



ESMA Risk Dashboard

3 June 2021









No. 1, 2021

2

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ESMA risk assessment

Risk summary

Valuations in EU financial markets for most market segments are now at or above levels compared to pre-COVID-19 levels. They remain highly sensitive to events and volatile, as shown by the recent Gamestop related market movements and news on potential slow roll-out of vaccines driving equity prices. Fixed income valuations, notably for IG and HY corporate bonds are now far above their pre-COVID-19 levels, in part due to the continued monetary policy support. A sudden risk reassessment amid the general decoupling of securities prices from economic fundamentals remains the main risk for EU financial markets and we thus maintain our risk assessment. Credit risk is likely to increase further due to increasing corporate and public debt levels. Going forward, we high risks across the whole of the ESMA remit. The extent to which these risks will further materialise will critically depend on market expectations on monetary and fiscal policy support as well on the pace of the economic recovery.



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. 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: EU market valuations are now at or above levels compared to before the COVID-19 related market stress for most market segments, indicating a continued decoupling of securities prices from economic fundamentals with a risk of potentially significant market corrections. The extent to which these risks will materialise will critically depend on market expectations on monetary and fiscal policy support as well on the pace of the economic recovery. Hence, 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 we put a negative outlook on credit, contagion, and consumer risks as well as on sovereign and private debt markets.

Securities markets: Markets continued their recovery during 1Q21 with US and EU equity price/earning ratios hiking up (R.6). US equity markets stood 20% and the Eurostoxx 50 2% above pre-COVID-19 levels at the end of 1Q21, with significant variations between member states (from +9% in DE to -14% in ES) (R.1). Volatility receded in 1Q21, with event-driven spikes related to COVID-19 related newsflow, but also to spill-overs from Gamestop-related market movements in the US in January. Strong valuation increases were also observed on corporate bond markets, for investment grade (IG) and high-yield (HY) bonds whose valuations stand now far above pre-crisis levels (16% and 49% above for IG and HY respectively). Crypto

assets are at all-time highs. Their market capitalisation has grown quickly to over EUR 1.7tn at the end of 1Q21 amid growing retail and institutional investor interest. Meanwhile, political deliberations on the EU Commission's proposal for a Regulation of crypto assets have started between co-legislators.

Infrastructures and services: Following Brexit, and as a consequence of the share trading obligation (STO) introduced in MIFIR, most onexchange trading of EU shares moved to EU venues, with the share of lit trading on EU venues going from 71% in December to 96% in January, and auction trading from 84% to 93%. The central clearing environment remained stable over the reporting period. The level of settlement fails at EU CSDs is at pre-pandemic levels for corporate and sovereign bonds. Equity settlement fails came down from their end-2020 peak of 12% but remain above pre-pandemic levels. Risks arising from interconnections can be significant as shown by the Archegos event at the end of March. Archegos defaulted on margin calls related to Total Return Swap positions at various global investment banks, with multi-billion losses.

Asset management: As stress receded after the beginning of the pandemic, bond funds have reduced their cash holdings, while the credit risk profile of IG bond funds has slightly deteriorated (R.18). EU MMFs continued to expand their NAVs. Liquidity buffers deteriorated slightly, although remaining substantially above prestress levels and regulatory requirements (R.21, R.22). EU-domiciled hedge funds reduced their leverage through derivatives but increased their

financial leverage through borrowings. The overall interconnectedness of the financial system through bank-to-fund connections remains below pre-crisis levels across fund-types (R.42). Concerns over valuation of portfolio assets have clearly emerged, especially for real estate funds, while Liquidity Management Tools (LMTs) availability varies considerably across fund types and jurisdiction.¹ Valuation uncertainty linked to Greensill-related exposures led Credit Suisse to suspend redemptions in seven LUdomiciled AIFs with a NAV of EUR 8.7bn.

