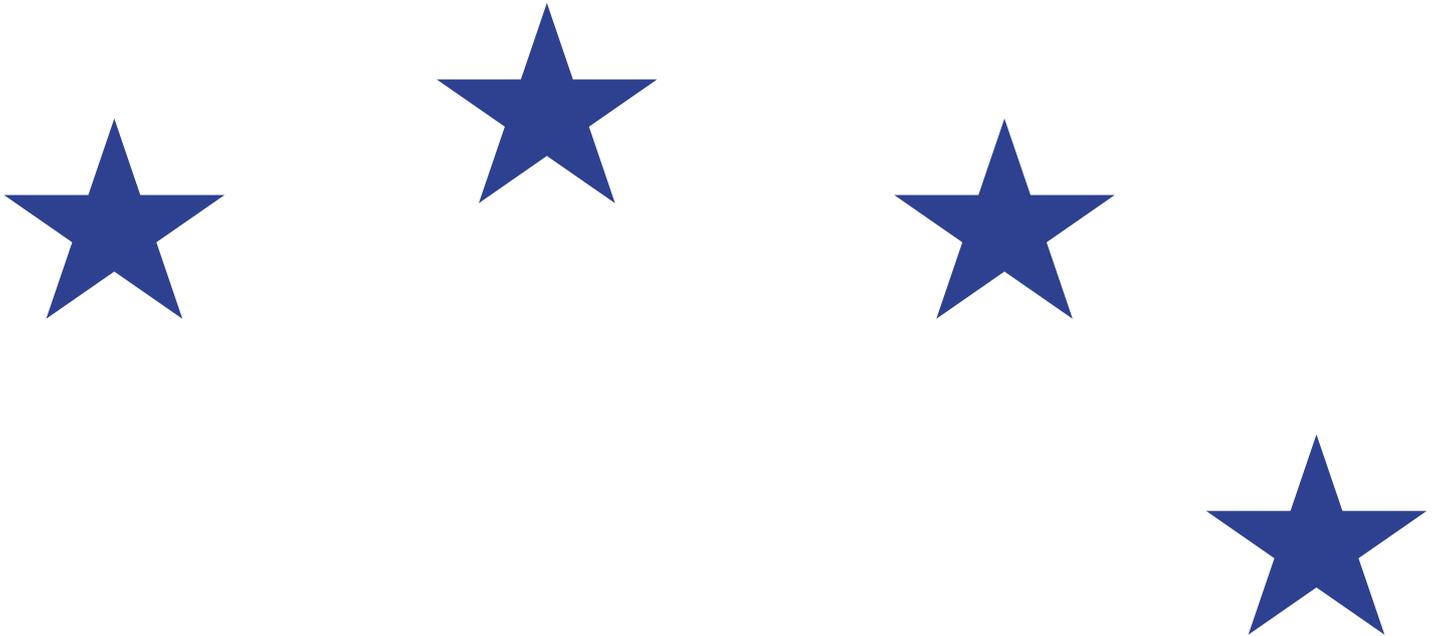


TRV Statistical Annex

ESMA Report on Trends, Risks and Vulnerabilities No. 1, 2022



ESMA Report on Trends, Risks and Vulnerabilities – Statistical Annex
No. 1, 2022

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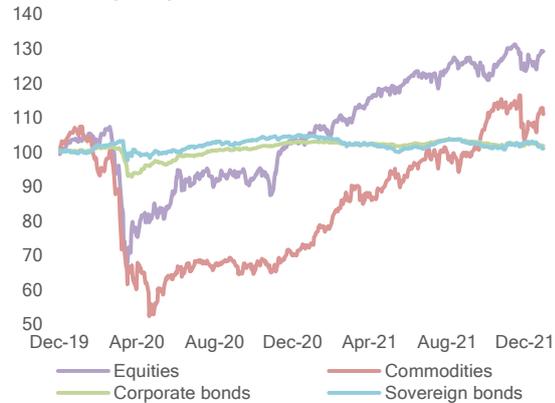
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Market environment

A.1

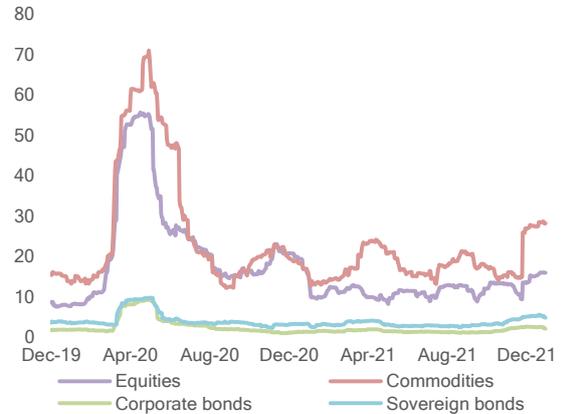
EU market price performance



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), 01/12/2019=100.
Sources: Refinitiv Datastream, ESMA.

A.2

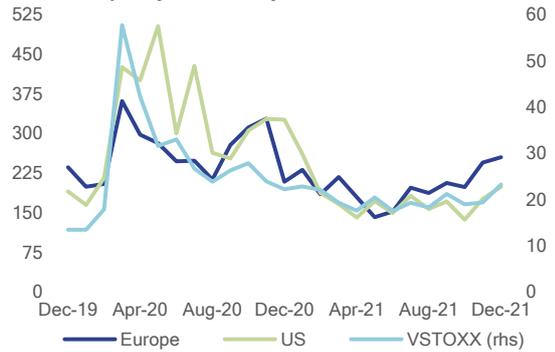
EU market volatilities



Note: Annualised 40D volatility of 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), in %.
Sources: Refinitiv Datastream, ESMA.

A.3

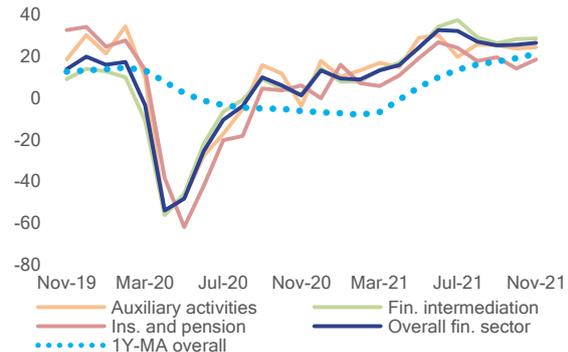
Economic policy uncertainty



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.

A.4

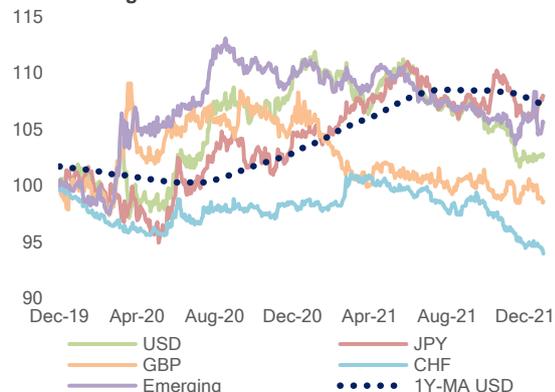
EU market confidence



Note: European Commission survey of EU27 financial services sector and subsectors (NACE Rev.2 64, 65, 66). Confidence indicators are averages of the net balance of responses to questions on development of the business situation over the past three months, evolution of demand over the past three months and expectation of demand over the next three months, in % of answers received. Fin.=financial. Ins.=insurance.
Sources: European Commission, ESMA.

A.5

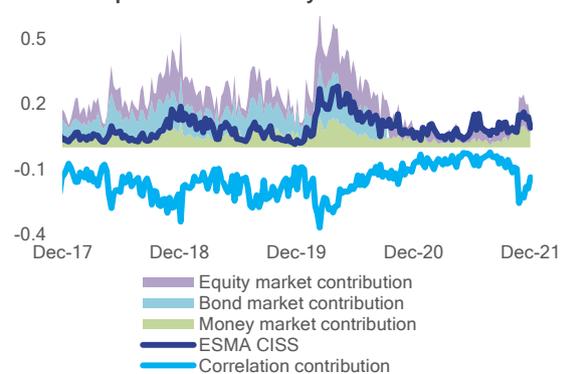
EUR exchange rates



Note: Spot exchange rates to EUR. Emerging is an average of spot exchange rates for CNY, BRL, RUB, INR, MXN, IDR and TRY weighted by GDP as of start date year. 01/11/2019=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.

A.6

ESMA composite indicator of systemic stress



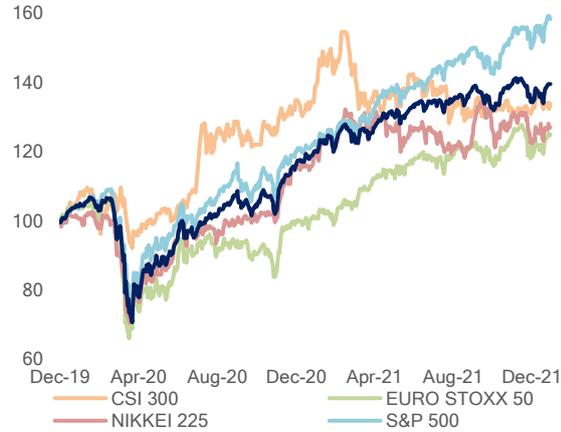
Note: ESMA version of the ECB-CISS indicator measuring systemic stress in securities markets. It focuses on three financial market segments: equity, bond and money markets, aggregated through standard portfolio theory. It is based on securities market indicators such as volatilities and risk spreads.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

Securities markets

Equity markets

A.7

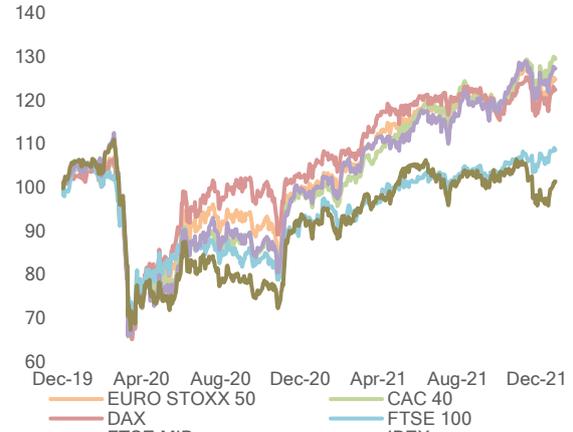
Global equity price performance by region



Note: Regional equity return indices. 01/12/2019=100.
Sources: Refinitiv Datastream, ESMA.

A.8

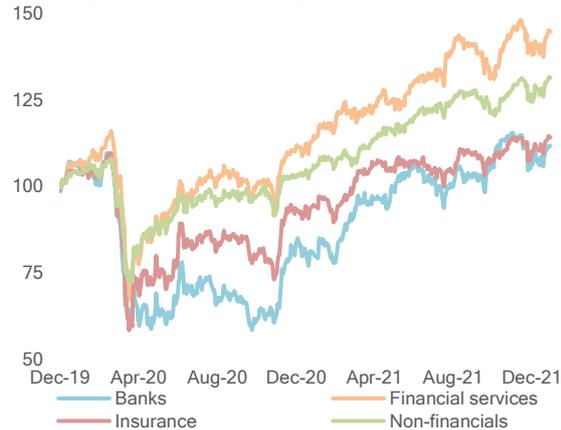
EU equity price performance of national indices



Note: European equity return indices. 01/11/2019=100.
Sources: Refinitiv Datastream, ESMA.

A.9

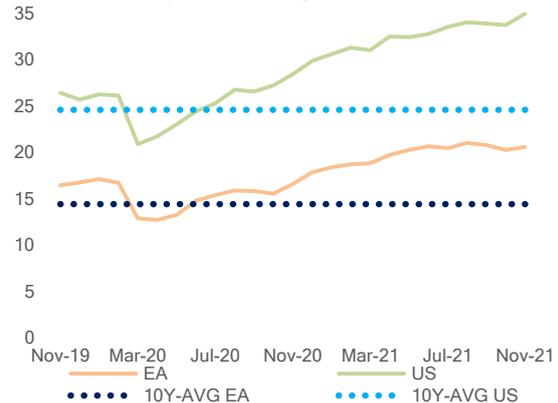
EU equity price performance by sector



Note: STOXX Europe 600 sectoral return indices. 01/12/2019=100.
Sources: Refinitiv Datastream, ESMA.

A.10

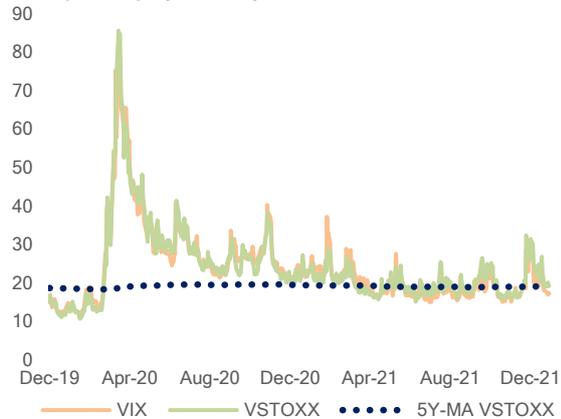
US and EU equity price-earnings ratios



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.

A.11

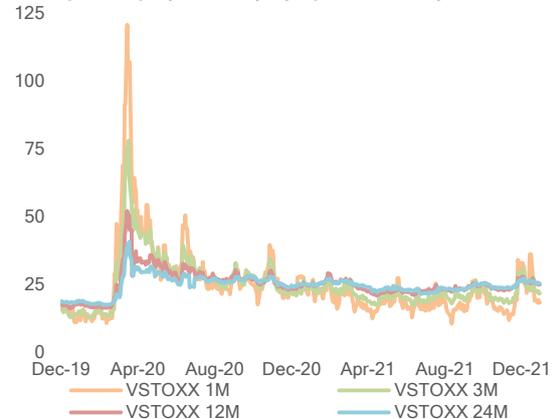
EU implied equity volatility



Note: Implied volatility of EURO STOXX 50 (VSTOXX) and S&P 500 (VIX), in %.
Sources: Refinitiv Datastream, ESMA.

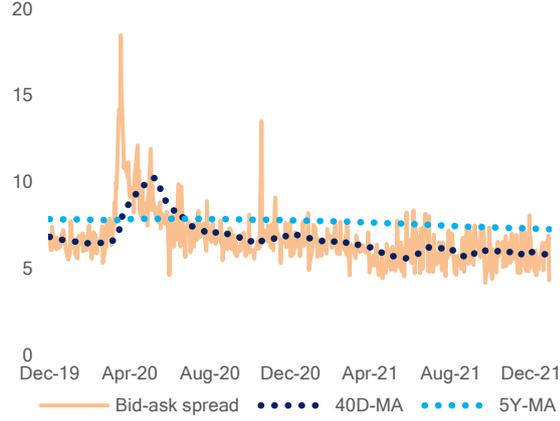
A.12

EU implied equity volatility by option maturity



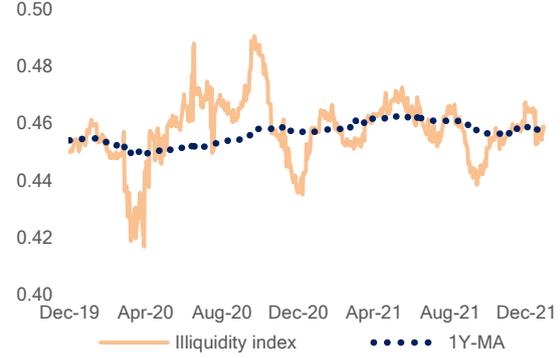
Note: EURO STOXX 50 implied volatilities, measured as price indices, in %.
Sources: Refinitiv Datastream, ESMA.

A.13
EU equity bid-ask spread



Note: Liquidity measure as median of the bid-ask price percentage difference for the current EEA30 constituents of STOXX Europe Large 200, in bps. Sources: Refinitiv Datastream, ESMA.

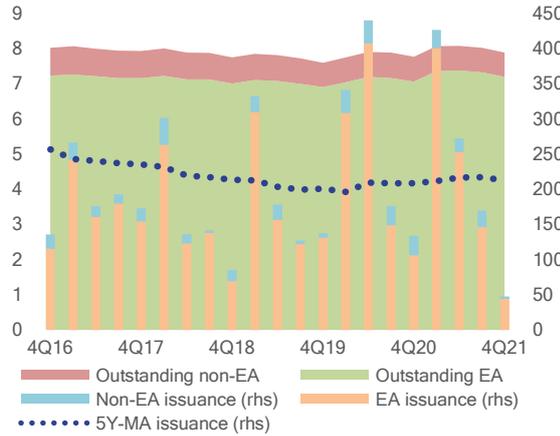
A.14
ESMA composite equity illiquidity index



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.

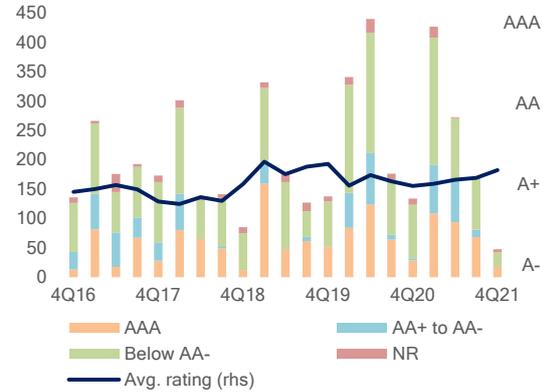
Sovereign-bond markets

A.15
EU sovereign bond issuance and outstanding



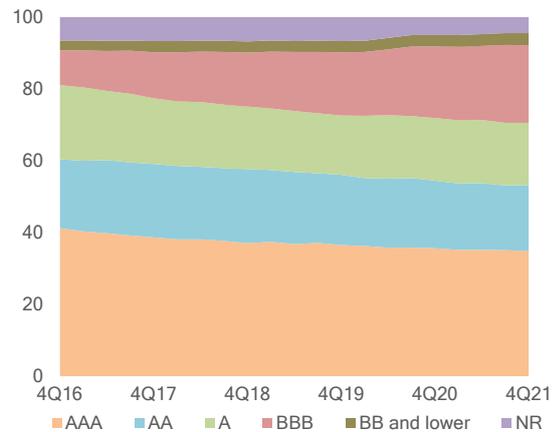
Note: Sovereign bond gross issuance in the EEA30 (rhs), EUR bn, and outstanding amounts, EUR tn. Maturities < 12 months are excluded. Sources: Refinitiv EIKON, ESMA.

A.16
EU sovereign bond issuance by credit rating



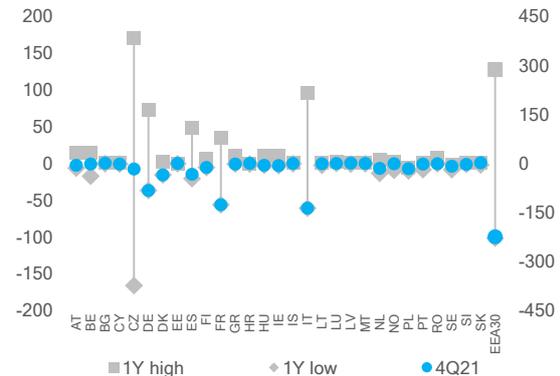
Note: Sovereign bond gross issuance in the EEA30 by rating bucket, EUR bn. Avg. rating=weighted average rating computed as a one-year moving average of ratings converted to a numerical scale (AAA=1, AA+=2, etc.) excluding non-rated bonds. Maturities < 12 months are excluded. Sources: Refinitiv EIKON, ESMA.

A.17
EU sovereign bond rating distribution



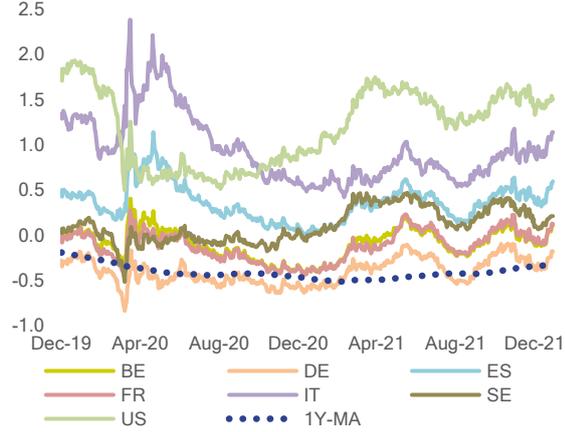
Note: Outstanding amount of sovereign bonds in the EEA30 as of issuance date by rating category, in % of the total. Maturities < 12 months are excluded. Sources: Refinitiv EIKON, ESMA.

A.18
Net EU sovereign bond issuance by country



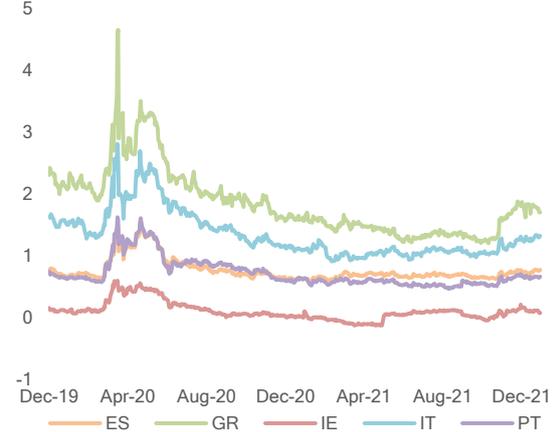
Note: Quarterly net issuance of EEA30 sovereign debt by country, EUR bn. Net issuance calculated as the difference between new issuance over the quarter and outstanding debt maturing over the quarter. Highest and lowest quarterly net issuance in the past year are reported. EEA30 total on right-hand scale.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

A.19
EU and US 10Y sovereign yields



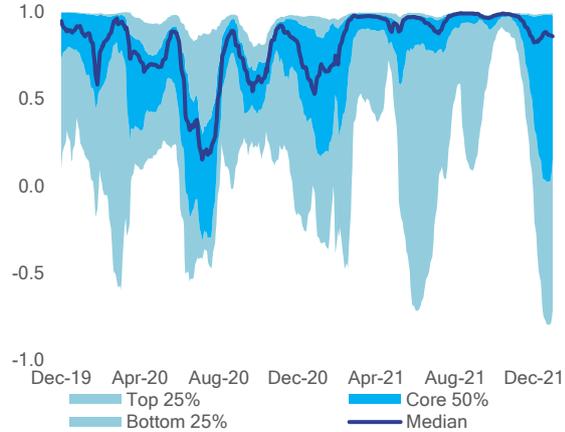
Note: Yields on 10Y sovereign bonds, selected countries, in %. 1Y-MA=one-year moving average of EA 10Y bond indices computed by Datastream.
Sources: Refinitiv Datastream, ESMA.

