

TRV Statistical Annex

ESMA Report on Trends, Risks and Vulnerabilities

No.1, 2025



ESMA Report on Trends, Risks and Vulnerabilities – Statistical Annex
No. 1, 2025

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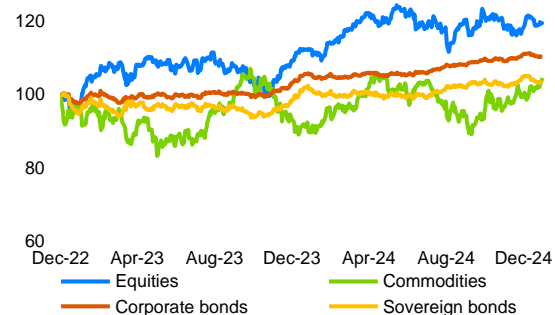
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Market environment

A.1

EU market price performance

140

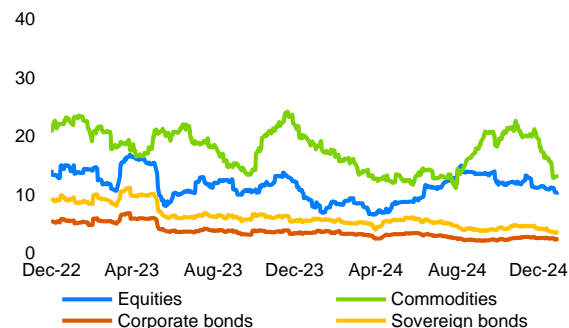


Note: Return indices on EA equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities). 01/12/2022=100.
Sources: Refinitiv Datastream, ESMA.

A.2

EU market volatilities

50

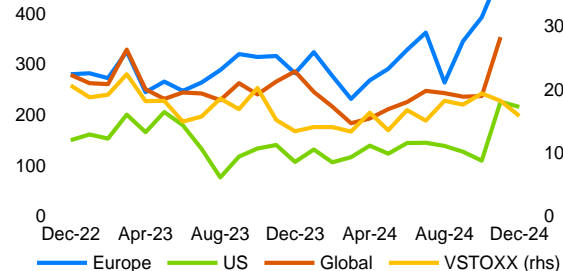


Note: Annualised 40D volatility of return indices on EA equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities), in %.
Sources: Refinitiv Datastream, ESMA.

A.3

Economic policy uncertainty

500

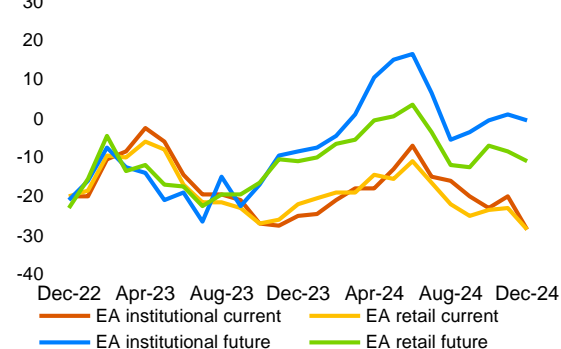


Note: Economic Policy Uncertainty Index (EPU), developed by Baker et al. (www.policyuncertainty.com), based on the frequency of articles in European newspapers that contain the following triple: "economic" or "economy", "uncertain" or "uncertainty" and one or more policy-relevant terms. Global aggregation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

40

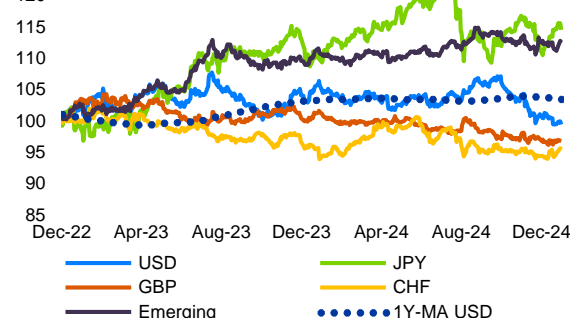


Note: Sentix Sentiment Indicators for the EA retail and institutional investors on a ten-year horizon. The zero benchmark is a risk-neutral position.
Sources: Refinitiv Datastream, ESMA.

A.5

EUR exchange rates

125

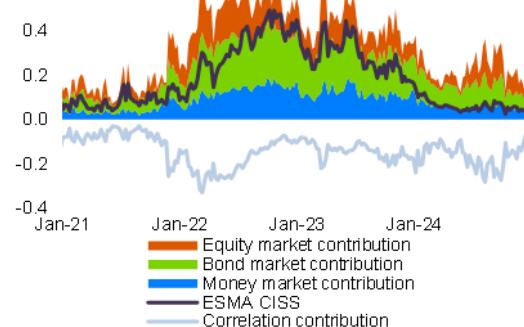


Note: Spot exchange rates to EUR. Emerging is an average of spot exchange rates for CNY, BRL, RUB, INR, MXN, IDR and TRY weighted by GDP as of start date year. 01/04/2022=100. Increases in value represent an appreciation of EUR. 1Y-MA USD=one-year moving average of the USD exchange rate.
Sources: ECB, IMF, ESMA.

A.6

ESMA composite indicator of systemic stress

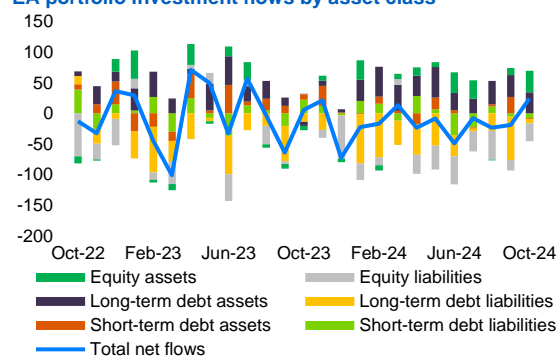
0.6



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.

A.7

EA portfolio investment flows by asset class



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. In the chart, positive values are investment outflows from the EA, negative values are investment inflows into the EA.

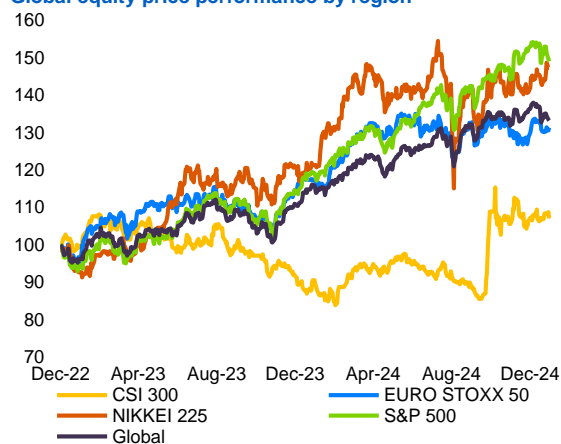
Sources: ECB, ESMA.

Securities markets

Equity markets

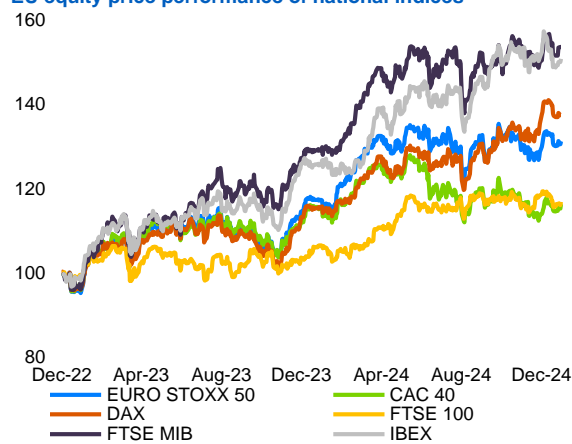
A.8

Global equity price performance by region



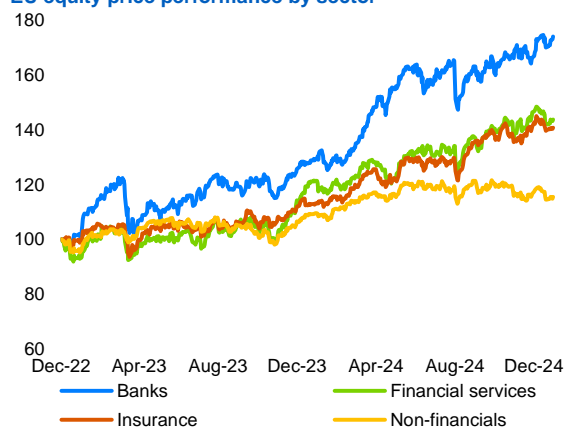
A.9

EU equity price performance of national indices



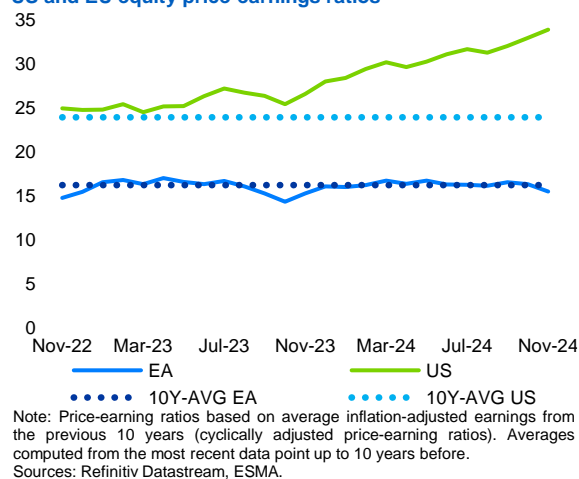
A.10

EU equity price performance by sector



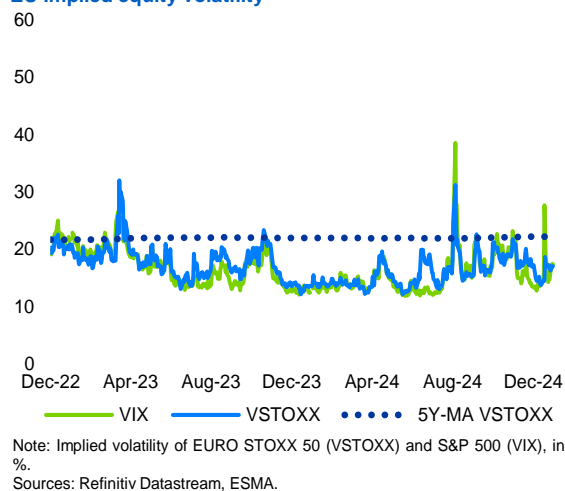
A.11

US and EU equity price-earnings ratios



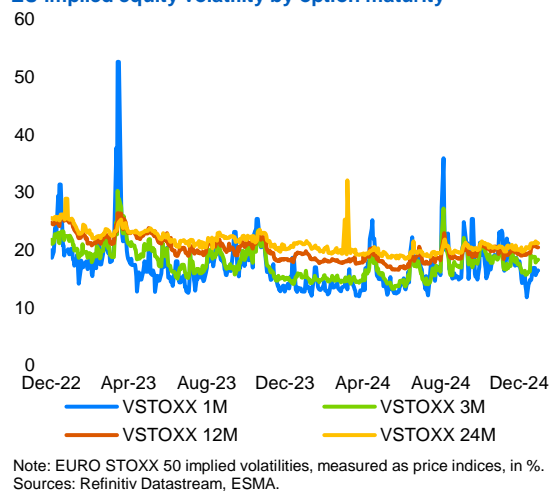
A.12

EU implied equity volatility

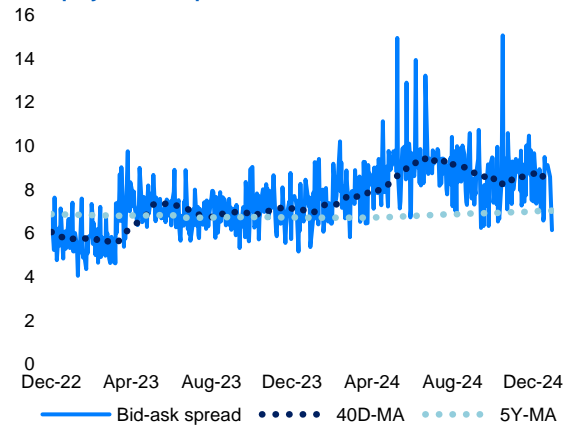


A.13

EU implied equity volatility by option maturity

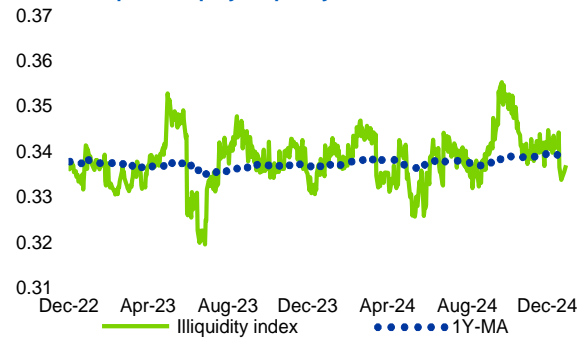


A.14
EU equity bid-ask spread



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.

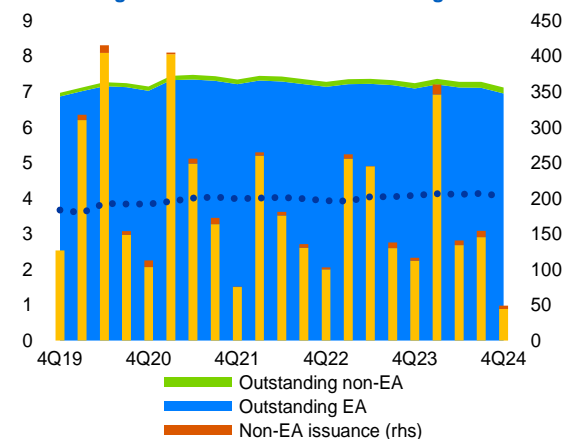
A.15
ESMA composite equity illiquidity index



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.

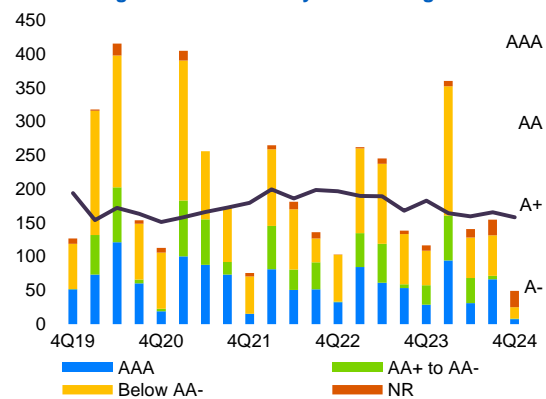
Sovereign-bond markets

A.16
EU sovereign bond issuance and outstanding



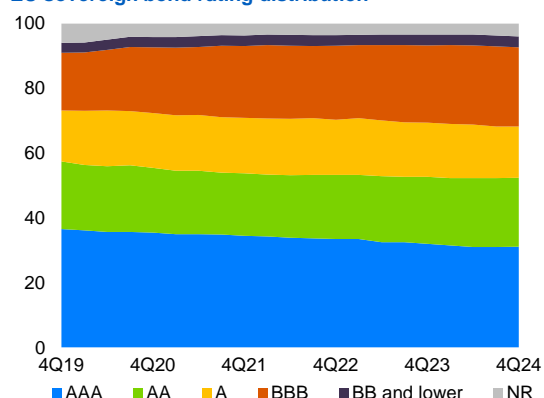
Note: Sovereign bond gross issuance in the EEA30 (rhs), EUR bn, and outstanding amounts, EUR tn. Maturities < 12 months are excluded.
Sources: Refinitiv EIKON, ESMA.

A.17
EU sovereign bond issuance by credit rating



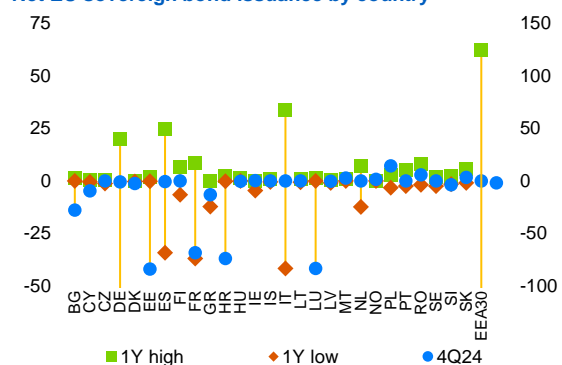
Note: Sovereign bond gross issuance in the EEA30 by rating bucket, EUR bn. Avg. rating=weighted average rating computed as a one-year moving average of ratings converted to a numerical scale (AAA=1, AA+=2, etc.) excluding non-rated bonds. Maturities < 12 months are excluded.
Sources: Refinitiv EIKON,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

A.18
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.

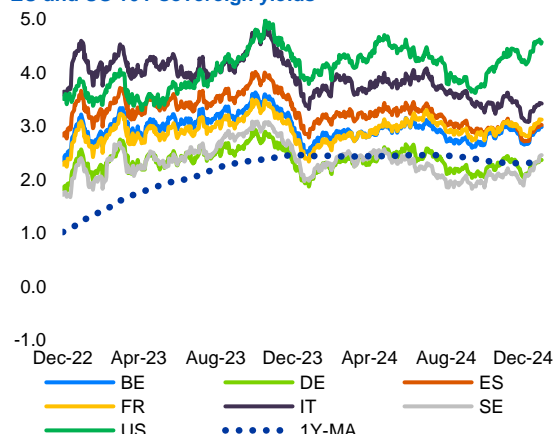
A.19
Net EU sovereign bond issuance by country



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.20

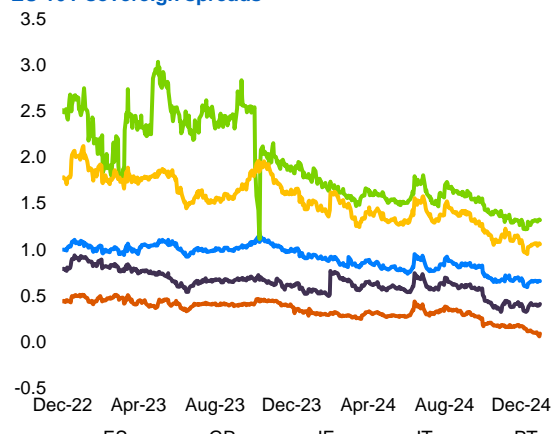
EU and US 10Y sovereign yields



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.21

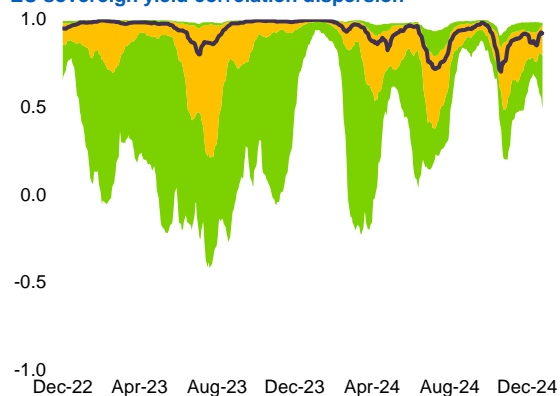
EU 10Y sovereign spreads



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

A.22

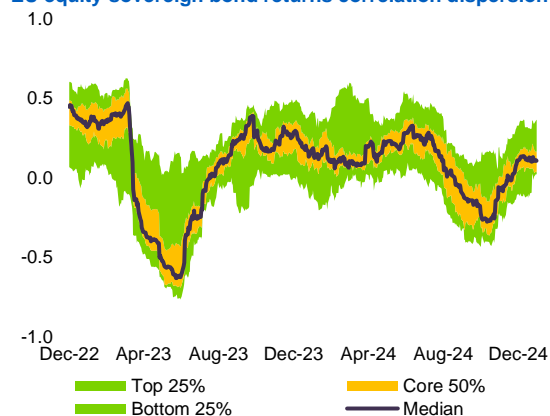
EU sovereign yield correlation dispersion



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.23

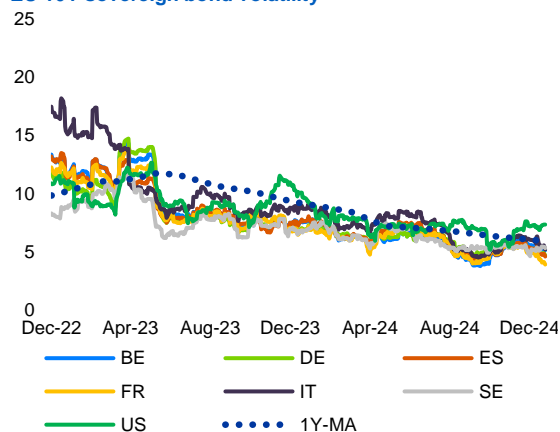
EU equity-sovereign bond returns correlation dispersion



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.24

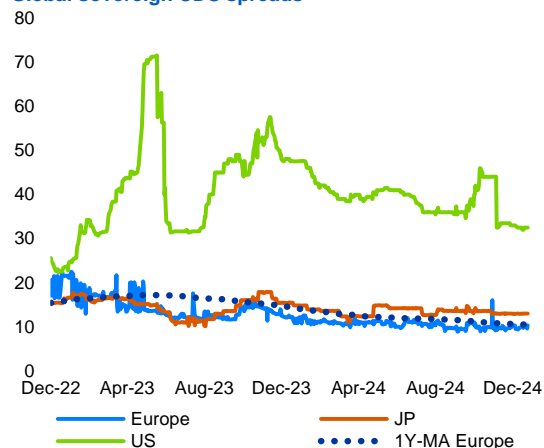
EU 10Y sovereign bond volatility



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.25

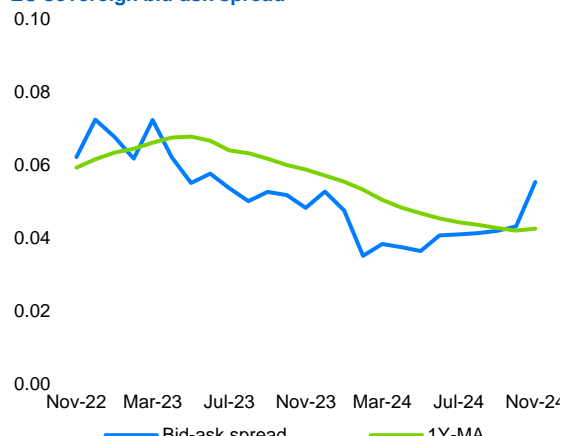
Global sovereign CDS spreads



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

A.26

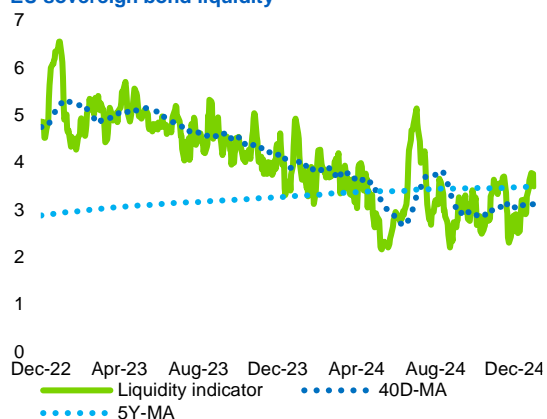
EU sovereign bid-ask spread



Note: Bid-ask spread as a monthly average of bid-ask spreads weighted by trading volumes for bonds both traded on one of 12 EU27 domestic markets (AT, BE, DE, ES, FI, FR, GR, IE, IT, NL, PT and SI) and Euro MTS, in EUR. Sources: MTS, ESMA.