Retail investors: Retail trading increased during and since the pandemic, potentially due to increase in savings stemming from restrained consumption under repeated lockdowns (R.24), digitalisation, high volatility encouraging speculation and relatively low valuations at the end of 1Q20 after the sharp downward movement at the start of the pandemic. In January, a number of heavily shorted US companies, prominently including Gamestop, saw their equity prices, trading volumes and volatility soar following massive purchases by retail investors using leverage while being amplified by forced buying from short sellers and underwriters of options. Although market rules and structures are different in the European Union, it cannot be ruled out that similar circumstances may develop here. ESMA released a statement² highlighting risks connected to social media driven trading decisions for retail investors and will continue monitoring this type of trading activities and possible spill overs to EU financial markets. Closet indexing continued to decline from 10% in 4Q19 to 6% of funds in 4Q20 according to the latest ESMA closet index indicator's (CII) data.

Risk drivers

Macroeconomic environment: In their spring European economic forecast the European Commission projects a stronger than anticipated recovery in the EU, with growth of 4.2% in 2021 and 4.4% in 2022 (up from 3.7% and 3.9%, respectively in the winter forecast). Economic growth is set to gather momentum in the summer as vaccination programmes progress and containment measures gradually ease. An improved outlook for the global economy is also set to support the recovery³. Nevertheless, the pace of recovery is projected to vary significantly across Member States. The medium-term severity, especially in presence of new COVID-19 variants and potential delays in the roll-out of vaccination programs could also delay the easing of containment measures. The COVID-19-related economic impact could thus be more pronounced than anticipated. Finally, sustainability of government support measures could become a risk in the short to medium term.

Interest-rate environment: Monetary policy remained supportive of the economy. The resulting low-for-long interest rate environment continues to lead to search-for-yield behaviour, which fuels the decoupling of financial asset prices from their fundamentals. Low interest rates are also expected to weigh on the profitability and solvency of banks and insurers.

Sovereign and private debt markets: Corporate bond valuations are now significantly above pre-COVID-19 levels, in a major and rapid recovery unseen after previous crises. Monetary and fiscal policy support in response to the COVID-19 pandemic facilitate sovereign and corporate debt issuances. The resulting higher sovereign and corporate debt levels raise the risk of future debt sustainability issues, potentially leading to reassessment of credit risk going forward. Additionally, sovereign yields increased during the first half of 1Q21 (R.5, R.43) even though at a slower pace in the EU than in the US, amid investors' concerns about a rise in inflation (+80bps in the US, +29bps on average in the EU over 1Q21).

Infrastructure disruptions: EU infrastructures experienced no major disruption in 1Q21. Circuit breaker (CB) usage remained low in 1Q21, averaging 55 CB triggered per week over the quarter, against 105 in 4Q20 (R.54). Taking this into consideration, and as no relevant effects from Brexit materialised on EU financial market infrastructures, our outlook for operational risk improves from deteriorating to stable.

Political and event risk: With Brexit behind and more economic and political predictability in the U.S. our political and event risk assessment remains stable although sources of geopolitical instability still exist both in neighbouring and more distant regions. Progress on reigning in the Corona pandemic will continue impacting market sentiment.

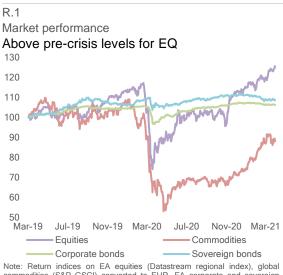
¹ <u>Recommendation of the ESRB on liquidity risks in</u> <u>investment funds</u>.

² ESMA highlights risks to retail investors of social media driven share trading.

³ <u>European Commission, European Economic Forecast.</u> <u>Spring 2021.</u>

Key indicators

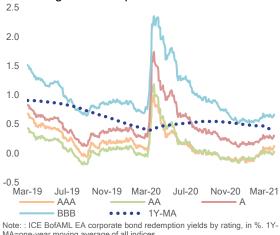
Markets Securities markets



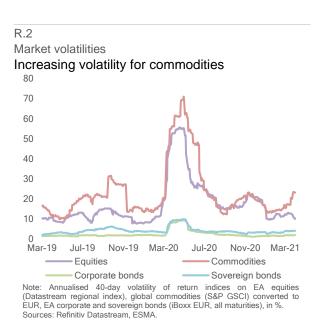
Note: Return indices on EA equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities). 01/03/2019=100. Sources: Refinitiv Datastream, ESMA.

