# Table of contents

**Market environment** 3

**Securities markets** 5
- Equity markets 5
- Sovereign-bond markets 7
- Corporate-bond markets 10
- Credit quality 11
- Securities lending 13
- Short selling 14
- Money markets 15
- Commodity markets 16
- Derivatives markets 17

**Infrastructures and services** 19
- Trading venues and MiFID entities 19
- Central counterparties 20
- Central securities depositories 22
- Credit rating agencies 22
- Financial benchmarks 24

**Asset management** 25
- Fund industry 25
- Money market funds 28
- Alternative funds 29
- Exchange-traded funds 30

**Consumers** 32
- Investment resources available to households 32
- Asset allocation by retail investors 32
- Costs and performance 35
- Complaints 37

**Market based finance** 38
- Capital markets financing 38
- SMEs 40
- Market-based credit intermediation 40

**Sustainable finance** 42
- ESG investing 42
- Sustainable debt 43
- Emissions trading 44

**Financial innovation** 45
- Financial innovation 45
Market environment

A.1 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 (Boxx EUR, all maturities). 01/06/2019=100. Sources: Refinitiv Datastream, ESMA.

A.2 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 (Boxx 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 EUR STOXX 50 (VSTOXX), monthly average, on the right-hand side. Sources: Baker, Bloom, and Davis 2019; Refinitiv Datastream, ESMA.

A.4 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. 01/06/2019=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.5 Exchange rate implied volatilities

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

A.6 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.7 Portfolio investment flows by asset class

-300 -200 -100 0 100 200 300 400
Apr-19 Aug-19 Dec-19 Apr-20 Aug-20 Dec-20 Apr-21
Equity assets Equity liabilities Long-term debt assets Long-term debt liabilities Short-term debt assets Short-term debt liabilities
Total net flows

Note: Balance of Payments statistics, financial accounts, portfolio investments by asset class, EUR bn. Assets=net purchases (net sales) of non-EA securities by EA investors. Liabilities=net sales (net purchases) of EA securities by non-EA investors. Total net flows=net outflows (inflows) from (into) the EA. Sources: ECB, ESMA.

A.8 Investment flows by resident sector

-600 -300 0 300 600 900 1,200
1Q16 1Q17 1Q18 1Q19 1Q20 1Q21
Govt. & househ. Other finance Ins. & pensions NFC 5Y-MA

Note: Quarterly Sector Accounts. Investment flows by EA resident sector in equity (excluding investment fund shares) and debt securities, EUR bn. 5Y-MA=five-year moving average of all investment flows. Sources: ECB, ESMA.

A.9 Institutional investment flows

-150 -75 0 75 150 225 300 375 450
1Q16 1Q17 1Q18 1Q19 1Q20 1Q21
Real estate funds Other Insurance & pensions Hedge funds Equity funds Bond funds

Note: EA institutional investment flows by type of investor, EUR bn. Other=financial vehicle corporations, mixed funds, other funds. 5Y-MA=five-year moving average of all investment flows. Sources: ECB, ESMA.
Securities markets

Equity markets

A.10 Equity prices by sector

Note: Datastream regional equity indices for the EA (in EUR), the US (in USD) and Japan (in JPY). 01/06/2019=100.
Sources: Refinitiv Datastream, ESMA.

A.11 Price performance of national indices

Note: European equity indices. 01/06/2019=100.
Sources: Refinitiv Datastream, ESMA.

A.12 Price performance

Note: STOXX Europe 600 sectoral return indices. 01/06/2019=100.
Sources: Refinitiv Datastream, ESMA.

A.13 Price performance of STOXX600 sectoral indices

Note: Euro STOXX 600 sectoral equity indices. 2020-02-20=100. Last available date = 30/06/2021
Sources: Refinitiv Datastream, ESMA.

A.14 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.15 Return dispersion

Note: Weekly return dispersion of the main equity indices in the EEA30.
Sources: Refinitiv Datastream, ESMA.
A.16 Implied volatility

- VIX (US)
- VSTOXX
- VSTOXX 5Y-MA

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

A.17 Implied volatility by option maturity

- VSTOXX 1M
- VSTOXX 3M
- VSTOXX 12M
- VSTOXX 24M

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

A.18 Correlation STOXX Europe 600 and sectoral indices

- Banks
- Financial services
- Insurance
- Non-financial corporation

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

A.19 ESMA composite equity liquidity index

- Illiquidity index 1Y-MA

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.

A.20 Bid-ask spread

- Bid-ask spread 40D-MA
- Bid-ask spread 5Y-MA

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.
Sovereign-bond markets

A.21 Issuance and outstanding

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

A.22 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.23 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.24 Equity-sovereign bond 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.25 Net 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.26 10Y 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.27 10Y spreads

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

A.28 Yield dispersion

Note: Yield dispersion on 10Y sovereign bonds of 16 EU27 countries, in %.
Sources: Refinitiv Datastream, ESMA.