A.28

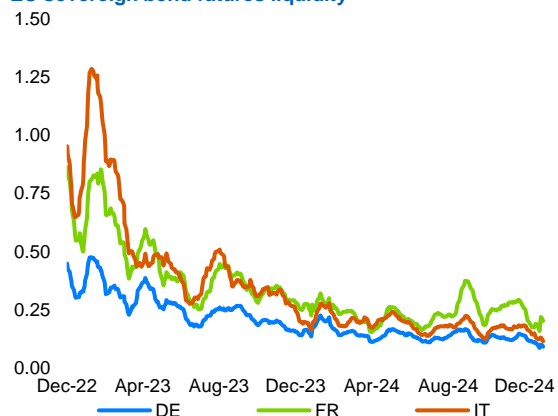
EU sovereign bond liquidity



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.30

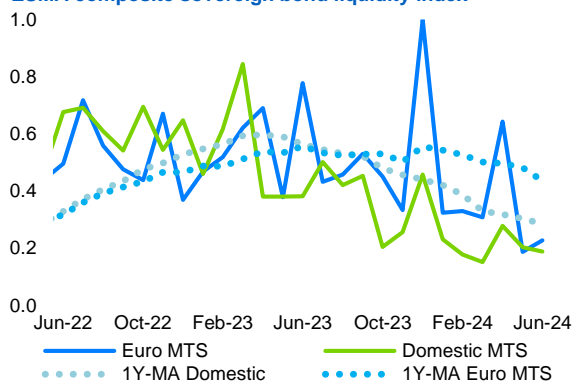
EU sovereign bond futures liquidity



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.

A.27

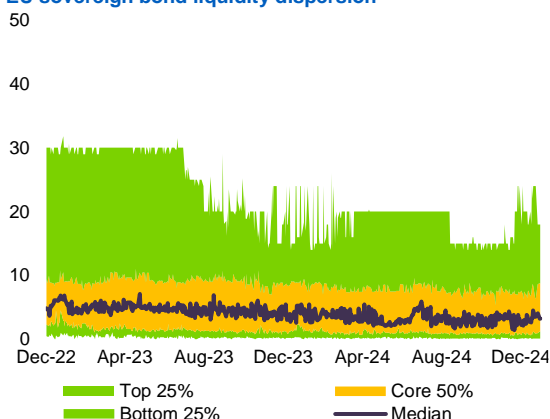
ESMA composite sovereign bond liquidity index



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 (Amihud illiquidity coefficient, Bid-ask spread, Roll illiquidity measure and Turnover). The indicator range is between 0 (higher liquidity) and 1 (lower liquidity). Sources: MTS, ESMA.

A.29

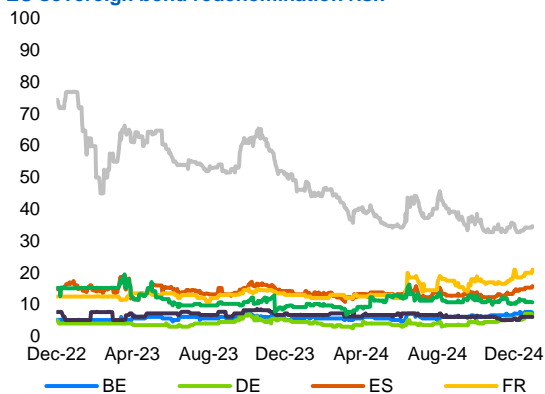
EU sovereign bond liquidity dispersion



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 EIKON, ESMA.

A.31

EU sovereign bond redenomination risk

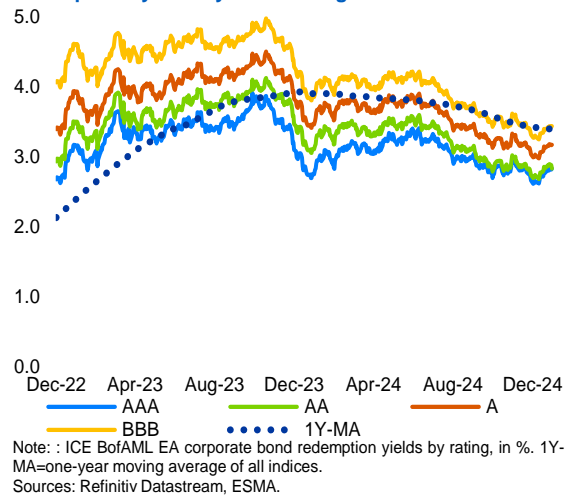


Note: Difference between 5Y CDS spreads under the 2014 ISDA definition (where debt redenomination is a credit event), and under the 2003 ISDA definition (where it is not), in bps. Sources: Refinitiv Datastream, ESMA.

Corporate-bond markets

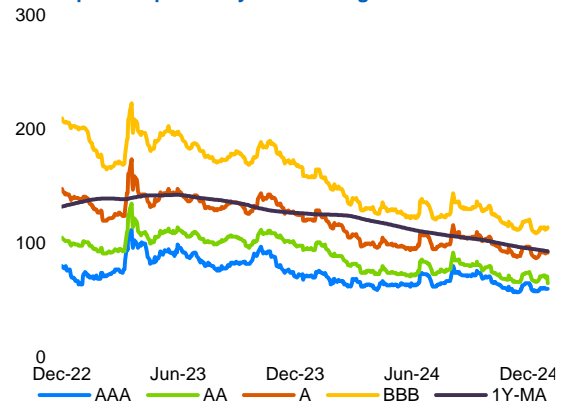
A.32

EU corporate yields by credit rating



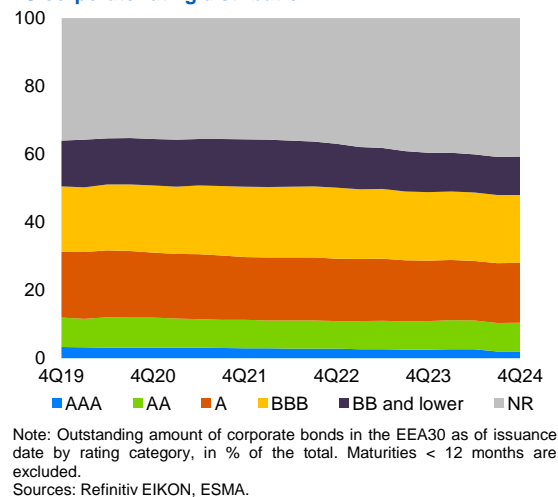
A.33

EU corporate spreads by credit rating



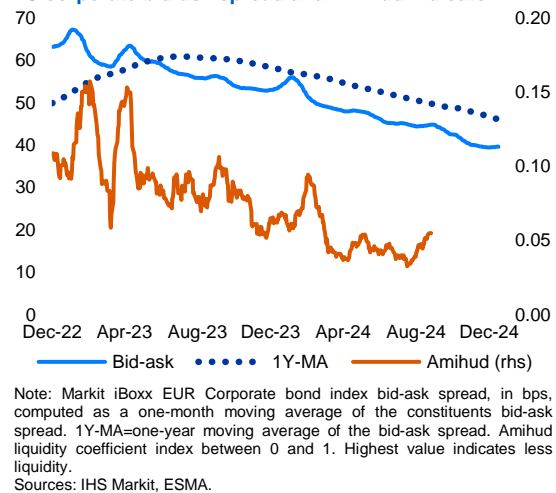
A.34

EU corporate rating distribution



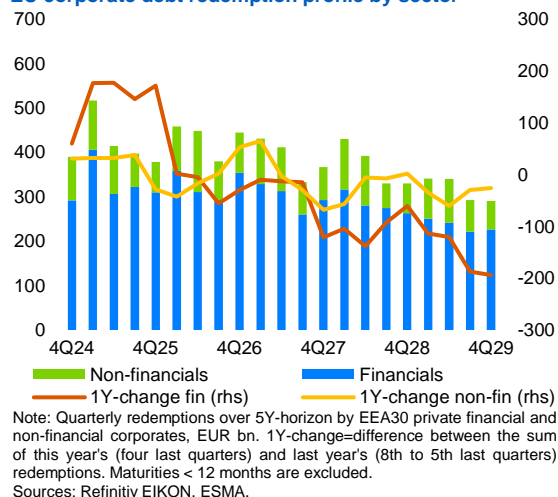
A.35

EU corporate bid-ask spread and Amihud indicator



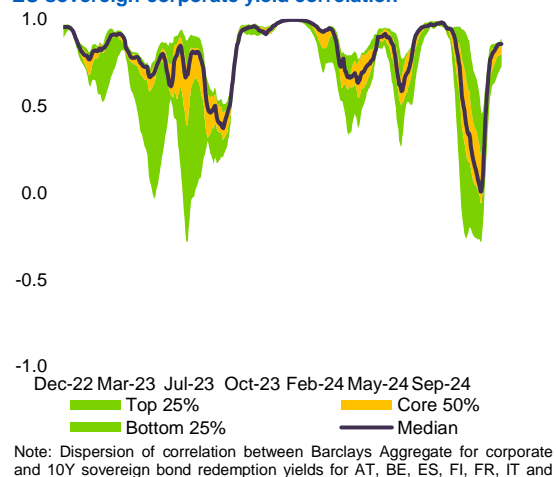
A.36

EU corporate debt redemption profile by sector

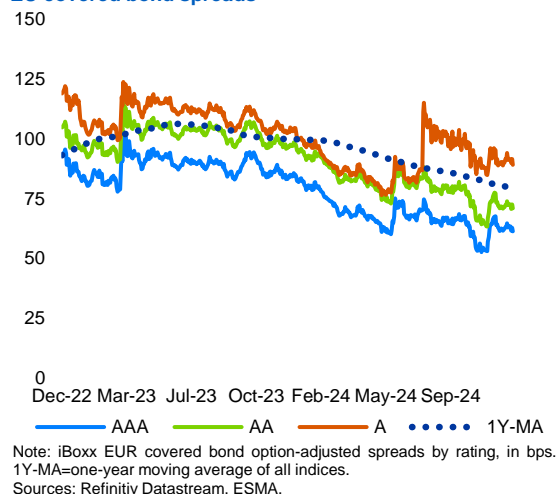


A.37

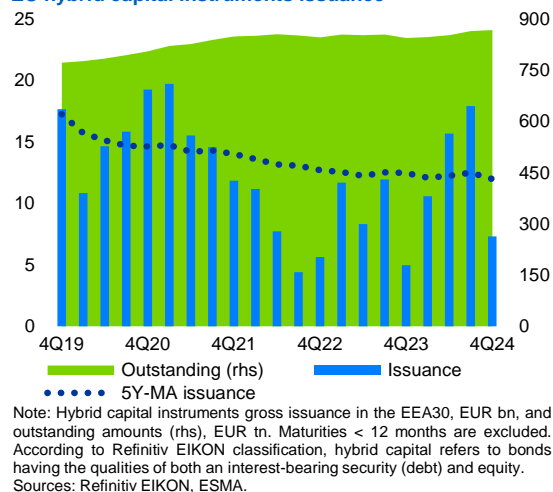
EU sovereign-corporate yield correlation



A.38
EU covered bond spreads

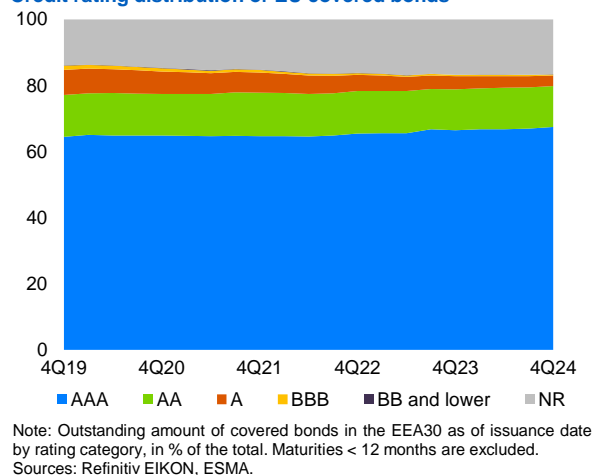


A.39
EU hybrid capital instruments issuance

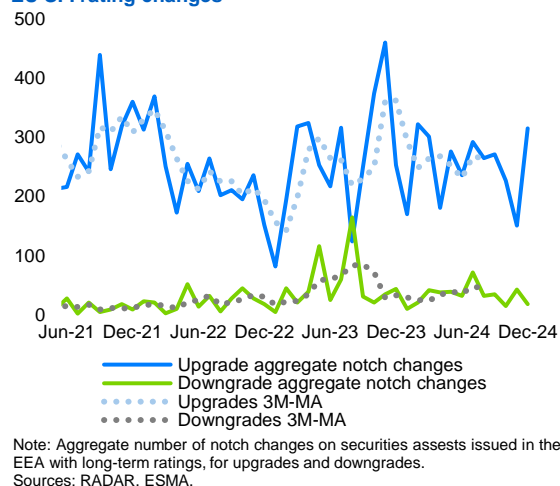


Credit quality

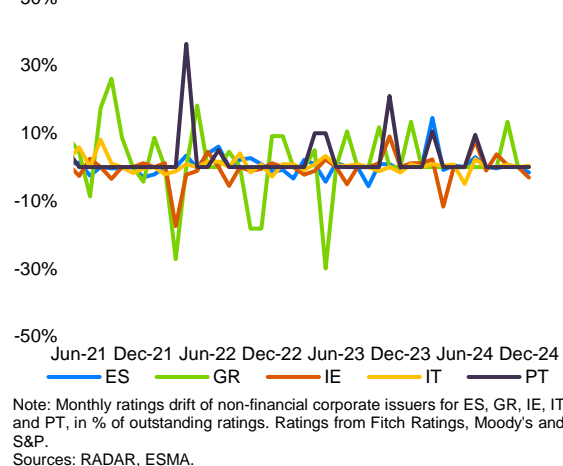
A.40
Credit rating distribution of EU covered bonds



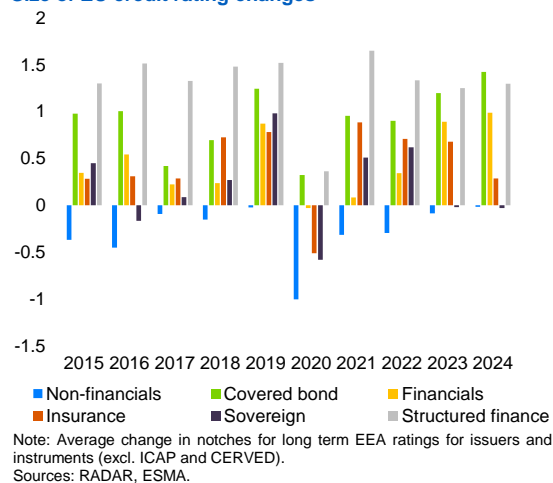
A.41
EU SFI rating changes



A.42
EU non-financial issuer corporate upgrades less downgrades

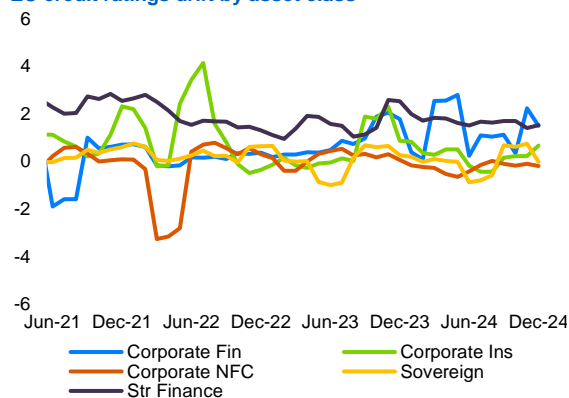


A.43
Size of EU credit rating changes



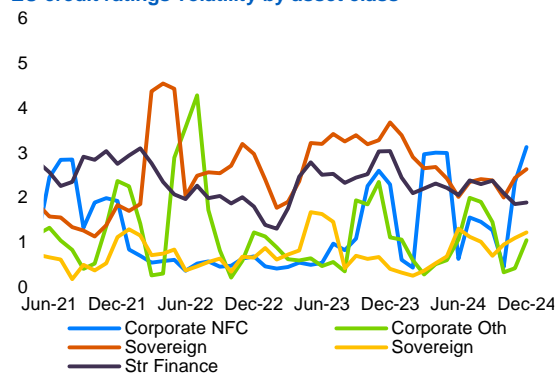
A.44

EU credit ratings drift by asset class



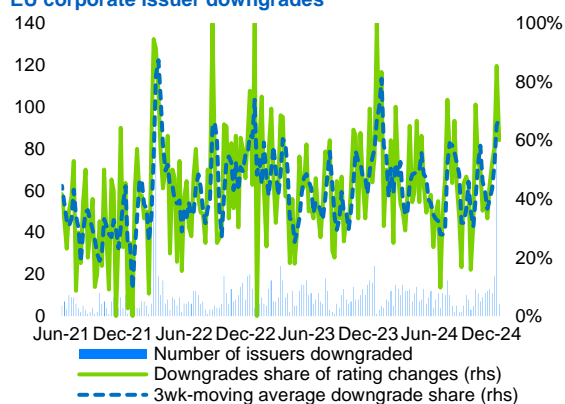
A.45

EU credit ratings volatility by asset class



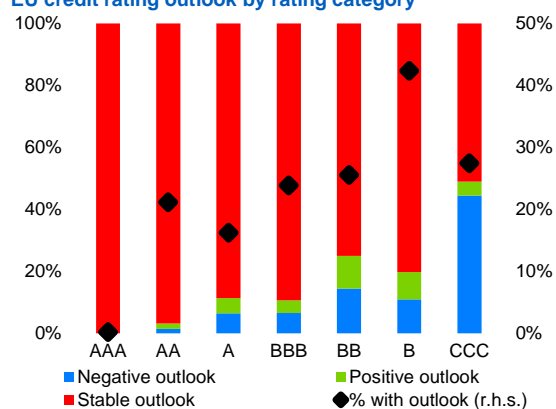
A.46

EU corporate issuer downgrades



A.47

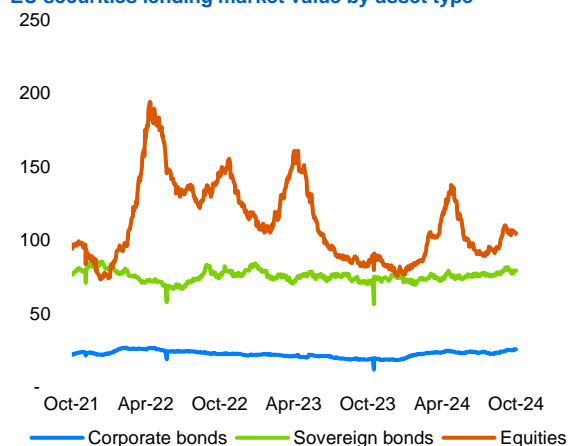
EU credit rating outlook by rating category