R.3

Corporate bond yields by ratings Increasing until mid-quarter

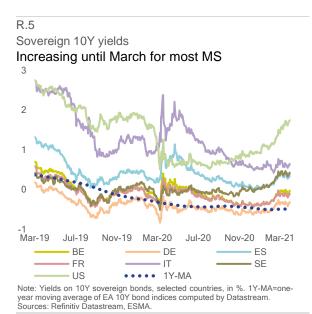


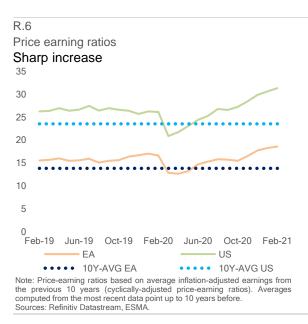
MA=one-year moving average of all indices. Sources: Refinitiv Datastream, ESMA.



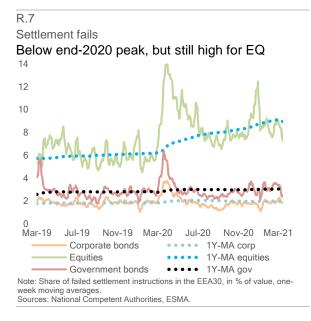
R.4 Equity prices Further increases during 1Q21

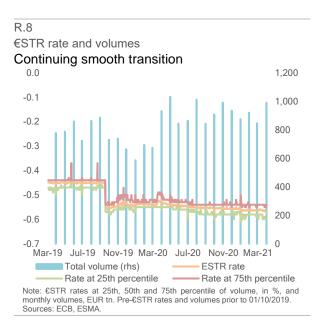






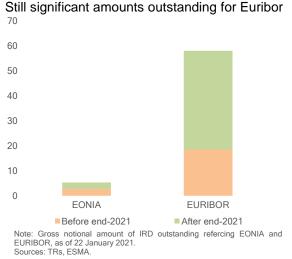
Markets Infrastructures and services





R.9

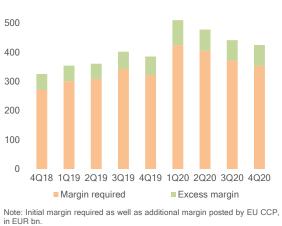
IRS referencing EONIA and Euribor by maturity



R.10

600

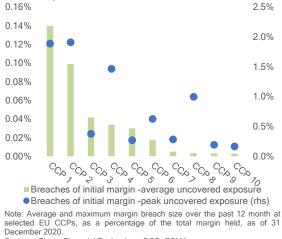
Initial Margins held at EU CCPs Decrease, but higher than pre-crisis levels



Sources: Clarus Financial Technology, CPMI-IOSCO PQD, ESMA.

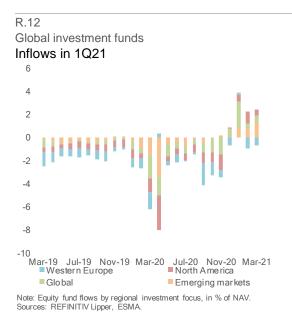
R.11

CCP Margin breaches Driven by 1Q20 COVID-19 market stress



Sources: Clarus Financial Technology, PQD, ESMA.

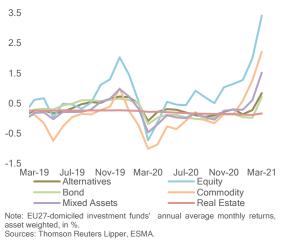
Markets Asset management



R.14 Assets by fund type Growth trend continued across fund industry 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0 Jan-19 May-19 Sep-19 Jan-20 May-20 Sep-20 Jan-21 Alternative Bond - Equity - Mixed Other -Real estate Note: AuM of EA funds by fund type, EUR tn. Sources: ECB, ESMA.

