
Sources: Thomson Reuters Lipper, ESMA.

R.14

Assets by fund type

Growth trend resumed across fund industry

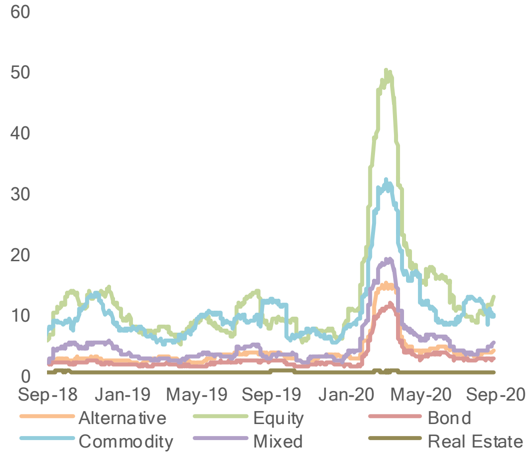


Note: AuM of EA funds by fund type, EUR tn.
Sources: ECB, ESMA.

R.15

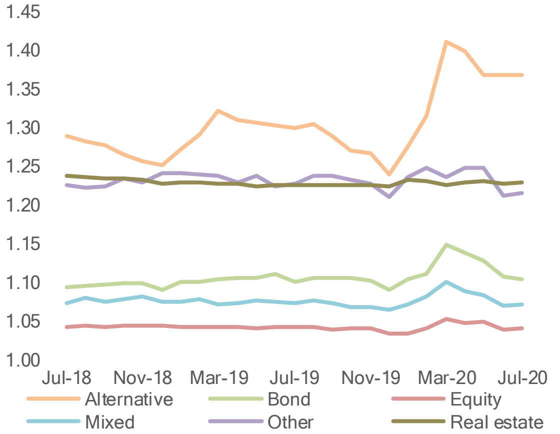
Rate of return volatilities by fund type

Still relatively high for EQ and CO



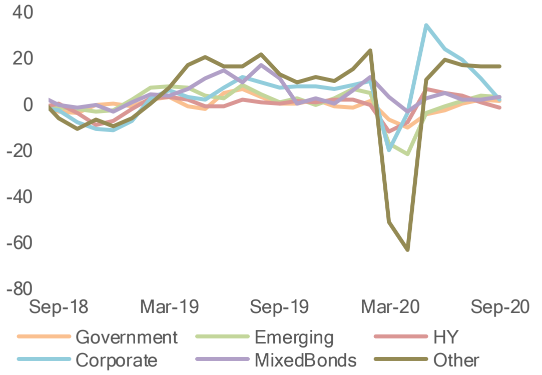
Note: Annualised 40D historical return volatility of EU domiciled mutual funds, in %.
Sources: Thomson Reuters Lipper, ESMA.

R.16
Leverage by fund type
Increased leverage during crisis



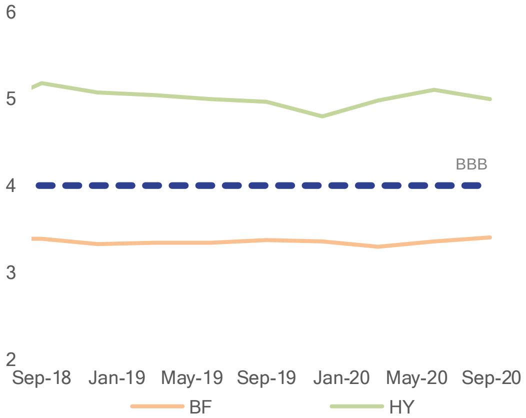
Note: Leverage of EA investment funds by fund type computed as the AuM/NAV ratio.
Sources: ECB, ESMA.

R.17
EU bond fund net flows
Net inflows for all types of bond funds



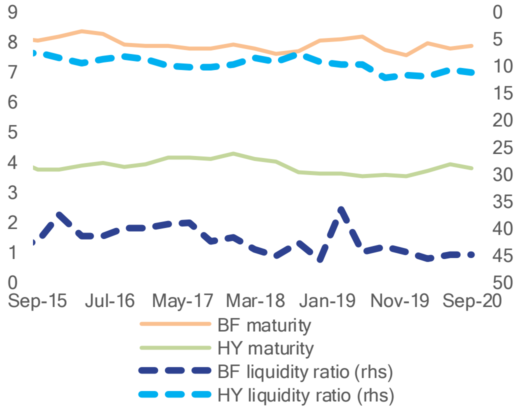
Note: Two-month cumulative net flows for bond funds, EUR bn. Funds investing in corporate and government bonds that qualify for another category are only reported once e.g. funds investing in emerging government bonds reported as Emerging; funds investing in HY corporate bonds reported as HY).
Sources: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

R.18
Bond funds credit risks
Better credit quality for HY in 3Q20



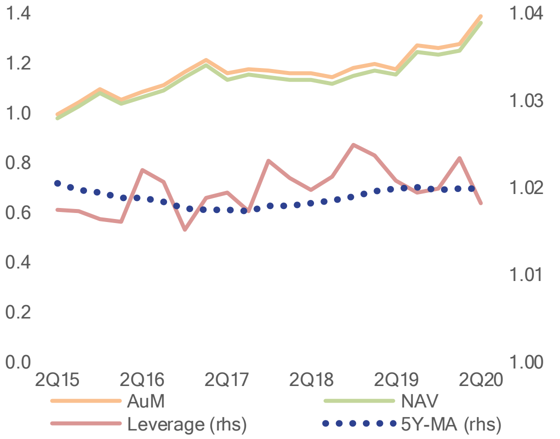
Note: Average credit quality (S&P ratings; 1= AAA; 4= BBB; 10 = D).
Sources: Thomson Reuters Lipper, ESMA.