A.29 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.30 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.31 CDS spreads

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

A.32 CDS notionals

Note: Value of outstanding net notional sovereign CDS for selected EU27 countries, in USD bn.
Sources: DTCC, ESMA.
A.33 Bid-ask spreads

Note: Bid-ask spread as weighted average of bid-ask spreads throughout a month weighted by trading volume across 10 EU27 domestic markets (AT, BE, DE, ES, FI, FR, IE, IT, NL and PT) and Euro MTS, in EUR.
Sources: MTS, ESMA.

A.34 ESMA composite sovereign bond liquidity index

Note: Composite indicator of market liquidity in the sovereign bond market for the domestic and Euro MTS platforms, computed by applying the principal component methodology to four input liquidity measures (Anshud illiquidity/coefficients, Bid-ask spread, Roll illiquidity measure and Turnover). The indicator range is between 0 (higher liquidity) and 1 (lower liquidity).
Sources: MTS, ESMA.

A.35 Liquidity

Note: 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.

A.36 Liquidity dispersion

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 Datastream, ESMA.

A.37 Redenomination risk

Note: Difference between 5Y CDS spreads under the 2014 ISDA definition (where debt redenomination is a credit event), and under the 2003 ISDA definition (where it is not), in bps.
Sources: Refinitiv Datastream, ESMA.

A.38 Bond futures liquidity

Note: One-month moving averages of the Hui-Heubel illiquidity indicator for selected 10Y sovereign bond futures, in %. Lower figures mean more liquidity and vice-versa.
Sources: Refinitiv Datastream, ESMA.
Corporate-bond markets

A.39
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.40
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.41
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.42
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.43
Hybrid capital instruments

Note: Hybrid capital instruments gross issuance in the EEA30, EUR bn, and outstanding amounts (rhs). EUR bn. 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.

A.44
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.
Credit quality

A.45 Bid-ask spreads and Amihud indicator

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

A.46 Turnover ratio and average trade size

Note: Average transaction size for the corporate bond segment as the ratio of nominal amount of settlement instructions to number of settled instructions, in EUR mn. Turnover is the one-month moving average of the ratio of trading volume over outstanding amount, in %. Sources: IHS Markit, ESMA.

A.47 SFI ratings issued by collateral type

Note: Number of rated structured finance instruments by asset class. ABS=Asset-backed securities; CDO=Collateralised debt obligations; CMBS=Commercial mortgage-backed securities; OTH=Other; RMBS=Residential mortgage-backed securities. Sources: RADAR, ESMA.

A.48 SFI ratings outstanding by collateral type

Note: Outstanding EU ratings of 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. Sources: RADAR, ESMA.

A.49 High-quality collateral outstanding

Note: Outstanding amount of high-quality collateral in the EEA30, EUR tn. High-quality collateral is the sum of outstanding debt securities issued by EEA30 governments with a rating equal to or higher than BBB-. Quasi high-quality collateral is the outstanding corporate debt with a rating equal to or higher than AA-. Maturities < 12 months are excluded. Sources: Refinitiv EIKON, ESMA.

A.50 Rating distribution of 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.51 SFI rating changes

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

A.52 Size of SFI rating changes

Note: Average size of upgrades and downgrades when credit rating agencies took rating actions on securitised assets, number of buckets traversed. Sources: RADAR, ESMA.

A.53 Size of rating changes

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

A.54 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.55 Ratings drift

Note: 3-month moving average of net rating changes in 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. EU-27+UK ratings. Sources: RADAR, ESMA.

A.56 Ratings volatility

Note: 3 month moving average of volatility of ratings by all credit rating agencies, excluding CERVED and ICAP, by asset class computed as number of rating changes over number of outstanding ratings. Sources: RADAR, ESMA.
Securities lending

A.57 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.58 Securities lending transactions by asset type

Note: number of daily transactions, in thousands, in securities lending markets for securities issued in the EEA. Sources: FIS Astec, Quandl, ESMA.

A.59 Securities lending contract tenure

Note: average tenure of loans for securities issued in the EEA, by asset class. Tenure is measured in days and weighted by the market value of the loan. Sources: FIS Astec, Quandl, ESMA.

A.60 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.61 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.62 Securities lending: equity utilisation rate by region

Note: Utilisation rate of equities 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.
A.63
Securities lending: sovereign 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.64
Value of net short positions in EU shares

Note: Market value of net short selling positions as percentage of total market value in the EEA30. Number of shares part of a main national index on which short positions were reported by NCAs under the Short Selling Regulation. Partially or fully missing data for the following countries: GR, IT, LT, NL, RO and SE.
Sources: NCAs, Refinitiv Datastream, ESMA.