A.20
EU 10Y sovereign spreads



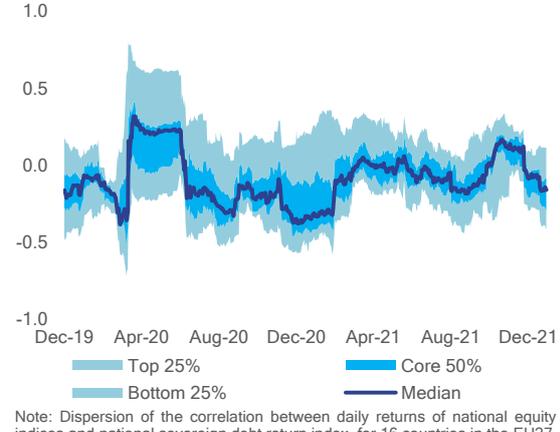
Note: Selected 10Y EA sovereign bond risk premia (vs. DE Bunds), in %.
Sources: Refinitiv Datastream, ESMA.

A.21
EU sovereign yield correlation dispersion



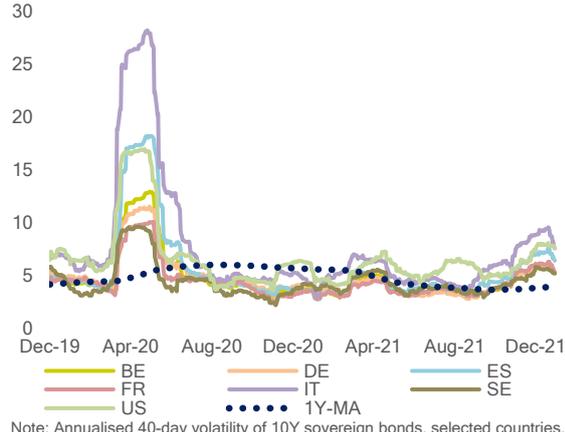
Note: Dispersion of correlations between 10Y DE Bunds and 15 other EU27 countries' sovereign bond redemption yields over a 60-day rolling window.
Sources: Refinitiv Datastream, ESMA.

A.22
EU equity-sovereign bond returns correlation dispersion



Note: Dispersion of the correlation between daily returns of national equity indices and national sovereign debt return index, for 16 countries in the EU27, over a 60-day rolling window.
Sources: Refinitiv Datastream, ESMA.

A.23
EU 10Y sovereign bond volatility

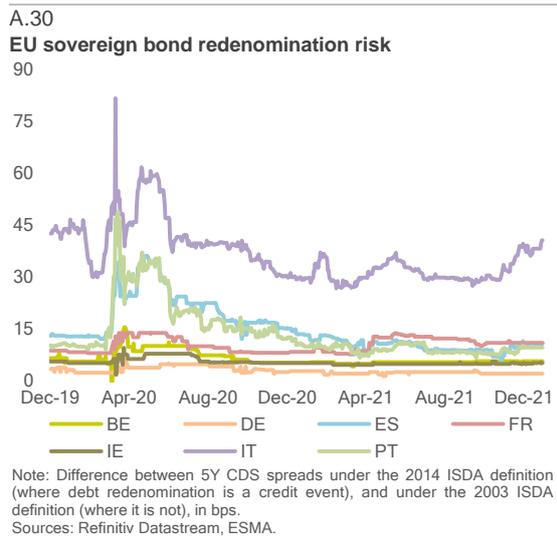
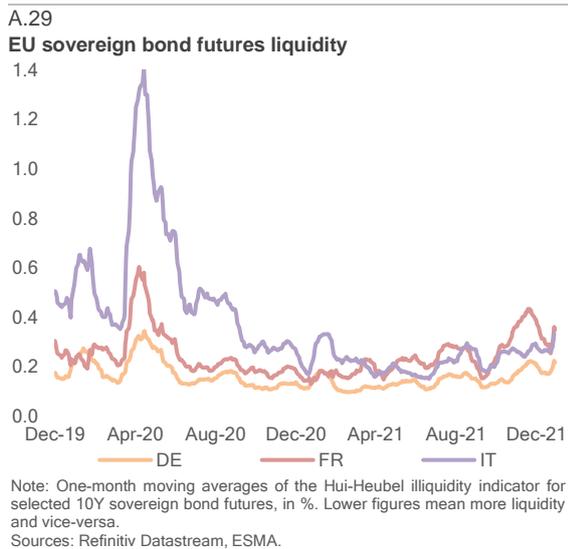
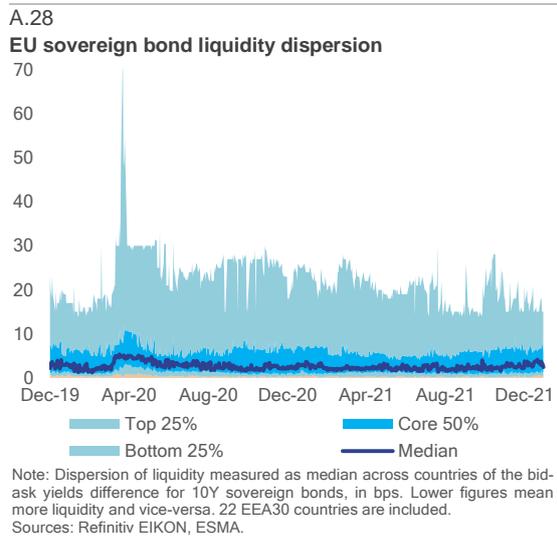
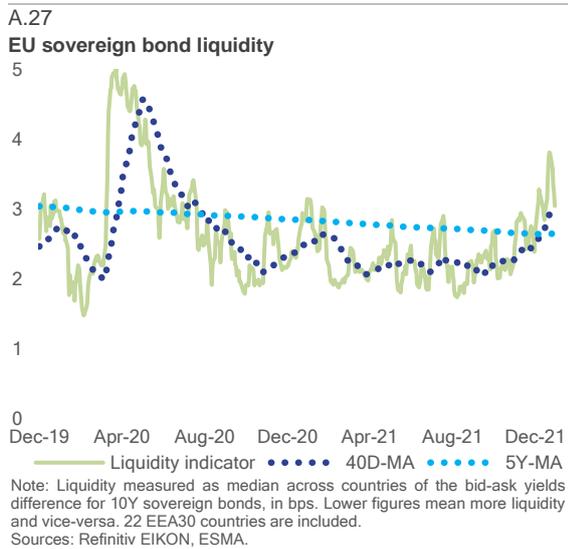
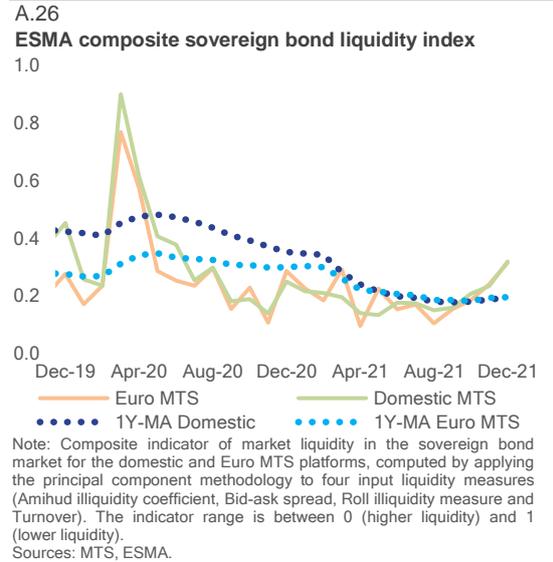
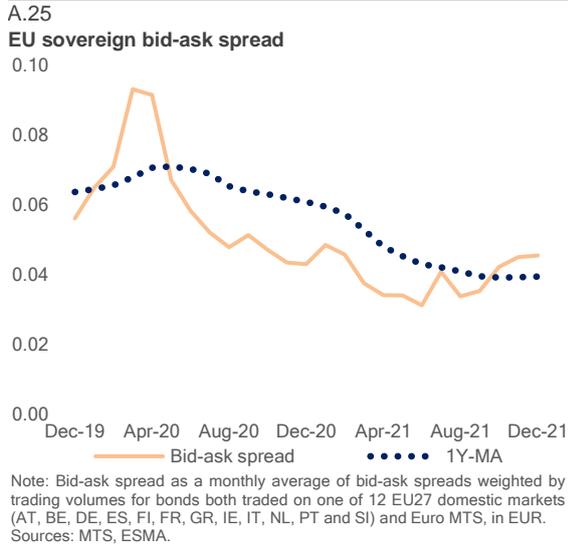


Note: Annualised 40-day volatility of 10Y sovereign bonds, selected countries, in %. 1Y-MA=one-year moving average of EA 10Y bond indices computed by Datastream.
Sources: Refinitiv Datastream, ESMA.

A.24
Global sovereign CDS spreads



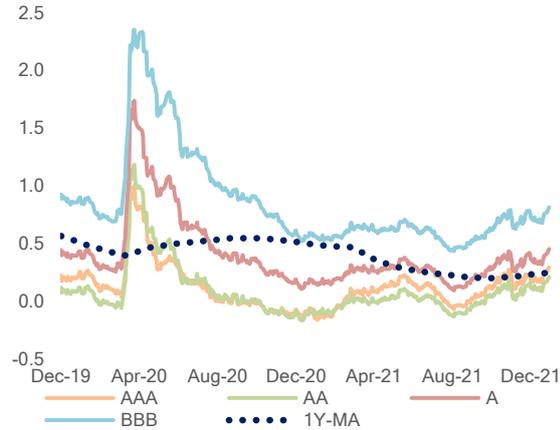
Note: Datastream CDS sovereign indices (5 years, mid-spread), in bps.
Sources: Refinitiv Datastream, ESMA.



Corporate-bond markets

A.31

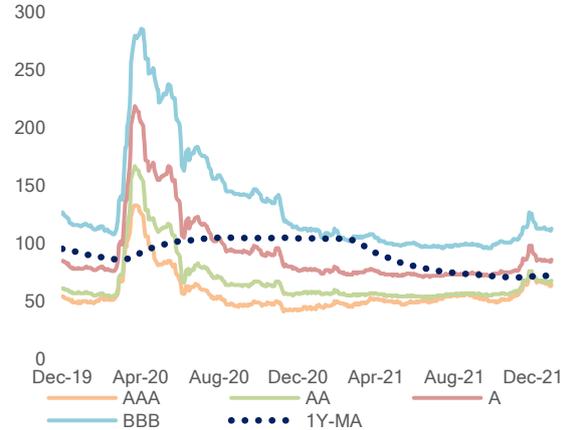
EU corporate yields by credit rating



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

A.32

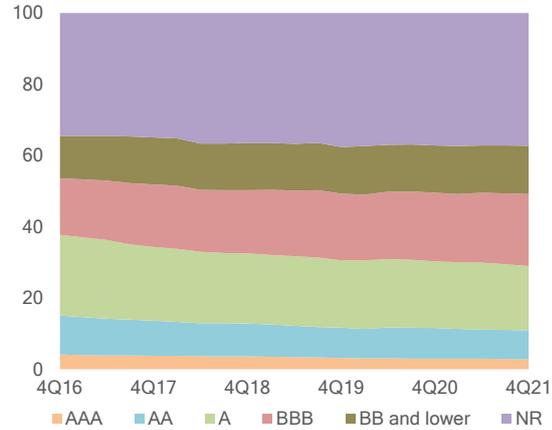
EU corporate spreads by credit rating



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.

A.33

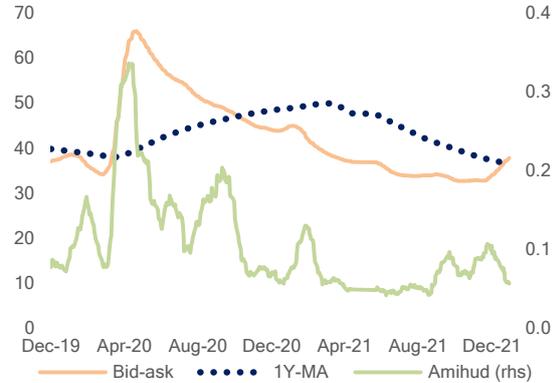
EU corporate rating distribution



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.

A.34

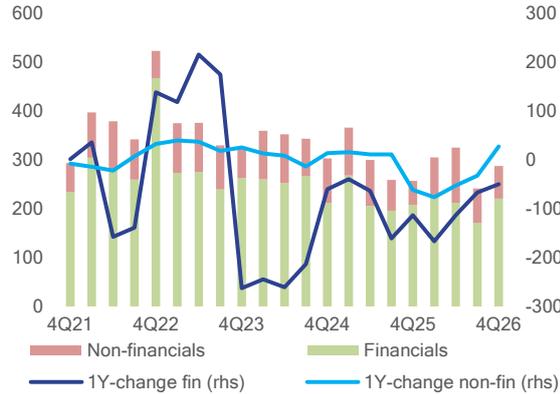
EU corporate bid-ask spread and Amihud indicator



Note: Markit iBoxx EUR Corporate bond index bid-ask spread, in bps, computed as a one-month moving average of the constituents bid-ask spread. 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.

A.35

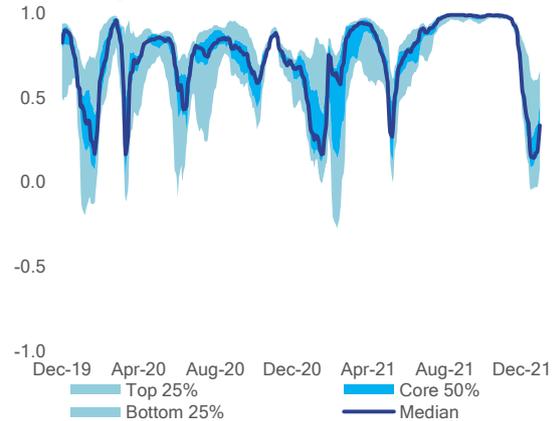
EU corporate debt redemption profile by sector



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.

A.36

EU sovereign-corporate yield correlation



Note: Dispersion of correlation between Barclays Aggregate for corporate and 10Y sovereign bond redemption yields for AT, BE, ES, FI, FR, IT and NL. Sources: Refinitiv Datastream, ESMA.

A.37

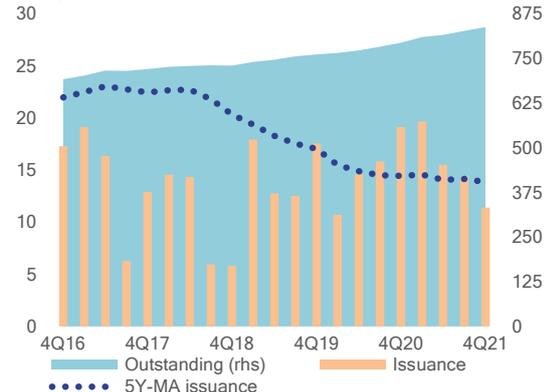
EU covered bond spreads



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.

A.38

EU hybrid capital instruments issuance

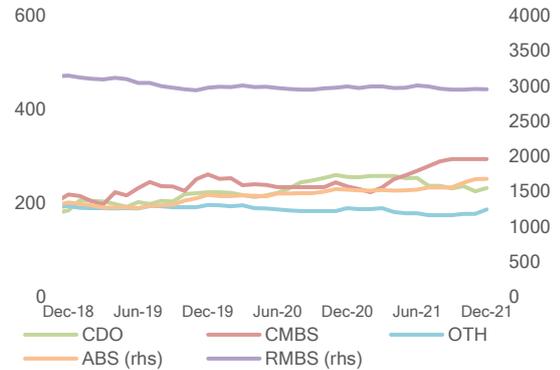


Note: Hybrid capital instruments gross issuance in the EEA30, EUR bn, and outstanding amounts (rhs), EUR tn. Maturities < 12 months are excluded. According to Refinitiv EIKON classification, hybrid capital refers to bonds having the qualities of both an interest-bearing security (debt) and equity. Sources: Refinitiv EIKON, ESMA.

Credit quality

A.39

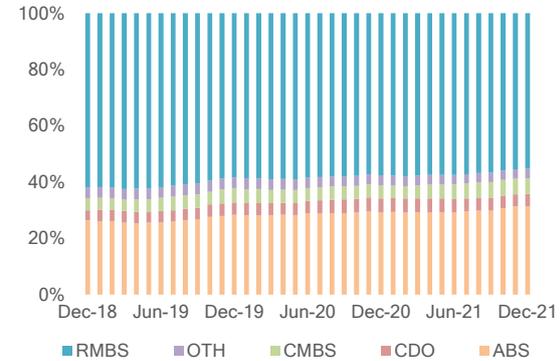
EU SFI ratings issued by collateral type



Note: Number of rated EEA30 structured finance instruments by asset class. ABS=Asset-backed securities (r.h.axis); CDO=Collateralised debt obligations; CMBS=Commercial mortgage-backed securities; OTH=Other; RMBS=Residential mortgage-backed securities. Asset backed commercial paper omitted due to very small sample size. Sources: RADAR, ESMA.

A.40

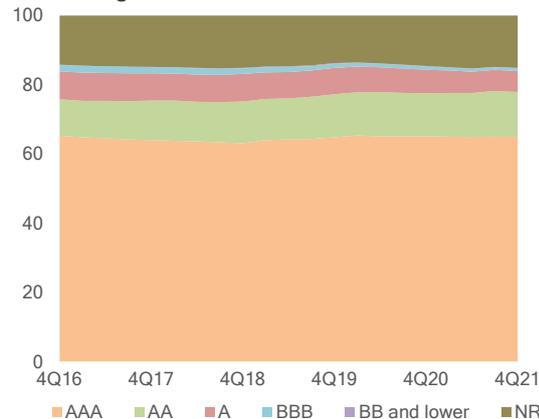
EU SFI ratings outstanding by collateral type



Note: Outstanding ratings of EEA30 structured finance instruments by asset class, in % of total. ABS=Asset-backed securities; CDO=Collateralised debt obligations; CMBS=Commercial mortgage-backed securities; OTH=other; RMBS=Residential mortgage-backed securities. Asset backed commercial paper omitted due to very small sample size. Sources: RADAR, ESMA.

A.41

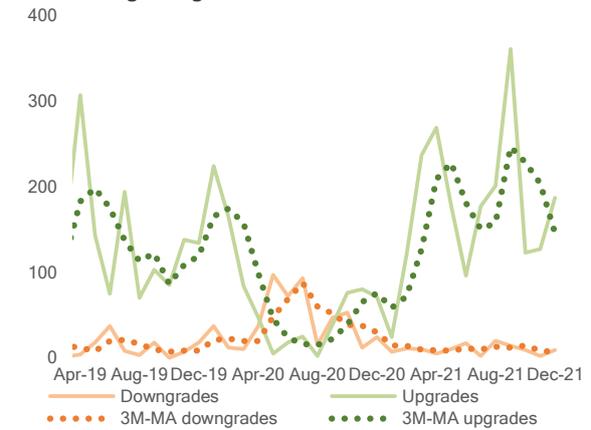
Credit rating distribution of EU covered bonds



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

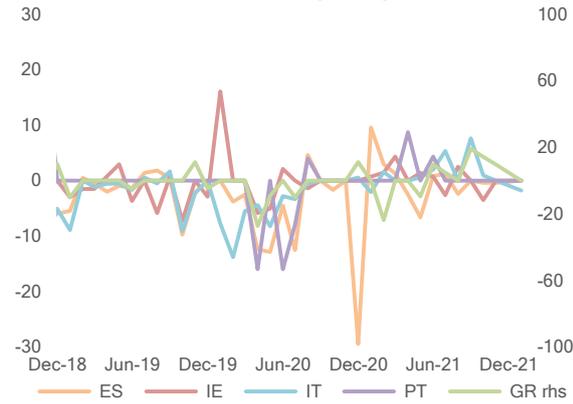
A.42

EU SFI rating changes



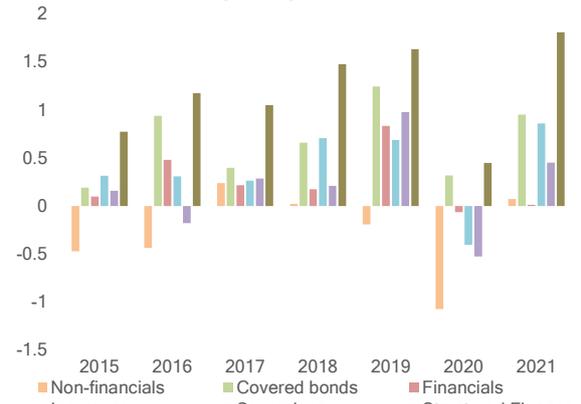
Note: Aggregate number of notch changes on securitised assets issued in the EEA30 with long-term ratings, for upgrades and downgrades. Sources: RADAR, ESMA.

A.43 EU non-financial corporate rating changes



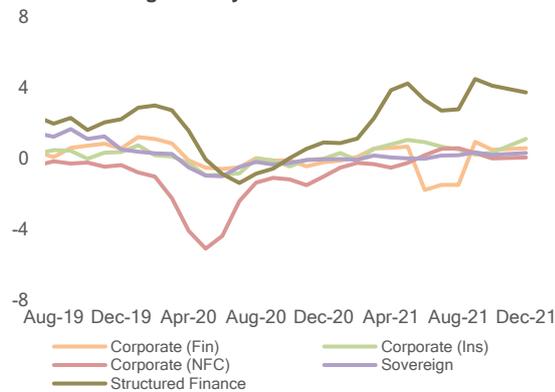
Note: Number of upgrades minus downgrades of non-financial corporate issuers for ES, GR, IE, IT and PT, in % of outstanding ratings. Ratings from Fitch Ratings, Moody's and S&P's.
Sources: RADAR, ESMA.

A.44 Size of EU credit rating changes



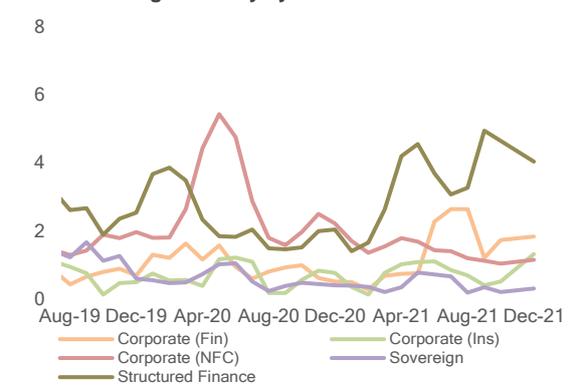
Note: Average change in notches for long-term EEA30 ratings for issuers and instruments (excl. ICAP and CERVED)
Sources: RADAR, ESMA

A.45 EU credit ratings drift by sector



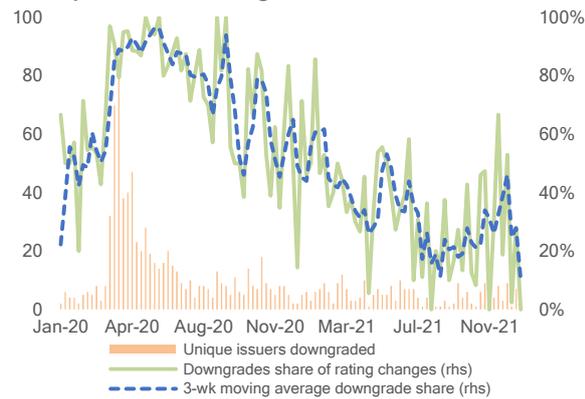
Note: 3-month moving average of net rating changes in EEA30 outstanding ratings from all credit rating agencies, excluding CERVED and ICAP, by asset class, computed as the percentage of upgrades minus the percentage of downgrades. EEA30 ratings. Fin - Financials, Ins - Insurance, NFC - non-financials.
Sources: RADAR, ESMA.