R.19
Bond funds' maturity and liquidity profile
Stable maturity and liquidity profiles



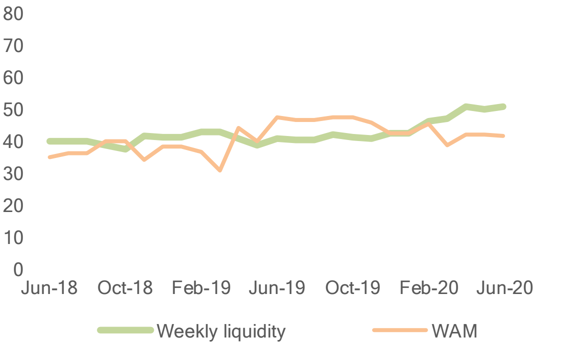
Note: Effective average maturity of fund assets in years; ESMA liquidity ratio (rhs, in reverse order).
Sources: Thomson Reuters Lipper, ESMA.

R.20
MMF assets and leverage
Increasing size, but lower leverage in 2Q20



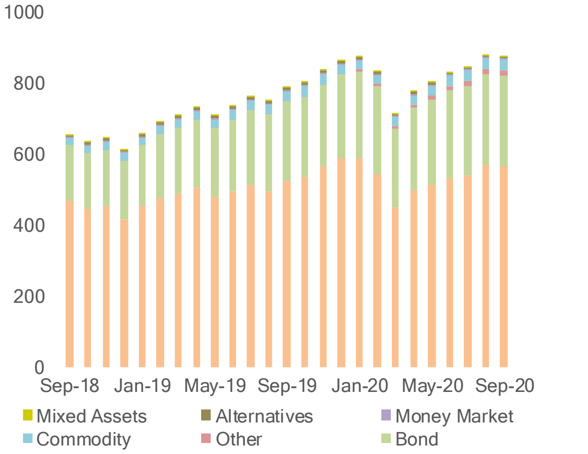
Note: NAV and AuM of EA MMFs, EUR tn. Leverage computed as the AuM/NAV ratio. 5Y-MA=five-year moving average of the leverage ratio.
Sources: ECB, ESMA.

R.21
MMF liquidity and maturity
Increasing MMF liquidity



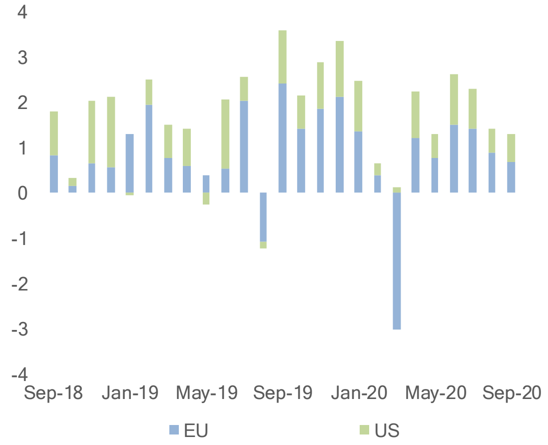
Note: Weighted average maturity (WAM) of EU prime MMFs, in days. Aggregation carried out by weighting individual MMFs' WAM by AuM. Weekly liquidity includes all assets maturing overnight and shares by AAA MMFs, securities issued by highly rated sovereigns with a maturity of less than one year, in % of total assets. Aggregation carried out using individual MMF data weighted by AuM
Sources: Fitch Ratings, ESMA.

R.22
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.

R.23
ETF net flows by domicile
Inflows in EU and US

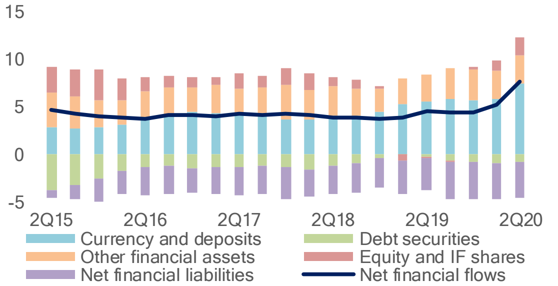


Note: ETF net flows by domicile, in % of NAV.
Sources: Refinitiv Lipper, ESMA.