A.65
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, IT, LT, NL, RO and SE.
Sources: NCAs, Refinitiv Datastream, ESMA.

A.66
Value of net short positions in EU shares by sector

Note: Net short selling positions on blue-chip shares reported by NCAs under Article 5 of SSR as % of total market value of shares listed on a EU Regulated Market by sector. Applied market value for reference as of 19-Feb-20.
Sources: FIRDS, NCAs, Refinitiv Eikon, ESMA.

A.67
Number of shares by level of NSP

Note: Number of shares for which net short selling positions have been reported by NCAs under Article 5 of SSR as % of total number of shares listed on a EU Regulated Market.
Sources: FIRDS, NCAs, ESMA.
A.68 Net short positions in industrial shares and equity prices

Note: Market value of net short selling positions in EA financial shares as percentage of market value of EA financial sectoral index. 01/03/2019=100. Partially or fully missing data for the following countries: GR, IT, LT and NL. Sources: NCAs, Refinitiv Datastream, ESMA.

A.69 Net short positions in financial shares and equity prices

Note: Market value of net short selling positions in EA industrial shares as percentage of market value of EA industrial sectoral index. 01/03/2019=100. Partially or fully missing data for the following countries: GR, IT, LT and NL. Sources: NCAs, Refinitiv Datastream, ESMA.

A.70 Value of net short positions in EU sovereign debt

Note: Duration-adjusted net short selling positions held in EEA30 sovereign debt, EUR tn. Partially or fully missing data for the following countries: GR, IT, LT, NL, RO and SE. Sources: NCAs, ESMA.

Money markets

A.71 Interest rates

Note: Money market rates, in %. Sources: Refinitiv Datastream, ESMA.

A.72 Spreads to overnight index swap

Note: Spreads between 3M interbank rates and 3M overnight index swap, in bps. Sources: Refinitiv Datastream, ESMA.
A.73 Interbank overnight activity

Note: 1M-MA of daily lending volumes on Euro Overnight Index Average (EONIA), EUR bn, Euro short-term rate (ESTR), and Sterling Overnight Index Average (SONIA), GBP bn.
Sources: ECB, Refinitiv EIKON, ESMA.

A.74 EONIA forwards

Note: Implied volatilities on one-month Euro-Euribor, UK Pound Sterling-GBP Libor and US Dollar-USD Libor swaptions measured as price indices, in %.
Sources: Refinitiv EIKON, ESMA.

Commodity markets

A.75 Prices

Note: S&P GSCI commodity indices and Brent price, 01/06/2019=100. 1Y-MA=one-year moving average computed using S&P GSCI.
Sources: Refinitiv Datastream, ESMA.

A.76 Volatility

Note: Annualised 40-day volatility of S&P GSCI commodity indices and Brent price, in %. 1Y-MA=one-year moving average computed using S&P GSCI.
Sources: Refinitiv Datastream, ESMA.

A.77 Open interest

Note: Continuous future open interests on number of barrels, in million of contracts. 1Y-MA oil (gas)=one-year moving average of light crude oil futures (natural gas futures).
Sources: Refinitiv Datastream, ESMA.

A.78 Implied volatility

Note: One-month implied volatility of at-the-money options, in %. 1Y-MA oil (gas)=one-year moving average of light crude oil (natural gas).
Sources: Refinitiv Datastream, ESMA.
### Derivatives markets

**A.79**

**OTC notional outstanding**

<table>
<thead>
<tr>
<th>Product Category</th>
<th>2H15</th>
<th>2H16</th>
<th>2H17</th>
<th>2H18</th>
<th>2H19</th>
<th>2H20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodity</td>
<td>700</td>
<td>500</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Credit default swaps</td>
<td>600</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Equity-linked</td>
<td>500</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
<td>50</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: Gross notional amounts of outstanding OTC derivatives by product category, USD tn.
Sources: Bank for International Settlements, ESMA.

**A.80**

**OTC market value**

<table>
<thead>
<tr>
<th>Product Category</th>
<th>2H15</th>
<th>2H16</th>
<th>2H17</th>
<th>2H18</th>
<th>2H19</th>
<th>2H20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodity</td>
<td>25</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Credit default swaps</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Equity-linked</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Gross market values of outstanding OTC derivatives by category, USD tn. Gross market values represent the cost of replacing all open contracts at the prevailing market prices.
Sources: Bank for International Settlements, ESMA.