A.46 EU credit ratings volatility by sector



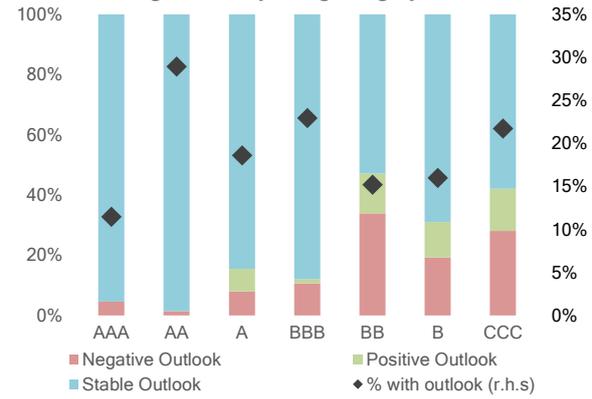
Note: 3-month moving average of net rating changes in EEA30 outstanding ratings from all credit rating agencies, excluding CERVED and ICAP, by asset class, computed as the percentage of upgrades minus the percentage of downgrades. EEA30 ratings. Fin - Financials, Ins - Insurance, NFC - non-financials.
Sources: RADAR, ESMA.

A.47 EU corporate issuer downgrades



Note: Number of EEA30 corporate issuers with at least one bond downgraded, and ratio of downgraded corporate issues over upgrades and downgrades (3 week moving average). Issuers with same reported parent treated as one issuer.
Sources: RADAR, ESMA.

A.48 EU credit rating outlook by rating category

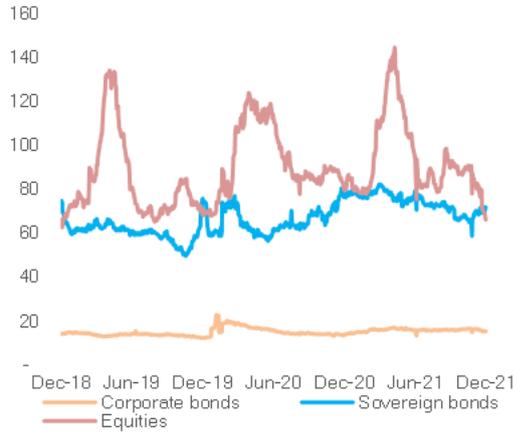


Note: Distribution of outlooks for EEA30 corporate non-financial instruments (ISINs) with outlook rated by the Big 5 (Fitch, Moody's, S&P, Scope and DBRS) by category value over the total ratings per category value. Cutoff date 31/12/2021.
Sources: RADAR, ESMA.

Securities lending

A.49

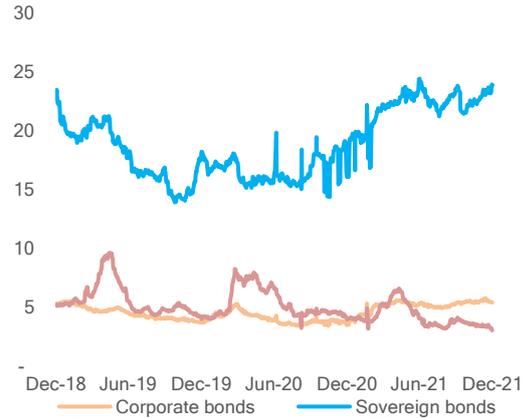
EU securities lending market value by asset type



Note: value on loan of securities issued in the EEA by asset class, in EUR bn.
Sources: FIS Astec, Quandl, ESMA.

A.50

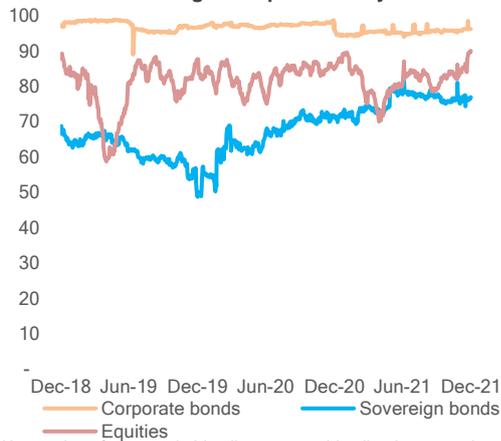
EU securities utilisation rate



Note: Utilisation rate of securities issued in the EEA, by asset class. Utilisation rate in percent: the ratio of the market value of securities lent over the market value of securities available for lending.
Sources: FIS Astec, Quandl, ESMA.

A.51

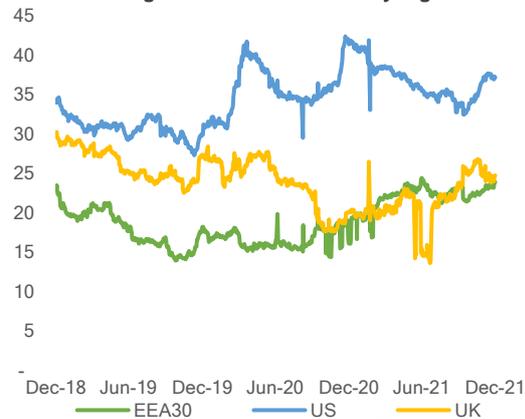
EU securities lending with open maturity



Note: value of open-ended lending over total lending by asset class, in percentage.
Sources: FIS Astec, Quandl, ESMA.

A.52

Global sovereign bond utilisation rate by region

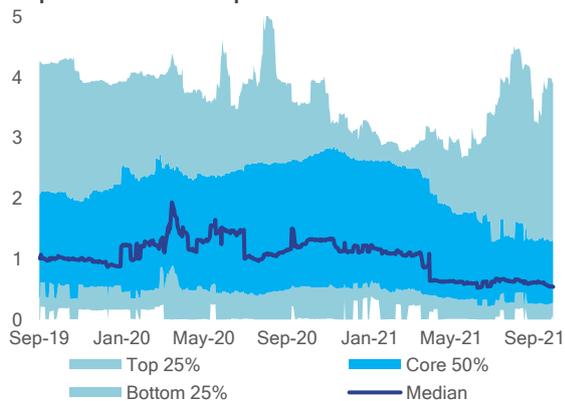


Note: Utilisation rate of sovereign bonds issued in EEA countries, in the US and in the UK. Utilisation rate in percent: the ratio of the market value of securities lent over the market value of securities available for lending.
Sources: FIS Astec, Quandl, ESMA.

Short selling

A.53

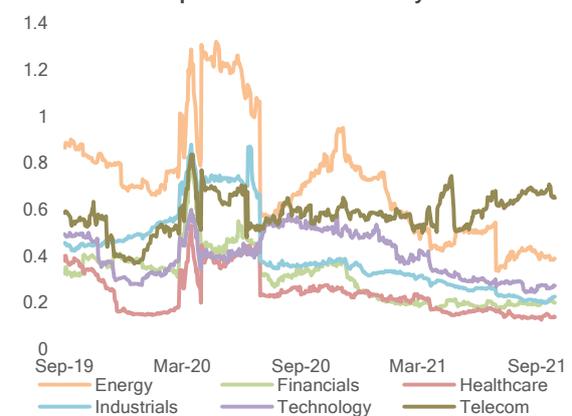
Dispersion of net short positions in EU shares



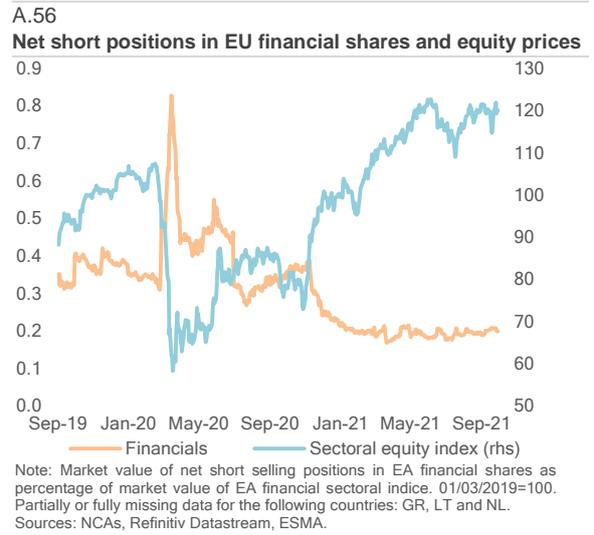
Note: Dispersion of net short selling positions by country in the EEA30 as percentage of market value of those positions relative to each country's blue-chip index market value. Partially or fully missing data for the following countries: GR, LT, NL, RO and SE.
Sources: NCAs, Refinitiv Datastream, ESMA.

A.54

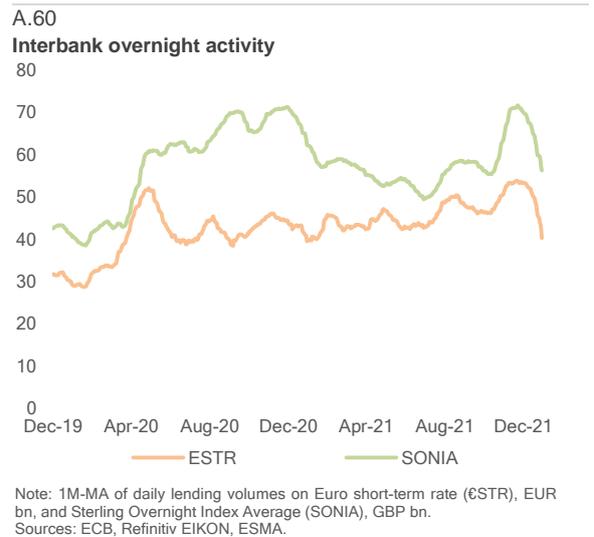
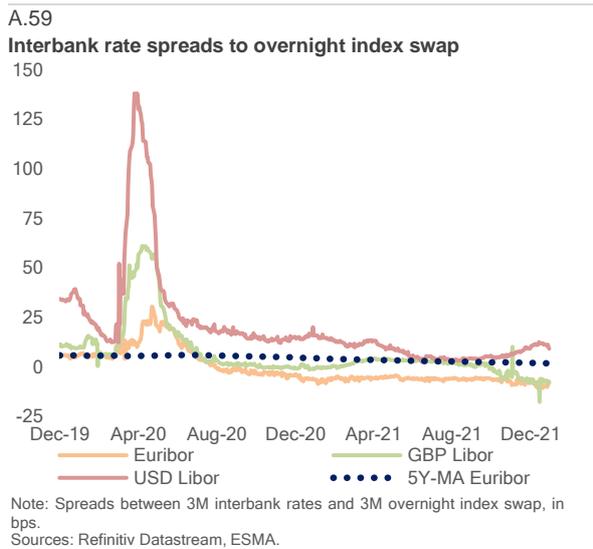
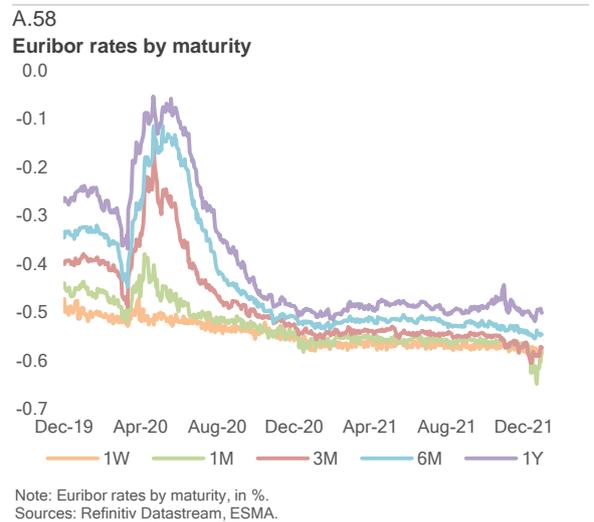
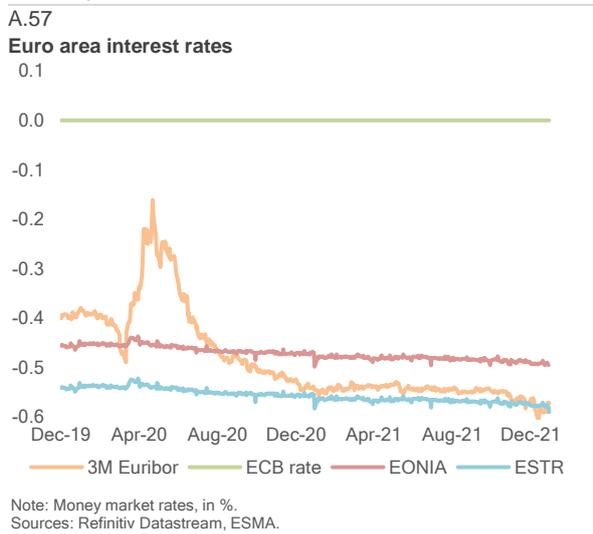
Value of net short positions in EU shares by sector



Note: Market value of net short selling positions in EA shares as percentage of market value of selected EA sectoral indices. Partially or fully missing data for the following countries: GR, LT and NL.
Sources: NCAs, Refinitiv Datastream, ESMA.



Money markets

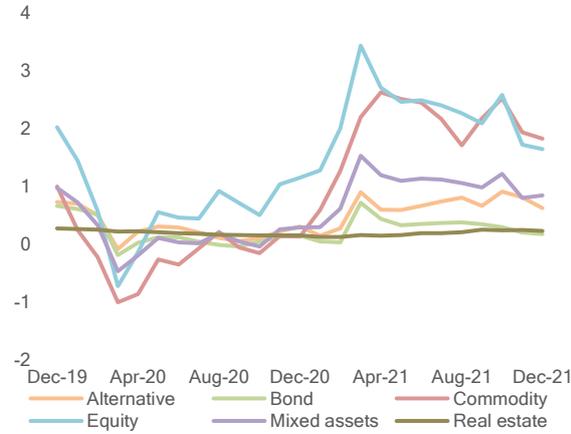


Asset management

Fund industry

A.61

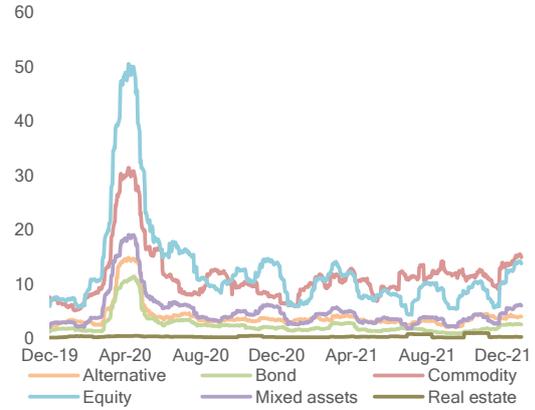
EU fund performance



Note: EU27-domiciled investment fund annual average of monthly returns, asset-weighted, in %.
Sources: Refinitiv Lipper, ESMA.

A.62

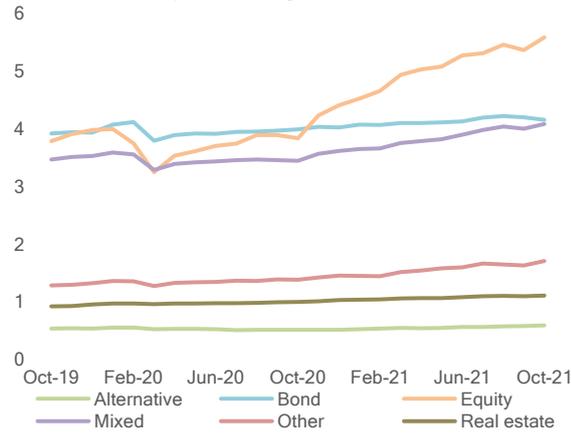
Volatility of EU fund returns



Note: Annualised 40-day historical return volatility of EU27-domiciled investment funds, in %.
Sources: Refinitiv Lipper, ESMA.

A.63

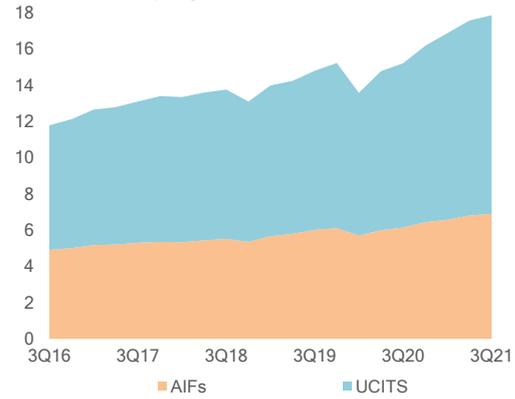
EU fund assets by market segment



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

A.64

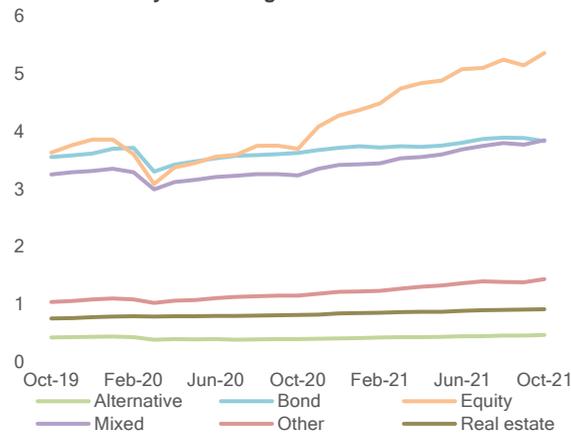
EU fund NAV by legal form



Note: NAV of EEA30 funds, EUR tn.
Sources: EFAMA, ESMA.

A.65

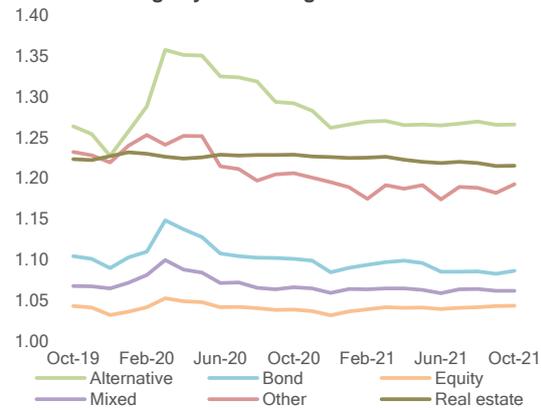
EU fund NAV by market segment



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

A.66

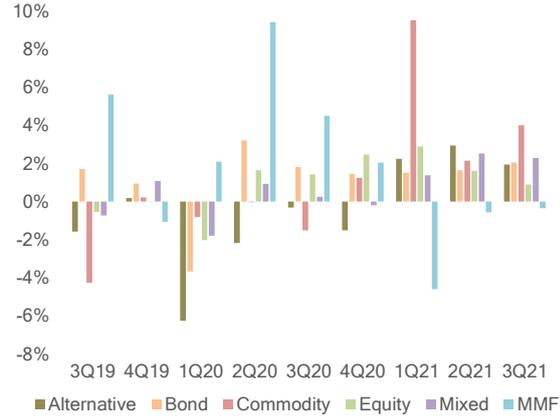
EU fund leverage by market segment



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

A.67

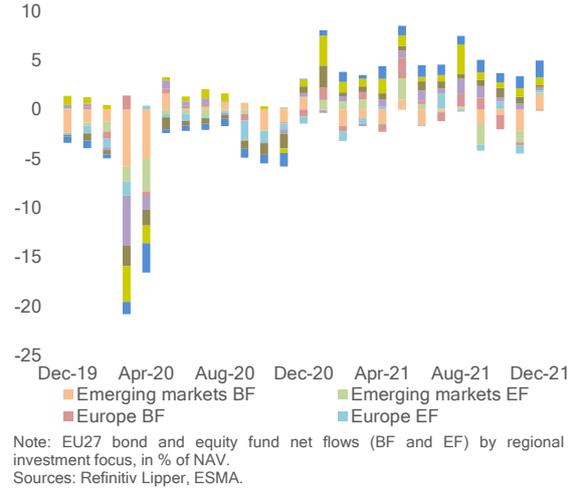
EU fund flows by fund type



Note: EU-domiciled funds' quarterly flows, in % of NAV.
Sources: Refinitiv Lipper, ESMA.

A.68

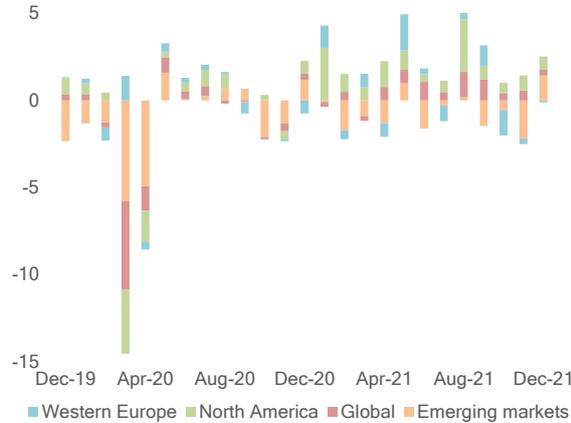
EU fund flows by regional investment focus



Note: EU27 bond and equity fund net flows (BF and EF) by regional investment focus, in % of NAV.
Sources: Refinitiv Lipper, ESMA.

A.69

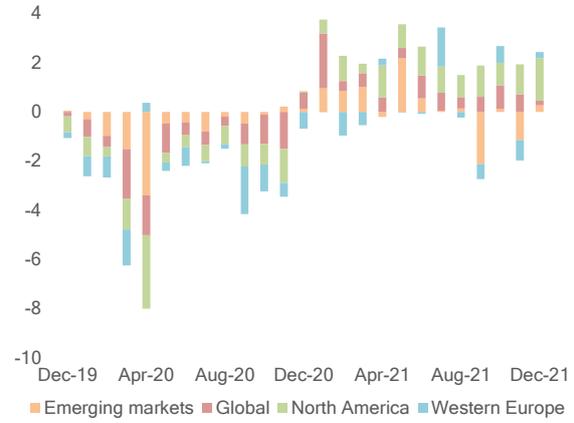
EU bond fund flows by regional investment focus



Note: EU27 bond fund net flows by regional investment focus, in % of NAV.
Sources: Refinitiv Lipper, ESMA.

A.70

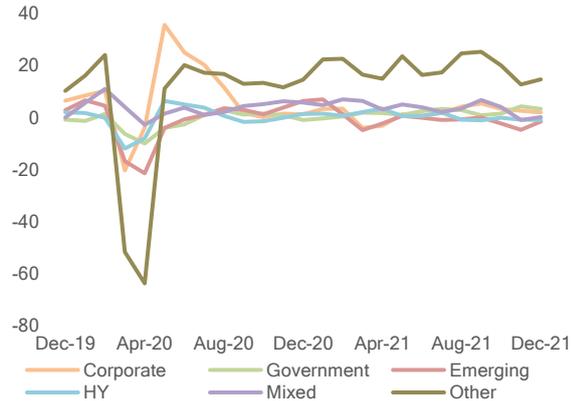
EU equity fund flows by regional investment focus



Note: EU27 equity fund net flows by regional investment focus, in % of NAV.
Sources: Refinitiv Lipper, ESMA.