Securities lending

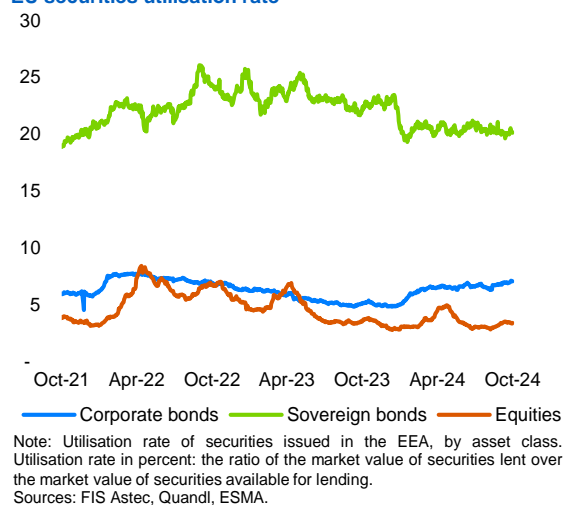
A.48

EU securities lending market value by asset type



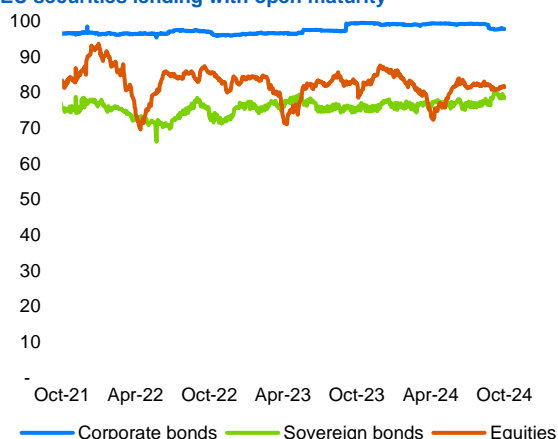
A.49

EU securities utilisation rate



A.50

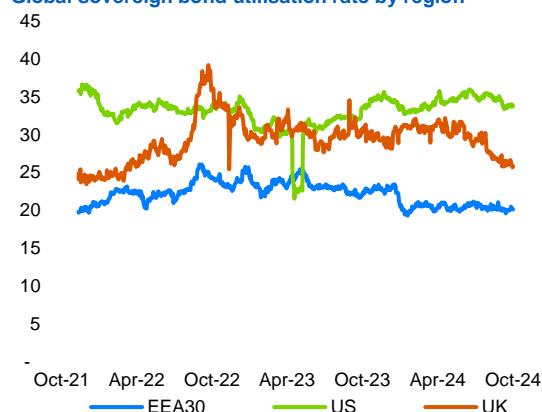
EU securities lending with open maturity



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

A.51

Global sovereign bond utilisation rate by region

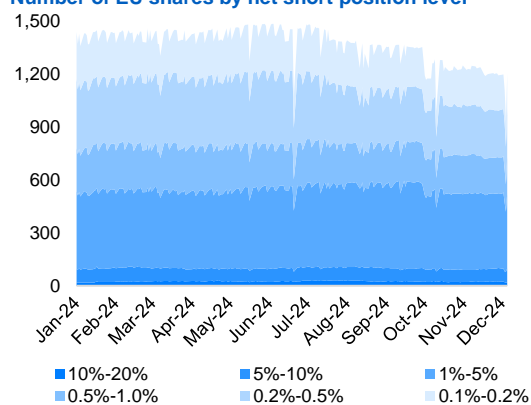


Note: Utilisation rate of sovereign bonds issued in EEA countries, in the US and in the UK. Utilisation rate in percent: the ratio of the market value of securities lent over the market value of securities available for lending.
Sources: FIS Astec, Quandl, ESMA.

Short selling

A.52

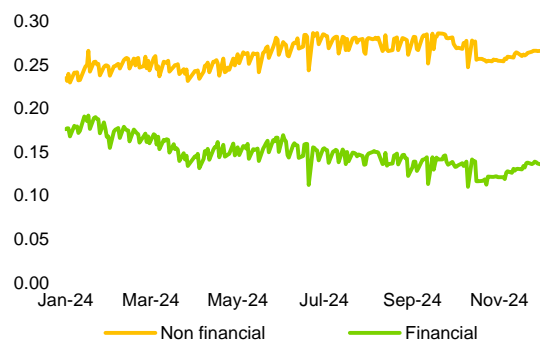
Number of EU shares by net short position level



Note: Number of equities by the level of net short positions reported, end of the day.
Sources: SSREP, FIRDS, ESMA.
KIR: SSREP.NM_SEC.D.Y.Z.Z.Z.Z.Z.Z.Y

A.53

Net short positions in EU financial vs non-financial shares

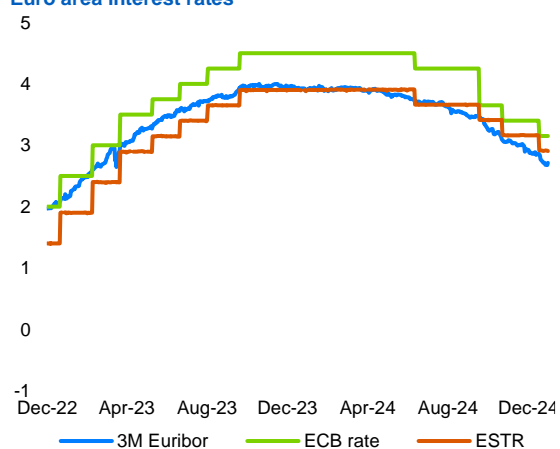


Note: Average percentage of NSP weighted by market capitalisation (31/12/2023) compared to value of all listed shares by institutional sector of the issuer.
Sources: SSREP, FIRDS, FITRS, EIS, ESMA.
KIR: SSREP.AVG_NSP_MV.D.Y.Z.Z.Z.Y.Z.Z.Z

Money markets

A.54

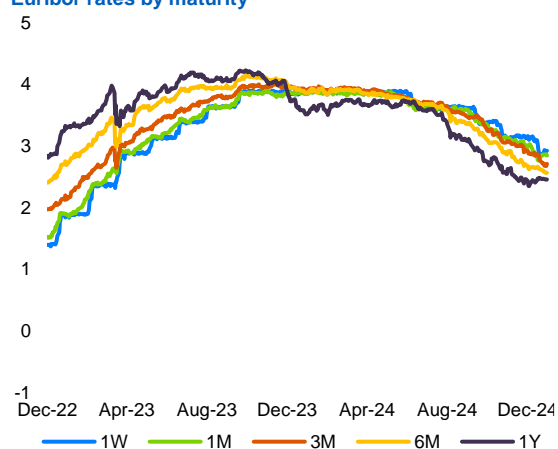
Euro area interest rates



Note: EA money market interest rates, in %.
Sources: Refinitiv Datastream, ESMA.

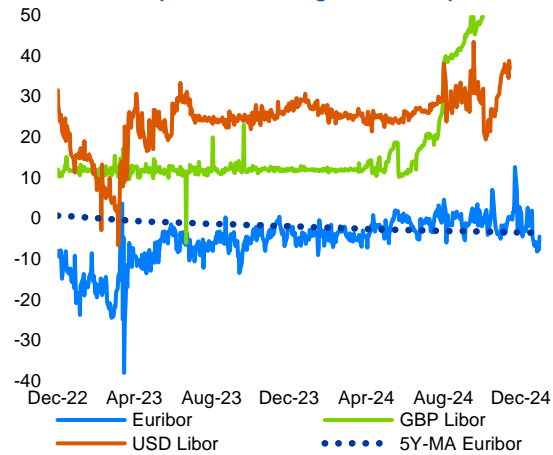
A.55

Euribor rates by maturity



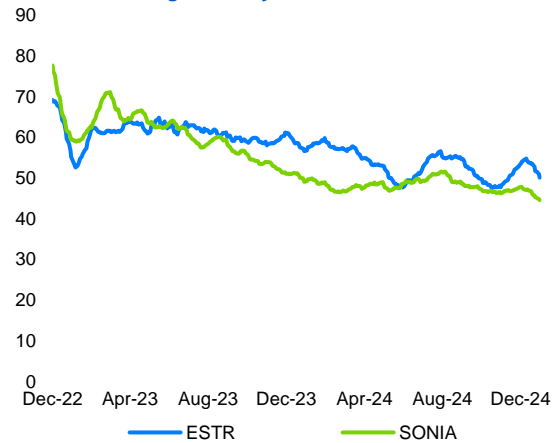
Note: Euribor interest rates by maturity, in %.
Sources: Refinitiv Datastream, ESMA.

A.56

Interbank rate spreads to overnight index swap

Note: Spreads between 3M interbank interest rates and 3M overnight index swaps, in bps.
Sources: Refinitiv Datastream, ESMA.

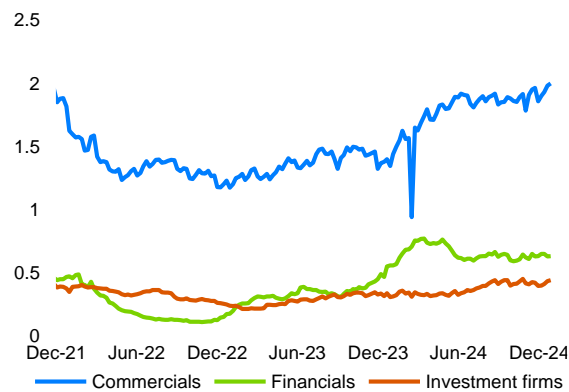
A.57

Interbank overnight activity

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

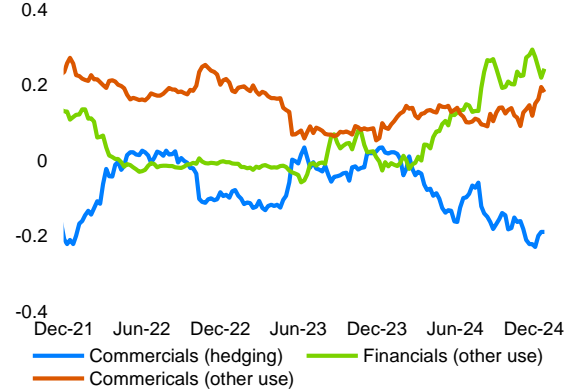
Commodities

A.58

Dutch Natural Gas Futures open interest

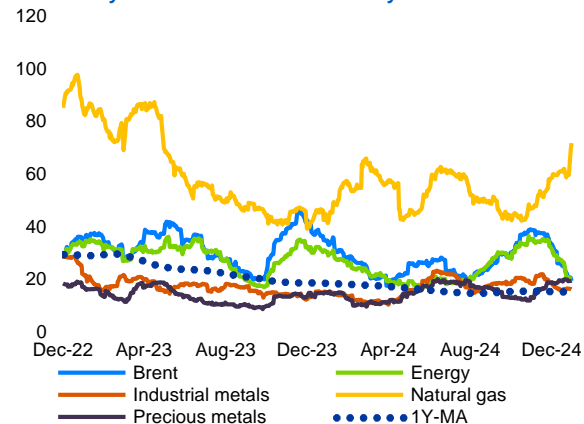
Note: Open interest on Dutch Natural Gas Futures by commercial, financials traders (funds and other financial institutions) and investment firms in bn. Spikes might reflect data quality issues.
Sources: ESMA Weekly Commodities Derivatives Positions Reporting, ESMA

A.59

Dutch Natural Gas Futures net positions

Note: Net number of positions (long minus short) of Dutch Natural Gas Futures held by commercials and financials traders (funds and other financial institutions) and investment firms in billions. Spikes might reflect data quality issues.
Sources: ESMA Weekly Commodity Derivative Positions Reporting, ESMA.

A.60

Commodity derivatives realised volatility

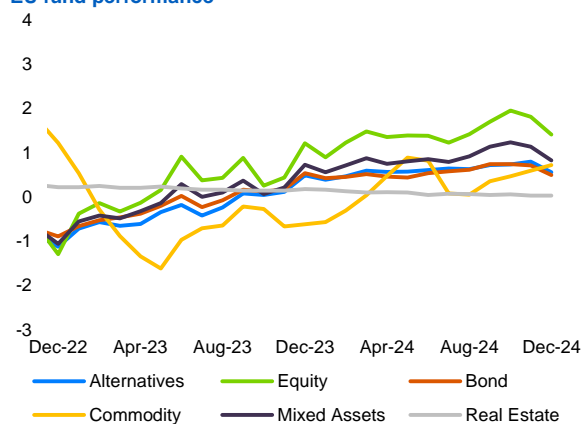
Note: Annualised 40-day volatility of S&P GSCI commodity indices and Brent price, in %. 1Y-MA=one-year moving average computed using S&P GSCI.
Sources: Refinitiv Datastream, ESMA.

Asset management

Fund industry

A.61

EU fund performance

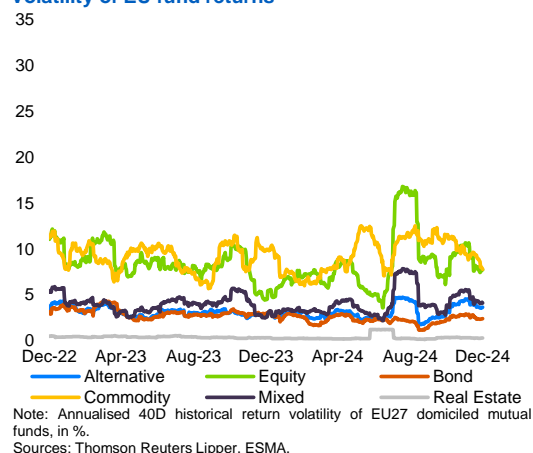


Note: EU27-domiciled investment funds' annual average monthly returns, asset weighted, in %.

Sources: Thomson Reuters Lipper, ESMA.

A.62

Volatility of EU fund returns

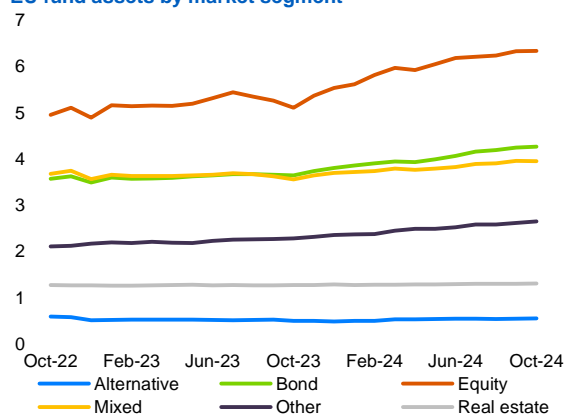


Note: Annualised 40D historical return volatility of EU27 domiciled mutual funds, in %.

Sources: Thomson Reuters Lipper, ESMA.

A.63

EU fund assets by market segment

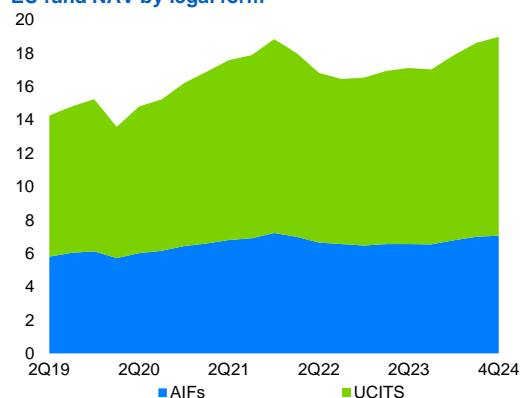


Note: AuM of EA funds by fund type, EUR tn.

Sources: ECB, ESMA.

A.64

EU fund NAV by legal form

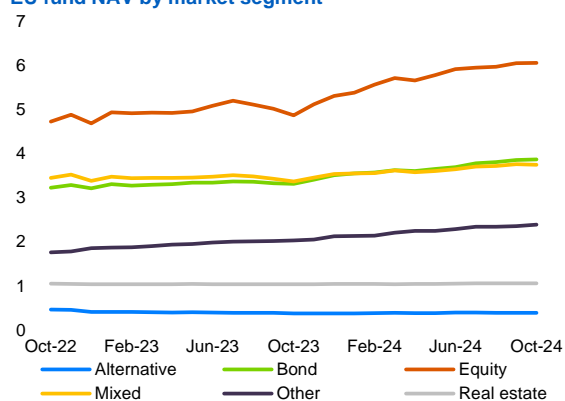


Note: NAV of EEA30 funds, EUR tn.

Sources: EFAMA, ESMA.

A.65

EU fund NAV by market segment

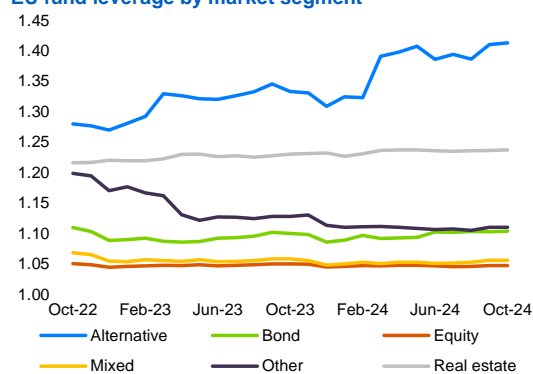


Note: NAV of EA investment funds by fund type, EUR tn.

Sources: ECB, ESMA.

A.66

EU fund leverage by market segment

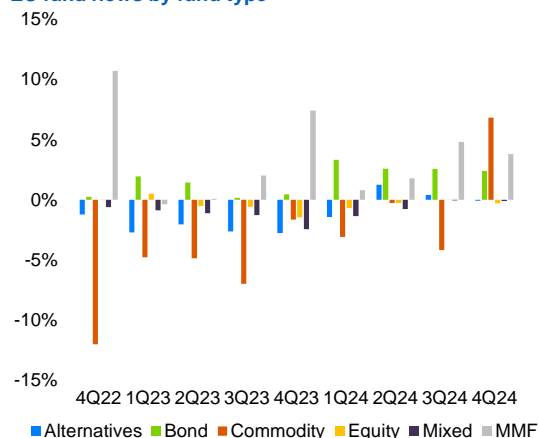


Note: Leverage of EA investment funds by fund type computed as the AuM/NAV ratio.

Sources: ECB, ESMA.

A.67

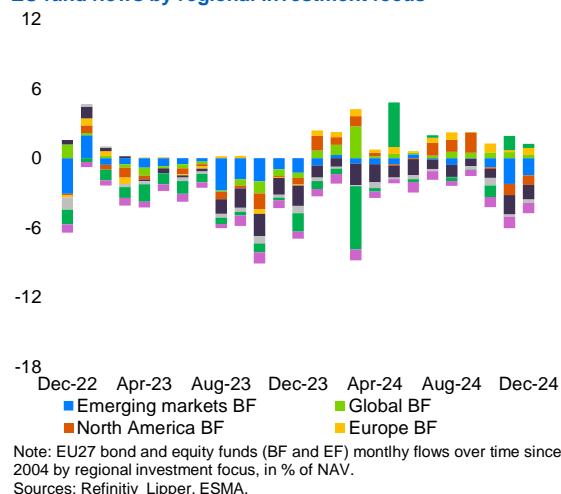
EU fund flows by fund type



Note: EU27-domiciled funds' quarterly flows, in % of NAV.
Sources: Refinitiv Lipper, ESMA.