Markets

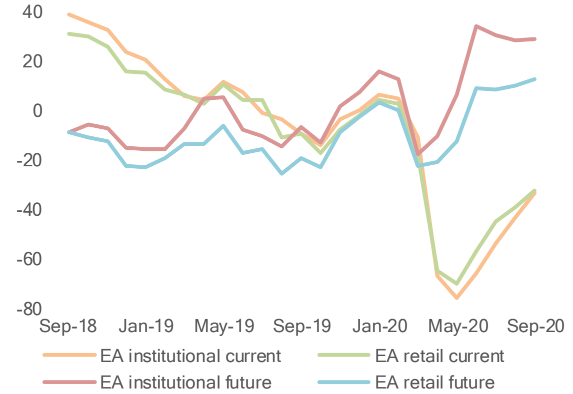
Consumers

R.24
EA households' net acquisition of financial assets
Increased acquisition of financial assets in 2Q



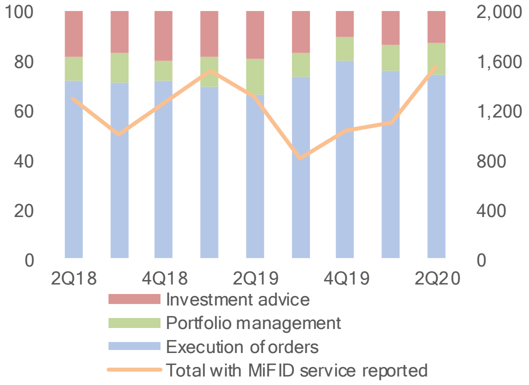
Note: Net acquisition of financial assets and net incurrence of liabilities for EA households as a share of their gross disposable income adjusted for changes in pension entitlements, based on a one-year rolling period, in %. IF shares=investment fund shares. Other financial assets=Insurance technical 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.

R.25
Investor sentiment
Still low but with higher expectations



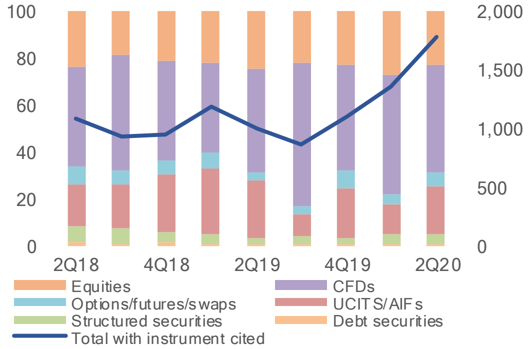
Note: Sentix Sentiment Indicators for the EA retail and institutional investors on a ten-year horizon. The zero benchmark is a risk-neutral position.
Sources: Refinitiv Datastream, ESMA.

R.26
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.

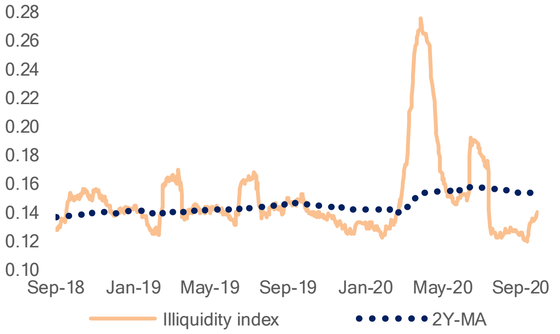
R.27
Complaints by financial instruments
Increase in complaints related to funds



Note: Share of complaints from quarterly-reporting NCAs (n=14) received direct from consumer and via firms by type of financial instrument, where none of the instruments listed was reported. 'Total with instrument cited'=number of complaints via these reporting channels excluding those with instrument type not reported or reported as 'other' or 'N/A'. 'Total complaints'=number of complaints via these reporting channel whether or not further categorisation possible. 'CFDs''=Contracts for Differences.
Sources: ESMA complaints database

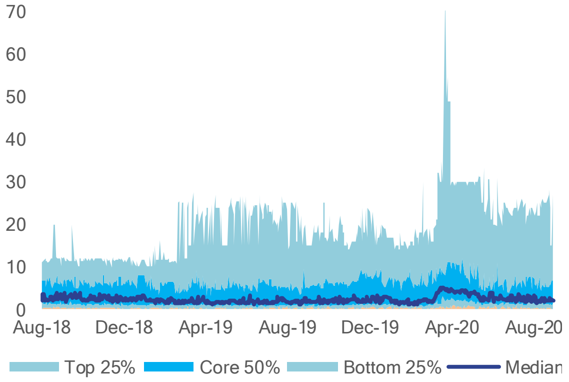
Risk categories
Liquidity risk

R.28
Composite equity liquidity index
Spike in July, return to low levels after



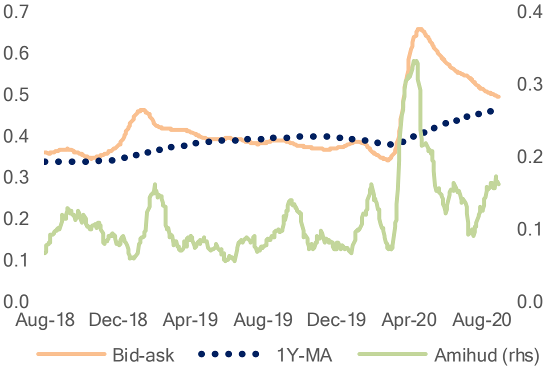
Note: Composite indicator of illiquidity in the equity market for the current STOXX Europe Large 200 constituents, computed by applying the principal component methodology to six input liquidity measures (Amihud illiquidity coefficient, bid-ask spread, Hui-Heubel ratio, turnover value, inverse turnover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