**A.81**

**ETD notional outstanding by product category**

<table>
<thead>
<tr>
<th>Product Category</th>
<th>1Q16</th>
<th>1Q17</th>
<th>1Q18</th>
<th>1Q19</th>
<th>1Q20</th>
<th>1Q21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodity</td>
<td>125</td>
<td>100</td>
<td>75</td>
<td>50</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Credit default swaps</td>
<td>100</td>
<td>80</td>
<td>50</td>
<td>25</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Equity-linked</td>
<td>75</td>
<td>50</td>
<td>25</td>
<td>10</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>50</td>
<td>25</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Open interest in exchange-traded derivatives by product category, in USD tn.
Sources: Bank for International Settlements, ESMA.

**A.82**

**ETD turnover by product category**

<table>
<thead>
<tr>
<th>Product Category</th>
<th>March-19</th>
<th>July-19</th>
<th>November-19</th>
<th>March-20</th>
<th>July-20</th>
<th>November-20</th>
<th>March-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodity</td>
<td>0.00</td>
<td>0.05</td>
<td>0.10</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
</tr>
<tr>
<td>Credit default swaps</td>
<td>0.05</td>
<td>0.10</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
<td>0.35</td>
</tr>
<tr>
<td>Equity-linked</td>
<td>0.10</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
<td>0.35</td>
<td>0.40</td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
<td>0.35</td>
<td>0.40</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Note: Global average daily turnover in exchange-traded derivatives by product category, in USD tn. 1Y-MA FX=one-year moving average for foreign exchange.
Sources: Bank for International Settlements, ESMA.

**A.83**

**ETD notional outstanding by asset class**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>1Q16</th>
<th>1Q17</th>
<th>1Q18</th>
<th>1Q19</th>
<th>1Q20</th>
<th>1Q21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Futures</td>
<td>125</td>
<td>100</td>
<td>75</td>
<td>50</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Options</td>
<td>100</td>
<td>80</td>
<td>50</td>
<td>25</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: Open interest in exchange-traded derivatives by asset class, in USD tn.
Sources: Bank for International Settlements, ESMA.

**A.84**

**ETD turnover by asset class**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>March-19</th>
<th>July-19</th>
<th>November-19</th>
<th>March-20</th>
<th>July-20</th>
<th>November-20</th>
<th>March-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Futures</td>
<td>0.00</td>
<td>0.05</td>
<td>0.10</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
</tr>
<tr>
<td>Options</td>
<td>0.05</td>
<td>0.10</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Note: Global average daily turnover in exchange-traded derivatives by asset class, in USD tn.
Sources: Bank for International Settlements, ESMA.
A.85
ETD notional outstanding by exchange location

A.86
ETD turnover by exchange location

Note: Open interest in exchange-traded derivatives by exchange location, in USD tn.
Sources: Bank for International Settlements, ESMA.

Note: Global average daily turnover in exchange-traded derivatives by exchange location, in USD tn. “Europe” as defined by BIS.
Sources: Bank for International Settlements, ESMA.
Infrastructures and services

Trading venues and MiFID entities

### A.87
Equity trading by trading type

<table>
<thead>
<tr>
<th>May-19</th>
<th>Sep-19</th>
<th>Jan-20</th>
<th>May-20</th>
<th>Sep-20</th>
<th>Jan-21</th>
<th>May-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lit</td>
<td>Dark pool</td>
<td>Systematic internaliser</td>
<td>Periodic auction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTC</td>
<td>Total volumes (rhs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 May 2021. Sources: FIrDS, FITRS, ESMA.

### A.88
Equity trading turnover by issuer origin

<table>
<thead>
<tr>
<th>May-19</th>
<th>Sep-19</th>
<th>Jan-20</th>
<th>May-20</th>
<th>Sep-20</th>
<th>Jan-21</th>
<th>May-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign issuer</td>
<td>Domestic issuer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Monthly equity turnover on EEA30 trading venues by origin of the traded equity, in EUR bn. Data for Aquis Exchange, CBOE Europe Equities, Equiduct, London Stock Exchange and Turquoise are not reported. Foreign equities are issued in a country other than that of the trading venue. Sources: FESE, ESMA.