A.71

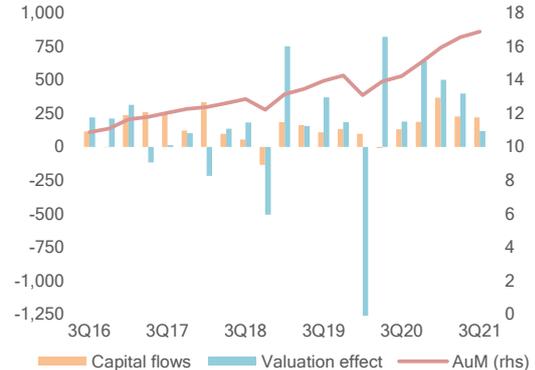
Net flows in EU bond funds



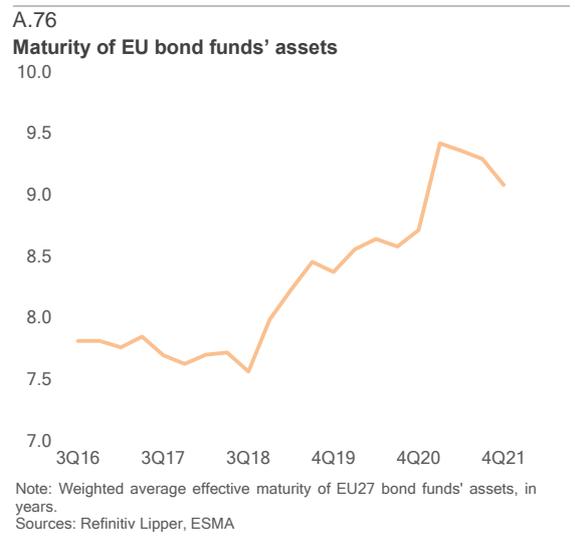
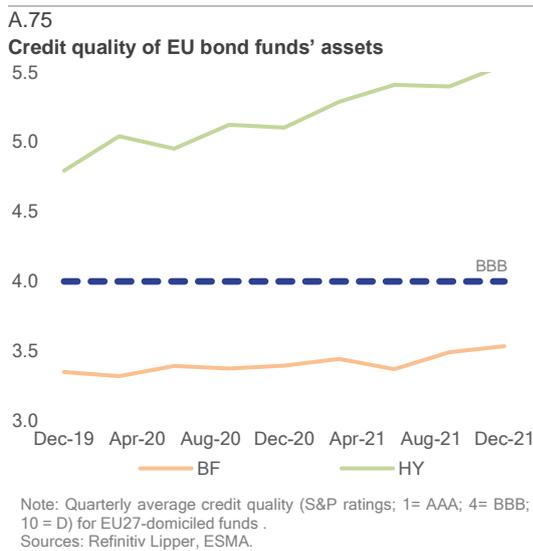
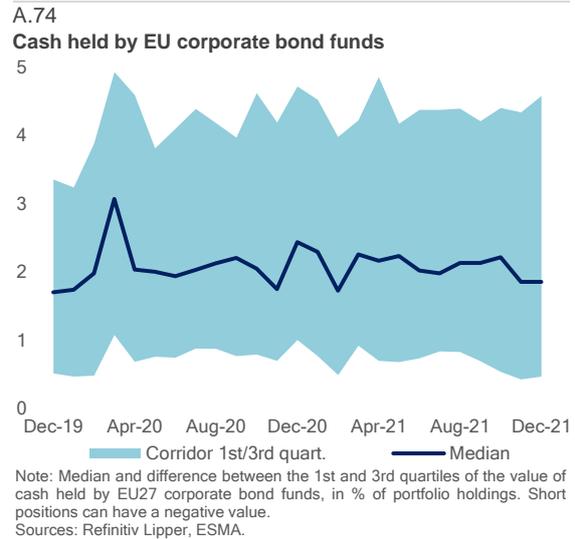
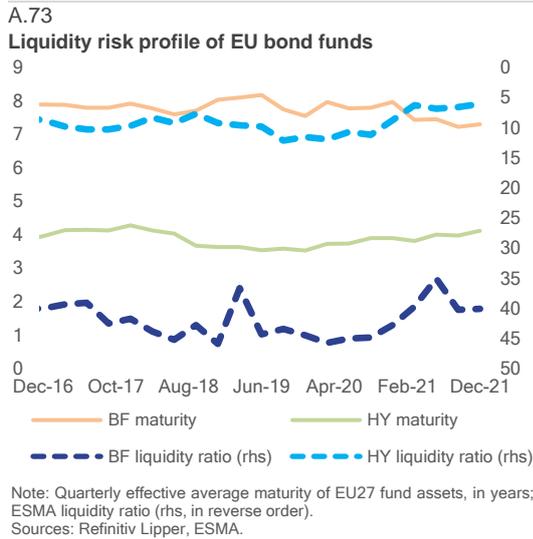
Note: Two-month cumulative net flows for EU27 bond funds, EUR bn. Funds investing in corporate and government bonds that qualify for another category are only reported once (e.g. funds investing in emerging government bonds reported as emerging; funds investing in HY corporate bonds reported as HY).
Sources: Refinitiv Lipper, ESMA.

A.72

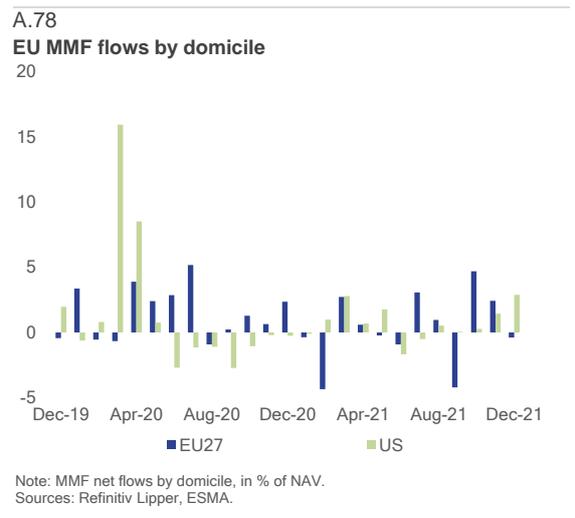
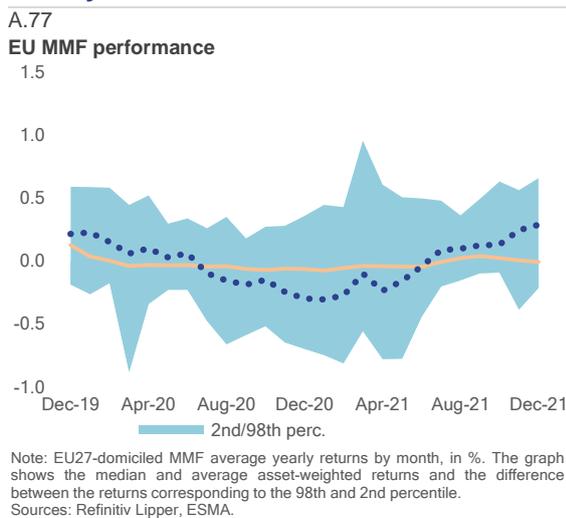
Net asset valuation of EU funds



Note: Net valuation effect related to the AuM of EA investment funds, computed as the intraperiod change in AuM, net of flows received in the respective period. Capital flows and valuation effects in EUR bn. AuM expressed in EUR tn.
Sources: ECB, ESMA.

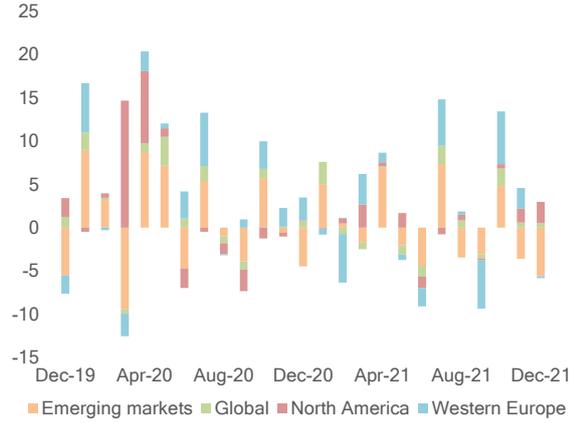


Money market funds



A.79

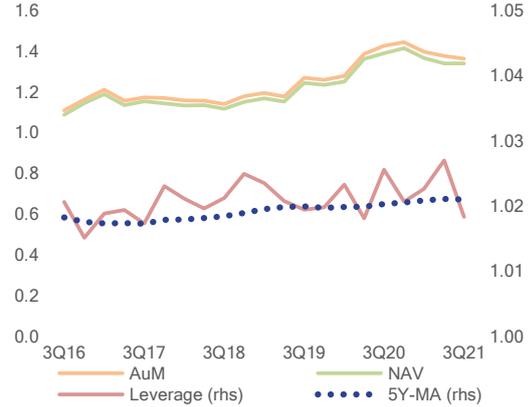
EU MMF flows by geographical focus



Note: EU27 MMF net flows by geographical focus, in % of NAV.
Sources: Refinitiv Lipper, ESMA.

A.80

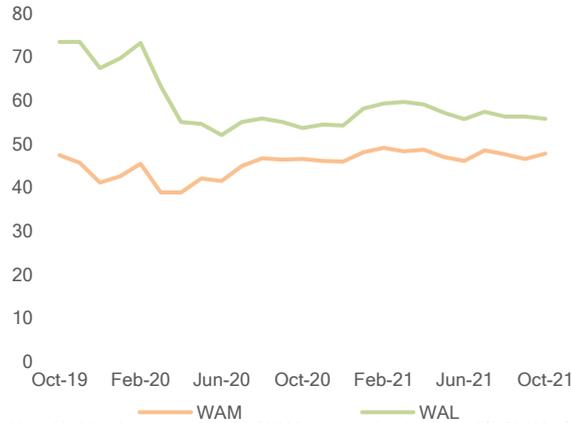
EU MMF assets and leverage



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.

A.81

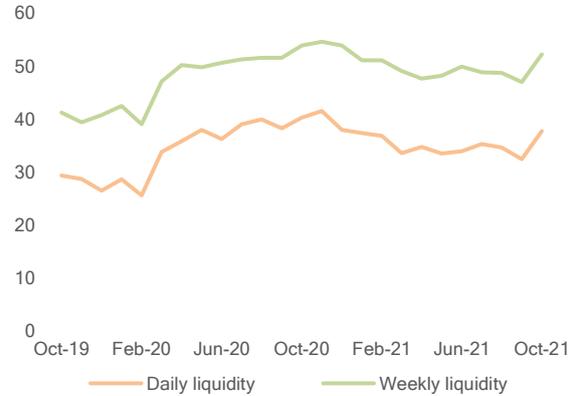
EU MMF maturity



Note: Weighted average maturity (WAM) and weighted average life (WAL) of Europe-domiciled MMFs, in days. Aggregation carried out by weighting individual MMFs' WAM and WAL by AuM.
Sources: Fitch Ratings, ESMA.

A.82

EU MMF liquidity

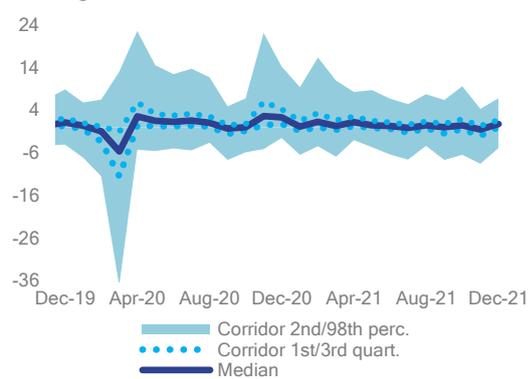


Note: Daily and weekly liquidity includes all assets maturing overnight and shares by AAA MMFs, securities issued by highly rated sovereigns with a maturity of less than one year, in % of total assets. Aggregation carried out using individual Europe-domiciled MMF data weighted by AuM.
Sources: Fitch Ratings, ESMA.

Alternative funds

A.83

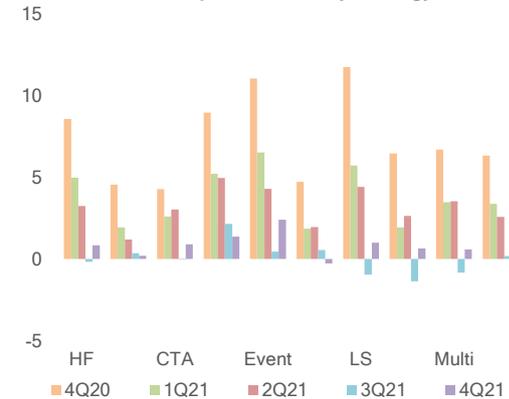
EU hedge fund returns



Note: EU27-domiciled hedge funds' monthly returns, %. The graph shows the returns' median, the difference between the returns corresponding to the 98th and 25th percentiles (light blue corridor) and the difference between the returns corresponding to the 1st and 3rd quartiles (dotted line corridor).
Sources: Lipper Tass, ESMA.

A.84

EU alternative fund performance by strategy



Note: Growth in hedge fund performance indices by strategy: Hedge fund index (Total), arbitrage, Commodity Trading Advisor (CTA), distressed debt, event driven, fixed income, long/short equity, macro, multi-strategy, relative value (RV), in %.
Sources: Eurekahedge, ESMA.

A.85

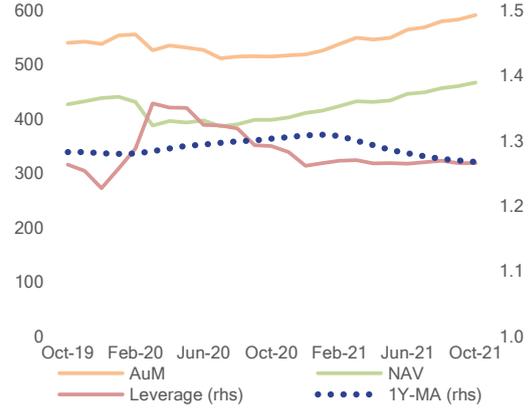
EU alternative fund flows by domicile



Note: Alternative mutual funds monthly net flows by domicile, in %. Data on alternative mutual funds represents only a subset of the entire alternative fund industry.
Sources: Refinitiv Lipper, ESMA.

A.86

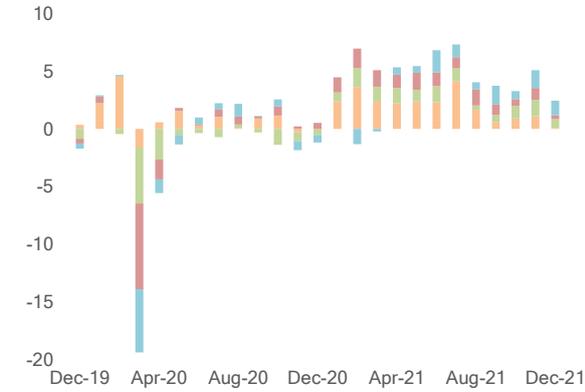
EU alternative fund assets and leverage



Note: NAV and AuM of EA alternative funds, EUR bn. Leverage computed as the AuM/NAV ratio. 1Y-MA=one-year moving average for the leverage ratio.
Sources: ECB, ESMA.

A.87

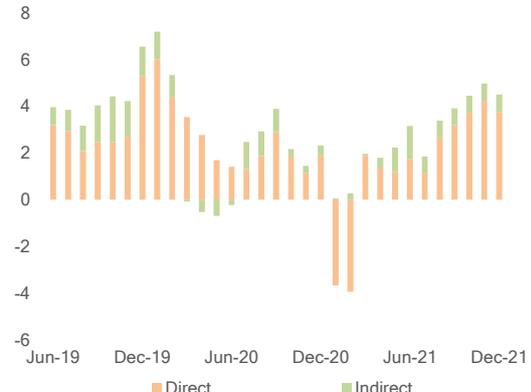
Alternative fund flows by geographical focus



Note: EU27-domiciled alternative mutual funds net flows by geographical investment focus, in % of NAV. Data on alternative mutual funds represent only a subset of the entire alternative fund industry.

A.88

Direct and indirect EU property fund flows

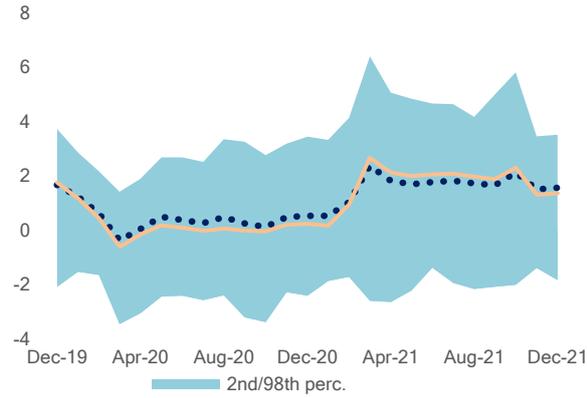


Note: Two-month cumulative flows for direct and indirect EU27-domiciled property funds. Indirect property funds invest in securities of real estate companies, including Real Estate Investment Trusts (REITs), in EUR bn.
Sources: Morningstar, ESMA.

Exchange-traded funds

A.89

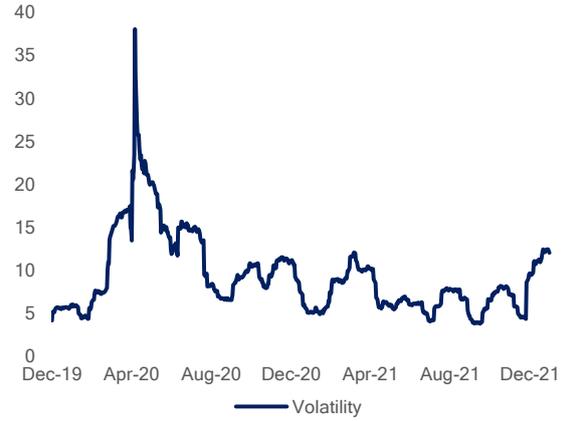
EU ETF returns



Note: Average yearly returns by month of EU27-domiciled ETFs, in %. The graph shows the median and average asset-weighted returns and the difference between the returns corresponding to the 98th and 2nd percentile. Sources: Refinitiv Lipper, ESMA.

A.90

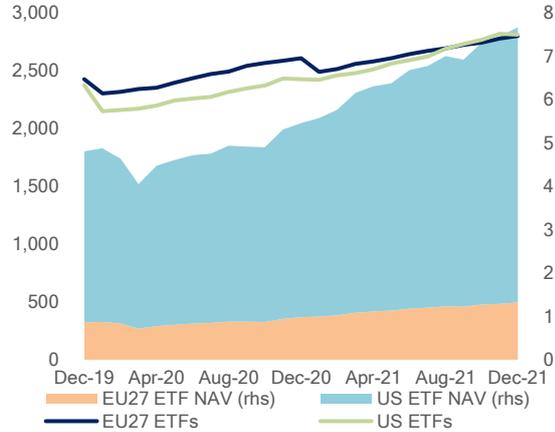
EU ETF returns volatility



Note: Annualised 40-day historical return volatility of EU27-domiciled ETFs, in %. Sources: Refinitiv Lipper, ESMA.

A.91

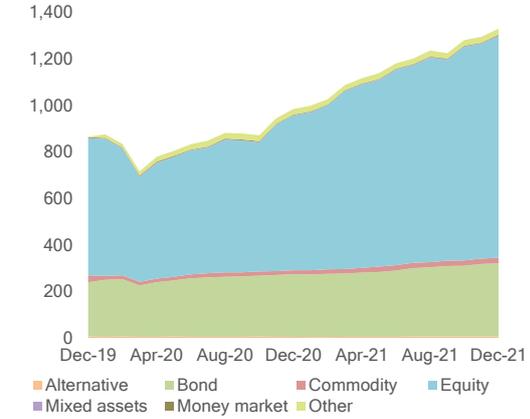
EU ETF and NAV by domicile



Note: NAV, EUR bn, and number of ETFs by domicile. Sources: Refinitiv Lipper, ESMA.

A.92

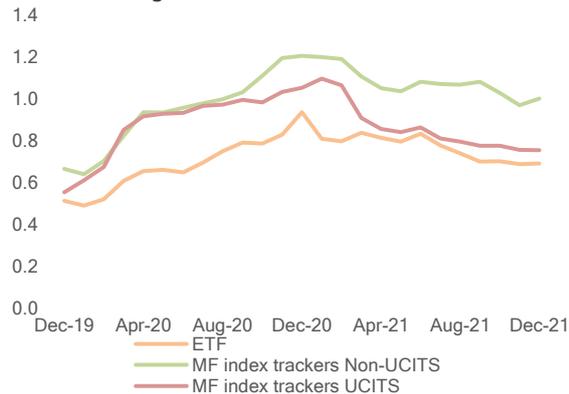
EU ETF NAV by asset type



Note: NAV of EU27 ETFs by asset type, EUR bn. Sources: Refinitiv Lipper, ESMA.

A.93

EU ETF tracking error



Note: Tracking error defined as standard deviation of mutual fund excess returns compared with benchmark. The graph shows the tracking error for EU27 ETFs and mutual funds both UCITS and non-UCITS. Yearly standard deviation reported on monthly frequency. End-of-month data. Sources: Refinitiv Lipper, ESMA.

A.94

EU and US ETF flows by domicile



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

A.95

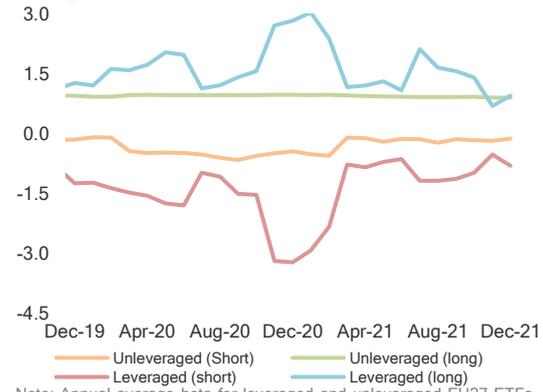
Assets of leveraged EU ETFs



Note: Total assets of leveraged long and leveraged short ETFs with primary listings in Europe, in EUR bn and total number of products (rhs), in thousand.
Sources: ETFGI, ESMA

A.96

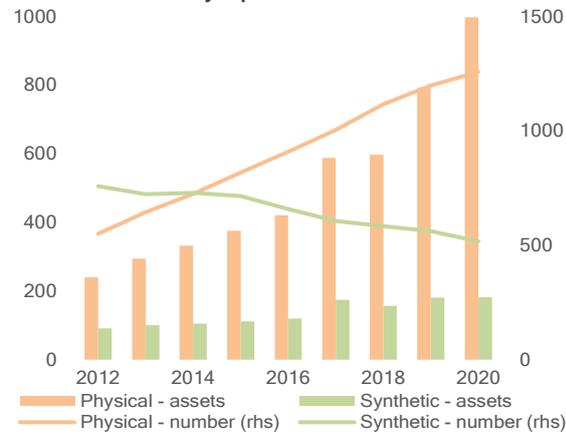
Average beta values for EU ETFs



Note: Annual average beta for leveraged and unleveraged EU27 ETFs. Leveraged ETFs are self-reported. The annual average monthly beta is measured as the volatility of a fund return in comparison to its benchmark. An unleveraged ETF replicating its benchmark will typically have a beta close to 1.0.
Sources: Refinitiv Lipper, ESMA.