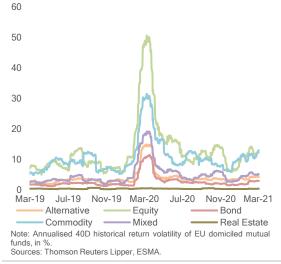
R.13 Fund performance

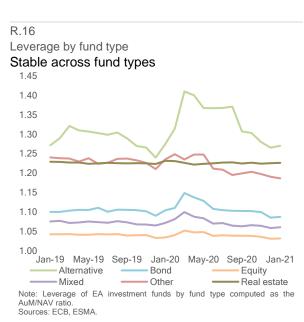
Sharp performance increase across asset classes 4.5

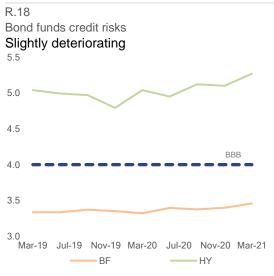




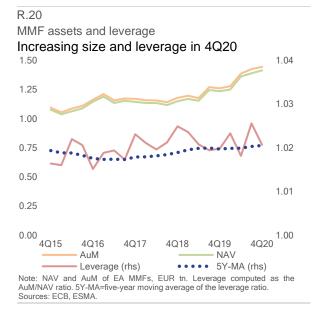
Rate of return volatilities by fund type increasing volatilities

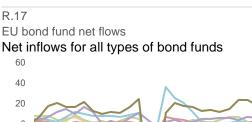




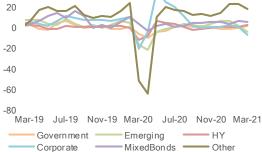


Note: Average credit quality (S&P ratings; 1= AAA; 4= BBB; 10 = D). Sources: Refinitiv Lipper, ESMA.





No. 1, 2021



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 governm ent bonds reported as Emerging; funds investing in HY corporate bonds reported as HY). Sources: Thomson Reuters Lipper, ESMA.





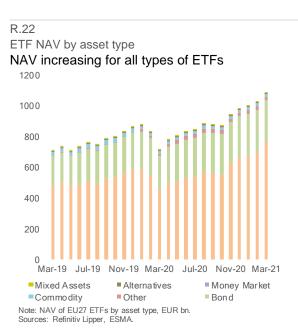
Note: Effective average maturity of fund assets in years; ESMA liquidity ratio (rhs, in reverse order). Sources: Thomson Reuters Lipper, ESMA.

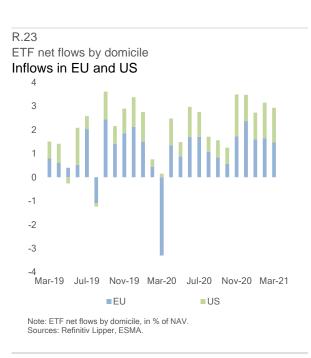
R.21 MMF liquidity and maturity Slightly deteriorating MMF liquidity



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 Europe-domiciled MMF data weighted by AuM. Sources: Fitch Ratings, ESMA.

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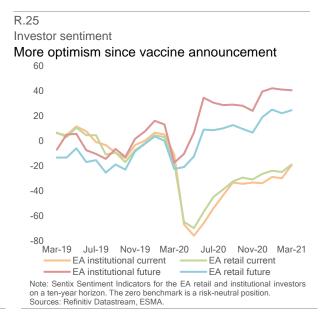
Markets Consumers

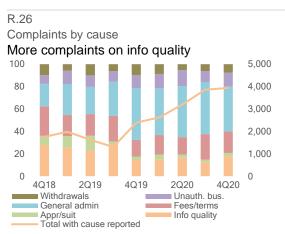
R.24

EA households' net acquisition of financial assets Increased acquisition of financial assets in 3Q

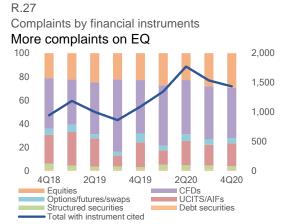


Currency and deposits — Net financial itows Note: Net acquisition of financial assets and net incurrence of liabilities for EA households as a share of their gross disposable income adjusted for changes in pension entitlements, based on a one-year rolling period, in %. IF shares=investment fund shares.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