R.29
Sovereign bond liquidity dispersion
Liquidity improved, although still high dispersion



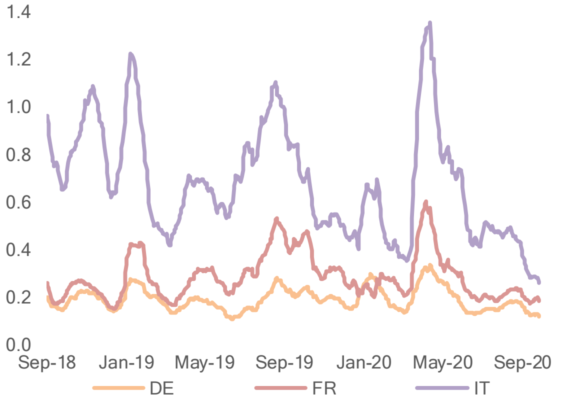
Note: Dispersion of liquidity measured as median across countries of the bid-ask yields difference for 10Y sovereign bonds, in bps. 20 EU27 countries are included.

R.30
Corporate bond liquidity
Bid-ask spreads remaining high



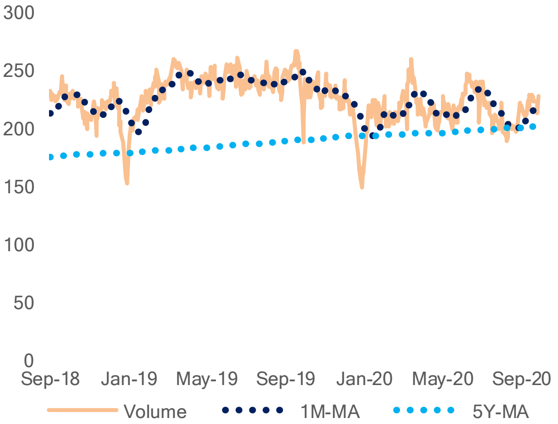
Note: Markit iBoxx EUR Corporate bond index bid-ask spread, in %, computed as a one-month moving average of the iBoxx components in the current composition. 1Y-MA=one-year moving average of the bid-ask spread. Amihud liquidity coefficient index between 0 and 1. Highest value indicates less liquidity.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

R.31
Bond futures liquidity
Liquidity improving to pre-crisis levels



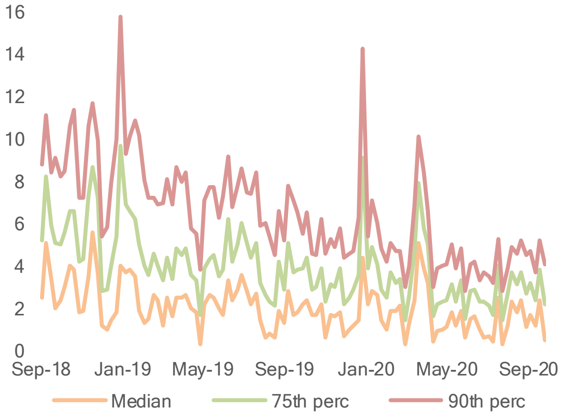
Note: One-month moving averages of the Hui-Heubel illiquidity indicator for selected 10Y sovereign bond futures, in %.
Sources: Refinitiv Datastream, ESMA.

R.32
Sovereign repo volumes
Slight increase in July



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

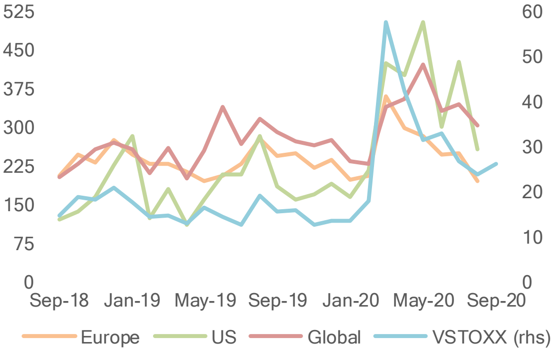


Note: Median, 75th and 90th percentile of weekly specialness, measured as the difference between general collateral and special collateral repo rates on government bonds in selected countries.
Sources: RepoFunds Rate, ESMA.