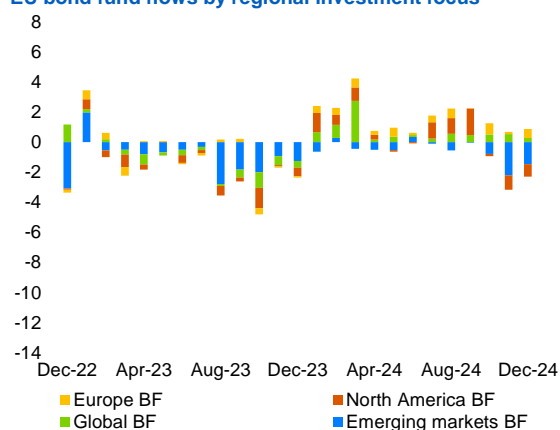
A.68

EU fund flows by regional investment focus



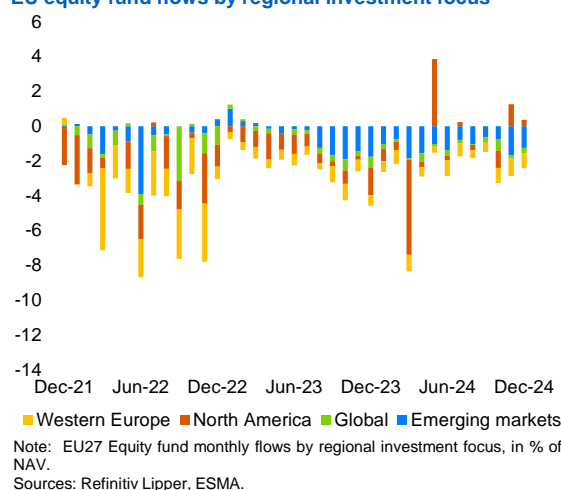
A.69

EU bond fund flows by regional investment focus



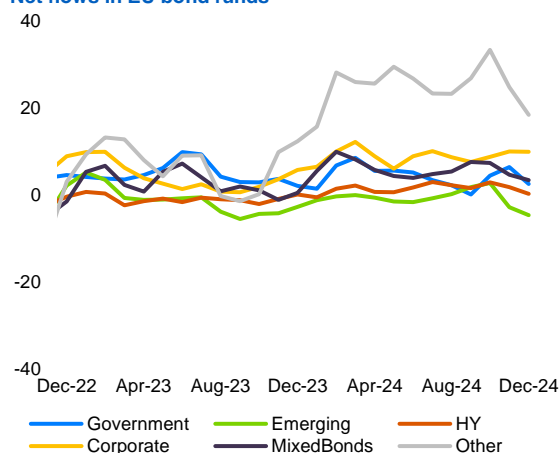
A.70

EU equity fund flows by regional investment focus



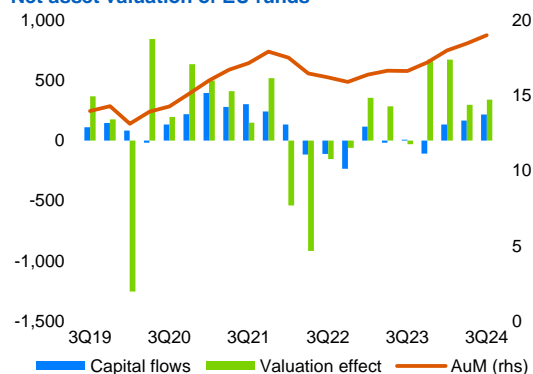
A.71

Net flows in EU bond funds



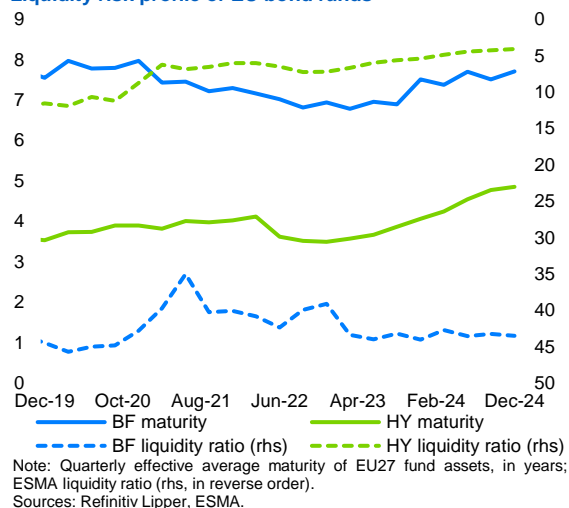
A.72

Net asset valuation of EU funds



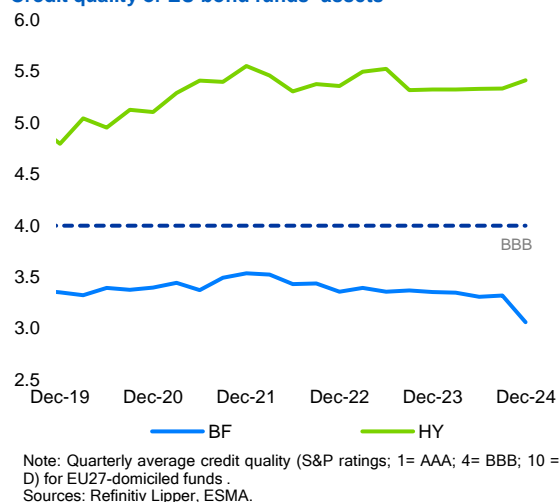
A.73

Liquidity risk profile of EU bond funds



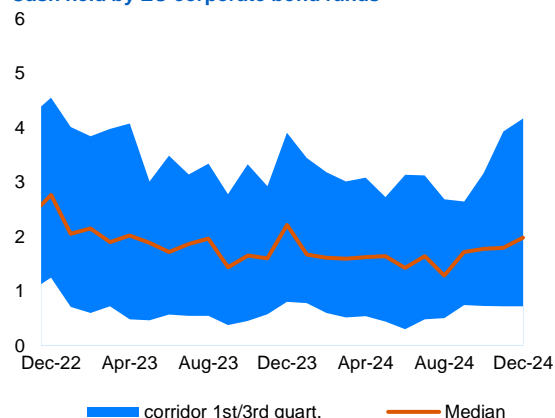
A.75

Credit quality of EU bond funds' assets



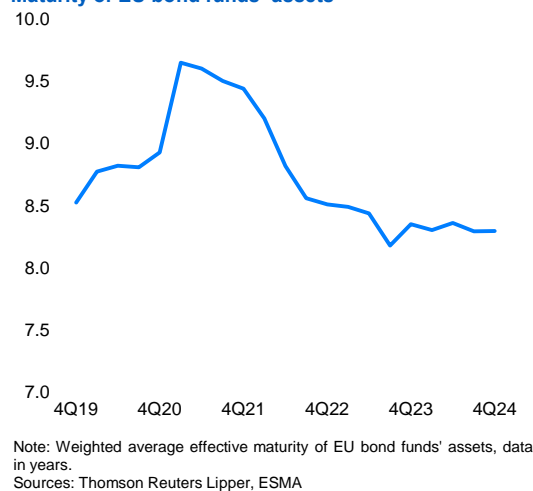
A.74

Cash held by EU corporate bond funds



A.76

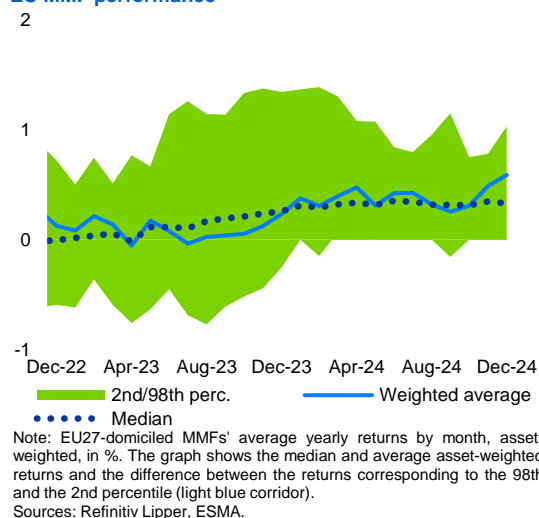
Maturity of EU bond funds' assets



Money market funds

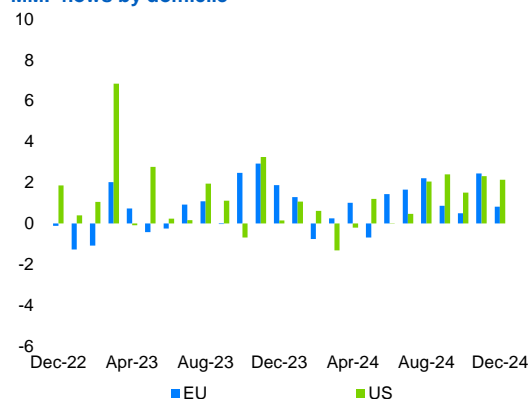
A.77

EU MMF performance



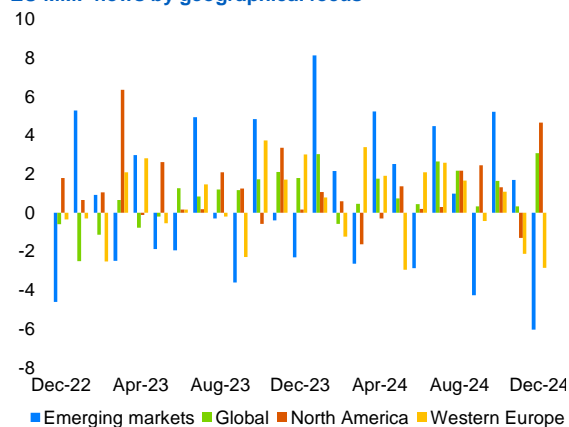
A.78

MMF flows by domicile



A.79

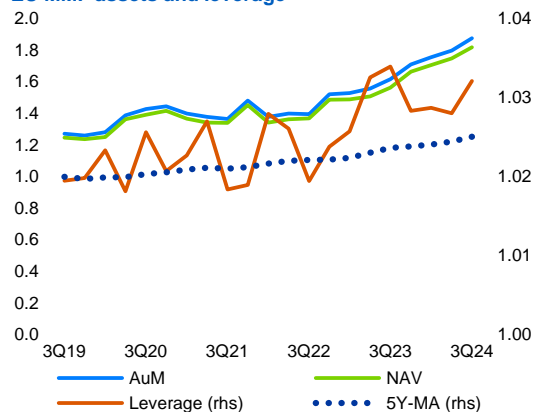
EU MMF flows by geographical focus



Note: EU27 MMF monthly net flows by geographical focus, in % of NAV of the geographical area.
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

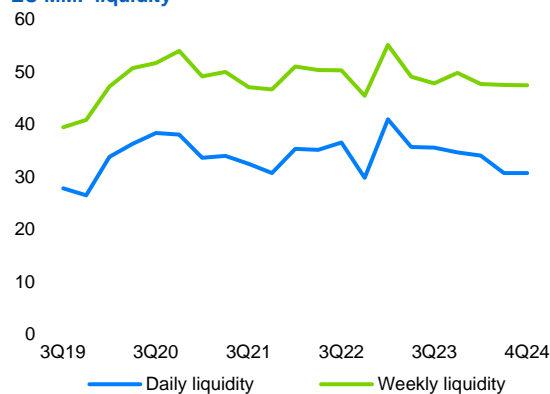
EU MMF maturity



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

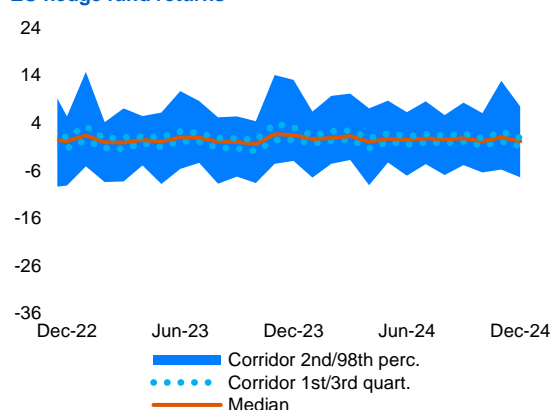


Note: Daily and weekly liquidity includes all assets maturing overnight and shares by AAA MMFs, securities issued by highly rated sovereigns with a maturity of less than one year, in % of total assets. Aggregation carried out using individual Europe-domiciled MMF data weighted by AuM.
Sources: Fitch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

Alternative funds

A.83

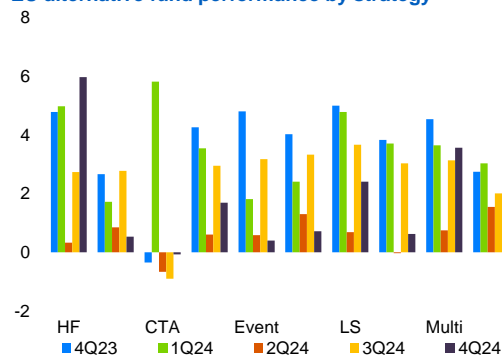
EU hedge fund returns



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

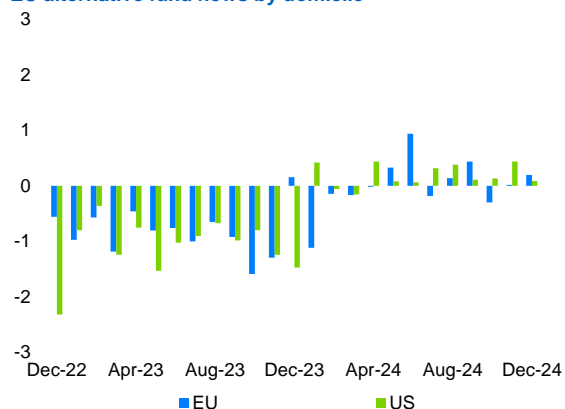
EU alternative fund performance by strategy



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

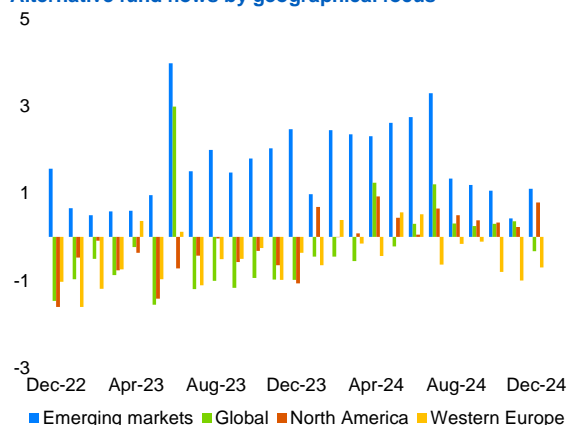


Note: Alternative mutual funds monthly net flows by domicile, in %. Data on alternative mutual funds represents only a subset of the entire alternative fund industry.

Sources: Refinitiv Lipper, ESMA.

A.87

Alternative fund flows by geographical focus

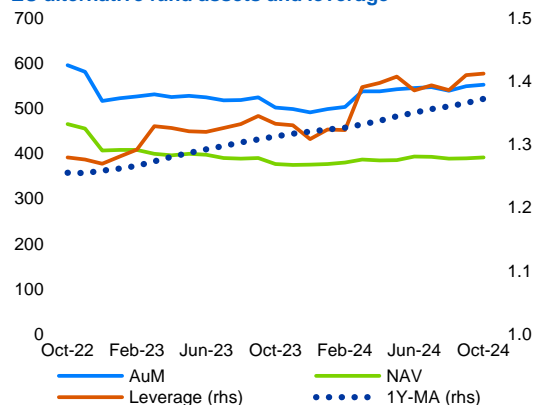


Note: Alternative mutual funds' monthly net flows by geographical focus, in % of NAV of the geographical area. Data on alternative mutual funds represents only a subset of the entire alternative fund industry.

Sources: Refinitiv Lipper, ESMA.

A.86

EU alternative fund assets and leverage

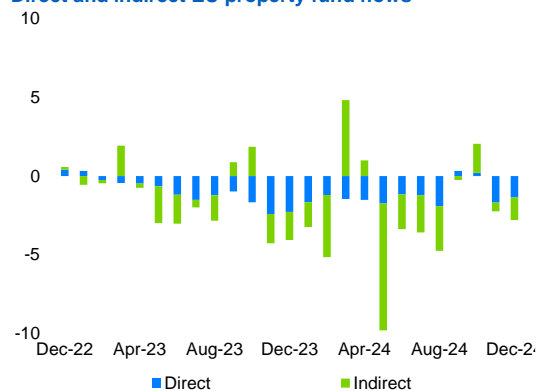


Note: NAV and AuM of EA alternative funds, EUR bn. Leverage computed as the AuM/NAV ratio. 1Y-MA=one-year moving average for the leverage ratio.

Sources: ECB, ESMA.

A.88

Direct and indirect EU property fund flows



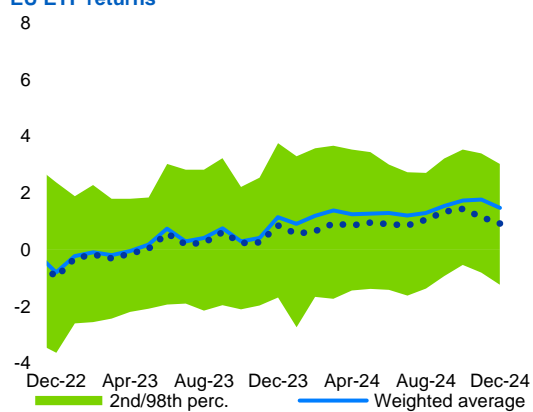
Note: Two-month cumulative flows for direct and indirect EU27-domiciled property funds. Indirect property funds invest in securities of real estate companies, including Real Estate Investment Trusts (REITs), in EUR bn.

Sources: Morningstar, ESMA.

Exchange-traded funds

A.89

EU ETF returns



Note: EU27-domiciled ETFs' average yearly returns by month, asset-weighted, in %. The graph shows the median and average asset-weighted returns and the difference between the returns corresponding to the 98th and the 2nd percentile (light blue corridor).

Sources: Refinitiv Lipper, ESMA.

A.90

EU ETF returns volatility

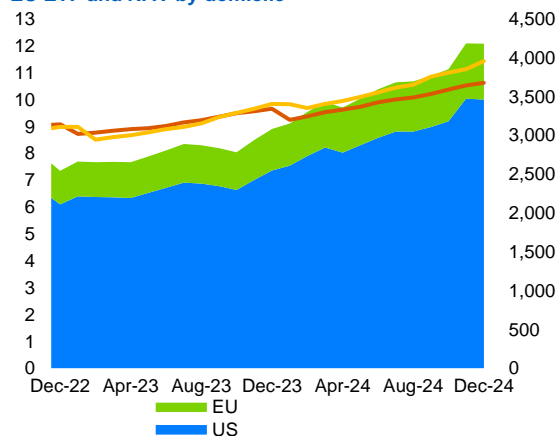


Note: Annualised 40-day historical return volatility of EU27-domiciled ETF, in %.

Sources: Refinitiv Lipper, ESMA.

A.91

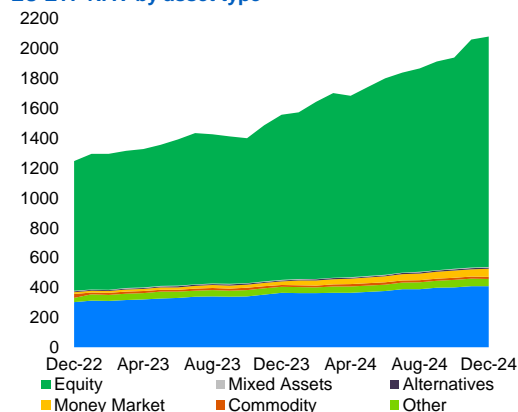
EU ETF and NAV by domicile



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

A.92

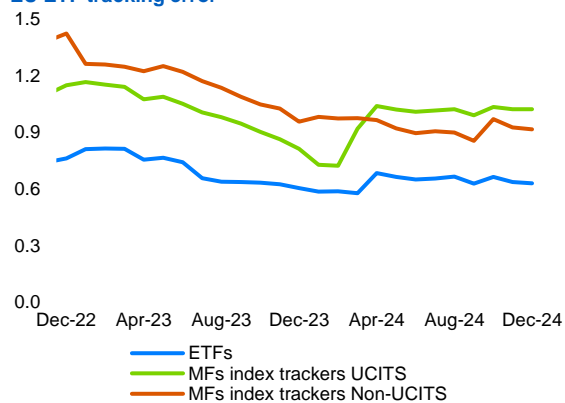
EU ETF NAV by asset type



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

A.93

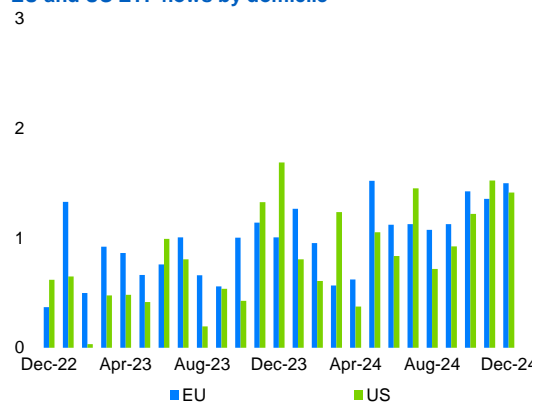
EU ETF tracking error



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

A.94

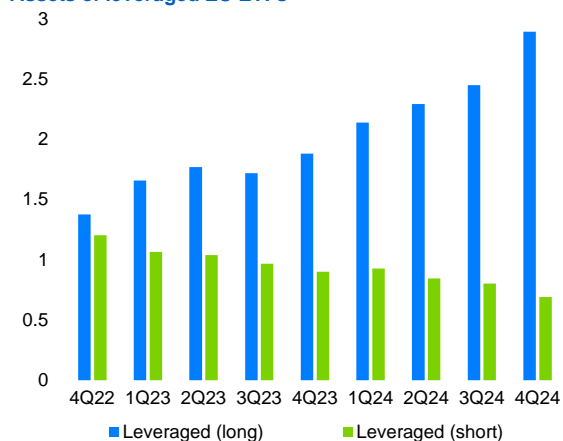
EU and US ETF flows by domicile



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

A.95

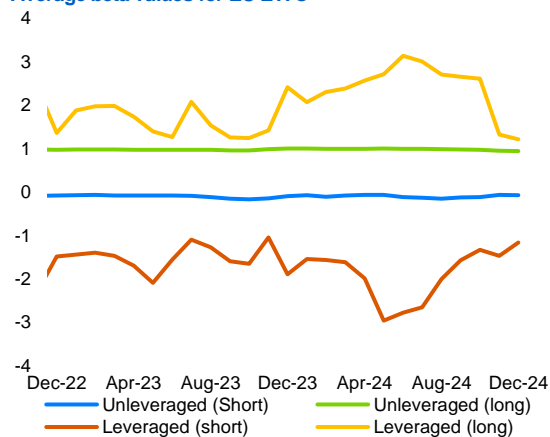
Assets of leveraged EU ETFs



Note: Total assets of leveraged ETFs by exposure type, EUR bn.
Sources: Refinitiv Lipper, ESMA.