A.97

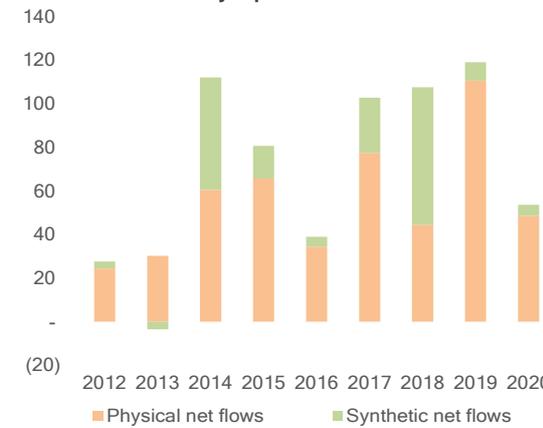
Assets of EU ETFs by replication method



Note: Total assets of physical and synthetic ETFs with primary listings in Europe, in EUR bn and total number of products (rhs).
Sources: ETFGI, ESMA

A.98

Flows into EU ETFs by replication method



Note: Net flows of physical and synthetic ETFs with primary listings in Europe, in EUR bn.
Sources: ETFGI, ESMA

Consumers

Investment resources available to households

A.99

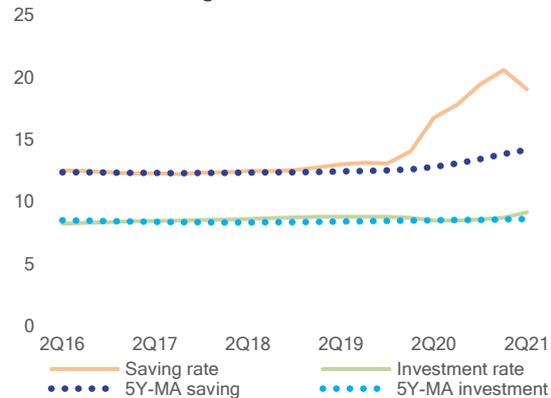
EU household disposable income growth



Note: Annualised growth rate of household gross disposable income adjusted for changes in pension entitlements for EU27 countries, in %. 5Y-MA=five-year moving average of the growth rate.
Sources: Eurostat, ESMA.

A.100

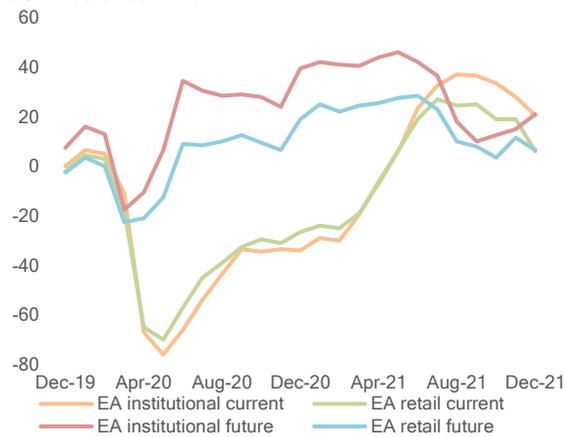
EU household saving and investment rates



Note: EA household annual saving and investment rates, based on four-quarter cumulated transactions, in %. 5Y-MA saving=five-year moving average of the saving rate. 5Y-MA investment=five-year moving average of the investment rate.
Sources: ECB, ESMA.

A.101

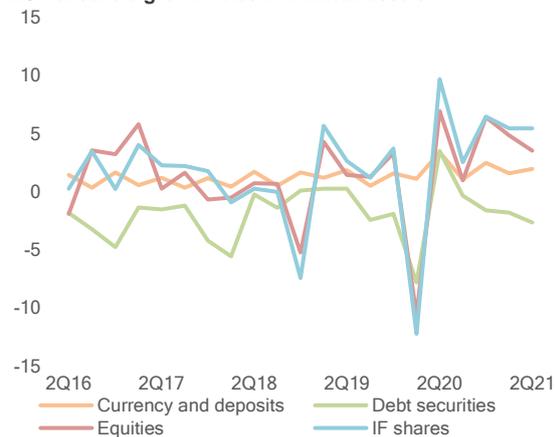
EU investor sentiment



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.

A.102

EU household growth rates in financial assets



Note: Quarterly asset growth rates of financial assets held by EU27 households, in %. IF shares=investment fund shares.
Sources: ECB, ESMA.

Asset allocation by retail investors

A.103

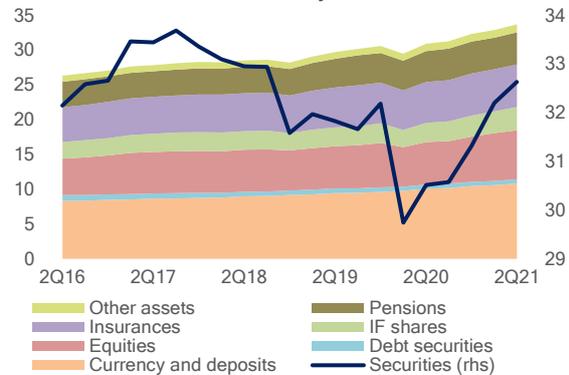
EU household assets to liabilities ratio



Note: Financial assets and liabilities of EU27 households, EUR tn. Assets/liabilities ratio in %.
Sources: ECB, ESMA.

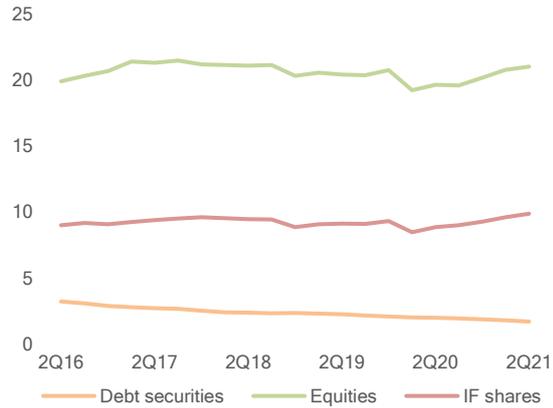
A.104

EU household financial assets by class



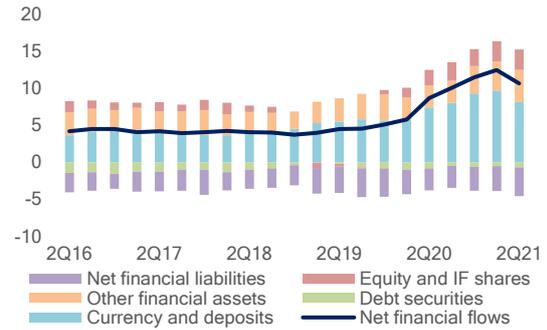
Note: Financial assets of EU27 households, EUR tn, and share of securities investments (debt securities, equities and IF shares), in % of total assets on right hand side (rhs). IF shares=investment fund shares. Other assets=Insurance technical reserves, financial derivatives, loans granted and other accounts receivable.
Sources: ECB, ESMA.

A.105
Share of securities investments in EU household assets



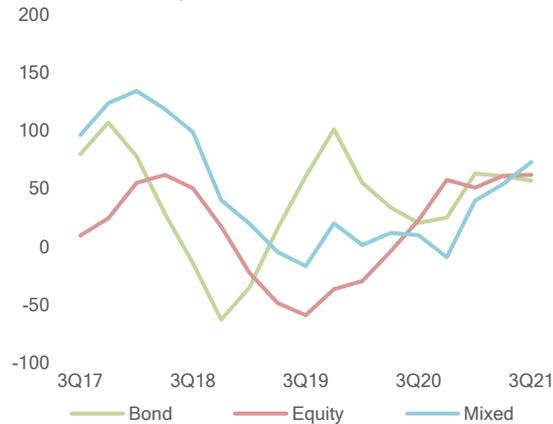
Note: Share of debt securities, equities and investment fund (IF) shares into the financial assets of EU27 households, in % of total financial assets. IF shares=investment fund shares.
Sources: ECB, ESMA.

A.106
EU household net financial asset flows



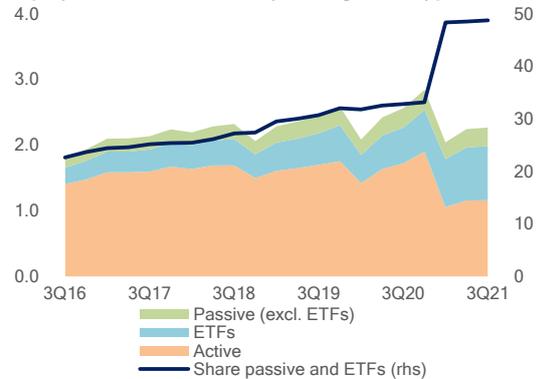
Note: Net acquisition of financial assets and net incurrence of liabilities for EA households as a share of their gross disposable income adjusted for changes in pension entitlements, based on a one-year rolling period, in %. IF shares=investment fund shares. Other financial assets=Insurance technical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

A.107
UCITS net flows by asset class for retail investors



Note: EU27 UCITS annual net flows, retail investors only, at quarterly frequency by asset class, EUR bn.
Sources: Refinitiv Lipper, ESMA.

A.108
Equity UCITS market size by management type



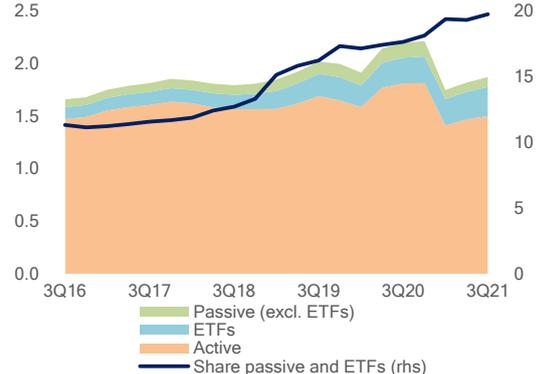
Note: EU27 equity UCITS market size, retail and institutional investors, by management type. All observations for which information on fund value, performance, net flows, subscription and redemption fees are available, in EUR tn. Share of passive and ETFs over total EU equity UCITS assets, in %.
Sources: Refinitiv Lipper, ESMA.

A.109
Equity UCITS net flows by management type



Note: EU27 equity UCITS annual net flows from retail and institutional investors at quarterly frequency by management type, EUR bn.
Sources: Refinitiv Lipper, ESMA.

A.110
Bond UCITS market size by management type



Note: EU27 bond UCITS market size, retail and institutional investors, by management type. All observations for which information on fund value, performance, net flows, subscription and redemption fees are available, in EUR tn. Share of passive and ETFs over total EU equity UCITS assets, in %.
Sources: Refinitiv Lipper, ESMA.

A.111

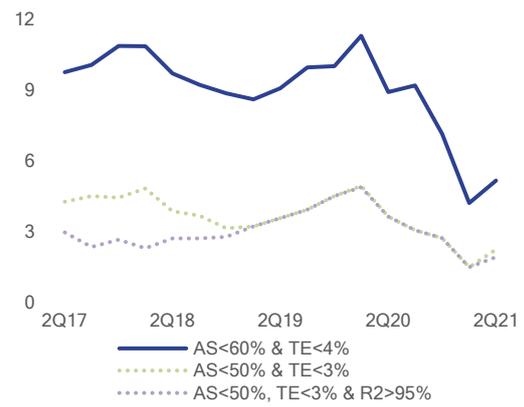
Bond UCITS net flows by management type



Note: EU27 bond UCITS annual net flows from retail and institutional investors at quarterly frequency by management type, EUR bn.
Sources: Refinitiv Lipper, ESMA.

A.112

Equity active funds closet index indicator



Note: EU27 active equity UCITS share of potential closet index (CI) within our sample. Share of total, %. Potential CI based on three criteria: Active Share (AS) < 60% and Tracking Error (TE) < 4%; AS < 50% and TE < 3%; AS < 50% and TE < 3% and R-squared (R2) > 95%.
Sources: Morningstar Direct, ESMA.

Costs and performance

A.113

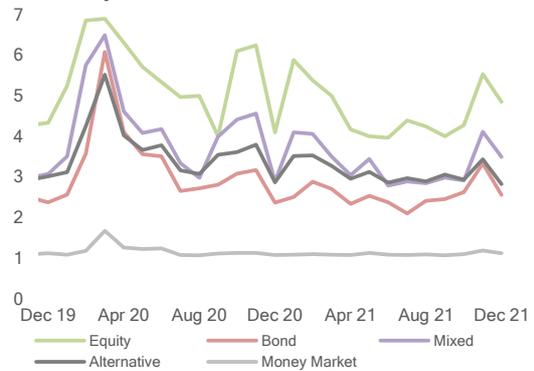
EU household portfolio returns



Note: One-year moving average of the monthly gross returns of a stylised household portfolio, in %. Asset weights, computed using National Financial Accounts by Institutional Sectors, are 36% for collective investment schemes, 39% for deposits, 22% for shares and 3% for debt securities. Costs, fees and other charges incurred for buying, holding or selling these instruments are not taken into account.
Sources: Refinitiv Datastream, Refinitiv Lipper, ECB, ESMA.

A.114

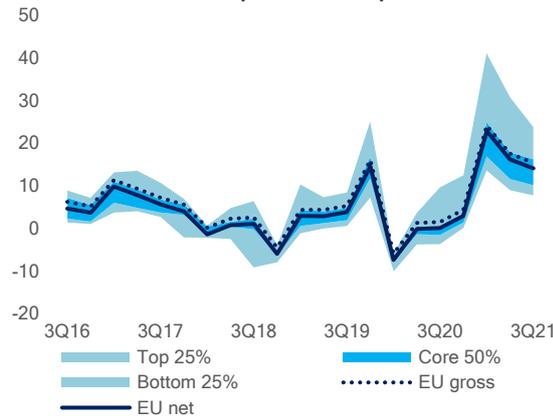
EU fund synthetic risk and reward indicator



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

A.115

UCITS retail investor dispersion of net performance



Note: Dispersion of EU27 UCITS net performances, retail investors only, adjusted for total expense ratio and load fees, in %. Distribution represents selected EU27 markets.
Sources: Refinitiv Lipper, ESMA.

A.116

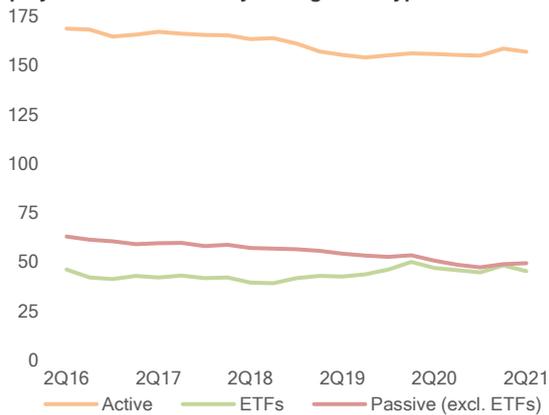
UCITS retail investors net performance by asset class



Note: Evolution of net annual performance (net of ongoing costs (TER), subscription and redemption fees) of EU27 UCITS, retail investors only, by asset class, in %.
Sources: Refinitiv Lipper, ESMA.

A.117

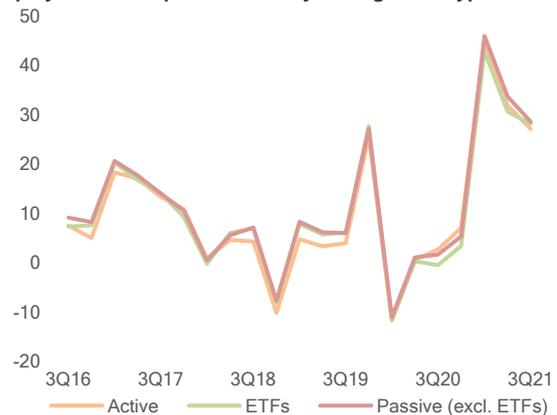
Equity UCITS total costs by management type



Note: Evolution of total costs (ongoing costs (TER), subscription and redemption fees) of EU27 equity UCITS, retail and institutional investors, by management type, in bps.
Sources: Refinitiv Lipper, ESMA.

A.118

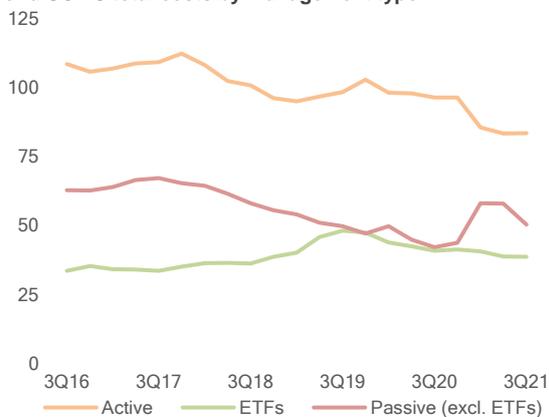
Equity UCITS net performance by management type



Note: Evolution of net annual performance (net of ongoing costs (TEF subscription and redemption fees) of EU27 equity UCITS, retail at institutional investors, by management type, in %.
Sources: Refinitiv Lipper, ESMA.

A.119

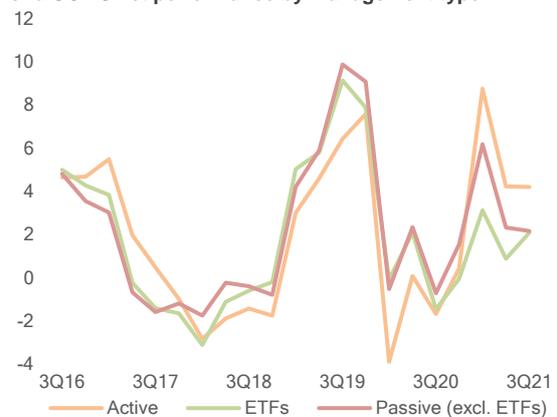
Bond UCITS total costs by management type



Note: Evolution of total costs (ongoing costs (TER), subscription and redemption fees) of EU27 bond UCITS, retail and institutional investors, by management type, in bps.
Sources: Refinitiv Lipper, ESMA.

A.120

Bond UCITS net performance by management type

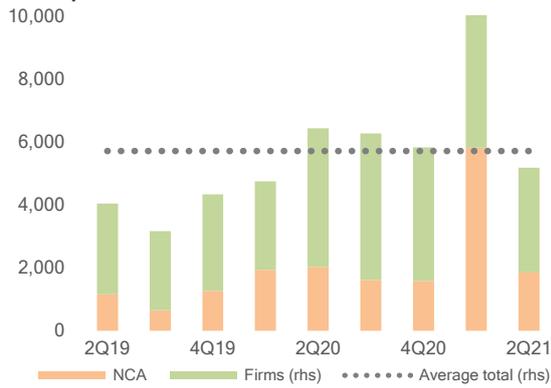


Note: Evolution of net annual performance (net of ongoing costs (TEF subscription and redemption fees) of EU27 bond UCITS, retail at institutional investors, by management type, in %.
Sources: Refinitiv Lipper, ESMA.

Complaints

A.121

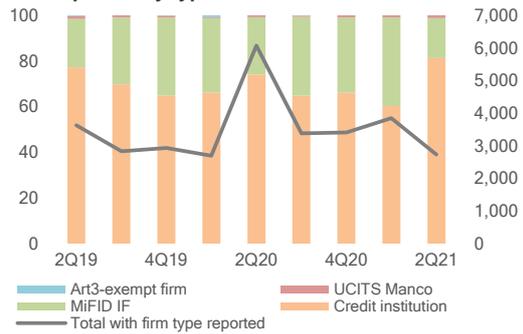
EU complaints



Note: Number of complaints recorded by quarterly-reporting NCAs (n=14) via given reporting channels. "NCA"=Reports lodged directly by consumers with NCAs. "Firms"=Complaints recorded by NCAs via firms. "Average total"=average total number from 4Q18 to 4Q20.
Sources: ESMA complaints database

A.122

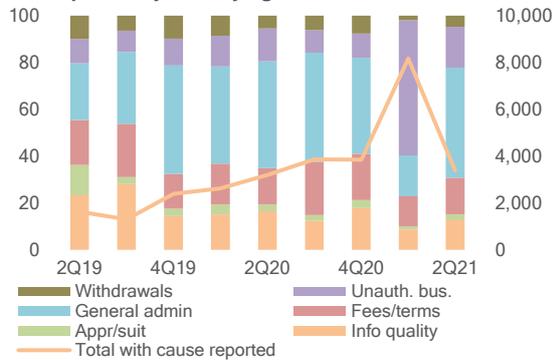
EU complaints by type of firm involved



Note: Share of complaints for quarterly-reporting NCAs (n=14) received direct from consumers and via firms by type of firm involved, excluding complaints with firm type recorded, %. 'Total with firm type reported'=Number of complaints via these reporting channels excluding those with no firm type recorded. 'MiFID IF'=MiFID investment firm. 'UCITS Manco'=UCITS management company. 'Art3-exempt firm'=Firm exempt under Article 3 of MiFID.
Sources: ESMA complaints database

A.123

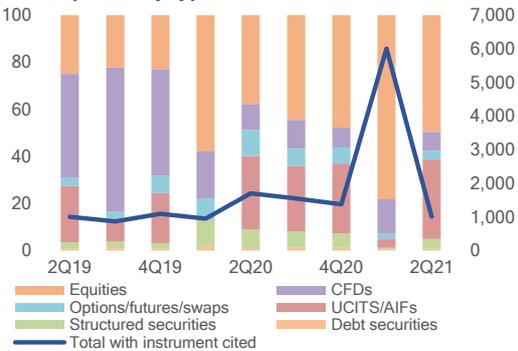
EU complaints by underlying cause



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

A.124

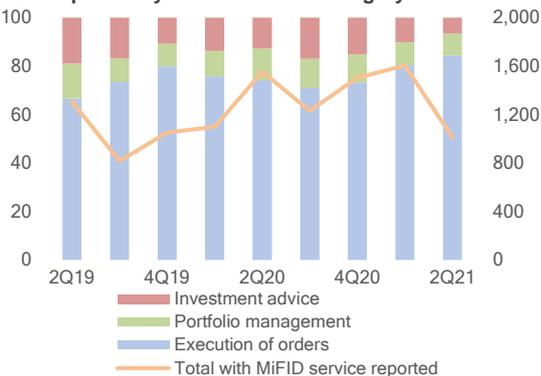
EU complaints by type of financial instrument



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

A.125

EU complaints by MiFID II service category



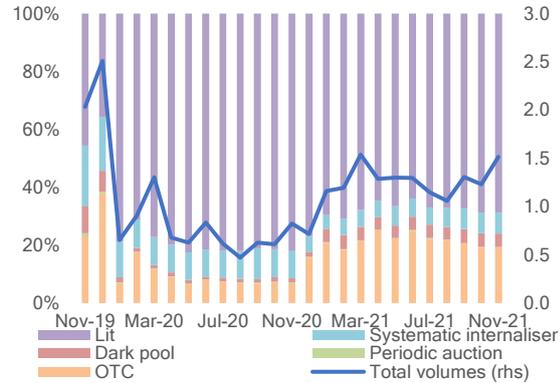
Note: Share of complaints for quarterly-reporting NCAs (n=14) received direct from consumers and via firms recorded as associated with a given MiFID service, excluding complaints with no such category recorded, all reporting channels, %. 'Total with MiFID service reported'=Total complaints received via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

Infrastructures and services

Trading venues and MiFID entities

A.126

EU equity trading by trading type

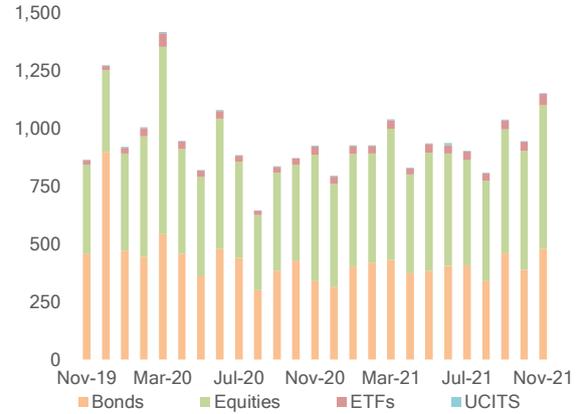


Note: Type of equity trading in the EEA as a percentage of total turnover. Total equity trading turnover in EUR trillion (right axis). Turnover volumes reported by UK TVs and SIs as well as OTC trading reported by UK APAs are included only until the end of 2019. Last available data point is November 2021.