### A.89
Trading turnover by type of assets

<table>
<thead>
<tr>
<th>May-19</th>
<th>Sep-19</th>
<th>Jan-20</th>
<th>May-20</th>
<th>Sep-20</th>
<th>Jan-21</th>
<th>May-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds</td>
<td>Equities</td>
<td>ETFs</td>
<td>UCITS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

### A.90
Share of turnover by type of assets

- ETFs: 3.7%
- UCITS: 0.4%
- Equities: 52.7%
- Bonds: 43.3%

Note: Share of turnover on EEA30 trading venues by asset class, in % of total turnover over the reporting period. 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.91
Circuit-breaker occurrences by market capitalisation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Large caps</td>
<td>Mid caps</td>
<td>Small caps</td>
<td>ETFs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.92
Circuit-breaker trigger events by sector

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic materials, industrials and energy</td>
<td>Financials</td>
<td>Healthcare, consumer cyclicals and non-cyclicals</td>
<td>Technology, utilities and telecommunications services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
Central counterparties

**A.95 Initial Margins held at EU and UK CCPs**

Dotted line: Margin required

Solid line: Excess margin

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.96 Margin breaches**

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 31 December 2020.
Sources: Clarus Financial Technology, PQD, ESMA.

**A.97 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.98 IM held by EU and UK CCPs**

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 31 March 2021.
Sources: Clarus Financial Technology, CPMI-IOSCO PQD, ESMA.
Central securities depositories

A.105 Settlement activity

- Graph showing settlement activity with lines for different asset classes.
- Note: Total value of settlement instructions in the EEA30 as reported by NCAs, in EUR bn, one-week moving averages. Missing data for some CSDs prior to mid-March 2020. Dotted lines represent one-year moving averages of the respective asset classes.
- Sources: NCAs, ESMA.

A.106 Settlement fails

- Graph showing settlement fails with lines for different asset classes.
- Note: Share of failed settlement instructions in the EEA30, in % of value, one-week moving averages. Missing data for some CSDs prior to mid-March 2020. Dotted lines represent one-year moving averages of the respective asset classes.
- Sources: NCAs, ESMA.

A.107 Number of settlement instructions

- Graph showing number of settlement instructions with lines for different asset classes.
- Note: Total number of settlement instructions in the EEA30 as reported by NCAs, in thousand, one-week moving averages. Missing data for some CSDs prior to mid-March 2020. Dotted lines represent one-year moving averages of the respective asset classes.
- Sources: NCAs, ESMA.

A.108 Number of failed settlement instructions

- Graph showing number of failed settlement instructions with lines for different asset classes.
- Note: Share of failed settlement instructions in the EEA30, in % of number of instructions, one-week moving averages. Missing data for some CSDs prior to mid-March 2020. Dotted lines represent one-year moving averages of the respective asset classes.
- Sources: NCAs, ESMA.

Credit rating agencies

A.109 Ratings drift

- Graph showing ratings drift with lines for different asset classes.
- Note: 3-month moving average of net rating changes in 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. EU-27+UK ratings.
- Sources: RADAR, ESMA.

A.110 Ratings volatility

- Graph showing ratings volatility with lines for different asset classes.
- Note: 3-month moving average of volatility of ratings by all credit rating agencies, excluding CERVED and ICAP, by asset class computed as number of rating changes over number of outstanding ratings.
- Sources: RADAR, ESMA.
A.111 Outstanding ratings issued by the top 3 CRAs

Note: Evolution of outstanding ratings, indexed 1Q16=100. S&P, Moody’s and Fitch.
Sources: RADAR, ESMA.

A.112 Outstanding ratings excluding the top 3 CRAs

Note: Evolution of outstanding ratings, indexed 1Q16=100. S&P, Moody’s and Fitch. Sub-sovereign on rhs axis.
Sources: RADAR, ESMA.

A.113 Changes in outstanding structured finance ratings

Note: Number of withdrawn and new ratings for structured finance instruments. EU-27+UK ratings.
Sources: RADAR, ESMA.

A.114 Changes in outstanding covered bond ratings

Note: Number of withdrawn and new ratings for structured finance instruments. EU-27+UK ratings.
Sources: RADAR, ESMA.

A.115 Share of outstanding ratings Big 3 CRAs vs. others

Note: Share of outstanding ratings from S&P, Moody’s and Fitch, and ratings from all other CRAs, in %.
Sources: RADAR, ESMA.
Financial benchmarks

A.116 EURIBOR rates

Note: EURIBOR across maturities. Sources: EMMI, ESMA.

A.118 IRDs linked to Euribor and Libor

Note: Gross notional amount of IRD referencing benchmarks, EUR tn. 1Q21 = 26-Mar-21. Sources: TRs, ESMA.

A.120 €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.117 IRSs linked to new RFRs

Note: Number of active banks reporting transactions before trimming. Sources: ECB, ESMA.

A.121 €STR volumes

Note: Total nominal value of transactions before trimming, in EUR bn. Number of transactions before trimming.
Asset management

Fund industry

A.122 Fund performance

-2 0 2 4
Alternative Bond Commodity Equity Mixed assets Real estate
Note: EU27-domiciled investment fund annual average of monthly returns, asset-weighted, in %.
Sources: Refinitiv Lipper, ESMA.