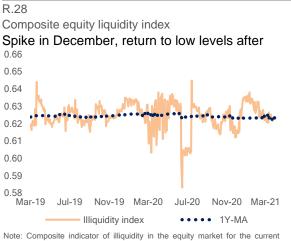


Note: Share of complaints for quarterly-reporting NCAs (n=14) received direct from consumers and via firms by underlying cause, excluding complaints with no cause recorded, %. 'Unauth. bus.'=Unauthorised business. 'Appr/suit'=Appropriateness or suitability assessment. 'Info quality'=Quality or lack of information. 'Total with cause reported'=Number of complaints via these reporting channels including those with none of the listed causes recorded. Sources: ESMA complaints database



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

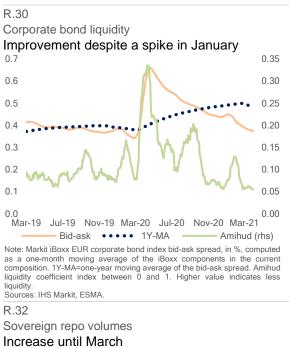
Risk categories Liquidity risk

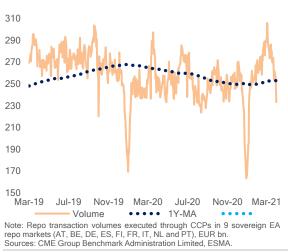


Note: Composite indicator or iniquidity in the equity market for the current STOXX Europe Large 200 constituents, computed by applying the principal component methodology to six input liquidity measures (Amihud illiquidity coefficient, bid-ask spread, Hui-Heubel ratio, turnover value, inverse turnover 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 Stable liquidity, although still high dispersion 70 60 50 40 30 20 10 Nov-19 Mar-20 Mar-19 Jul-19 Jul-20 Nov-20 Mar-21 Top 25% Core 50% Bottom 25% Median Note: Dispersion of liquidity measured as median across countries of the bid-

ask yields difference for 10Y sovereign bonds, in bps. Lower figures mean more liquidity and vice-versa. 22 EEA30 countries are included. Sources: Refinitiv EIKON, ESMA.





Bond futures liquidity Spike in illiquidity in January 1.50 1 25 1.00 0.75 0.50 0.25 0.00 Mar-19 Jul-19 Nov-19 Mar-20 Jul-20 Nov-20 Mar-21 DE -FR - IT Note: One-month moving averages of the Hui-Heubel illiquidity indicator for selected 10Y sovereign bond futures, in %. Sources: Refinitiv Datastream, ESMA. R.33 Repo market specialness Peak in March 18 16 14 12 10



R.31

8 6

4

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0 Mar-19

Jul-19

- Median

Nov-19 Mar-20

Sources: CME Group Benchmark Administration Limited, ESMA.

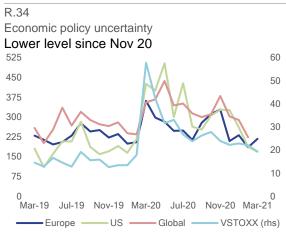
- 75th perc

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.

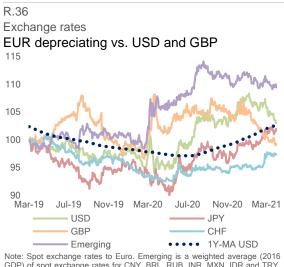
Jul-20 Nov-20 Mar-21

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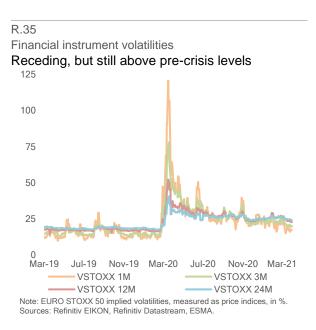
- 90th perc

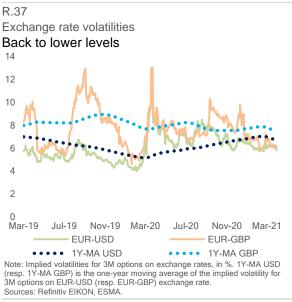


Note: Economic Policy Uncertainty Index (EPU), developed by Baker et al. (www.policyuncertainty.com), based on the frequency of articles in European newspapers that contain the following triple: "economic" or "economy", "uncertain" or "uncertainty" and one or more policy-relevant terms. Global aggregation 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. 01/03/2019=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.