Risk categories

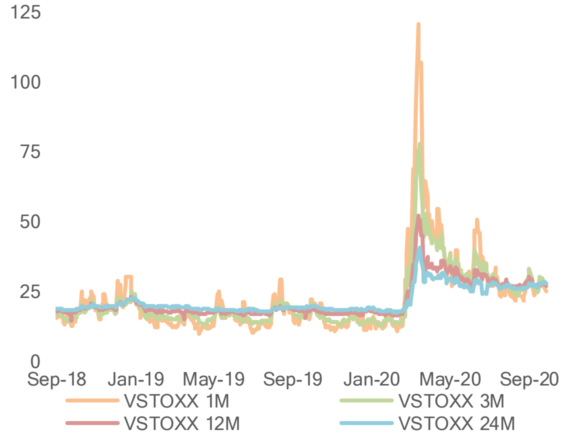
Market risk

R.34
Economic policy uncertainty
Still high level of uncertainty



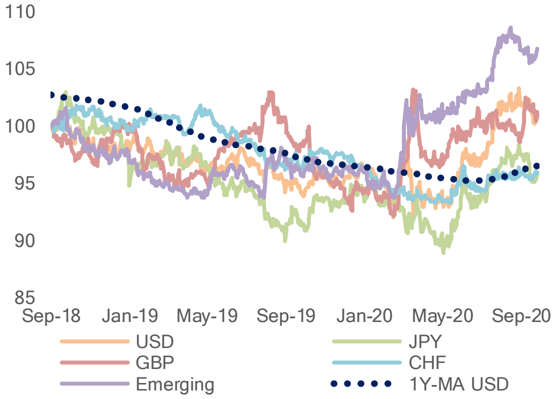
Note: Economic Policy Uncertainty Index (EPU), developed by Baker et al. (www.policyuncertainty.com), based on the frequency of articles in European newspapers that contain the following triple: "economic" or "economy", "uncertain" or "uncertainty" and one or more policy-relevant terms. Global aggregation 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.

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



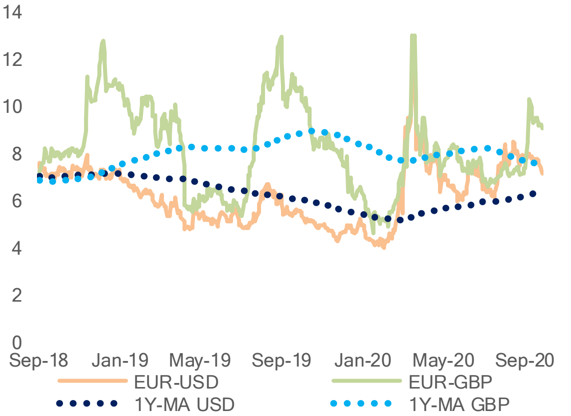
Note: EURO STOXX 50 implied volatilities, measured as price indices, in %.
Sources: Refinitiv EIKON, Refinitiv Datastream, ESMA.

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



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.

R.37
Exchange rate volatilities
Spike for EUR-GBP

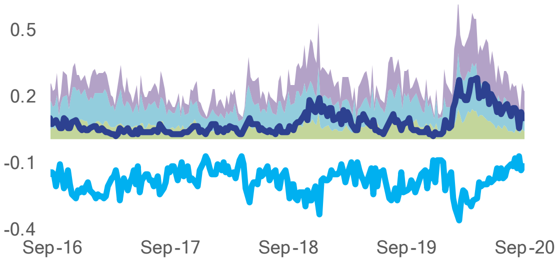


Note: Implied volatilities for 3M options on exchange rates, in %. 1Y-MA USD (resp. 1Y-MA GBP) is the one-year moving average of the implied volatility for 3M options on EUR-USD (resp. EUR-GBP) exchange rate.
Sources: Refinitiv EIKON, ESMA.

Risk categories

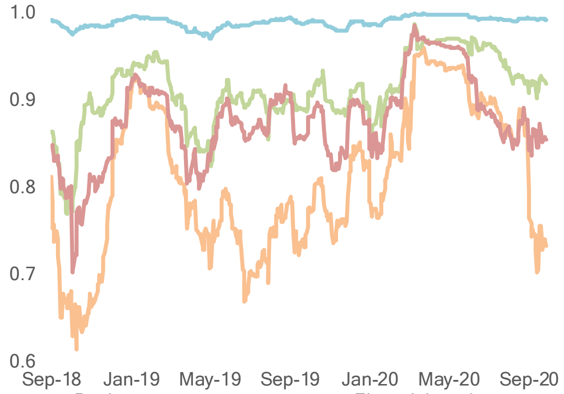
Contagion risk

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



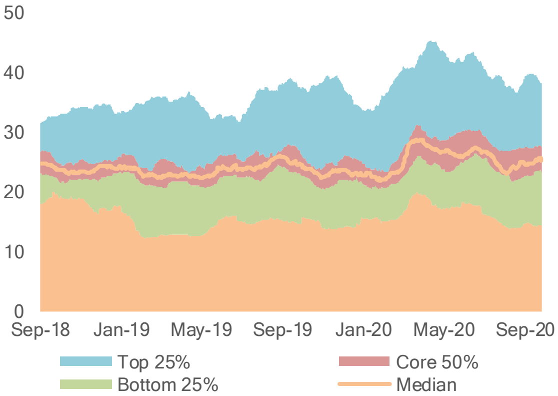
Note: ESMA version of the ECB-CISS indicator measuring systemic stress in securities markets. It focuses on three financial market segments: equity, bond and money markets, aggregated through standard portfolio theory. It is based on securities market indicators such as volatilities and risk spreads.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

R.39
Sectoral equity indices correlation
Differentiation across sectors



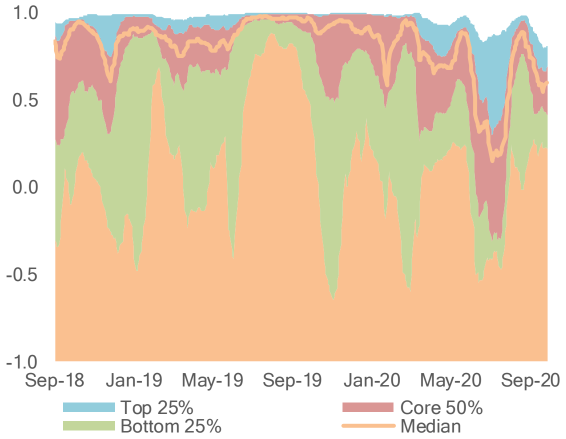
Note: Correlations between daily returns of the STOXX Europe 600 and STOXX Europe 600 sectoral indices. Calculated over 60D rolling windows.
Sources: Refinitiv Datastream, ESMA.