A.96

Average beta values for EU ETFs

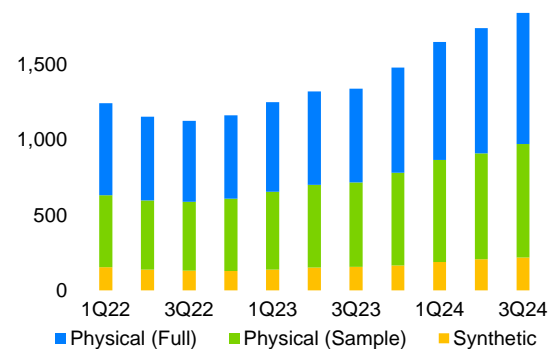


Note: Leveraged ETFs are self-reported. The annual average beta is measured as the volatility of fund return in comparison to its benchmark.
Sources: Refinitiv Lipper, ESMA.

A.97

Assets of EU ETFs by replication method

2,000



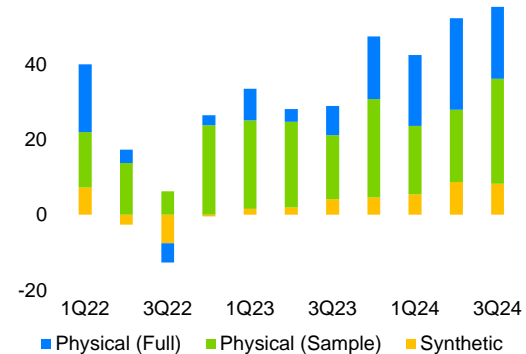
Note: Assets under management of EU-domiciled ETFs by replication method. "Physical (Full)" = fund replicates index performance by purchasing all constituent securities. "Physical (Sample)" = fund replicates index performance by purchasing only some of the constituent securities.

Sources: Morningstar, ESMA

A.98

Flows into EU ETFs by replication method

60



Note: Net quarterly flows of EU-domiciled ETFs by replication method. "Physical (Full)" = fund replicates index performance by purchasing all constituent securities. "Physical (Sample)" = fund replicates index performance by purchasing only some of the constituent securities.

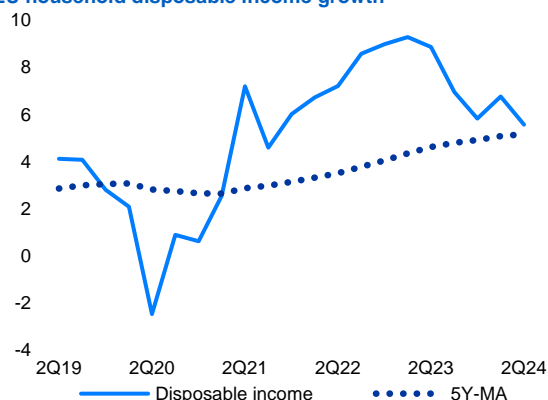
Sources: Morningstar, ESMA

Consumers

Investment resources available to households

A.99

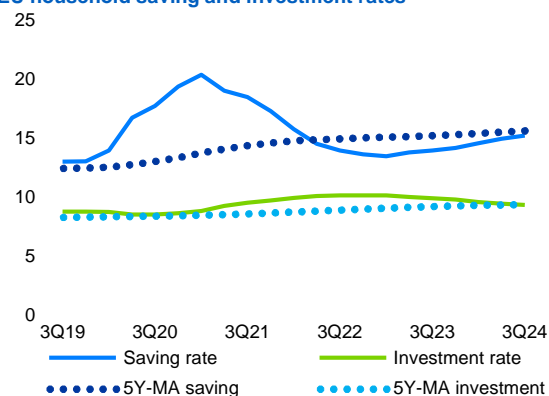
EU household disposable income growth



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

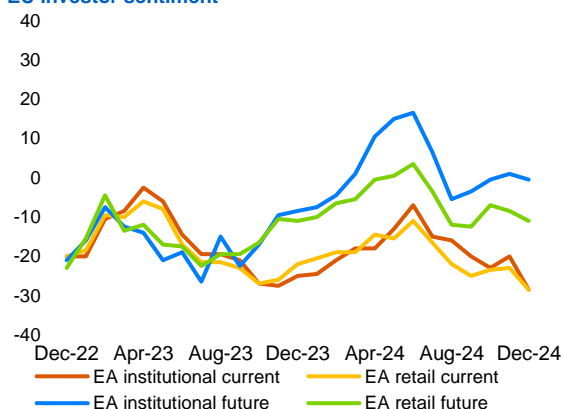
EU household saving and investment rates



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

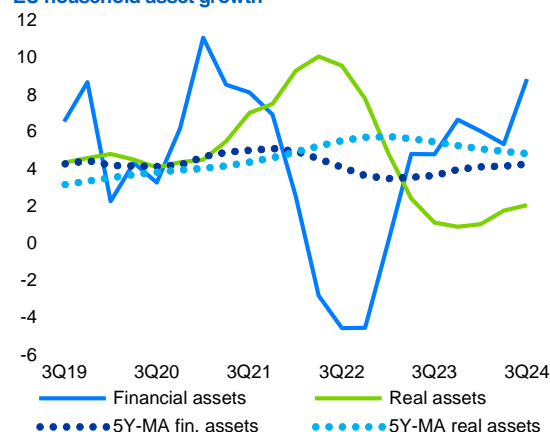
EU investor sentiment



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 asset growth

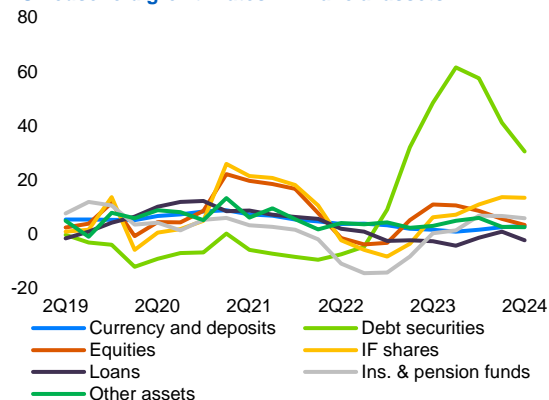


Note: Annualised growth rate real and financial assets of EA households, in %. 5Y-MA=five-year moving average of the growth rates.
Sources: ECB, ESMA.

Asset allocation by retail investors

A.103

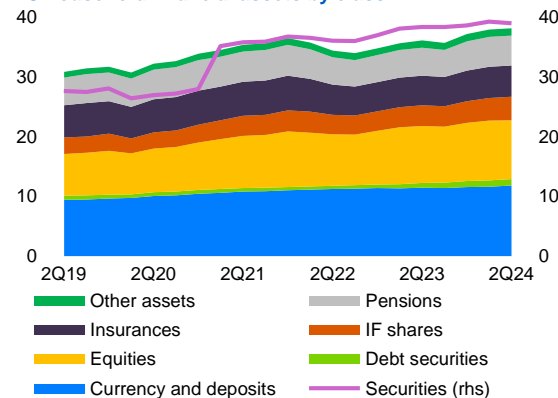
EU household growth rates in financial assets



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.104

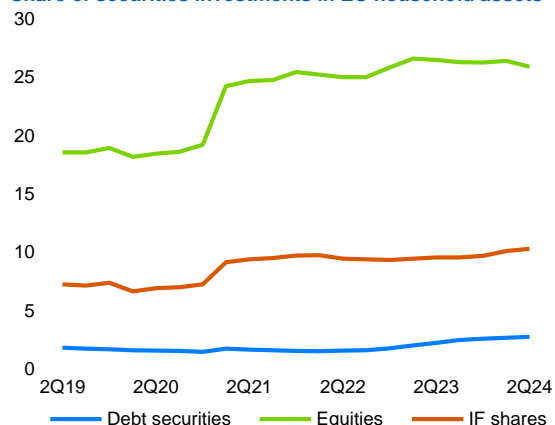
EU household financial assets by class



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

A.105

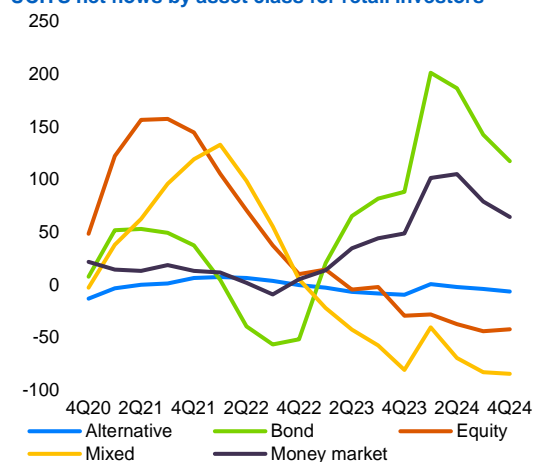
Share of securities investments in EU household assets



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

A.107

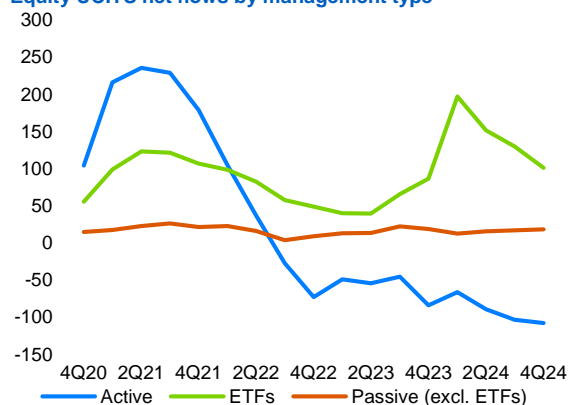
UCITS net flows by asset class for retail investors



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

A.109

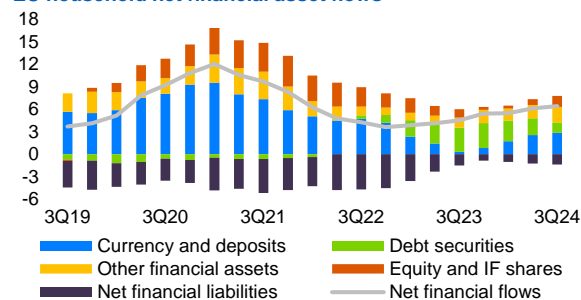
Equity UCITS net flows by management type



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.106

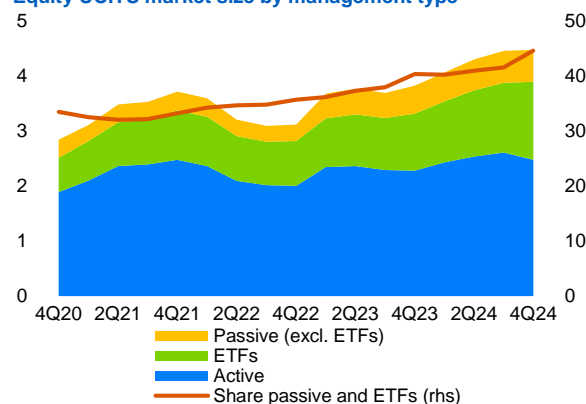
EU household net financial asset flows



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.108

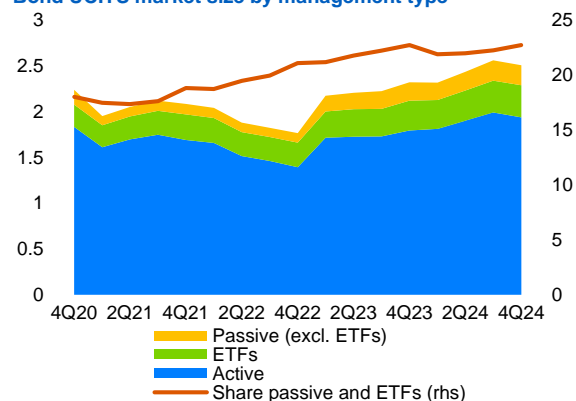
Equity UCITS market size by management type



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 redemptions fees are available, in EUR tn. Share of passive and ETFs, in %.
Sources: Refinitiv Lipper, ESMA.

A.110

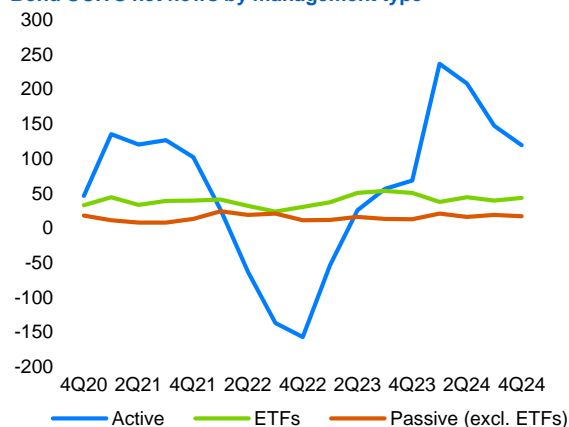
Bond UCITS market size by management type



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, in %.
Sources: Refinitiv Lipper, ESMA.

A.111

Bond UCITS net flows by management type

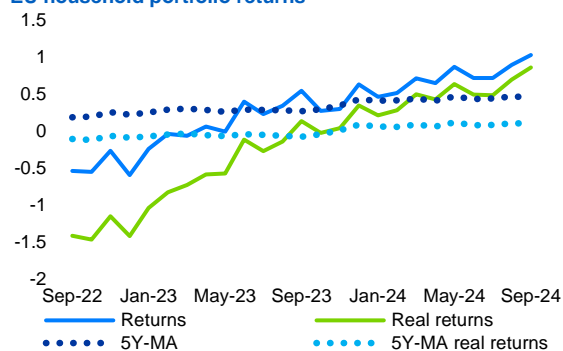


Note: EU27 bond UCITS annual net flows from retail and institutional investors at quarterly frequency by management type, EUR bn.
Sources: Refinitiv Lipper, ESMA.

Costs and performance

A.112

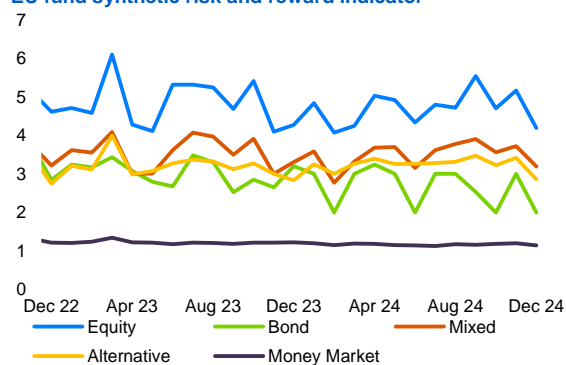
EU household portfolio returns



Note: One-year moving average of the monthly gross nominal and real returns of a stylised EU 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, Eurostat, ESMA.

A.113

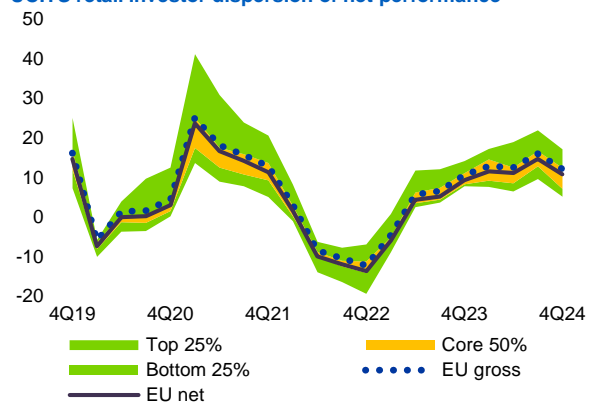
EU fund synthetic risk and reward indicator



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.114

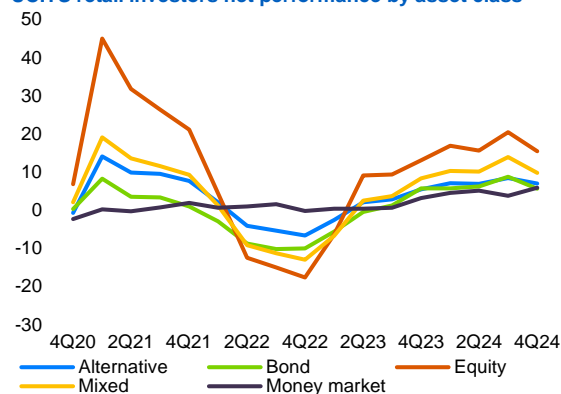
UCITS retail investor dispersion of net performance



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.

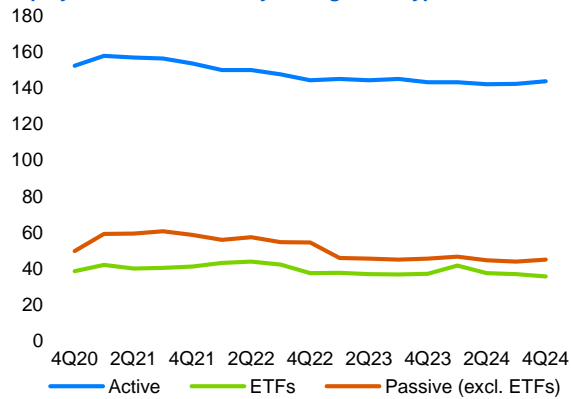
A.115

UCITS retail investors net performance by asset class



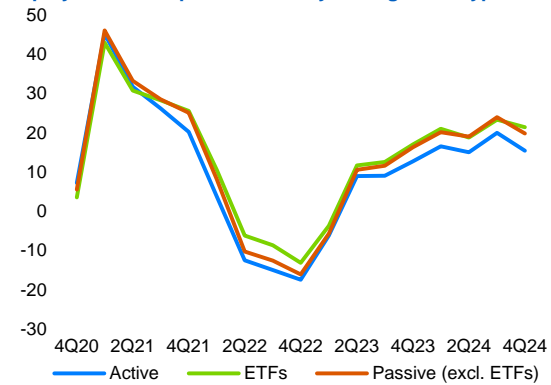
Note: Evolution of net annual performance (net of ongoing costs (TER) subscription and redemptions fees) of EU27 UCITS, retail investors only, by asset class, in %.
Sources: Refinitiv Lipper, ESMA.

A.116

Equity UCITS total costs by management type

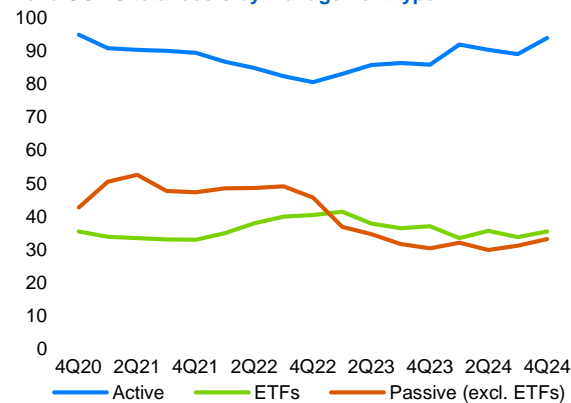
Note: Evolution of total costs (ongoing costs (TER), subscription and redemption fees) of EU27 equity UCITS, retail and institutional investors, by management type, in bps.
Sources: Refinitiv Lipper, ESMA.

A.117

Equity UCITS net performance by management type

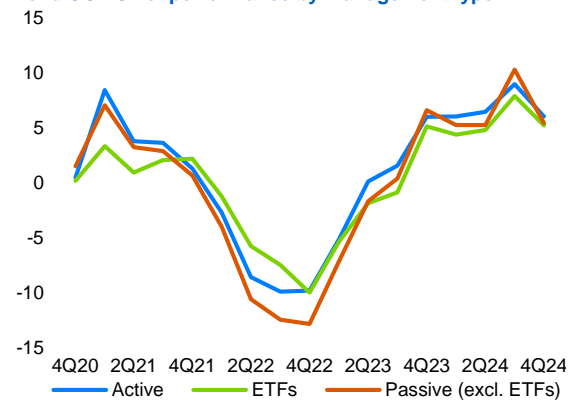
Note: Evolution of net annual performance (net on ongoing costs (TER), subscription and redemption fees) of EU27 equity UCITS, retail and institutional investors, by management type, in %.
Sources: Refinitiv Lipper, ESMA.

A.118

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.