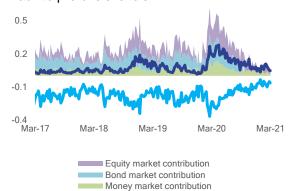




Risk categories Contagion risk

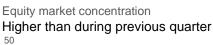
R.38

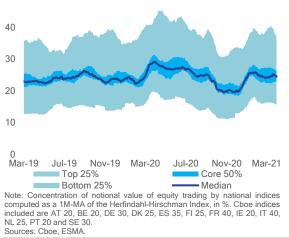
Composite systemic stress indicator Back to pre-crisis levels



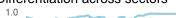
Note: ESMA version of the ECB-CISS indicator measuring systemic stress in securities markets. It focuses on three financial market segments: equily, bond and money markets, aggregated through standard portfolio theory. It is based on securities market indicators such as volatilities and risk spreads.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

R.40





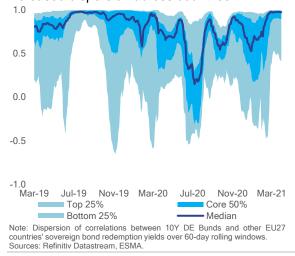
R.39 Sectoral equity indices correlation Differentiation across sectors

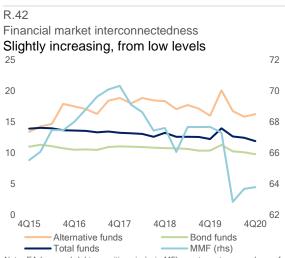




R.41

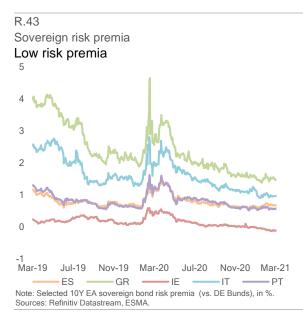
Dispersion in sovereign yield correlation Increased dispersion across countries

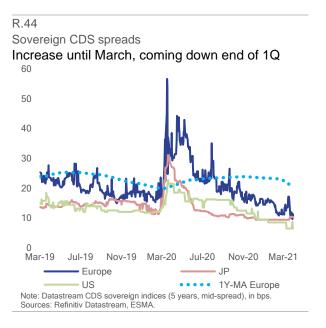


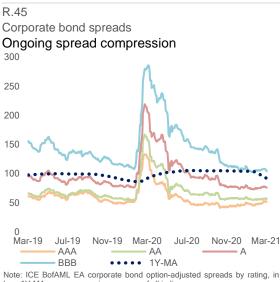


Note: EA loan and debt securities vis-à-vis MFI counterparts, as a share of total asset, investment funds and MMFs, in %. Total funds includes: bond funds, equity funds, mixed funds, real estate funds, hedge funds, MMFs and other non-MMF investment funds. Sources: ECB, ESMA.

Risk categories Credit risk





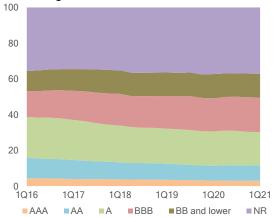


Sources: Refinitiv Datastream, ESMA.