A.123 Fund volatility

-20 -10 0 10 20 30 40
Alternative Bond Commodity Equity Mixed assets Real estate
Note: Annualised 40-day historical return volatility of EU27-domiciled investment funds, in %.
Sources: Refinitiv Lipper, ESMA.

Entities authorised under UCITS

A.124

1,400 1,350 1,300 1,250 1,200 1,150
2Q16 2Q17 2Q18 2Q19 2Q20 2Q21
Withdrawn Newly authorised Total
Note: Number of management companies authorised under the UCITS Directive by EEA30 National Competent Authorities as notified to ESMA. Newly authorised entities and withdrawn entities on the right axis. Sources: ESMA Registers.

A.125 Share of entities authorised under UCITS by country

Note: Number of management companies authorised under the UCITS Directive by EEA30 National Competent Authorities as notified to ESMA, in %.
Sources: ESMA Registers.

Entities authorised under AIFMD

A.126

2,750 2,500 2,250 2,000 1,750 1,500
2Q16 2Q17 2Q18 2Q19 2Q20 2Q21
Withdrawn Newly authorised Total
Note: Number of managers authorised under AIFMD by EEA30 National Competent Authorities as notified to ESMA. Newly authorised entities and withdrawn entities on the right axis. Sources: ESMA Registers.

A.127 Share of entities authorised under AIFMD by country

Note: Number of managers authorised under AIFMD by EEA30 National Competent Authorities as notified to ESMA, in %.
Sources: ESMA Registers.
A.128

Assets by market segment

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

A.129

NAV by legal form

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

A.130

NAV by fund market segment

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

A.131

Leverage by market segment

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

A.132

Fund flows by fund type

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

A.133

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.134 Bond fund flows by regional investment focus

A.135 Equity fund flows by regional investment focus

A.136 Net flows for bond funds

A.137 Net asset valuation

A.138 Liquidity risk profile of EU bond funds

A.139 Cash as percentage of assets
A.140 Credit quality of bond funds’ assets

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

A.141 Maturity of EU bond funds’ assets

Note: Weighted average effective maturity of EU bond funds’ assets, data in years. Sources: Thomson Reuters Lipper, ESMA.

Money market funds

A.142 MMF performance

Note: EU27-domiciled MMF average yearly returns by month, 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.143 MMF flows by domicile

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

A.144 MMF flows by geographical focus

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

A.145 Assets and leverage

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

A.146
MMF maturity

A.147
MMF liquidity

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.

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.

A.148
Hedge fund returns

A.149
Hedge fund performance by strategy

Note: EU-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.

Note: Growth of EU27 alternative fund performance indices by strategy: hedge fund index (Total), arbitrage (Arb), commodity trading advisor (CTA), distressed debt, event driven, fixed income (FI), long/short equity (LS), macro, multi-strategy, relative value (RV), in %.
Sources: Eurekahedge, ESMA.

A.150
Fund flows by domicile

A.151
Assets and leverage

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

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.152 Alternative fund flows by geographical focus**

<table>
<thead>
<tr>
<th>Year</th>
<th>Emerging markets</th>
<th>Global</th>
<th>North America</th>
<th>Western Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. Sources: Refinitiv Lipper, ESMA.

**A.153 Direct and indirect property fund flows**

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.154 Returns**

<table>
<thead>
<tr>
<th>Year</th>
<th>2nd/98th perc.</th>
<th>Weighted average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.155 Volatility**

<table>
<thead>
<tr>
<th>Year</th>
<th>Volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-19</td>
<td></td>
</tr>
<tr>
<td>Oct-19</td>
<td></td>
</tr>
<tr>
<td>Feb-20</td>
<td></td>
</tr>
<tr>
<td>Jun-20</td>
<td></td>
</tr>
<tr>
<td>Oct-20</td>
<td></td>
</tr>
<tr>
<td>Feb-21</td>
<td></td>
</tr>
<tr>
<td>Jun-21</td>
<td></td>
</tr>
</tbody>
</table>

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

**A.156 NAV and number by domicile**

<table>
<thead>
<tr>
<th>Year</th>
<th>EU27 ETF NAV (rhs)</th>
<th>US ETF NAV (rhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**A.157 NAV by asset type**

<table>
<thead>
<tr>
<th>Year</th>
<th>Alternative</th>
<th>Bond</th>
<th>Commodity</th>
<th>Equity</th>
<th>Mixed assets</th>
<th>Money market</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: NAV of EU27 ETFs by asset type, EUR bn. Sources: Refinitiv Lipper, ESMA.
A.158 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.159 Flows by domicile

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

A.160 Assets of leveraged European 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.161 Average beta values for European ETFs

Note: 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.162 Assets of European 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.163 Flows into European 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.164 Disposable income

A.165 Household saving and investment rates

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.166 Investor sentiment

A.167 Annualised growth rates in financial assets

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.