R.40
Equity market concentration
Decreased concentration



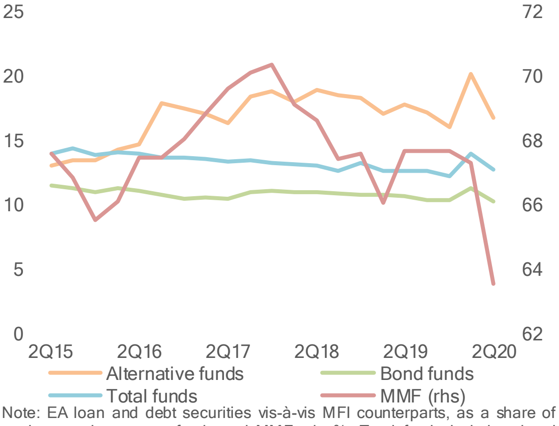
Note: Concentration of notional value of equity trading by national indices computed as a 1M-MA of the Herfindahl-Hirschman Index, in %. Cboe indices included are AT 20, BE 20, DE 30, DK 25, ES 35, FI 25, FR 40, IE 20, IT 40, NL 25, PT 20, SE 30 and UK 100.
Sources: Cboe, ESMA.

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



Note: Dispersion of correlations between 10Y DE Bunds and other EU27 countries' sovereign bond redemption yields over 60-day rolling windows.
Sources: Refinitiv Datastream, ESMA.

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

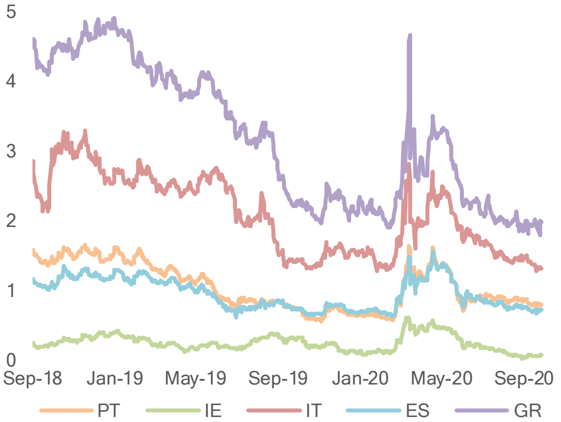


Note: EA loan and debt securities vis-à-vis MFI counterparts, as a share of total asset, investment funds and MMFs, in %. Total funds includes: bond funds, equity funds, mixed funds, real estate funds, hedge funds, MMFs and other non-MMF investment funds.
Sources: ECB, ESMA.

Risk categories

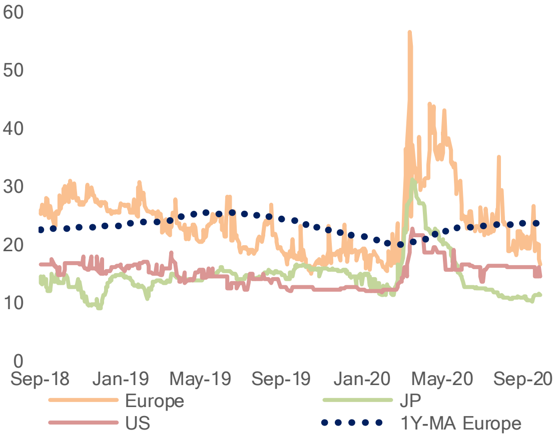
Credit risk

R.43
Sovereign risk premia
Low risk premia



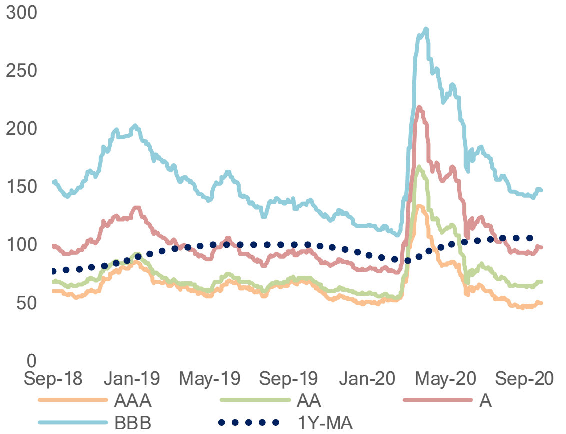
Note: Selected 10Y EA sovereign bond risk premia (vs. DE Bunds), in %.
Sources: Refinitiv Datastream, ESMA.