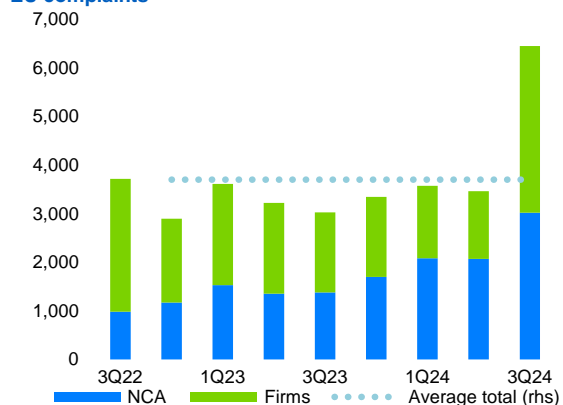
A.119

Bond UCITS net performance by management type

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

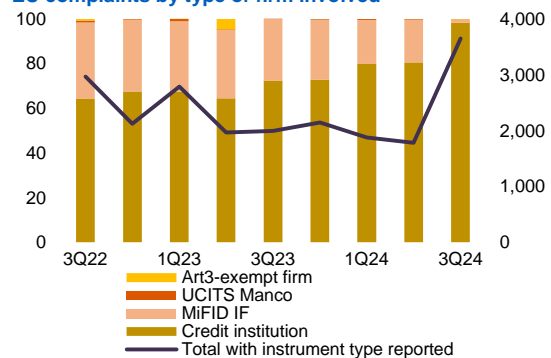
Complaints

A.120

EU complaints

Note: Number of complaints recorded by quarterly-reporting NCAs (n=13) 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 2Q22 to 2Q24.
Sources: ESMA complaints database.

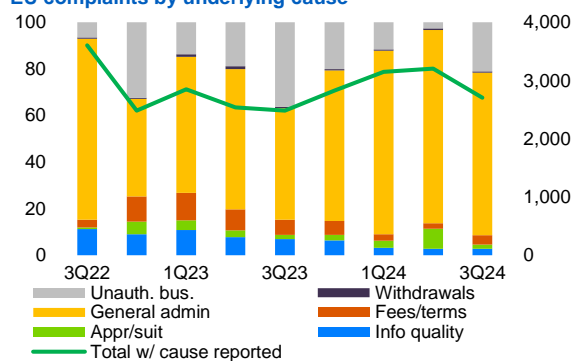
A.121

EU complaints by type of firm involved

Note: Share of complaints for quarterly-reporting NCAs (n=13) received direct from consumers and via firms by type of firm involved, excluding complaints without 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 MiFID Article 3.
Sources: ESMA complaints database.

A.122

EU complaints by underlying cause



Note: Share of complaints for quarterly-reporting NCAs (n=13) 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.

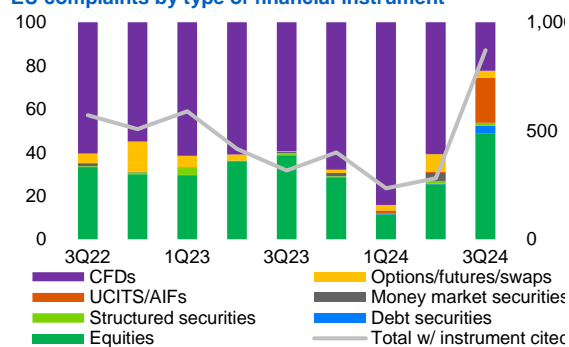
'Info quality'=Quality or lack of information.

'Total with cause reported'=Number of complaints via these reporting channels categorised by one of the listed causes.

Sources: ESMA complaints database.

A.123

EU complaints by type of financial instrument



Note: Share of complaints from quarterly-reporting NCAs (n=13) received direct from consumers 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'.

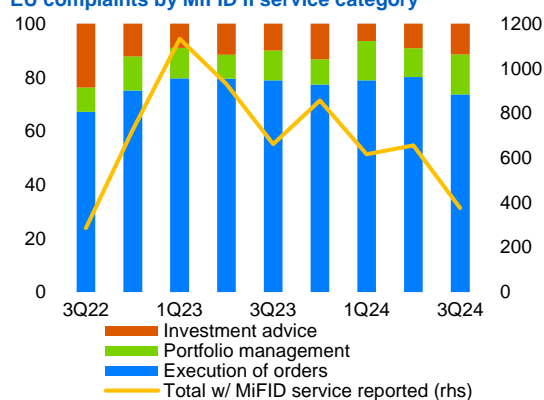
'Total complaints'=number of complaints via these reporting channels whether or not further categorisation possible.

'CFDs'=Contracts for Differences.

Sources: ESMA complaints database.

A.124

EU complaints by MiFID II service category



Note: Share of complaints for quarterly-reporting NCAs (n=13) 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, %.

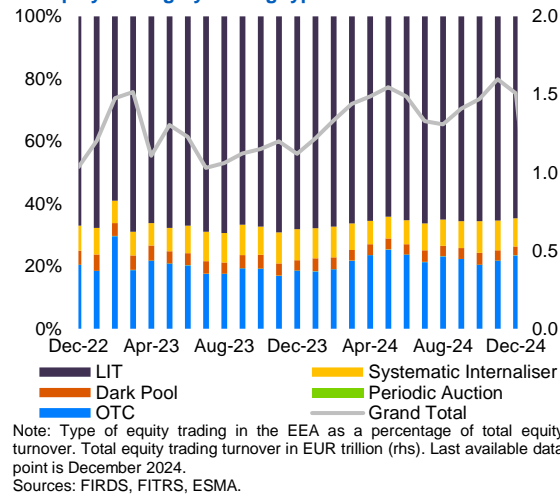
'Total with MiFID service reported' = Total complaints received via these reporting channels recorded as associated with a MiFID service.

Infrastructures and services

Trading venues and MiFID entities

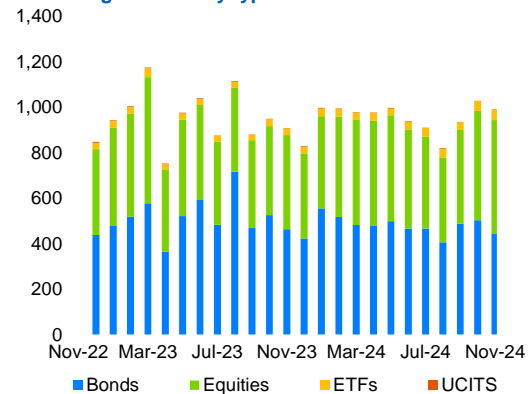
A.125

EU equity trading by trading type



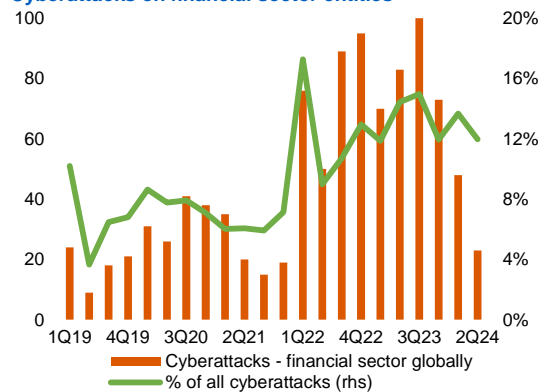
A.126

EU trading turnover by type of assets



A.127

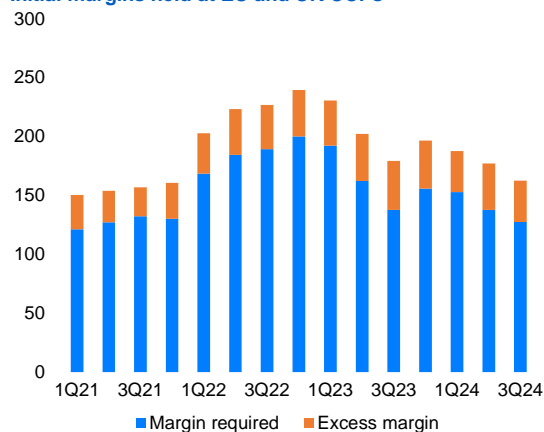
Cyberattacks on financial sector entities



Central counterparties

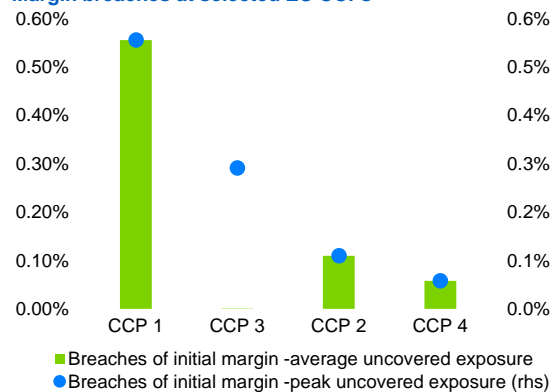
A.128

Initial margins held at EU and UK CCPs



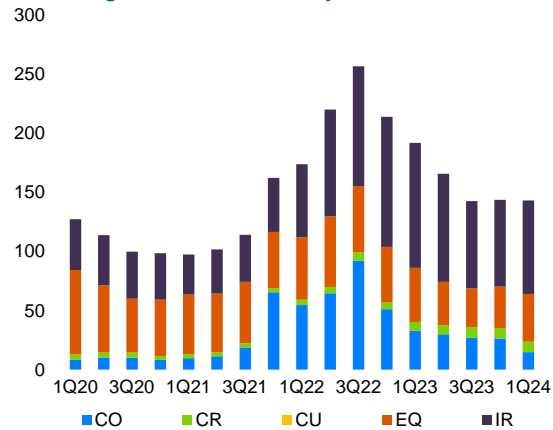
A.129

Margin breaches at selected EU CCPs



A.130

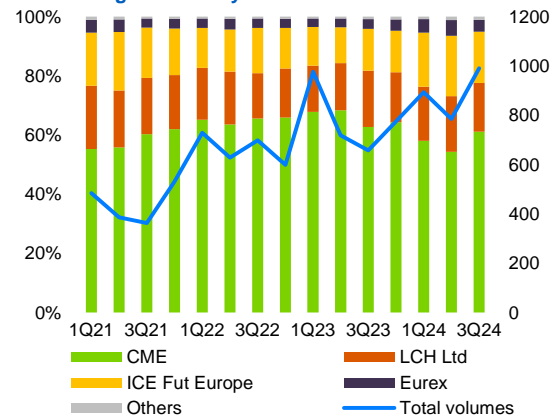
Initial margins held at EU CCPs by asset class



Note: Outstanding amounts of initial margin required and excess collateral received by EU27 CCPs for derivatives, in EUR bn.
Sources: TRs, ESMA.

A.132

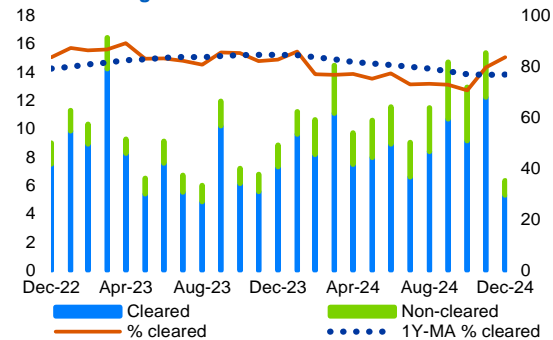
IRD clearing volumes by CCP



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.134

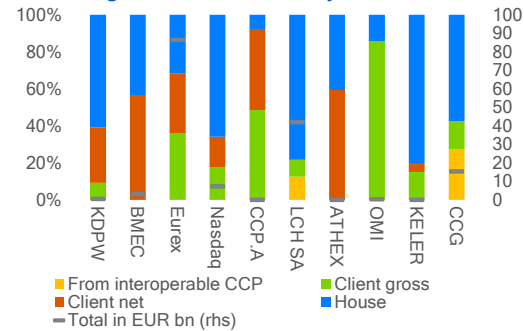
EU IRD trading volumes



Note: Monthly trading volumes for EU27-currency-denominated IRD products. Products include IRS, basis swaps, FRA, inflation swaps, OIS, 40-day moving average notional, USD tn. ISDA SwapsInfo data are based on publicly available data from DTCC Trade Repository LLC and Bloomberg Swap Data Repository.
Sources: ISDA SwapsInfo, ESMA.

A.131

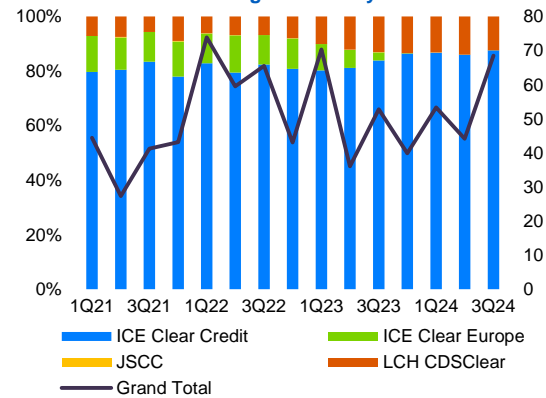
Initial margins held at EU CCPs by account



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). As of 30 September 2024. Data for CCG from 28 June 2024)
Sources: Clarus Financial Technology, CPMI-IOSCO PQD, ESMA.

A.133

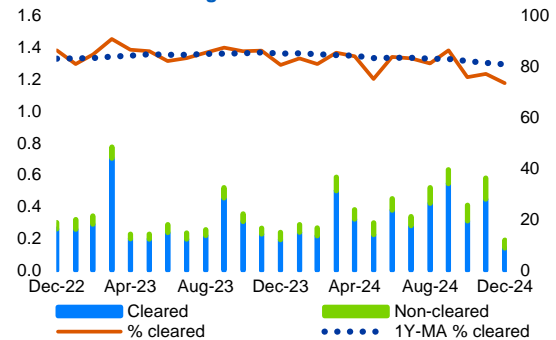
Credit derivatives clearing volumes by CCP



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.

A.135

EU CDS index trading volumes

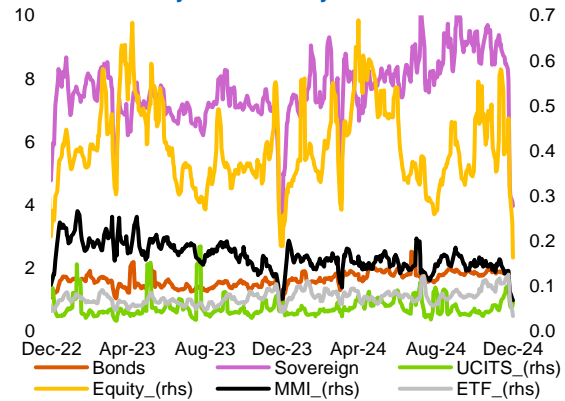


Note: Monthly trading volumes for the main EUR CDS indices including Itraxx Europe, Itraxx Europe Crossover, Itraxx Europe Senior Financials, 40-day moving average notional, USD tn. ISDA SwapsInfo data are based on publicly available data from DTCC Trade Repository LLC and Bloomberg Swap Data Repository.

Central securities depositories

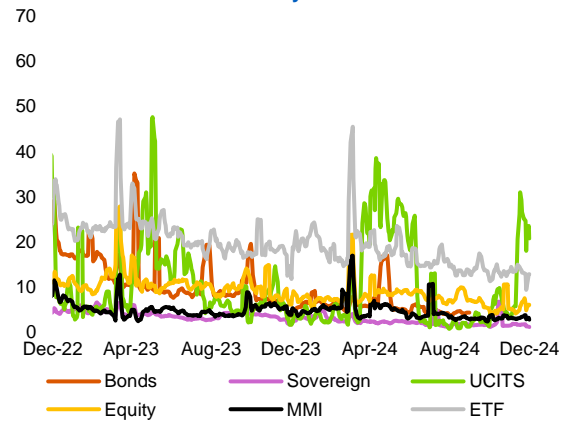
A.136

Settlement activity in EU CSDs by asset class



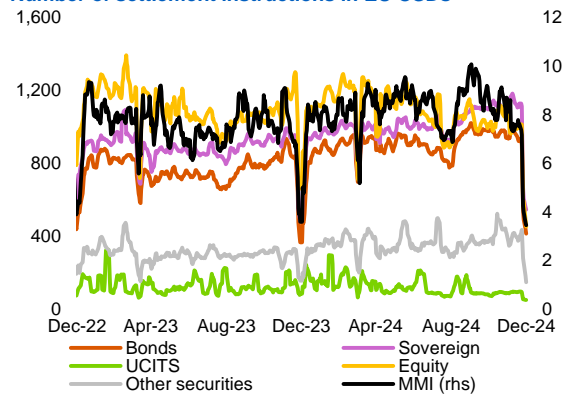
A.137

Settlement fails in EU CSDs by asset class



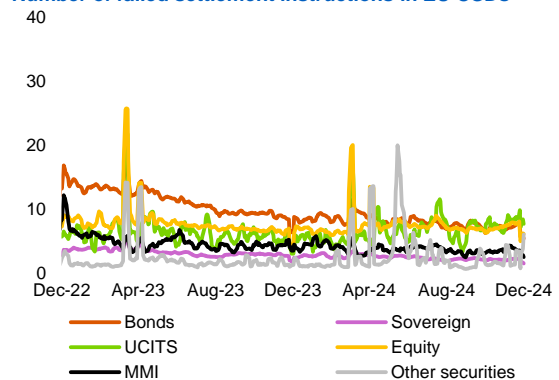
A.138

Number of settlement instructions in EU CSDs



A.139

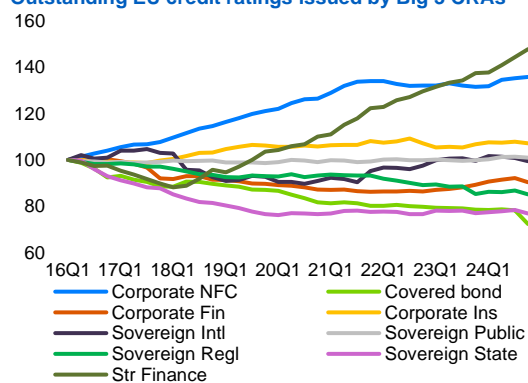
Number of failed settlement instructions in EU CSDs



Credit rating agencies

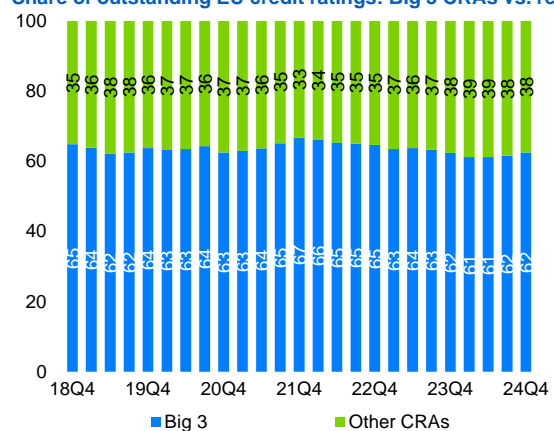
A.140

Outstanding EU credit ratings issued by Big 3 CRAs



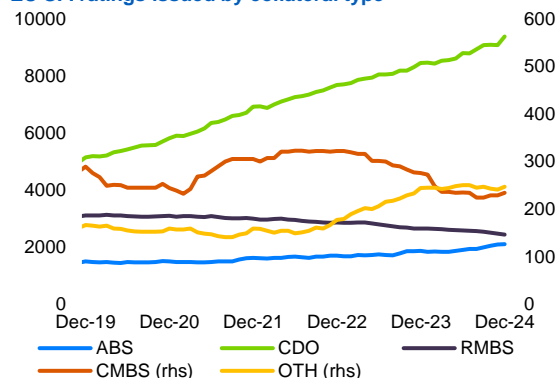
A.141

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



A.142

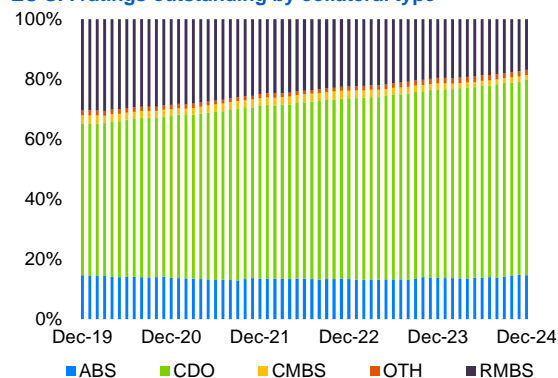
EU SFI ratings issued by collateral type



Note: Number of rated EEA 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.143

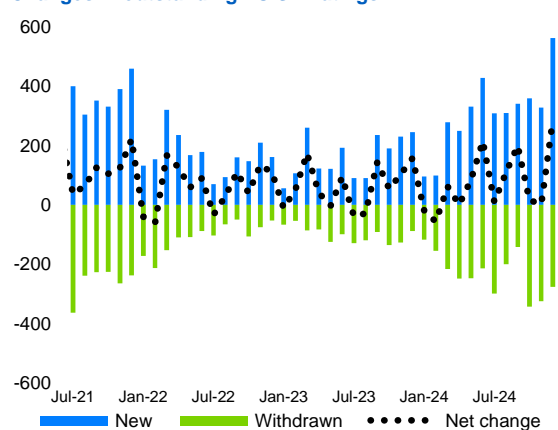
EU SFI ratings outstanding by collateral type



Note: Outstanding ratings of EEA 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.144

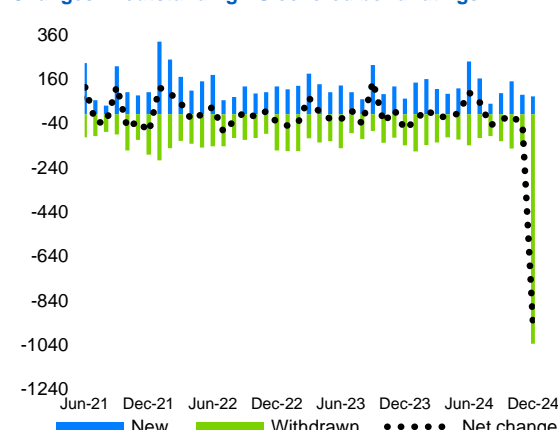
Changes in outstanding EU SFI ratings



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

A.145

Changes in outstanding EU covered bond ratings

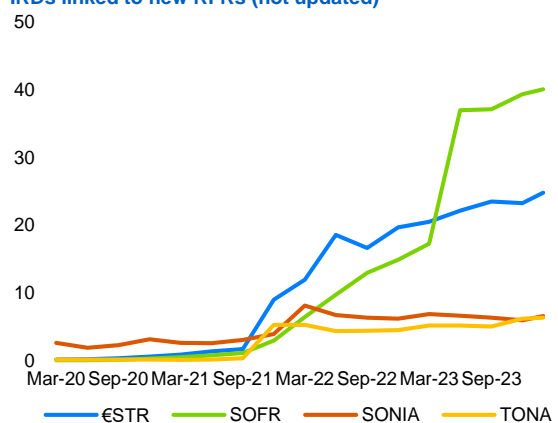


Note: Number of withdrawn and new ratings for covered bond ratings, EEA ratings. Sources: RADAR, ESMA.