Asset allocation by retail investors

A.168 Household assets to liabilities ratio

A.169 Household financial assets by class

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

Note: Average annualised growth rates of financial asset classes held by EU27 households, in %. IF shares=investment fund shares. Ins.=insurance companies, Other assets=other accounts receivable/payable.
Sources: ECB, ESMA.
A.170
Share of securities investments in household assets

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

A.172
EU UCITS net flows by asset class

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

A.174
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.171
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.173
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, in %.
Sources: Refinitiv Lipper, ESMA.

A.175
Equity UCITS cumulative net flows

Note: EU27 equity UCITS cumulative annual net flows from retail and institutional investors by management type, EUR bn. Indexed with 1Q16=0.
Sources: Refinitiv Lipper, ESMA.
### A.176
**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. Source: Refinitiv Lipper, ESMA.

### A.177
**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. Source: Refinitiv Lipper, ESMA.

### A.178
**Bond UCITS cumulative net flows**

Note: EU27 bond UCITS cumulative annual net flows from retail and institutional investors by management type, EUR bn. Indexed with 1Q16=0. Source: Refinitiv Lipper, ESMA.

### A.179
**Closet Index Indicator**

Note: EU 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.180 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.182 Dispersion of returns all assets

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.183 Net returns 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.184 UCITS total cost dispersion by asset class

Note: Dispersion of total costs (ongoing costs, subscription and redemption feed) of EU27 UCITS, retail investors only, computed as the difference between gross and net returns per asset class, in %.

Sources: Refinitiv Lipper, ESMA.

A.185 Dispersion by absolute cost impact

Note: Dispersion of total costs (ongoing costs, subscription and redemption feed) of EU27 UCITS, retail investors only, computed as the difference between gross and net returns for selected EU27 Member State, in %.

Sources: Refinitiv Lipper, ESMA.
A.186
Equity UCITS total costs by management type

A.187
Equity UCITS net returns by management type

A.188
Bond UCITS total costs by management type

A.189
Bond UCITS net returns 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.

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

A.190 Total 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.192 Complaints by cause

Note: Share of complaints for quarterly-reporting NCAs (n=14) received directly 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.193 Complaints by instrument

Note: Share of complaints for quarterly-reporting NCAs (n=14) received directly 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 channels whether or not further categorisation possible. 
Sources: ESMA complaints database
Market based finance

Capital markets financing

A.195 Total 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. funding (rhs)= annual growth rate in debt securities, equity and investment fund (IF) shares, in %.
Sources: ECB, ESMA.

A.196 Loans vis-à-vis EA NFCs

Note: Loans vis-à-vis EA NFC reported by NFI in the euro area. Financial transactions EUR bn (lhs) and annual growth rate of stock/share (rhs). Sources ECB, ESMA.

A.197 Number of IPOs by sector

Note: Number of IPOs by economic sector (lhs) and total amount of IPOs, in bn (rhs).
Sources: Refinitiv EIKON, ESMA.

A.198 SPAC proceeds

Note: SPAC proceeds in EUR bn.
Sources: Refinitiv EIKON, ESMA.

A.199 Gross equity issuance

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.200 Gross issuance of corporate bonds by rating

Note: Monthly gross long-term corporate bond issuance by rating in the EEA30, in EUR bn (lhs), and share of IG issuance with respect to rated bonds in % (rhs).
Sources: Refinitiv Eikon, ESMA.
A.201  
**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.203  
**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.204  
**Securitised products issuance and outstanding**

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

A.205  
**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.206  
**Non-bank wholesale funding**

Note: Amount of wholesale funding provided by EA non-banks, EUR bn, 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.207
Short-term 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.208
SME trading volumes

Note: Monthly trading volumes on EEA30 venues of SME shares, EUR bn (lhs), and % share of total trading in shares (rhs). Small =<0.2bn. Medium=0.2bn- 2bn. Based on share market capitalisation in 2020.
Sources: PIRC, FITIRS, ESMA.

A.209
SME trading volumes on Growth Markets

Note: SME trading volumes on GMs by segment MIC domicile, in EUR bn. Sources: PIRC, FITIRS, ESMA.

Market-based credit intermediation
A.210
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.211
US shadow banking liabilities

Note: Size of the US shadow banking system proxied by liabilities of ABS issuers, government-sponsored enterprise (GSE) and pool securities, open commercial paper (CP), size of the US repo and securities lending (collateralised with cash) markets, and liabilities of MMFs, in USD bn. Expressed in % of bank liabilities on rhs.
Sources: Refinitiv Datastream, ESMA.
A.212
MMFs and other financial institutions

A.213
Financial market interconnectedness

A.214
Credit terms in SFT and OTC derivatives

A.215
Securities financing conditions

A.216
Sovereign repo market turnover

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 bn. Expressed in % of bank assets on rhs.
Sources: ECB, ESMA.