R.44
Sovereign CDS spreads
Continued decline in 3Q20



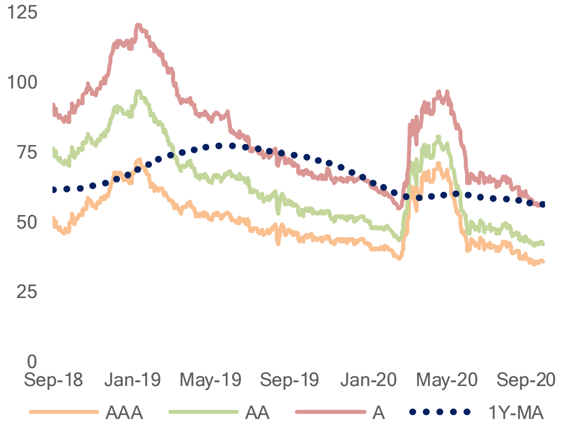
Note: Datastream CDS sovereign indices (5 years, mid-spread), in bps.
Sources: Refinitiv Datastream, ESMA.

R.45
Corporate bond spreads
Back to more compressed levels



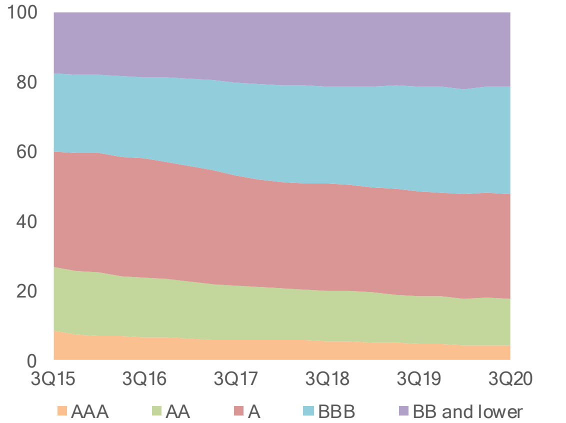
Note: ICE BofAML EA corporate bond option-adjusted spreads by rating, in bps. 1Y-MA=one-year moving average of all indices.
Sources: Refinitiv Datastream, ESMA.

R.46
Covered bond spreads
Decline to pre-crisis levels



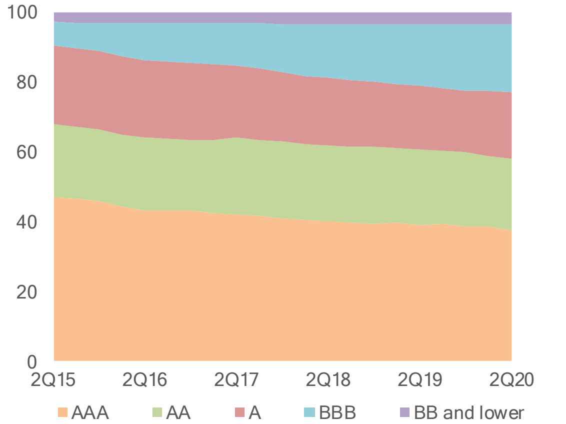
Note: iBoxx EUR covered bond option-adjusted spreads by rating, in bps. 1Y-MA=one-year moving average of all indices.
Sources: Refinitiv Datastream, ESMA.

R.47
Long term corporate debt outstanding
Increasing share of BBB and lower



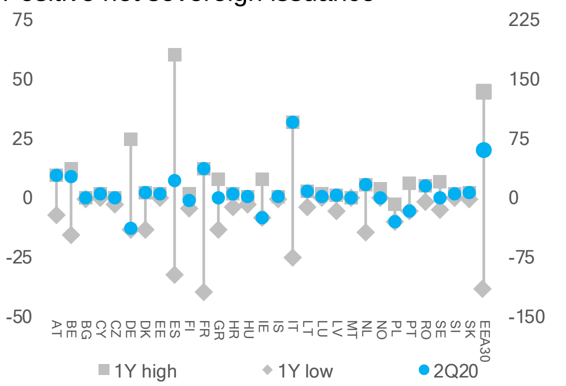
Note: Outstanding amount of corporate bonds in the EEA30 as of issuance date by rating category, in% of the total.
Sources: Refinitiv EIKON, ESMA.

R.48
Long term sovereign debt outstanding
Lowering share of AAA



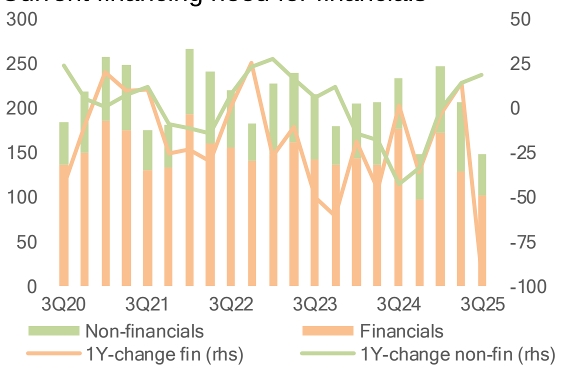
Note: Outstanding amount of sovereign bonds in the EEA30 as of issuance date by rating category, in % of the total.
Sources: Refinitiv EIKON, ESMA.