Financial benchmarks

A.146

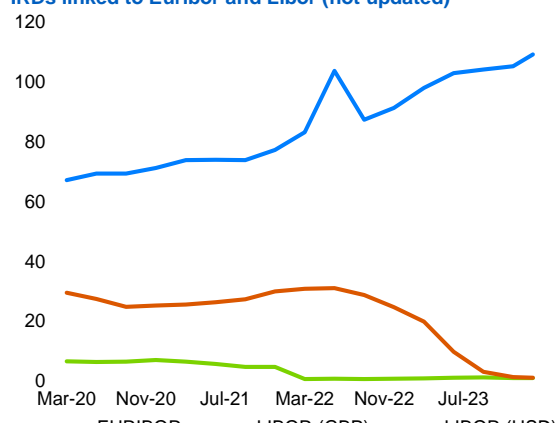
IRDs linked to new RFRs (not updated)



Note: Gross notional amount outstanding for interest rate derivatives referencing new benchmarks, excludes intragroup and UK-domiciled counterparties during transition period for UK withdrawal from the EU. Sources: TRs, ESMA.

A.147

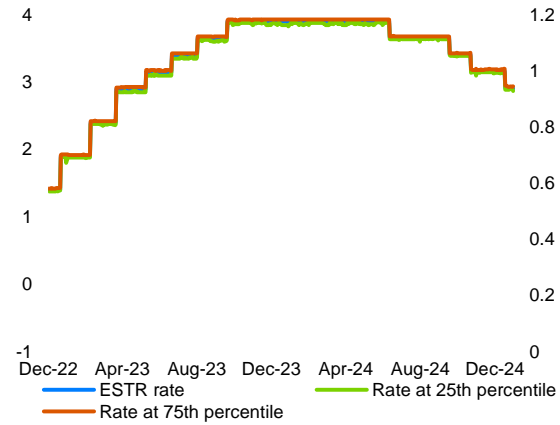
IRDs linked to Euribor and Libor (not updated)



Note: Gross notional amount outstanding for interest rate derivatives referencing benchmarks, excludes intragroup and UK-domiciled counterparties during transition period for UK withdrawal from the EU. Sources: TRs, ESMA.

A.148

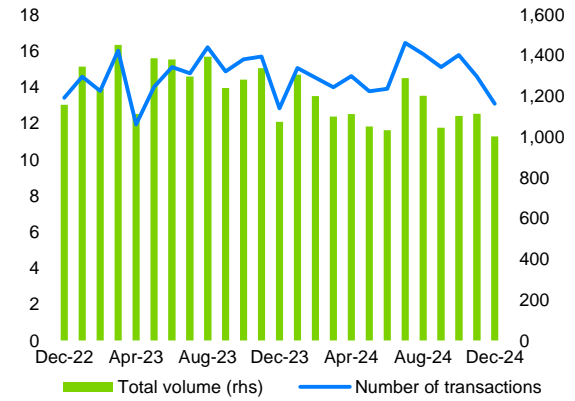
€STR rate



Note: €STR rates at 25th, 50th and 75th percentile of volume, in %.
Sources: ECB, ESMA.

A.149

€STR volumes



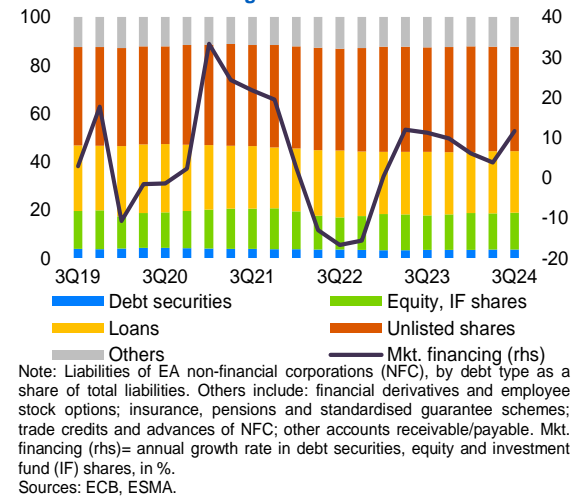
Note: €STR monthly number of transactions, in thousand, and monthly volumes, EUR tn, before trimming.
Sources: ECB, ESMA.

Market based finance

Capital markets financing

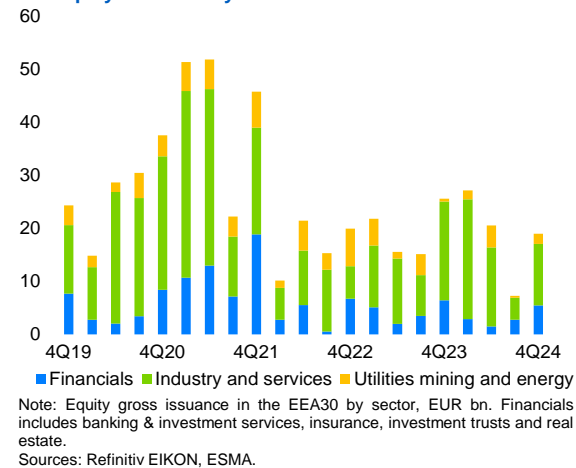
A.150

Total EA market financing



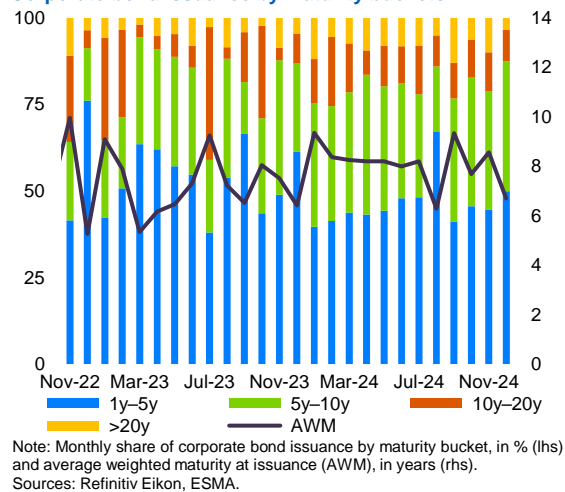
A.152

EEA equity issuance by sector



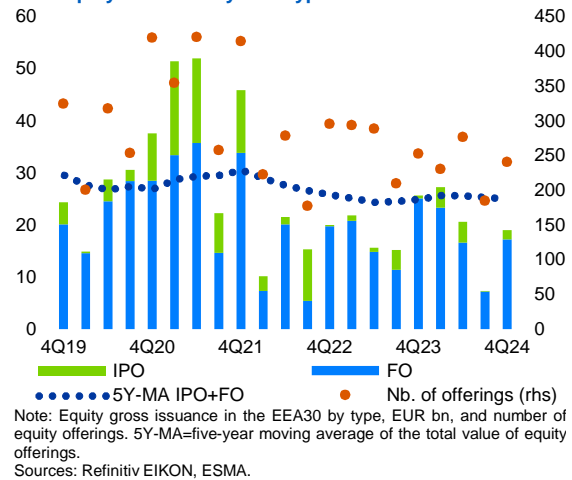
A.154

Corporate bond issuance by maturity buckets



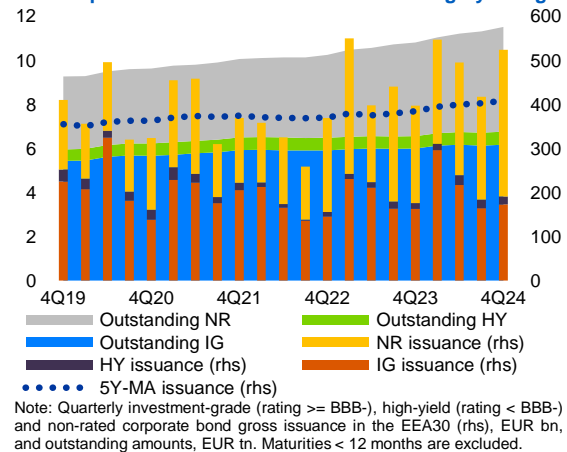
A.151

EEA equity issuance by deal type



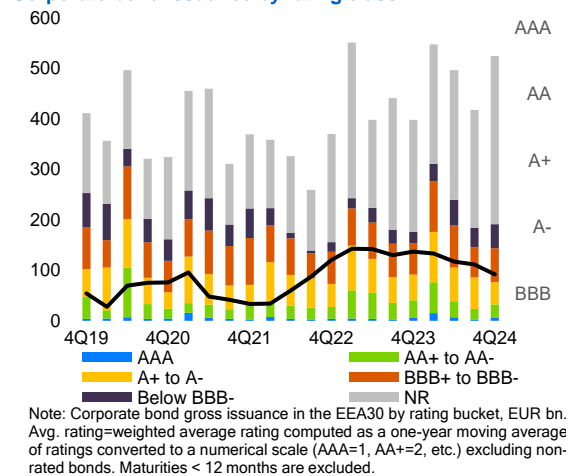
A.153

EEA corporate bond issuance and outstanding by rating



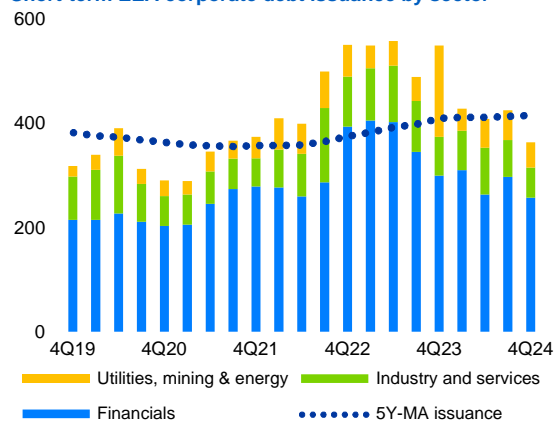
A.155

Corporate bond issuance by rating class



A.156

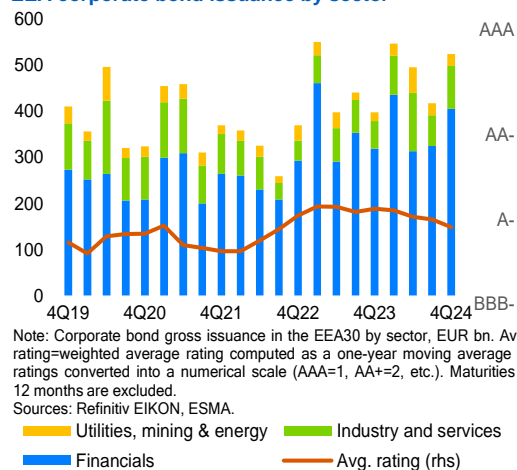
Short-term EEA corporate debt issuance by sector



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

A.157

EEA corporate bond issuance by sector

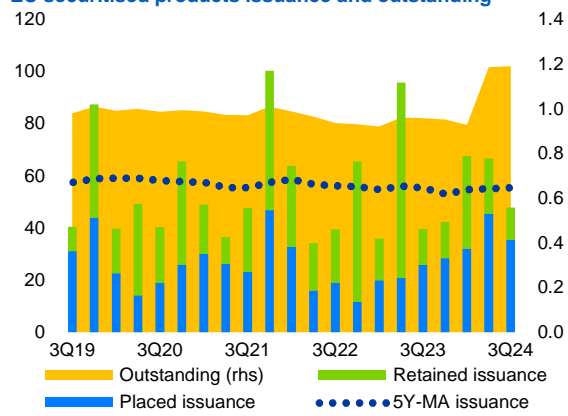


Note: Corporate bond gross issuance in the EEA30 by sector, EUR bn. Avg. rating=weighted average rating computed as a one-year moving average of ratings converted into a numerical scale (AAA=1, AA+=2, etc.). Maturities < 12 months are excluded.

Sources: Refinitiv EIKON, ESMA.

A.158

EU securitised products issuance and outstanding

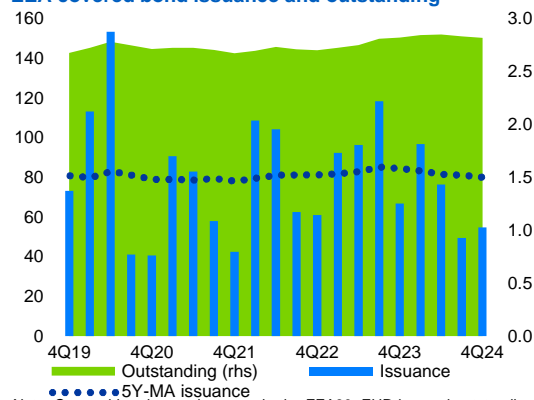


Note: Retained and placed securitised products gross issuance in Europe, EUR bn, and outstanding amounts (rhs), EUR tn. Data includes ABS, CDO, MBS, SME, WBS.

Sources: AFME, ESMA.

A.159

EEA covered bond issuance and outstanding

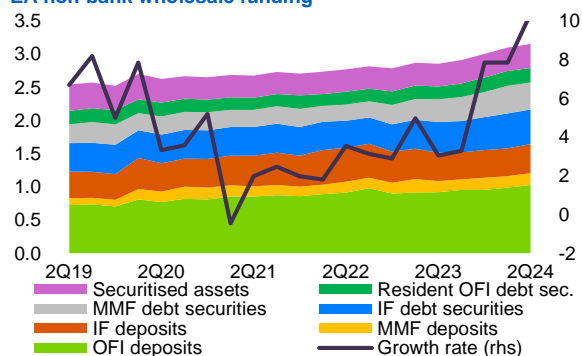


Note: Covered bond gross issuance in the EEA30, EUR bn, and outstanding amounts (rhs), EUR tn. Maturities < 12 months are excluded.

Sources: Refinitiv EIKON, ESMA.

A.160

EA non-bank wholesale funding



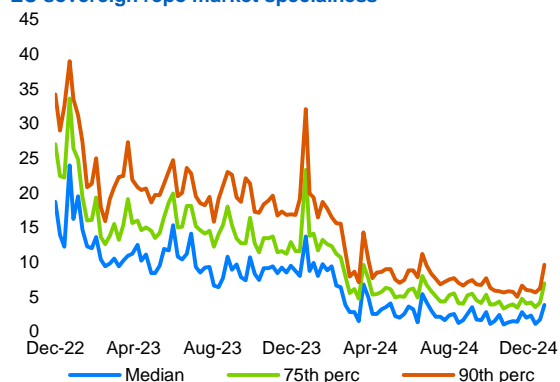
Note: Amount of wholesale funding provided by EA non-banks, EUR tn, and growth rate (rhs), in %. Securitised assets are net of retained securitisations. Resident OFI reflects the difference between the total financial sector and the known sub-sectors within the statistical financial accounts (i.e. assets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

Sources: ECB, ESMA.

Market-based credit intermediation

A.161

EU sovereign repo market specialness

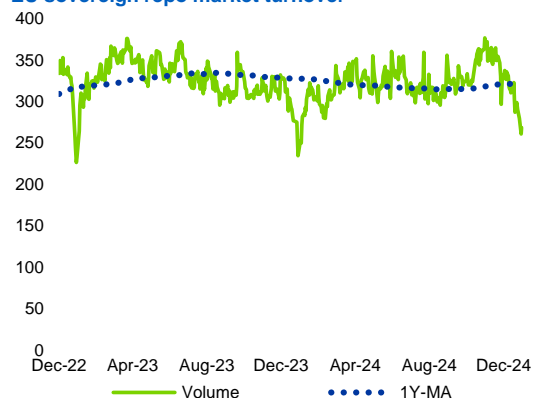


Note: Median, 75th and 90th percentile of weekly specialness, measured as the difference between general collateral and special collateral repo rates on government bonds in nine EUR repo markets (AT, BE, DE, ES, FI, FR, IT, NL and PT).

Sources: CME Group Benchmark Administration Limited, ESMA.

A.162

EU sovereign repo market turnover

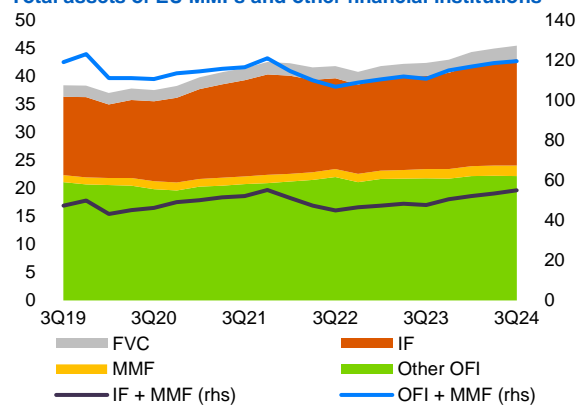


Note: Repo transaction volumes executed through CCPs in nine sovereign EUR repo markets (AT, BE, DE, ES, FI, FR, IT, NL and PT), EUR bn.

Sources: CME Group Benchmark Administration Limited, ESMA.

A.163

Total assets of EU MMFs and other financial institutions

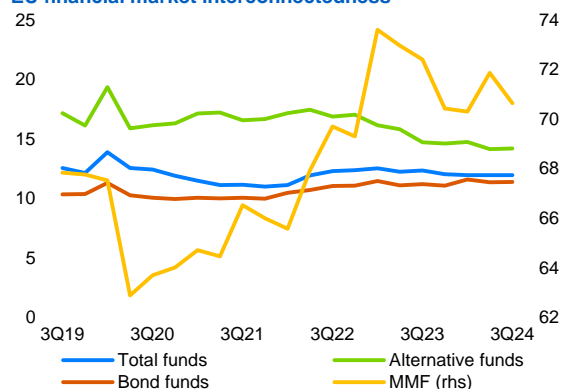


Note: Total assets for EA MMFs and other financial institutions (OFI): investment funds (IF), financial vehicle corporations (FVC), Other OFI estimated with ECB Quarterly Sector Accounts, in EUR tn. Expressed in % of bank assets on rhs.

Sources: ECB, ESMA.

A.164

EU financial market interconnectedness

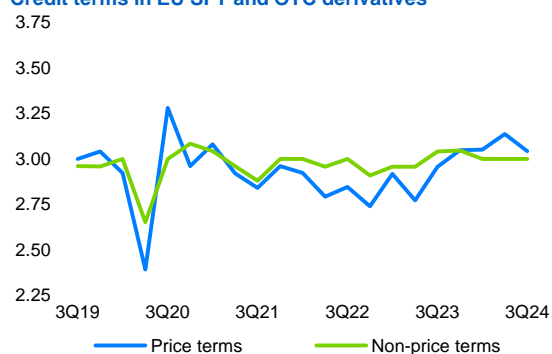


Note: EA loan and debt securities vis-à-vis MFI counterparts, as a share of total assets, investment funds and MMFs, in %. Total funds includes: bond funds, equity funds, mixed funds, real estate funds, hedge funds, MMFs and other non-MMF investment funds.

Sources: ECB, ESMA.

A.165

Credit terms in EU SFT and OTC derivatives

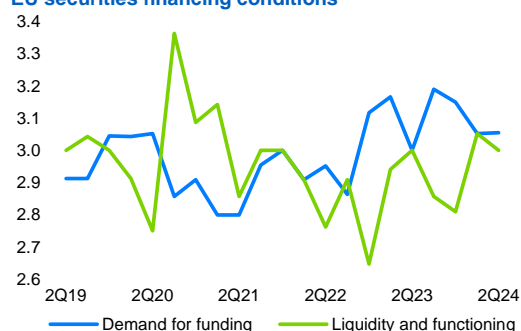


Note: Weighted average of responses to the question: "Over the past three months, how have terms offered as reflected across the entire spectrum of EUR-denominated instruments in securities financing and OTC derivatives transaction types changed?" 1=tightened considerably, 2=tightened somewhat, 3=remained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

Sources: ECB, ESMA.