Sources: FIRDS, FITRS, ESMA

A.127

EU trading turnover by type of assets

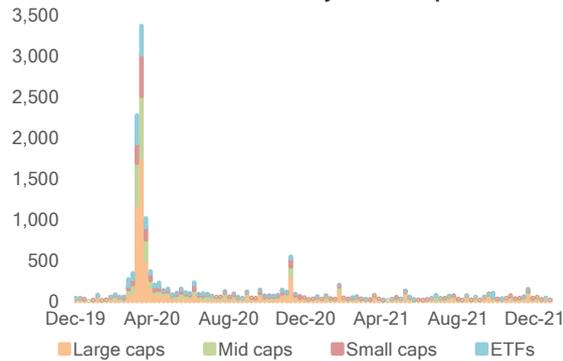


Note: Monthly turnover on EEA30 trading venues by type of assets, in EUR bn. Data for Aquis Exchange, CBOE Europe Equities, Equiduct, London Stock Exchange and Turquoise are not reported for bonds, ETFs and UCITS.

Sources: FESE, ESMA.

A.128

EU circuit-breaker occurrences by market capitalisation

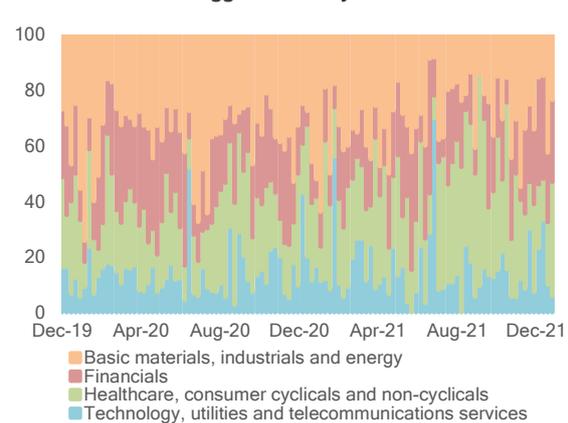


Note: Number of daily circuit-breaker trigger events by type of financial instrument and by market cap registered on 29 EEA30 trading venues for all constituents of the STOXX Europe Large/Mid/Small 200 and a large sample of ETFs tracking these indices or some of their subindices. Results displayed as weekly aggregates.

Sources: Morningstar Real-Time Data, ESMA.

A.129

EU circuit-breaker-trigger events by sector

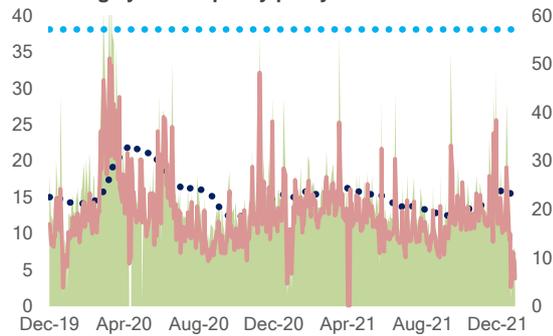


Note: Percentage of circuit-breaker trigger events by economic sector registered on 29 EEA30 trading venues for all constituents of the STOXX Europe Large/Mid/Small 200 and a large sample of ETFs tracking these indices or some of their subindices. Results displayed as weekly aggregates.

Sources: Morningstar Real-Time Data, ESMA.

A.130

EU trading system capacity proxy

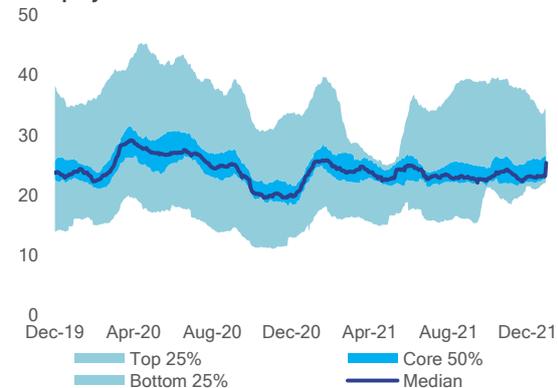


Note: Daily and 3M-MA of trading volumes on 29 EEA30 trading venues for all constituents of the STOXX Europe Large/Mid/Small 200 and a large sample of ETFs tracking these indices or some of their subindices, in EUR bn. Capacity computed as the average across trading venues of the ratio of daily trading volume over maximum volume observed since 31/03/2016, in %.

Sources: Morningstar Real-Time Data, ESMA.

A.131

EU equity market concentration



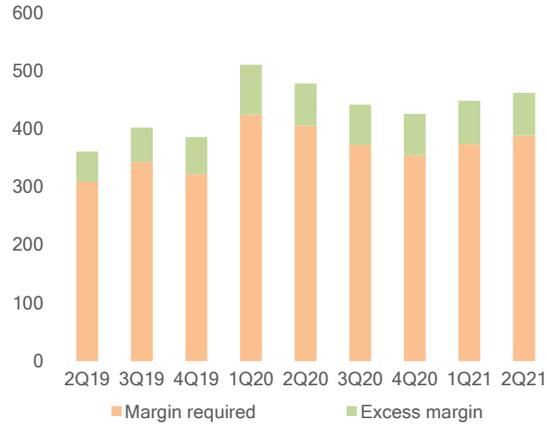
Note: Concentration of notional value of equity trading by national indices computed as a 1M-MA of the Herfindahl-Hirschmann Index, in %. Cboe indices included are AT 20, BE 20, DE 30, DK 25, ES 35, FI 25, FR 40, IE 20, IT 40, NL 25, PT 20 and SE 30.

Sources: Cboe, ESMA.

Central counterparties

A.132

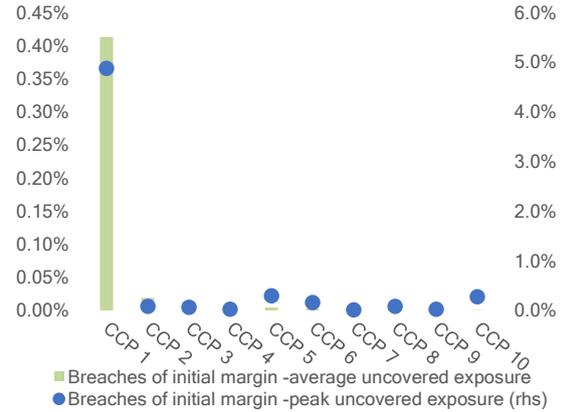
Initial margins held at EU and UK CCPs



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

A.133

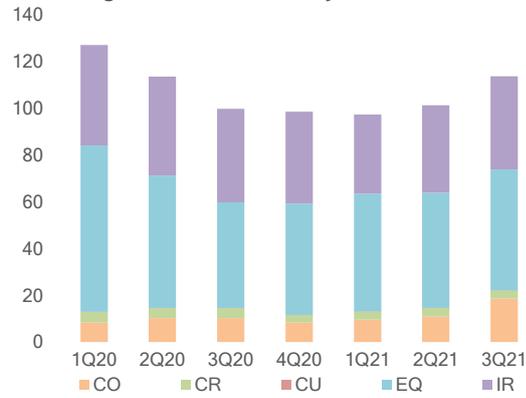
Margin breaches at selected EU CCPs



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 2021.
Sources: Clarus Financial Technology, PQD, ESMA.

A.134

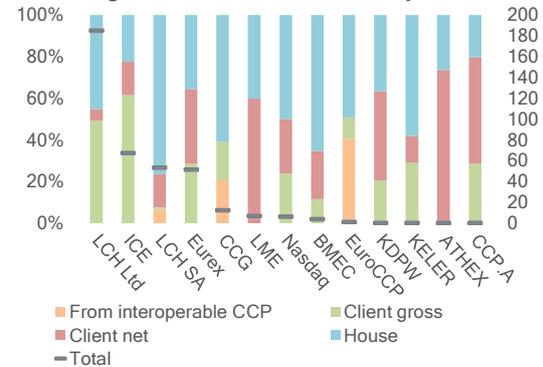
Initial margins held at EU CCPs by asset class



Note: Outstanding amounts of initial margin required and excess collateral received by EU27 and UK CCPs for derivatives (CCP.A, CC&G, European Central Counterparty N.V and KDPW data missing). in EUR bn. 1Q21 = 2 April 2021.
Sources: TRs, ESMA.

A.135

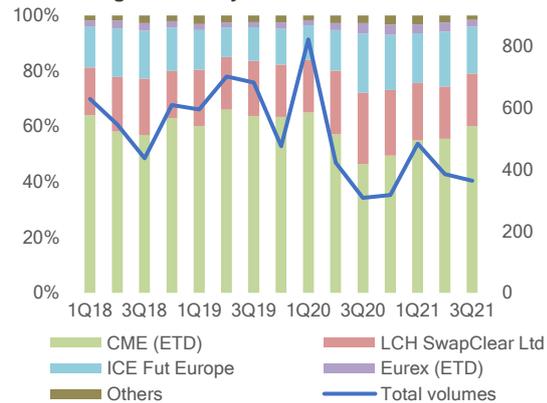
Initial margins held at EU and UK CCPs by account



Note: Total initial margin required, split by house accounts (participants positions on their own account), client gross (when initial margin for the positions of indirect participants must be provided for each indirect participant's own position) and client net (when positions are netted within a group of clients), in %. Total amounts in EUR bn (rhs). as of 30 June 2021.
Sources: Clarus Financial Technology, CPMI-IOSCO PQD, ESMA.

A.136

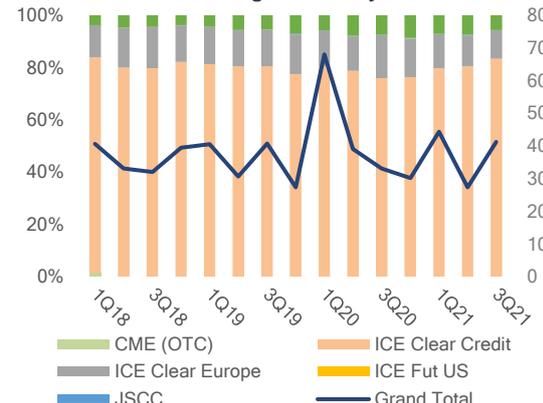
IRD clearing volumes by CCP



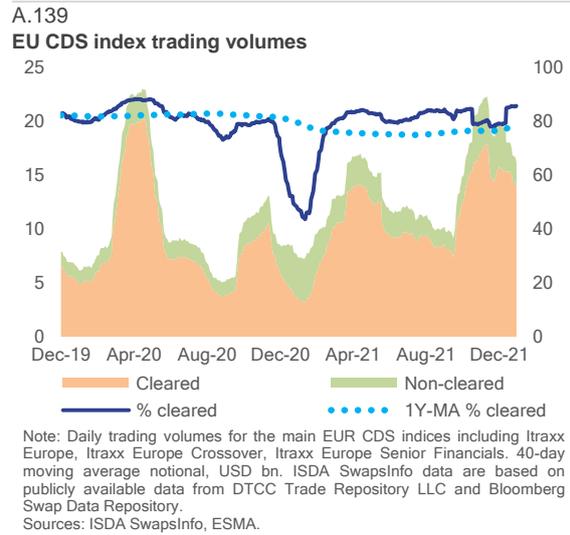
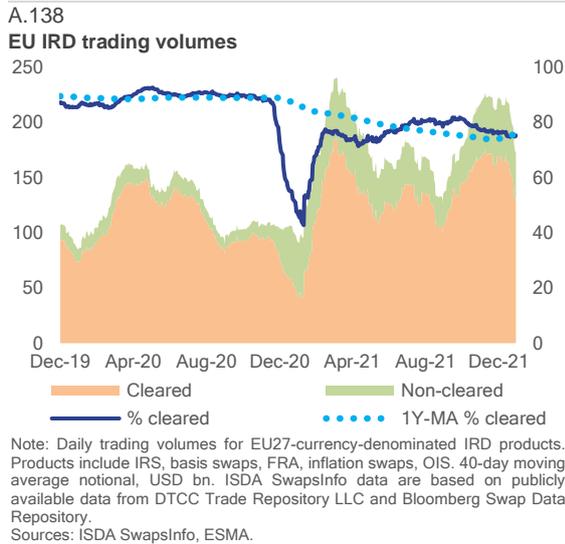
Note: Quarterly notional volumes cleared for OTC and ETD IRDs in EUR, USD, JPY or GBP. Market shares by CCP in % of total quarterly volumes cleared for these products. Total volumes in EUR tn.
Sources: Clarus Financial Technology, ESMA.

A.137

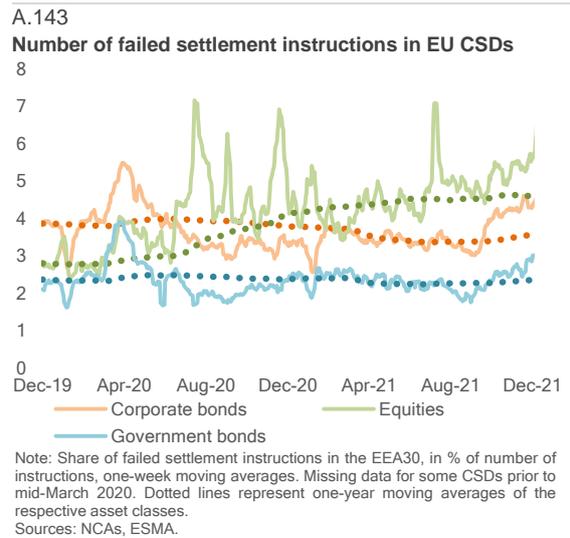
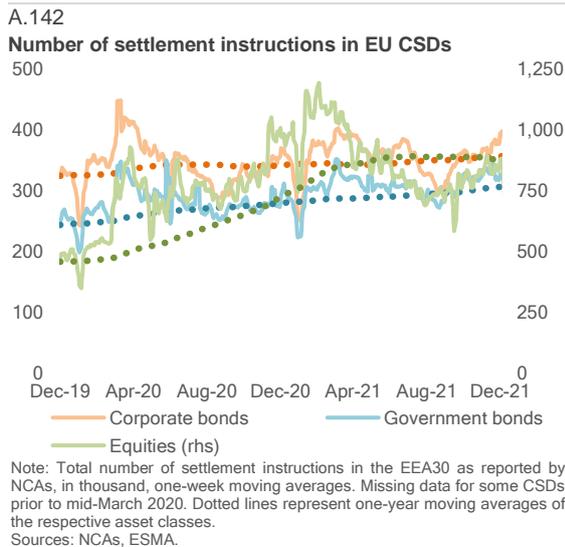
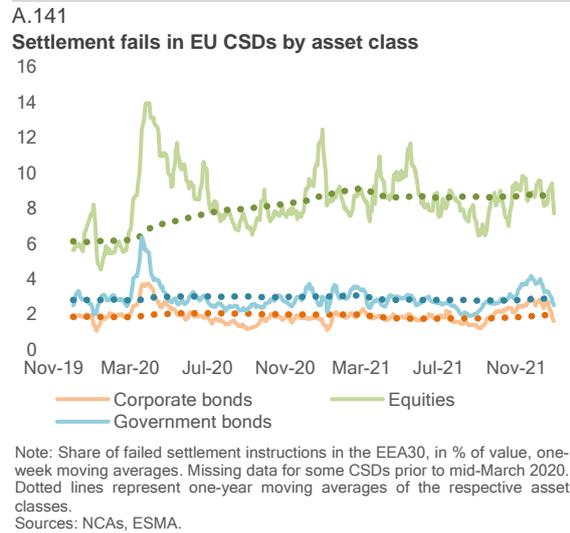
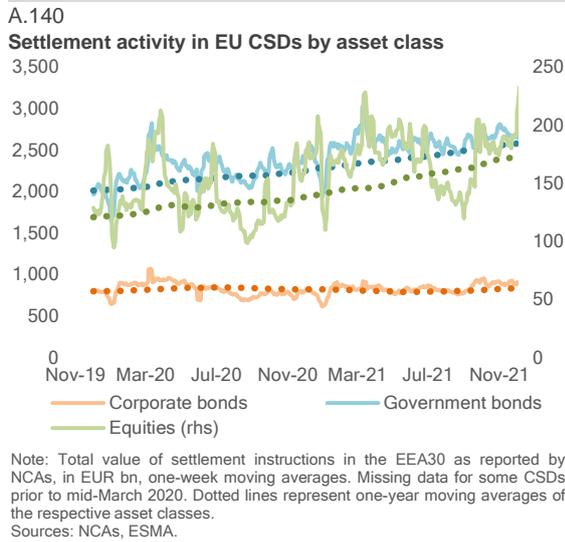
Credit derivatives clearing volumes by CCP



Note: Quarterly notional volumes cleared for CDS, CDX and CDX futures & swaptions in EUR, USD, JPY or GBP. Market shares by CCP in % of total quarterly volumes cleared for these products. Total volumes in EUR tn.
Sources: Clarus Financial Technology, ESMA.



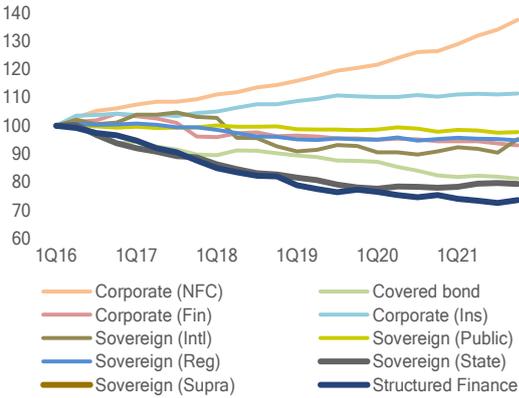
Central securities depositories



Credit rating agencies

A.144

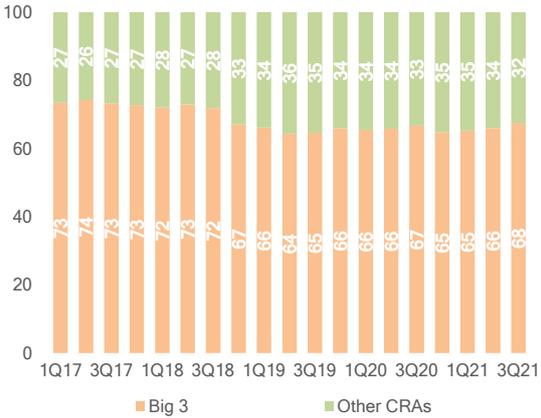
Outstanding EU credit ratings issued by Big 3 CRAs



Note: Evolution of the number of outstanding EEA30 issuer and instrument ratings by debt category, indexed 1Q16=100. S&P, Moody's and Fitch. NFC- non financial, Fin - financial, Ins - insurance, Intl - international, Reg - regional, Supra - supranational. Sources: RADAR, ESMA.

A.145

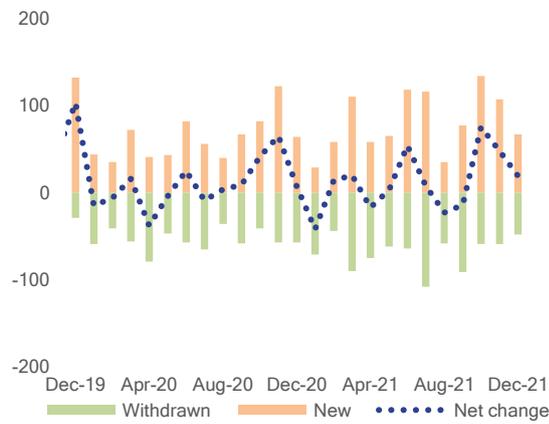
Share of outstanding EU credit ratings: Big 3 CRAs vs. rest



Note: Share of outstanding ratings of EEA30 issuers and instruments from Big 3 CRAs (S&P, Moody's and Fitch) and ratings from all other CRAs in %. Sources: RADAR, ESMA.

A.146

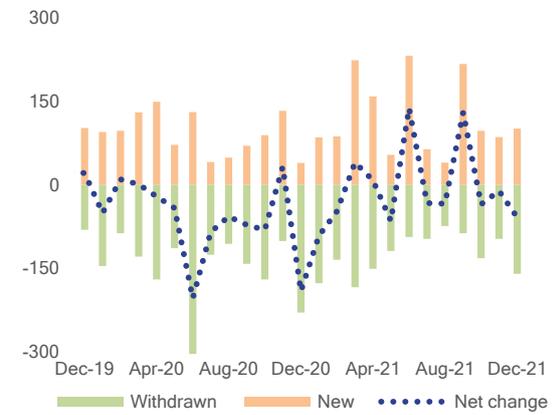
Changes in outstanding EU SFI ratings



Note: Number of withdrawn and new ratings for structured finance instruments, EEA30 ratings. Sources: RADAR, ESMA.

A.147

Changes in outstanding EU covered bond ratings

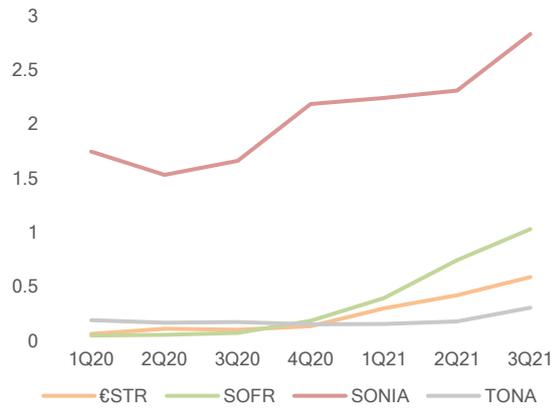


Note: Number of withdrawn and new ratings for covered bond ratings, EEA30 ratings. Sources: RADAR, ESMA.