R.49
Net sovereign debt issuance
Positive net sovereign issuance



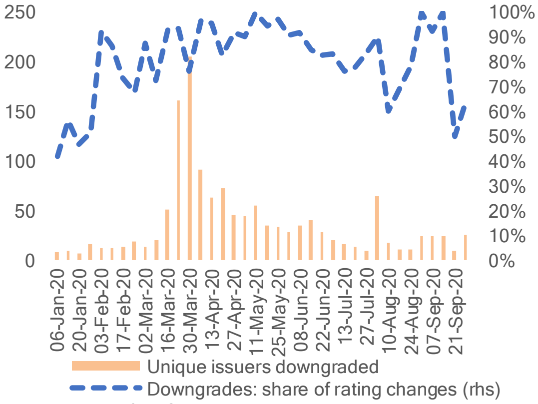
Note: Quarterly net issuance of EEA30 sovereign debt by country, EUR bn. Net issuance calculated as the difference between new issuance over the quarter and outstanding debt maturing over the quarter. Highest and lowest quarterly net issuance in the past year are reported. EEA30 total on right-hand scale.
Sources: Refinitiv EIKON, ESMA.

R.50
Debt redemption profile
Current financing need for financials



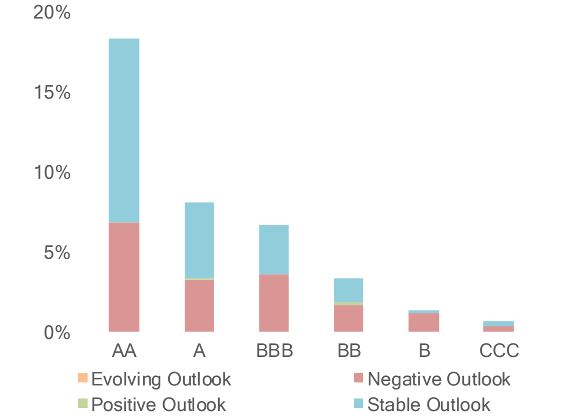
Note: Quarterly redemptions over 5Y-horizon by EEA30 private financial and non-financial corporates, EUR bn. 1Y-change=difference between the sum of this year's (four last quarters) and last year's (8th to 5th last quarters) redemptions.
Sources: Refinitiv EIKON, ESMA.

R.51
Corporate issuer downgrades
Downgrades still dominating



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

R.52
Ratings outlook by rating
Corporate ratings' outlook negatively skewed

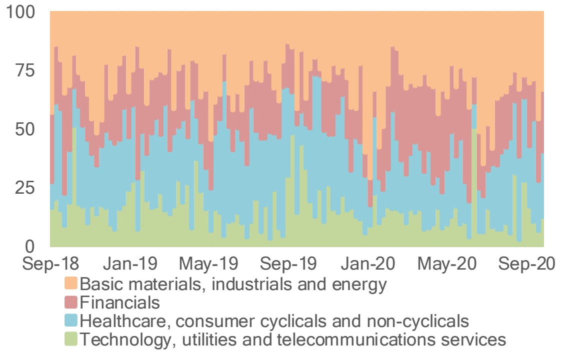


Note: Corporate non financial instruments (ISINs) with outlook rated by the Big 5 (Fitch, Moody's, S&P, Scope and DBRS) by category value over the total ratings per category value
Sources: RADAR, ESMA. Cut-off date: 08/10/2020.

Risk categories

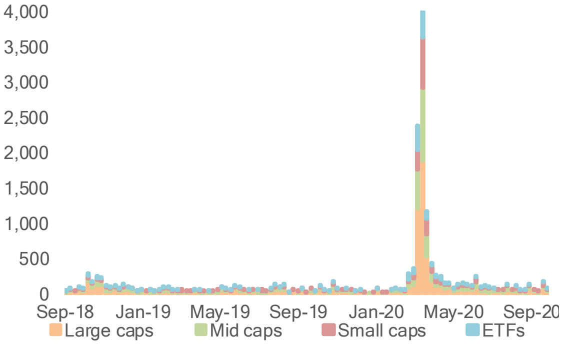
Operational risk

R.53
Circuit-breaker trigger events by sector
High share of basic mat. and health care



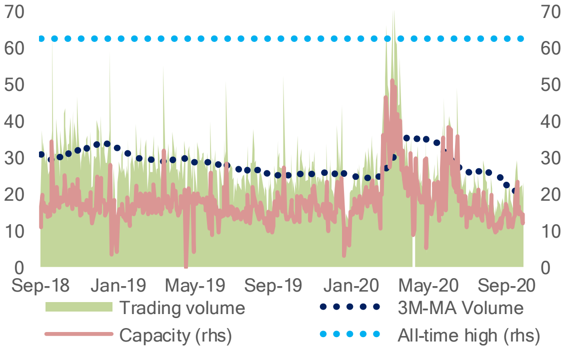
Note: Percentage of circuit-breaker trigger events by economic sector registered on 34 EEA31 trading venues for all constituents of the STOXX Europe Large/Mid/Small 200 and a large sample of ETFs tracking these indices or some of their subindices. Results displayed as weekly aggregates.
Sources: Morningstar Real-Time Data, ESMA.

R.54
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 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.55
Trading system capacity proxy
Back to lower trading volumes, spike in July



Note: Daily and 3M-MA of trading volumes of 34 EEA31 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 %.
Sources: Morningstar Real-Time Data, ESMA.

European Securities and
Markets Authority