R.47

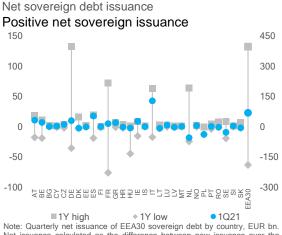


Increasing share of BBB and lower

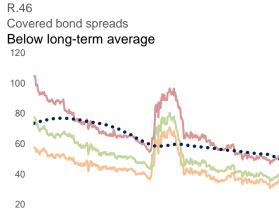


Note: Outstanding amount of corporate bonds in the EEA30 as of issuance date by rating category, in % of the total. Maturities < 12 months are excluded. Sources: Refinitiv EIKON, ESMA.

R.49



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. All maturities are included. Sources: Refinitiv EIKON, ESMA.

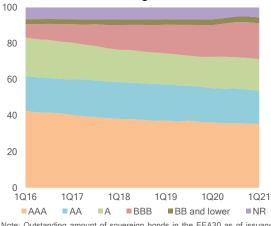


0 Mar-19 Jul-19 Nov-19 Mar-20 Jul-20 Nov-20 Mar-21 AAA — AA A A ••••• 1Y-MA Note: iBoxx EUR covered bond option-adjusted spreads by rating, in bps. 1Y-MA=one-year moving average of all indices. Sources: Refinitiv Datastream, ESMA.

R.48

No. 1, 2021

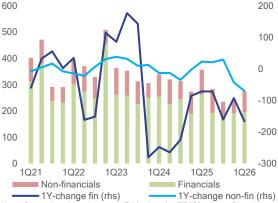
Long term sovereign debt outstanding Share of AAA decreasing



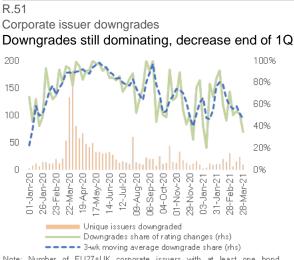
Note: Outstanding amount of sovereign bonds in the EEA30 as of issuance date by rating category, in % of the total. Maturities < 12 months are excluded. Sources: Refinitiv EIKON, ESMA.

R.50

Debt redemption profile Current financing need for financials



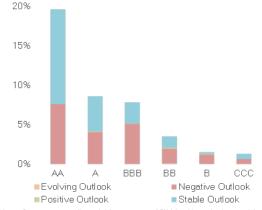
Note: Quarterly redemptions over 5Y-horizon by EEA30 private financial and non-financial corporates, EUR bn. 1Y-change=difference between the sum of this year's (four last quarters) and last year's (8th to 5th last quarters) redemptions. Maturities < 12 months are excluded. Sources: Refinitiv EIKON, ESMA.



Note: Number of EU27+UK corporate issuers with at least one bond downgraded, and ratio of dowgraded corporate issues over upgrades and downgrades (3 week moving average). Sources:ESMA, RADAR

R.52



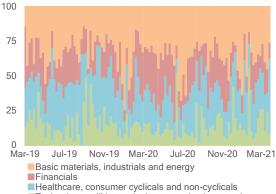


Note: Corporate non financial instruments (ISINs) with outlook rated by the Big 5 (Fitch, Moody's, S&P, Scope and DBRS) by category value over the total ratings per category value. Cutoff date 31/3/2021. Sources: RADAR, ESMA.

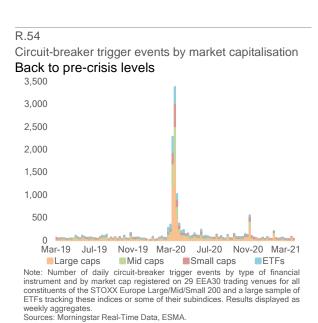
Risk categories Operational risk

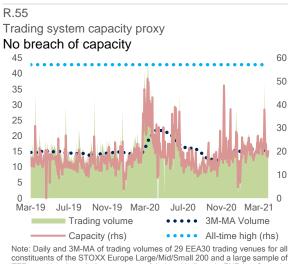
R.53

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



Finalicials
Healthcare, consumer cyclicals and non-cyclicals
Technology, utilities and telecommunications services
Note: Percentage of circuit-breaker trigger events by economic sector registered on 29 EEA30 trading venues for all constituents of the STOXX Europe Largel/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.





Note: Daily and 3M-MA of trading volumes of 29 EEA30 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.