Financial benchmarks

A.148

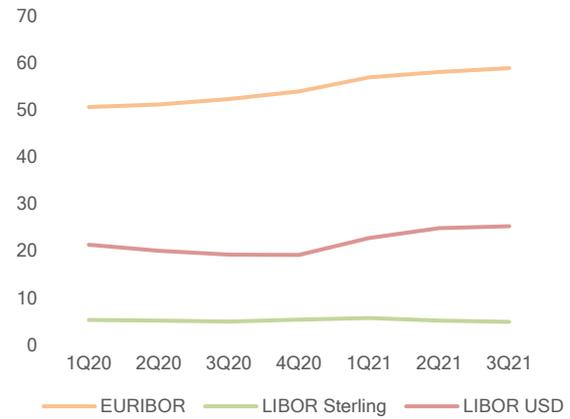
IRDs linked to new RFRs



Note: Gross notional amount of IRD outstanding referencing new benchmarks, EUR tn.
Sources: TRs, ESMA

A.149

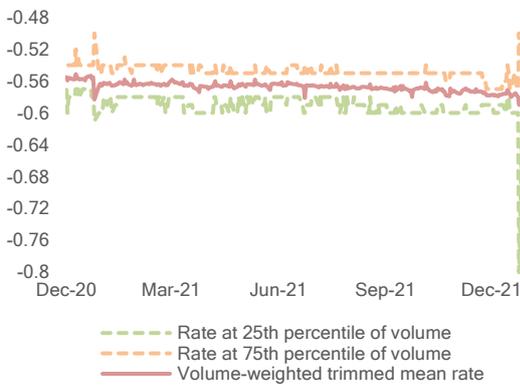
IRDs linked to Euribor and Libor



Note: Gross notional amount of IRD outstanding referencing benchmarks, EUR tn.
Sources: TRs, ESMA

A.150

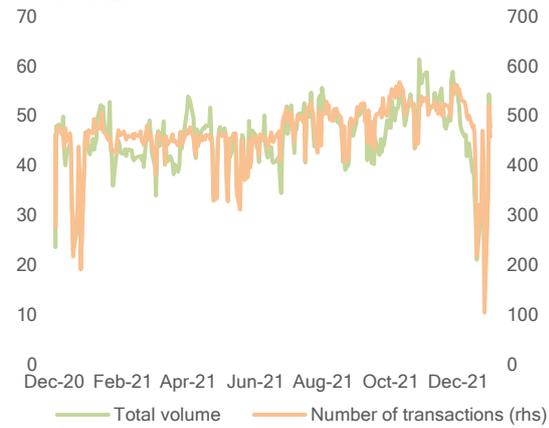
€STR rate



Note: Rates at the 25th and 75th percentiles of total volumes as well as the trimmed one, after removing the top and bottom 25% and calculating the mean of the remaining 50% of the volume-weighted distribution of rates.
Sources: ECB, ESMA

A.151

€STR volumes



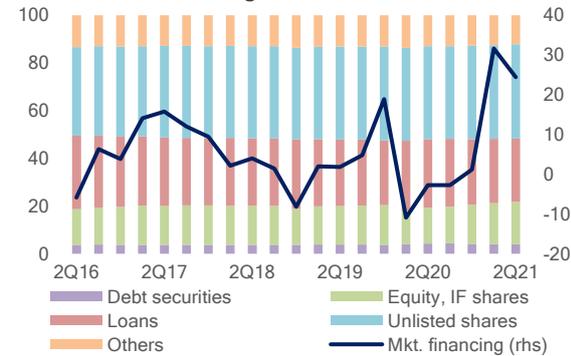
Note: Total nominal value of transactions before trimming, in EUR bn. Number of transactions before trimming.
Sources: ECB, ESMA.

Market based finance

Capital markets financing

A.152

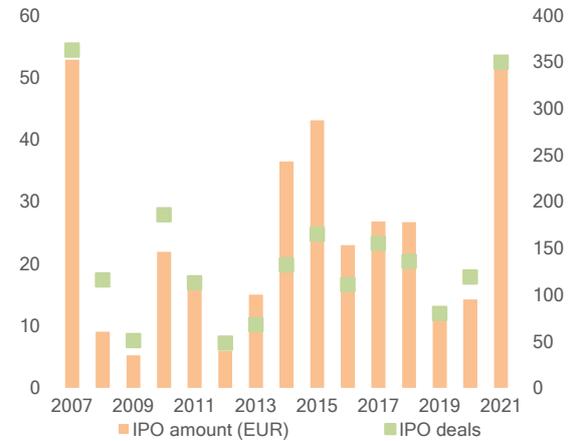
Total EU market financing



Note: Liabilities of EA non-financial corporations (NFC), by debt type as a share of total liabilities. Others include: financial derivatives and employee stock options; insurance, pensions and standardised guarantee schemes; trade credits and advances of NFC; other accounts receivable/payable. Mkt. financing (rhs)= annual growth rate in debt securities, equity and investment fund (IF) shares, in %.
Sources: ECB, ESMA.

A.153

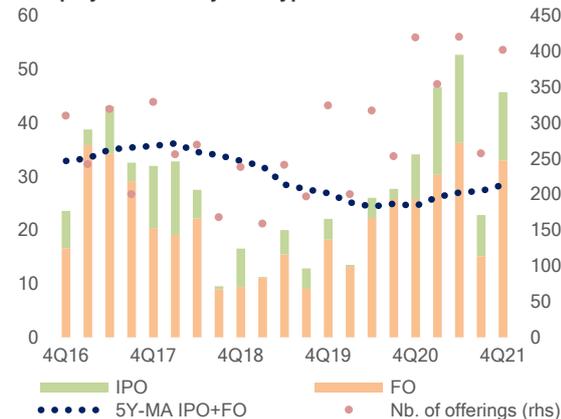
Number and volume of EU IPOs



Note: Number of IPOs in the EEA30 (rhs) and deal amount in EUR bn (lhs).
Sources: Refinitiv Eikon, ESMA.

A.154

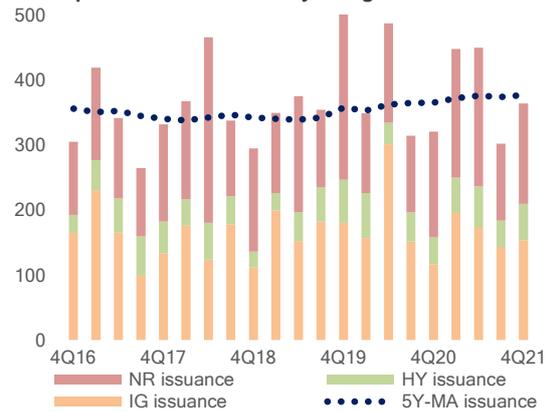
EU equity issuance by deal type



Note: Equity gross issuance in the EEA30 by type, EUR bn, and number of equity offerings. 5Y-MA=five-year moving average of the total value of equity offerings.
Sources: Refinitiv EIKON, ESMA.

A.155

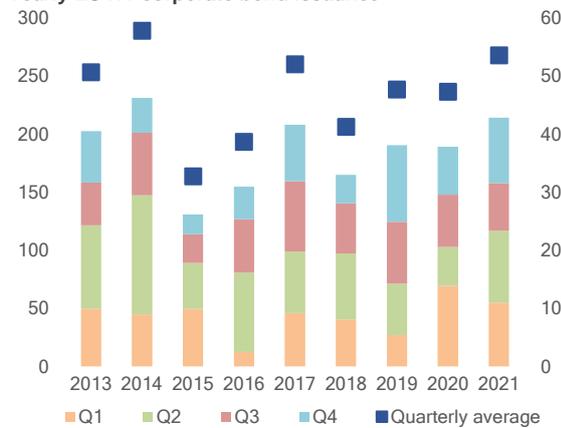
EU corporate bond issuance by rating



Note: Quarterly investment-grade (rating >= BBB-), high-yield (rating < BBB-) and non-rated corporate bond gross issuance in the EEA30, EUR bn.
Sources: Refinitiv EIKON, ESMA.

A.156

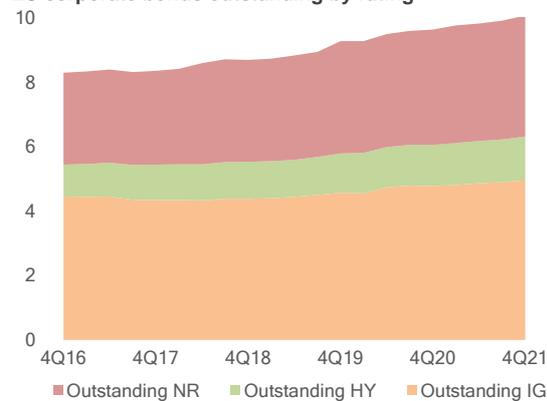
Yearly EU HY corporate bond issuance



Note: Yearly gross HY corporate bond issuance in the EEA30 since 2013, in EUR bn (lhs), and quarterly average in EUR bn (rhs).
Sources: Refinitiv Eikon, ESMA.

A.157

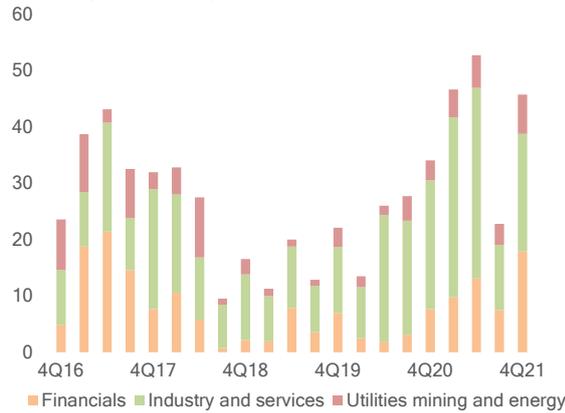
EU corporate bonds outstanding by rating



Note: Quarterly investment-grade (rating >= BBB-), high-yield (rating < BBB-) and non-rated corporate bond outstanding amounts, EUR tn. Maturities < 12 months are excluded.
Sources: Refinitiv EIKON, ESMA.

A.158

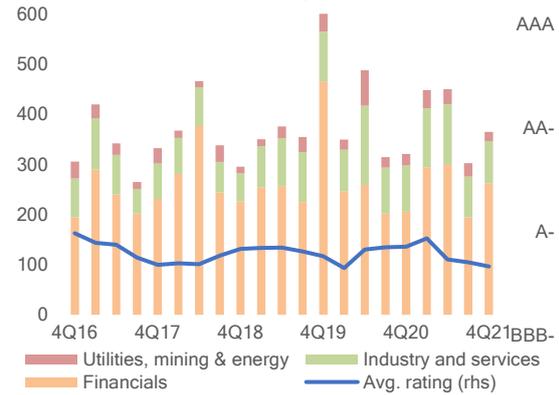
EU equity issuance by sector



Note: Equity gross issuance in the EEA30 by sector, EUR bn. Financials includes banking & investment services, insurance, investment trusts and real estate.
Sources: Refinitiv EIKON, ESMA.

A.159

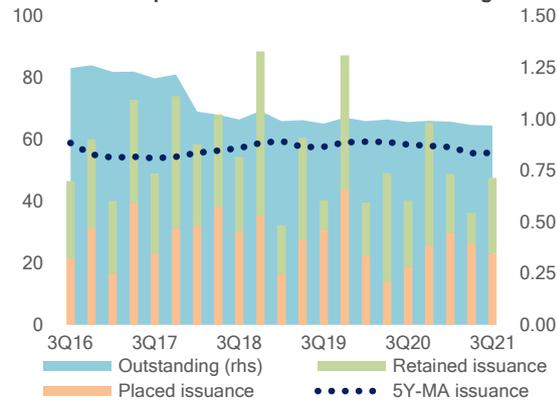
EU corporate bond issuance by sector



Note: Corporate bond gross issuance in the EEA30 by sector, EUR bn. Avg. rating=weighted average rating computed as a one-year moving average of ratings converted into a numerical scale (AAA=1, AA+=2, etc.). Maturities < 12 months are excluded.
Sources: Refinitiv EIKON, ESMA.

A.160

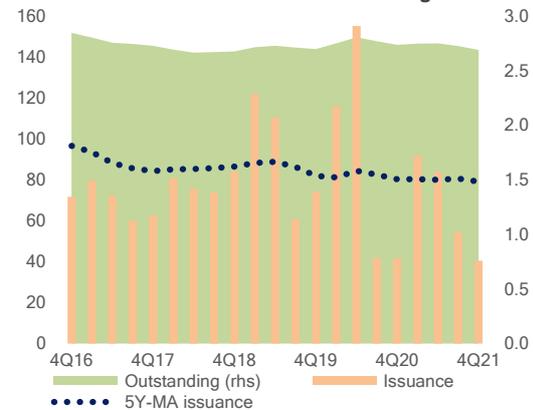
EU securitised products issuance and outstanding



Note: Retained and placed securitised products gross issuance in Europe, EUR bn, and outstanding amounts (rhs), EUR tn. Data includes ABS, CDO, MBS, SME, WBS.
Sources: AFME, ESMA.

A.161

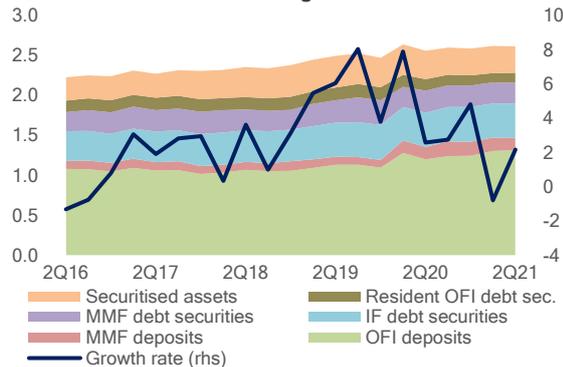
EU covered bond issuance and outstanding



Note: Covered bond gross issuance in the EEA30, EUR bn, and outstanding amounts (rhs), EUR tn. Maturities < 12 months are excluded.
Sources: Refinitiv EIKON, ESMA.

A.162

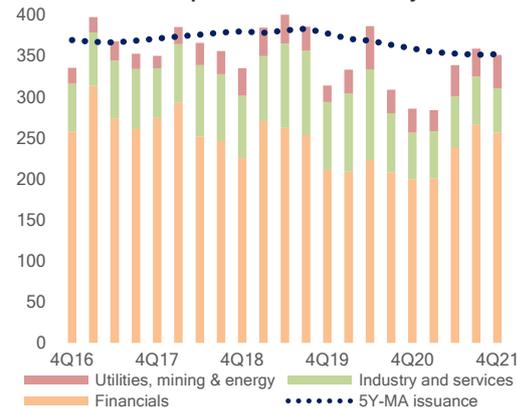
EU non-bank wholesale funding



Note: Amount of wholesale funding provided by EA non-banks, EUR tn, and growth rate (rhs), in %. Securitised assets are net of retained securitisations. Resident OFI reflects the difference between the total financial sector and the known sub-sectors within the statistical financial accounts (i.e. assets from banking sector, insurances, pension funds, financial vehicle corporations, investment funds and money market funds).
Sources: ECB, ESMA.

A.163

Short-term EU corporate debt issuance by sector

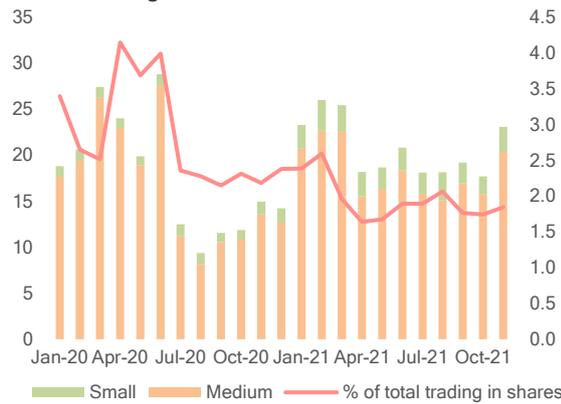


Note: Short-term corporate debt gross issuance in the EEA30 by sector, EUR bn. Short-term=Maturities < 12 months.
Sources: Refinitiv EIKON, ESMA.

SMEs

A.164

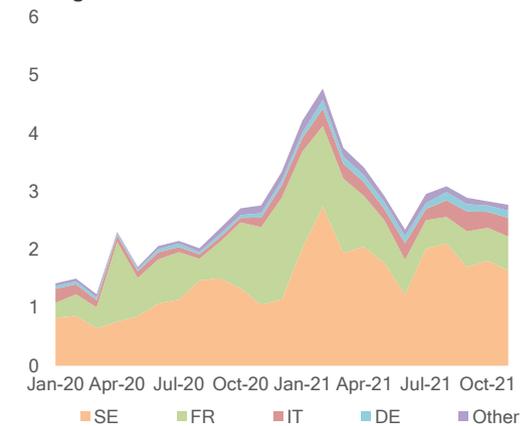
EU SME trading volumes



Note: Monthly trading volumes on EEA30 venues of SME shares, EUR bn (lhs), and % share of thtotal trading in shares (rhs). 'Small' =(0,20mn), 'Medium'=(20mn,200mn). Based on share market capitalisation in 2020. Sources: FIRDS, FITRS, ESMA.

A.165

Trading volumes on EU SME Growth Markets

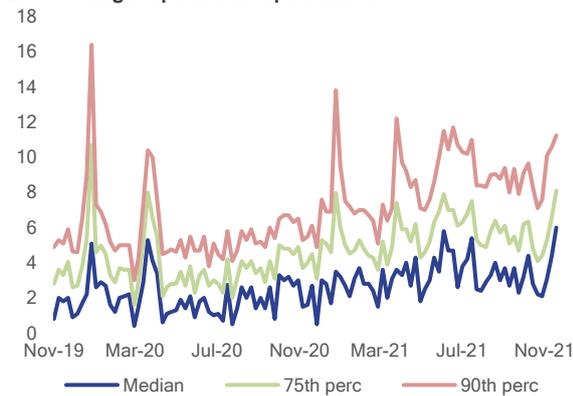


Note: SME trading volumes on GMs by segment MIC domicile and month, in EUR bn. Sources: FIRDS, FITRS, ESMA.

Market-based credit intermediation

A.166

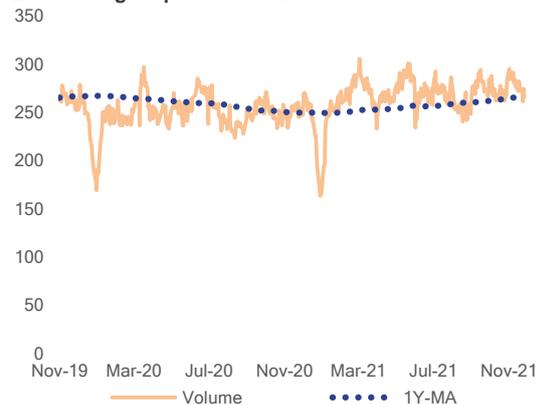
EU sovereign repo market specialness



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 nine EUR repo markets (AT, BE, DE, ES, FI, FR, IT, NL and PT). Sources: CME Group Benchmark Administration Limited, ESMA.

A.167

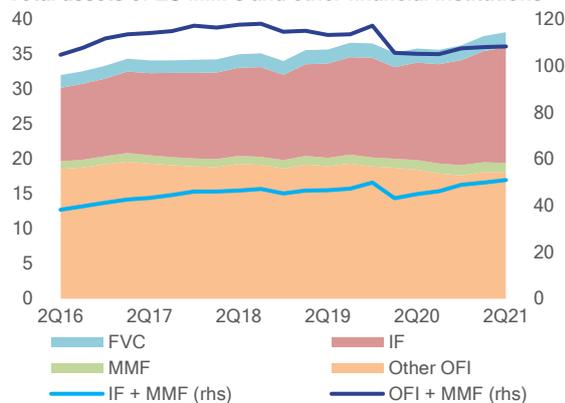
EU sovereign repo market turnover



Note: Repo transaction volumes executed through CCPs in nine sovereign EUR repo markets (AT, BE, DE, ES, FI, FR, IT, NL and PT), EUR bn. Sources: CME Group Benchmark Administration Limited, ESMA.

A.168

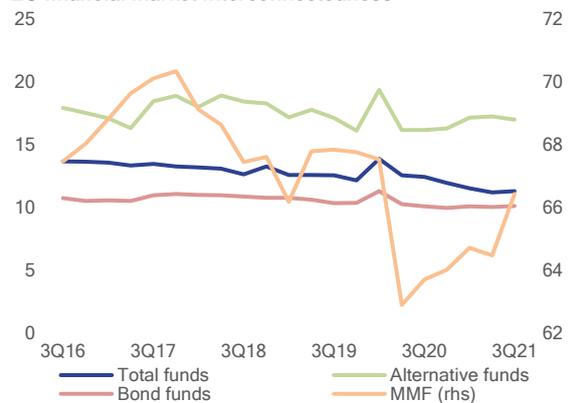
Total assets of EU MMFs and other financial institutions



Note: Total assets for EA MMFs and other financial institutions (OFI): investment funds (IF), financial vehicle corporations (FVC), Other OFI estimated with ECB Quarterly Sector Accounts, in EUR tn. Expressed in % of bank assets on rhs. Sources: ECB, ESMA.

A.169

EU financial market interconnectedness



Note: EA loan and debt securities vis-à-vis MFI counterparts, as a share of total assets, 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.

A.170

Credit terms in EU SFT and OTC derivatives



Note: Weighted average of responses to the question: "Over the past three months, how have terms offered as reflected across the entire spectrum of EUR-denominated instruments in securities financing and OTC derivatives transaction types changed?" 1=tightened considerably, 2=tightened somewhat, 3=remained basically unchanged, 4=eased somewhat, and 5=eased considerably.
Sources: ECB, ESMA.

A.171

EU securities financing conditions



Note: Weighted average of responses to the questions "Over the past three months, how has demand for funding/how have liquidity and functioning for all EUR-denominated collateral types changed?" 1=decreased/deteriorated considerably, 2=decreased/deteriorated somewhat, 3=remained basically unchanged, 4=increased/improved somewhat, and 5=increased/improved considerably.
Sources: ECB, ESMA.

Sustainable finance

ESG investing

A.172

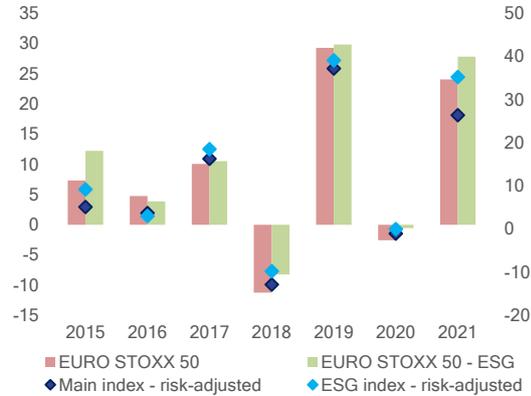
Global ESG leaders index performance



Note: MSCI ESG Leaders total return indices, denominated in USD, indexed with 01/11/2019=100. MSCI ESG Leaders are companies with an MSCI ESG rating of BB or above and an MSCI ESG controversies score of 3 or above. Sources: Refinitiv Datastream, ESMA.