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.

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.

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.
Sustainable finance

ESG investing

A.217 ESG leaders index performance

Note: MSCI ESG leaders total return indices, denominated in USD, indexed with 01/06/2019=100.
Sources: Refinitiv Datastream, ESMA.

A.218 Euro area ESG leaders index risk-adjusted returns

Note: Annual returns of the EURO STOXX 50 and its ESG leaders subindex, in %.
Risk-adjusted returns, on rhs, measured as Sharpe ratios. Current year data year-to-date.
Sources: Refinitiv Datastream, ESMA.

A.219 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.220 ESG equity fund flows

Note: Cumulative net flows in EU-domiciled ESG and non-ESG equity funds since January 2018, EUR bn.
Sources: Morningstar, Refinitiv Lipper, ESMA.

A.221 ESG equity fund returns

Note: Annual average returns of EU-domiciled ESG and non-ESG equity funds, in %.
Sources: Morningstar, Refinitiv Lipper, ESMA.

A.222 ESG ETF assets

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

#### A.223
**ESG bonds outstanding**

<table>
<thead>
<tr>
<th>Year</th>
<th>Green</th>
<th>Social</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

#### A.224
**Green bond quarterly issuance**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Private sector</th>
<th>Public sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>2Q16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2Q17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2Q18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2Q19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2Q20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2Q21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

#### A.225
**Labelled green bond issuance**

<table>
<thead>
<tr>
<th>Year</th>
<th>Green labelled</th>
<th>Other ESG</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: % share other (rhs). Sources: CBI, Refinitiv EIKON, ESMA.

#### A.226
**Social bond issuance by project type**

<table>
<thead>
<tr>
<th>Year</th>
<th>Equality &amp; Diversity</th>
<th>Healthcare</th>
<th>Housing</th>
<th>(Socio)Economic advancement</th>
<th>Total issuance volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Social bonds use of proceeds allocation as a share of total issuance volume. Gross annual issuance volume of social bonds by EEA- and UK-domiciled issuers in EUR bn (right axis). Sources: CBI, Refinitiv EIKON, ESMA.

#### A.227
**Corporate green bond liquidity**

<table>
<thead>
<tr>
<th>Date</th>
<th>Conventional bonds</th>
<th>Green bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr-17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec-17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug-18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr-21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Bid-ask spread for green bonds and conventional bonds issued by green bond issuers included in the Markit iBoxx EUR Overall index, in EUR. Sources: Markit iBoxx, ESMA.

#### A.228
**Sovereign green bond liquidity**

<table>
<thead>
<tr>
<th>Date</th>
<th>Conventional bonds</th>
<th>Green bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec-18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Average bid-ask spread for green bonds and other bonds issued by the same sovereign issuer traded on EuroMTS, in EUR. Sources: MTS, ESMA.
Emissions trading

A.229 Emission allowance prices

Note: Daily settlement price of European Emission Allowances (EUA) on European Energy Exchange spot market, in EUR/tCO2.
Sources: Refinitiv Datastream, ESMA.

A.230 Emission allowance turnover

Note: Monthly turnover of European Emission Allowances (EUA) on European Energy Exchange, in EUR mn.
Sources: Refinitiv Datastream, ESMA.
Financial innovation

Financial innovation
A.231 Funds with AI/FinTech investment focus

Note: Total AuM, 12-month rolling average, EUR bn, and monthly net flows, EUR mn, for selected EEA-domiciled funds (n=31) whose name includes reference to AI, automation, FinTech or robotics. Sources: Morningstar Direct, ESMA.

A.232 Cloud services revenues

Note: Percentage of businesses purchasing cloud computing services by year in 22 EU countries, %; Countries included: AT, BE, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LV, LT, LU, NL, PL, PT, SI, SK, SE. Firms across the economy with at least 10 employees were surveyed. Sources: OECD, ESMA.

A.233 Crypto Asset market capitalisation

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

A.234 Crypto Asset prices

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

A.235 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 %. Sources: Refinitiv Datastream, ESMA.

A.236 Crypto Asset trading volumes

Note: Trading volumes of Bitcoin, Ethereum, Tether and other crypto-assets, in EUR tn. Sources: CoinMarketCap, ESMA.
### A.237 Stablecoin market capitalisation

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

### A.238 Stablecoin trading volumes

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

### A.239 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.