A.166

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.

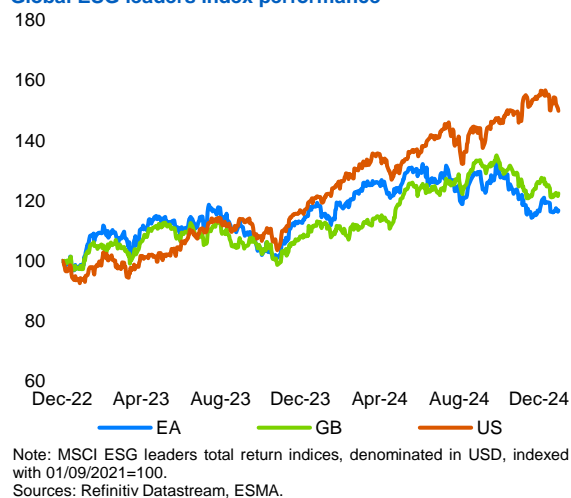
Sources: ECB, ESMA.

Sustainable finance

ESG investing

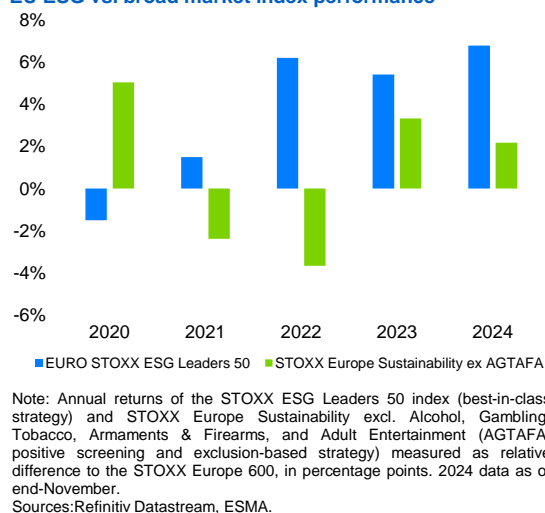
A.167

Global ESG leaders index performance



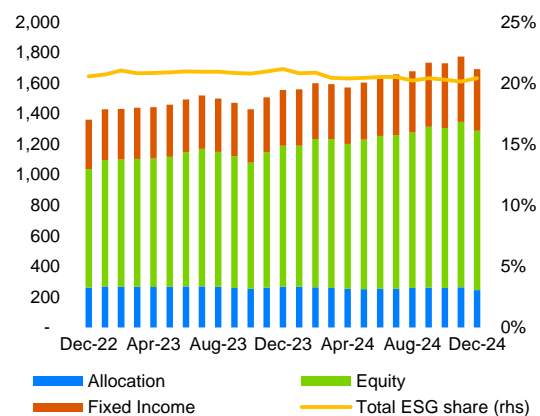
A.168

EU ESG vs. broad market index performance



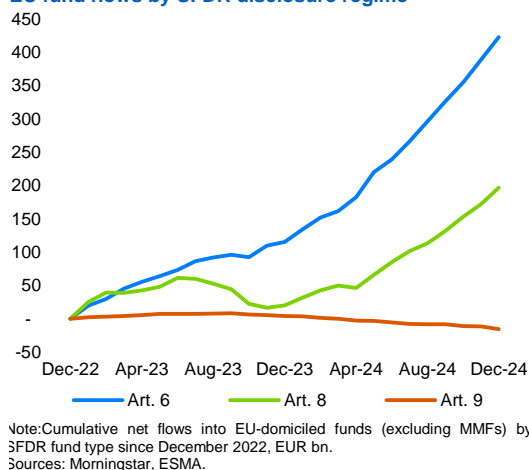
A.169

EU ESG fund assets



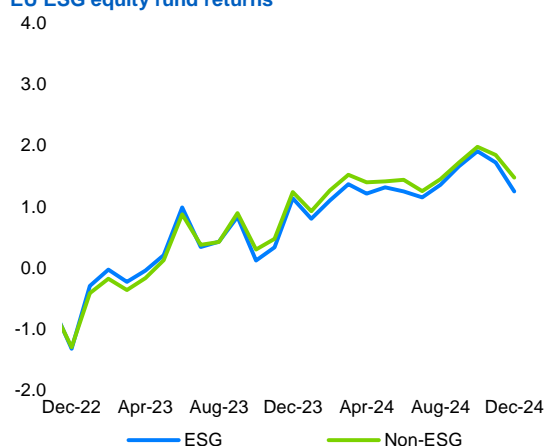
A.170

EU fund flows by SFDR disclosure regime



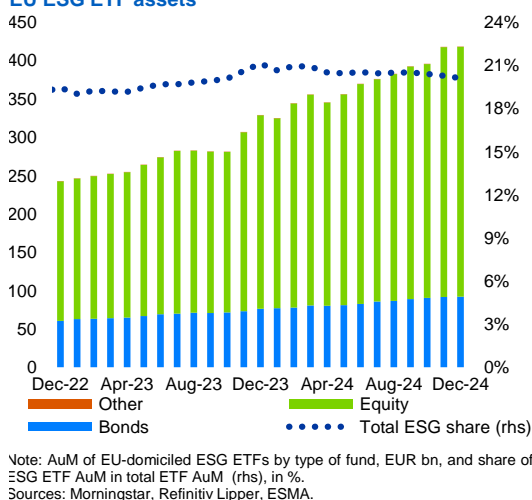
A.171

EU ESG equity fund returns



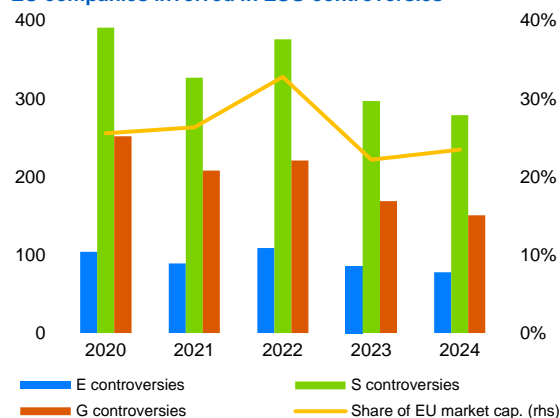
A.172

EU ESG ETF assets



A.173

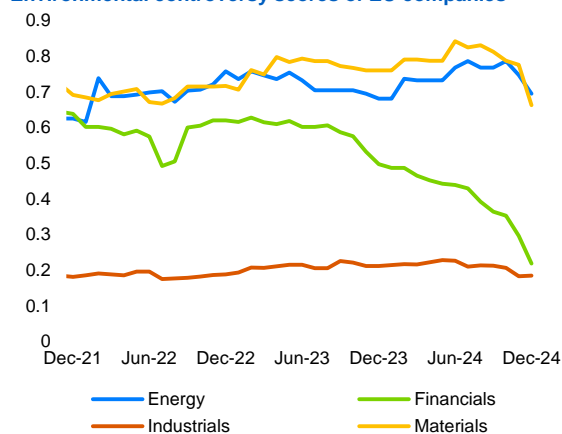
EU companies involved in ESG controversies



Note: Number of EU companies involved in high-impact environmental, social or governance controversies and share of EU market capitalisation (right axis), in % of total market capitalisation of EU-27 domiciled companies. Sources: Refinitiv Datastream, Sustainalytics, ESMA.

A.174

Environmental controversy scores of EU companies

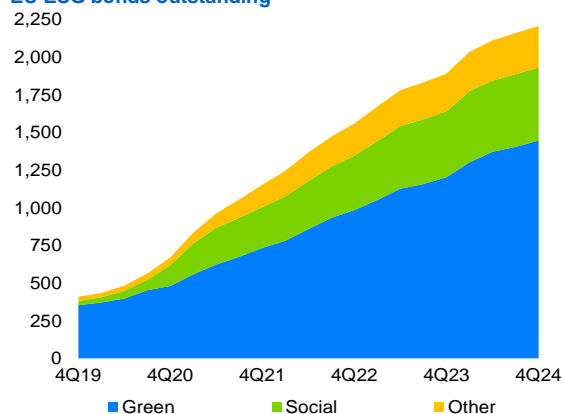


Note: Monthly average highest environmental controversy score of EU-27 domiciled companies within selected sectors, on a scale of 0 to 5. Sources: Sustainalytics, ESMA.

Sustainable debt

A.175

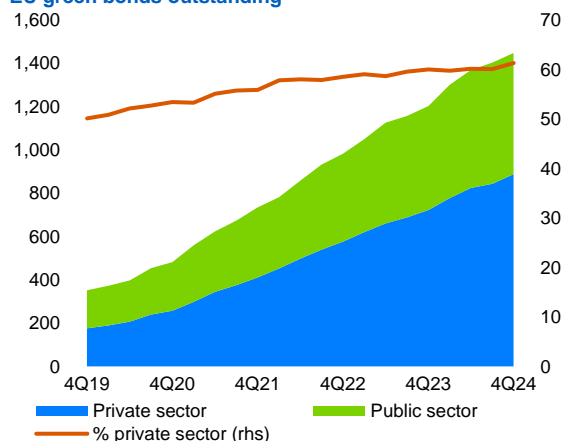
EU ESG bonds outstanding



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

A.176

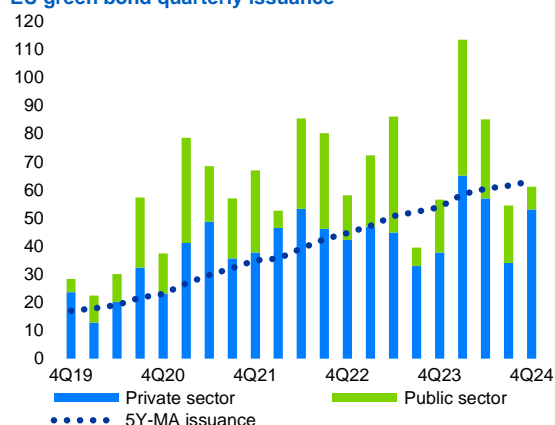
EU green bonds outstanding



Note: Outstanding amount of green bonds in the EEA30 by sector, EUR bn, and share of private sector (rhs), in %. Sources: Refinitiv EIKON, ESMA.

A.177

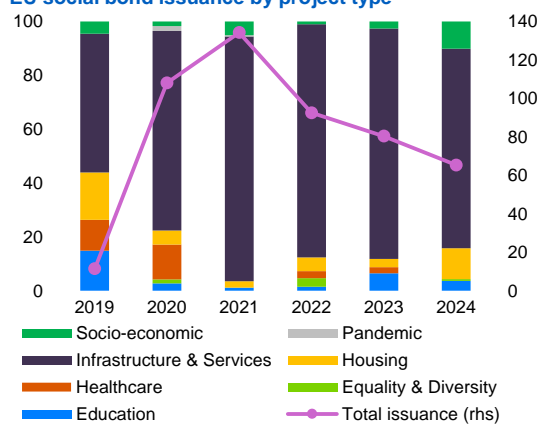
EU green bond quarterly issuance



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

A.178

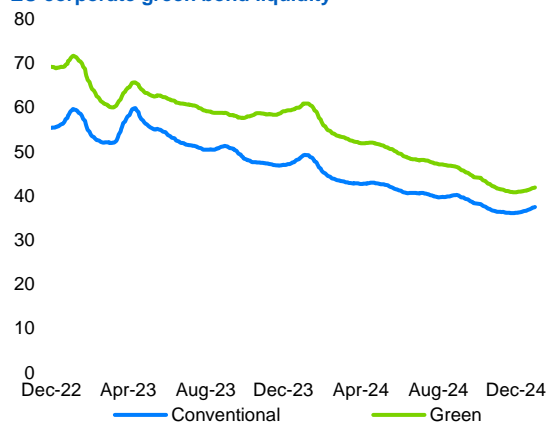
EU social bond issuance by project type



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.

A.179

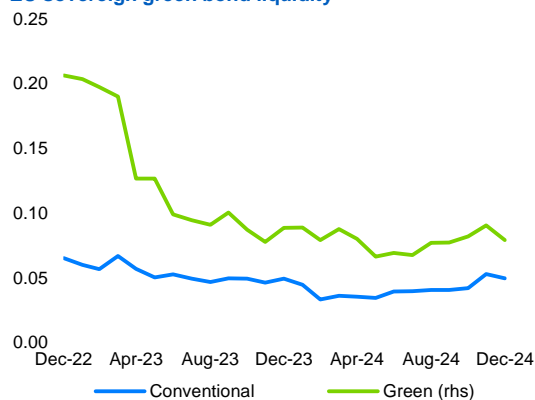
EU corporate green bond liquidity



Note: One-month moving average of the bid-ask spread of green and conventional bonds from green bond issuers included in the Market iBoxx EUR Corporate bond index, in bps.
Sources: IHS Markit, ESMA.

A.180

EU sovereign green bond liquidity



Note: Bid-ask spread of green and conventional bonds from government, supranational and agency green bond issuers, as a monthly average of bid-ask spreads weighted by trading volumes across 12 EU27 domestic markets (AT, BE, DE, ES, FI, FR, GR, IE, IT, NL, PT and SI) and Euro MTS, in EUR.
Sources: MTS, ESMA.

Carbon markets

A.181

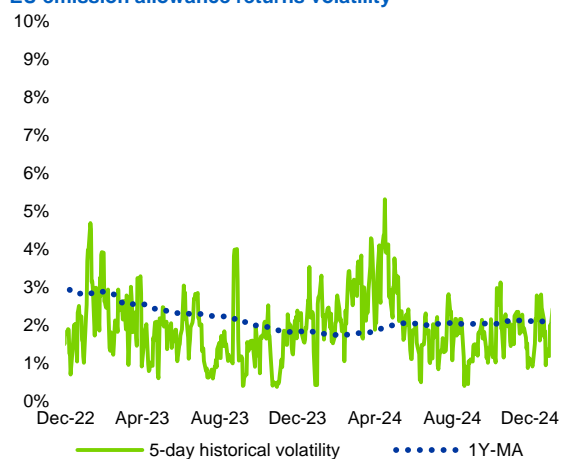
EU emission allowance prices



Note: Daily settlement price of European Emission Allowances (EUA) on European Energy Exchange spot market, in EUR/CO₂.
Sources: Refinitiv Datastream, ESMA.

A.182

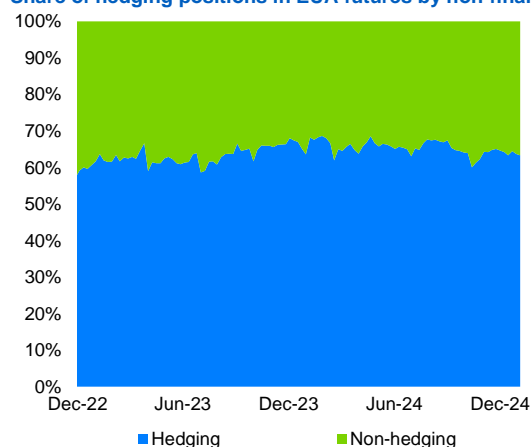
EU emission allowance returns volatility



Note: Rolling 5-day standard deviation of daily changes in EU emission allowance spot prices, in %.
Sources: Refinitiv Datastream, ESMA.

A.183

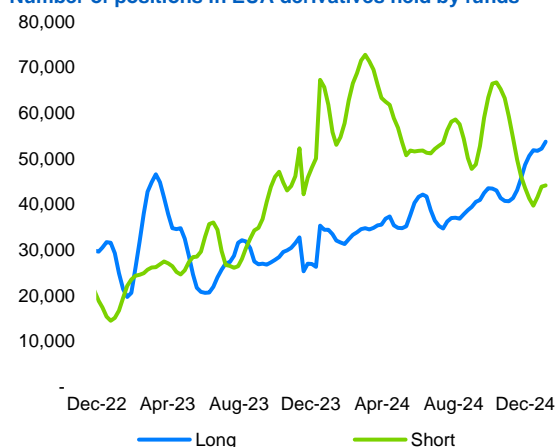
Share of hedging positions in EUA futures by non-financials



Note: Share of hedging and non-hedging positions of compliance entities and other commercial undertakings in EU emission allowance derivatives, in %.
Sources: ESMA.

A.184

Number of positions in EUA derivatives held by funds



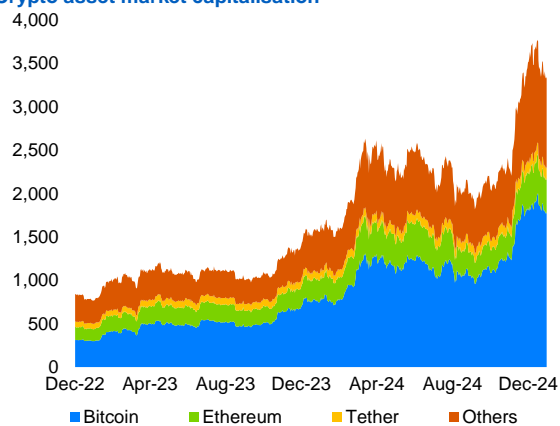
Note: Weekly number of long and short positions in EU emission allowance derivatives held by investment funds, four-week moving averages.
Sources: ESMA.

Financial innovation

Financial innovation

A.185

Crypto asset market capitalisation



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

A.186

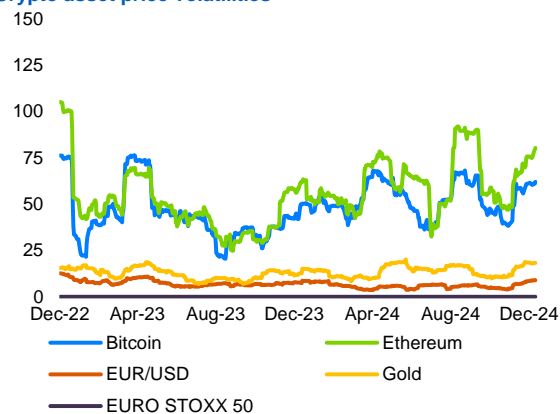
Crypto asset prices



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

A.187

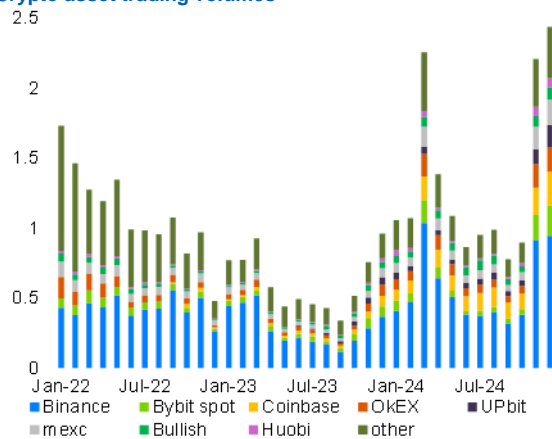
Crypto asset price volatilities



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.188

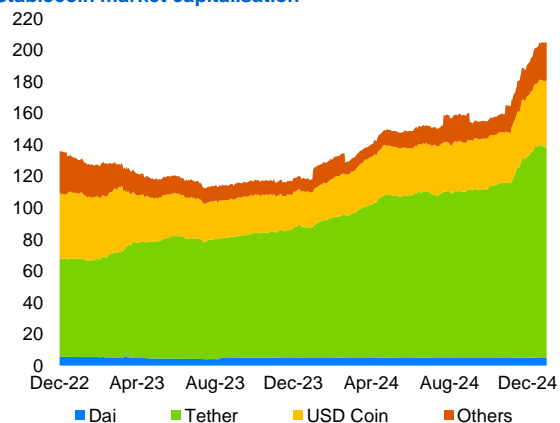
Crypto asset trading volumes



Note: Volume traded by exchange, in EUR tn (monthly)
Sources: Kaiko, ESMA

A.189

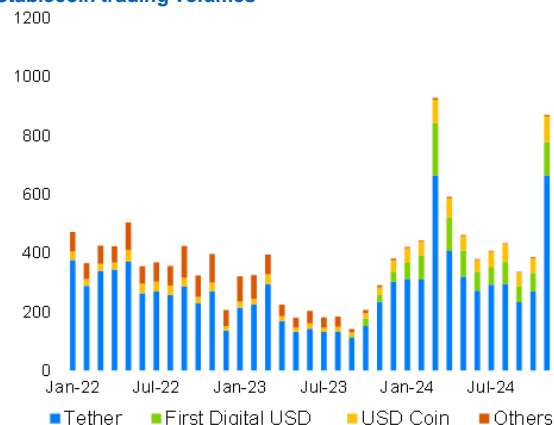
Stablecoin market capitalisation



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

A.190

Stablecoin trading volumes



Note: Volume traded by stablecoin, in EUR bn (monthly).
Sources: Kaiko, ESMA.