A.173

EU ESG leaders index risk-adjusted returns



Note: Annual returns of the EURO STOXX 50 and EURO STOXX ESG Leaders 50 indices, in %. Risk-adjusted returns, on rhs, measured as Sharpe ratios. Current year data year-to-date. STOXX ESG Leaders are companies with a Sustainalytics ESG rating in the top 25%. Sources: Refinitiv Datastream, ESMA.

A.174

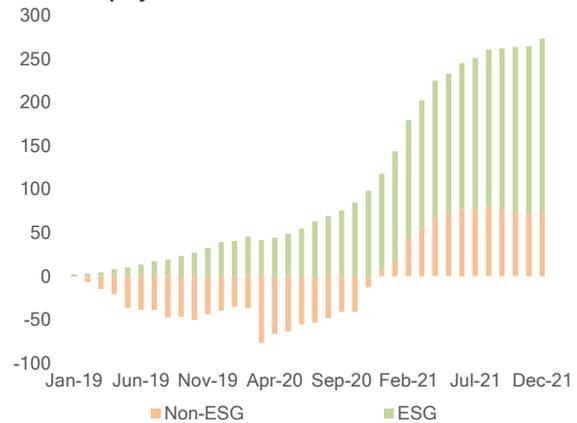
EU ESG fund assets



Note: AuM of EU-domiciled ESG funds by type of fund, EUR bn, and share of ESG fund AuM in total fund AuM (rhs), in %. Sources: Morningstar, Refinitiv Lipper, ESMA.

A.175

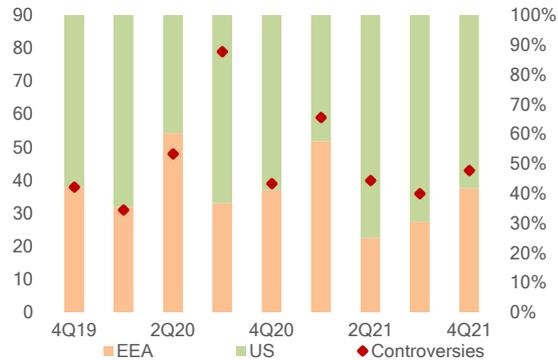
EU ESG equity fund flows



Note: Cumulative net flows of EU27-domiciled equity ESG and non-ESG funds since January 2019, EUR bn. Sources: Morningstar, Refinitiv Lipper, ESMA.

A.176

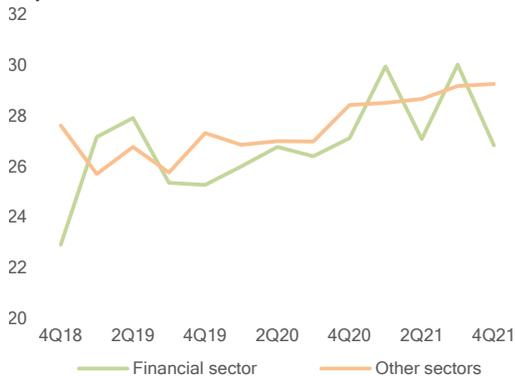
Number of EU and US climate-related controversies



Note: Quarterly number of new climate-related controversies involving EEA financial sector firms (based on the STOXX Europe 600) and US financial sector firms (based on the S&P 500), and share of climate-related controversies. Climate-related controversies include greenhouse gas emissions, soy, forest burning, energy management, arctic drilling and coal-fired power plants. Sources: RepRisk, ESMA.

A.177

Reputational Risk Index of EU firms



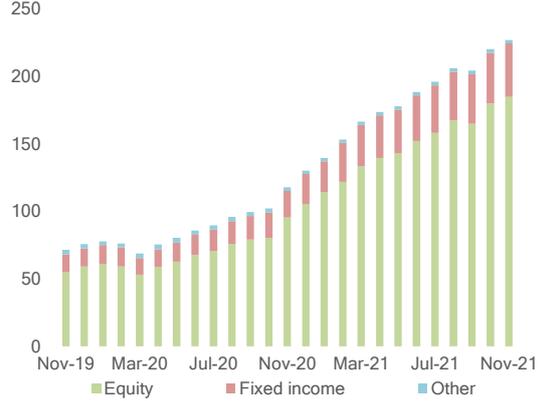
Note: Average quarterly RepRisk Index (RRI) for financial vs. non-financial sector firms from the STOXX Europe 600 index. The RRI captures firms' reputational risk related to ESG issues based on reach and impact of public information, ranging from 0 (no risk) to 100 (maximum risk). Sources: RepRisk, ESMA.

A.178
EU ESG equity fund returns



Note: EU27-domiciled ESG and non-ESG equity funds' annual average monthly returns, asset weighted, in %.
Sources: Morningstar, Thomson Reuters Lipper, ESMA.

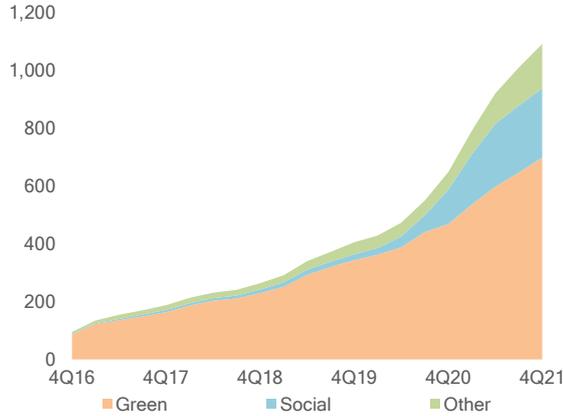
A.179
EU ESG ETF assets



Note: AuM of EU-domiciled ESG ETFs, EUR bn.
Sources: Morningstar, ESMA.

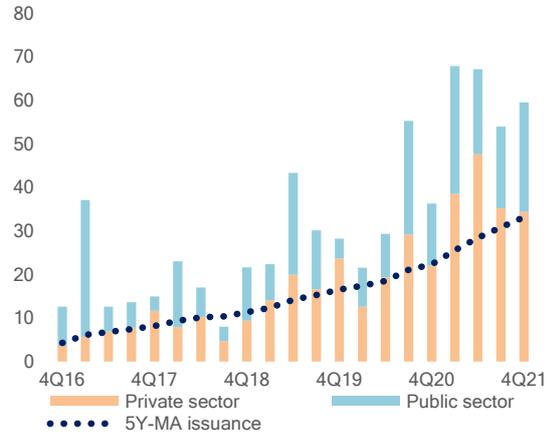
Sustainable debt

A.180
EU ESG bonds outstanding



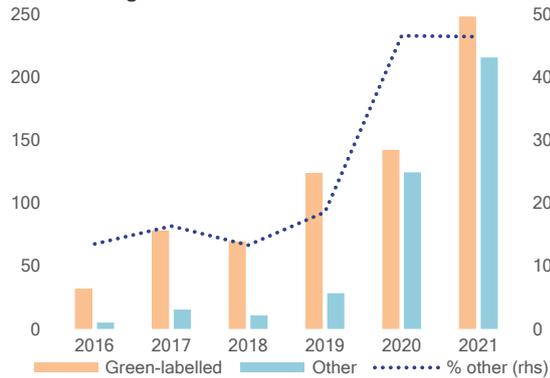
Note: Total amount of ESG bonds outstanding issued by EEA30-domiciled issuers, EUR bn.
Sources: Refinitiv EIKON, ESMA.

A.181
EU green bond quarterly issuance



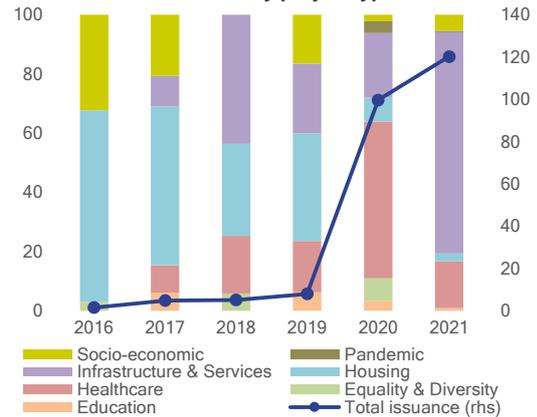
Note: Green bond gross issuance in the EEA30 by sector, EUR bn.
Sources: Refinitiv EIKON, ESMA.

A.182
Labelled EU green bond issuance

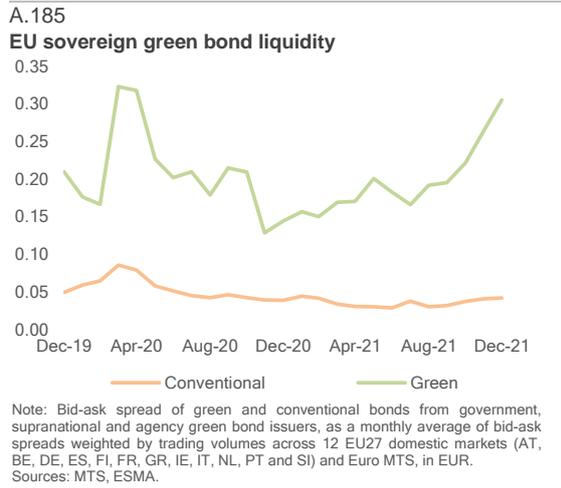
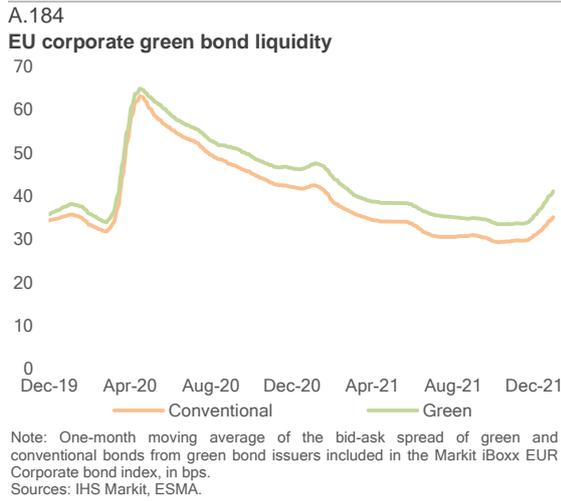


Note: ESG bond gross issuance in the EEA30, EUR bn, and share of other ESG bonds (rhs), in %. Other = all ESG bonds not labelled "Green" by the Climate Bond Initiative and/or aligned with the ICMA Green Bond Principles.

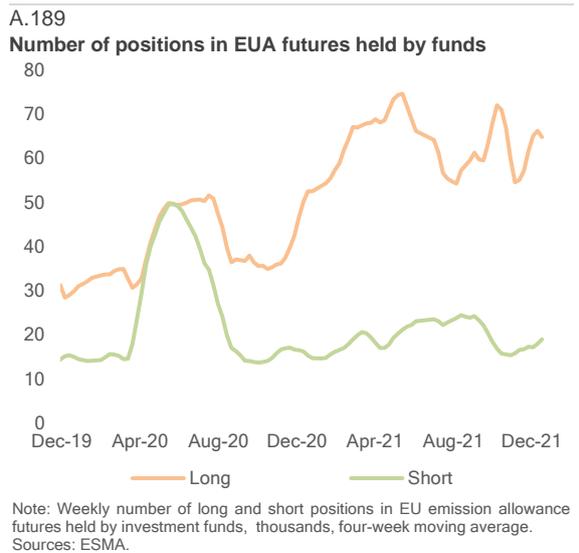
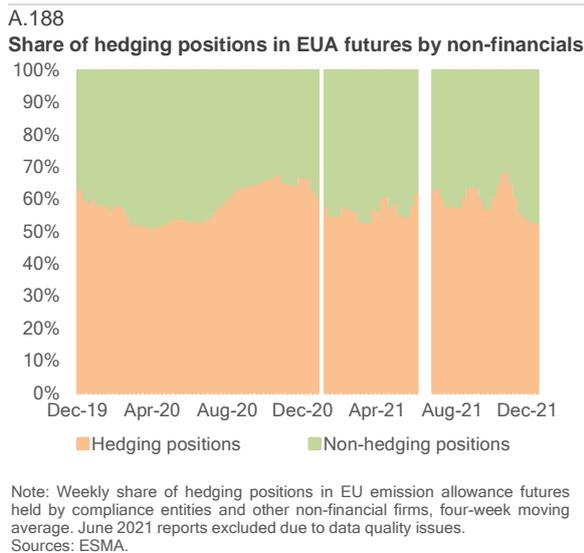
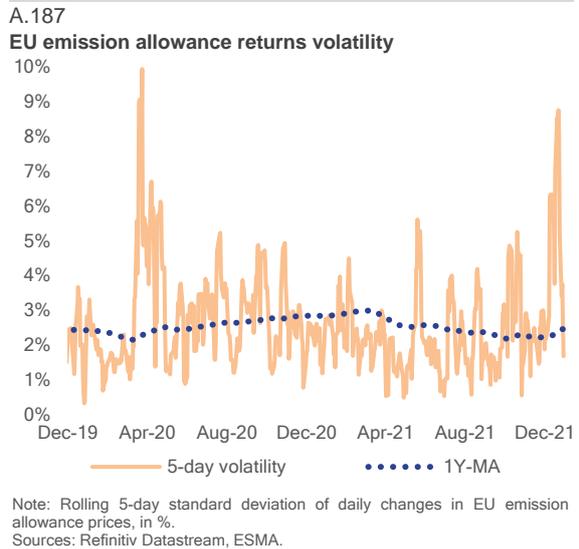
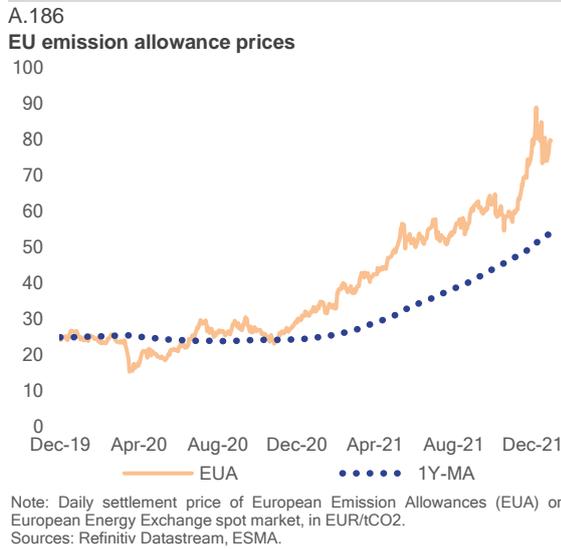
A.183
EU social bond issuance by project type



Note: Social bond gross issuance in the EEA30 by project type, in %, as a share of total social bond gross issuance (rhs), in EUR bn.
Sources: Refinitiv EIKON, ESMA.

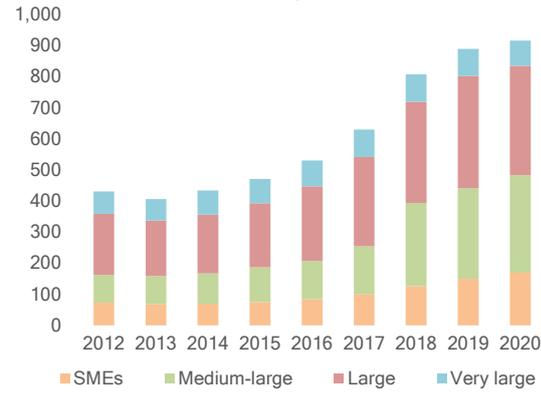


Carbon markets



A.190

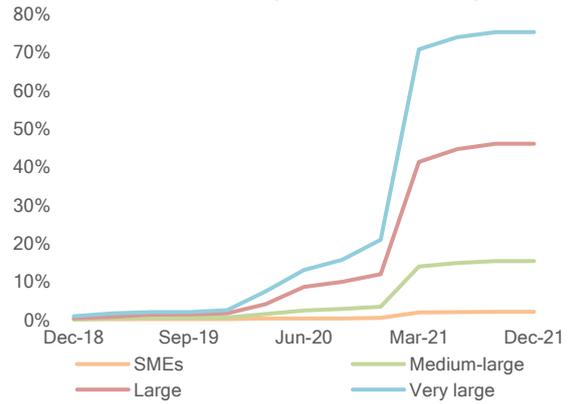
Number of EU firms disclosing Scope 1 GHG emissions



Note: Number of EEA-domiciled firms listed in the EU disclosing Scope 1 (direct) greenhouse gas emissions, by market capitalisation bucket. SMEs=below 200mn; Medium-large=from 200mn to 2bn; Large=from 2bn to 20bn; Very large=above 20bn.
Sources: Refinitiv EIKON, FIRDS, ESMA.

A.191

Share of EU firms disclosing GHG emissions target



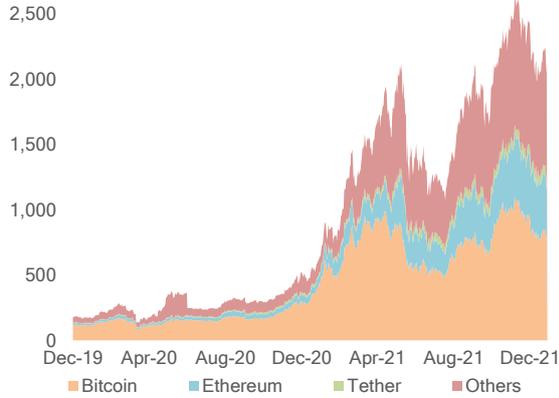
Note: Share of EEA-domiciled firms listed in the EU disclosing a greenhouse gas emissions reduction target, by market capitalisation. SMEs=below 200mn; Medium-large=from 200mn to 2bn; Large=from 2bn to 20bn; Very large=above 20bn.
Sources: Refinitiv EIKON, FIRDS, ESMA.

Financial innovation

Financial innovation

A.192

Crypto asset market capitalisation



Note: Market capitalisation of Bitcoin, Ethereum, Tether and other crypto-assets, in EUR bn.
Sources: CoinMarketCap, ESMA.

A.193

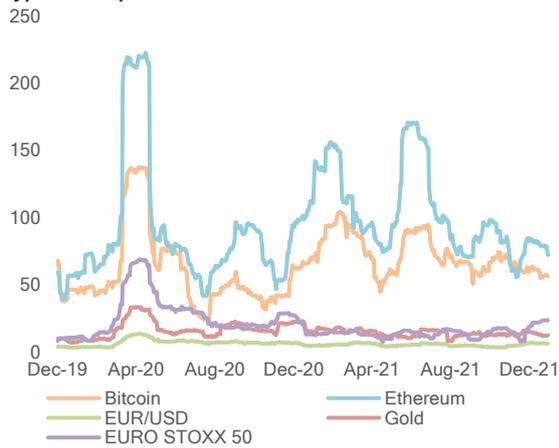
Crypto asset prices



Note: Prices of selected crypto-assets, EUR thousand.
Sources: Refinitiv Datastream, ESMA.

A.194

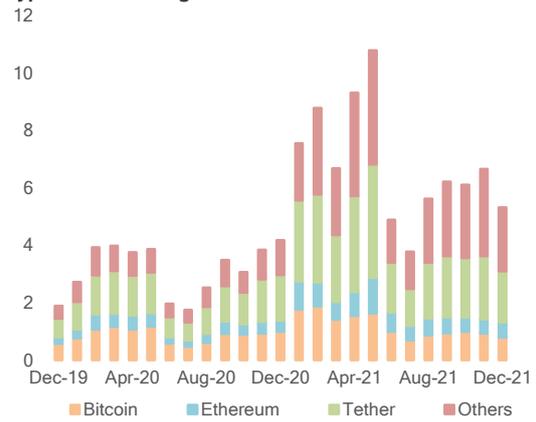
Crypto asset price volatilities



Note: Annualised 30-day historical volatility of EURO STOXX 50, EUR/USD spot rate returns and USD-denominated returns for Bitcoin, Ethereum and gold, in %.

A.195

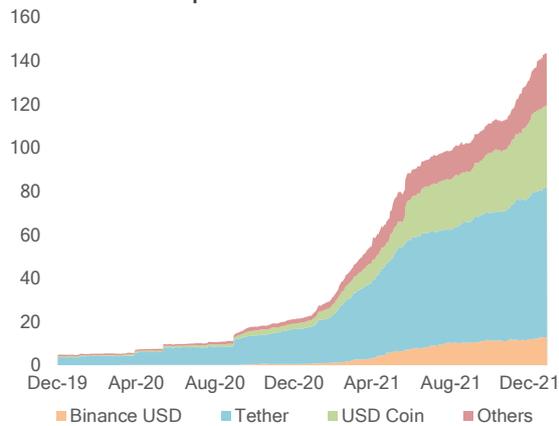
Crypto asset trading volumes



Note: Trading volumes of Bitcoin, Ethereum, Tether and other crypto-assets, in EUR tn.
Sources: CoinMarketCap, ESMA.

A.196

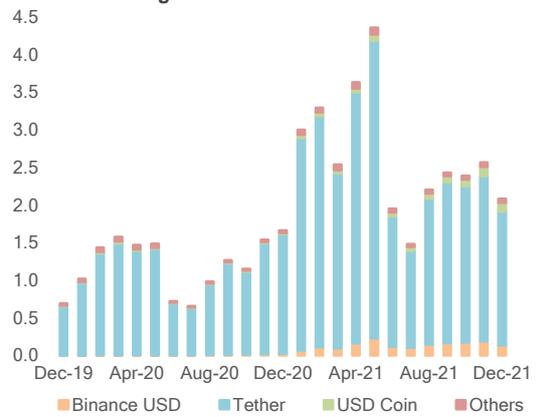
Stablecoin market capitalisation



Note: Market capitalisation of Binance USD, Tether, USD Coin and other stablecoins, in EUR bn.
Sources: CoinMarketCap, ESMA.

A.197

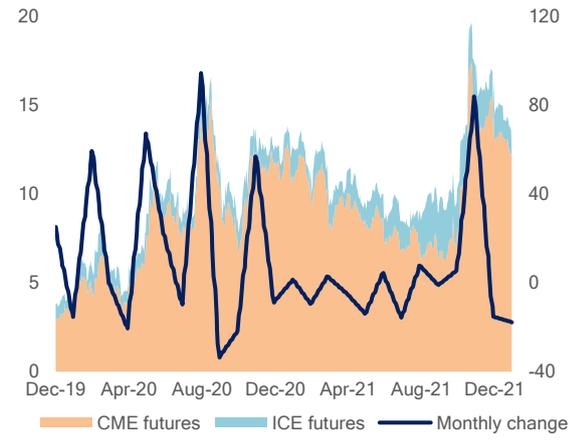
Stablecoin trading volumes



Note: Trading volumes of Binance USD, Tether, USD Coin and other stablecoins, in EUR tn.
Sources: CoinMarketCap, ESMA.

A.198

Bitcoin futures market



Note: Total open interest in Bitcoin futures, in thousand of contracts, and change in monthly average total open interest, in %.
 Sources: Refinitiv Datastream, ESMA.

