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ESMA Risk Dashboard 26 November 2021









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European Securities and Markets Authority (ESMA) Risk Analysis and Economics Department 201-203 rue de Bercy FR-75012 Paris risk.analysis@esma.europa.eu

ESMA risk assessment

Risk summary

EU financial markets continued to grow in 3Q21 but at a slower pace, with assets priced significantly above pre-crisis levels across all classes, reflecting growing investor risk-taking. While the macroeconomic outlook has brightened, uncertainty over the speed and resilience of the recovery persists. We see realistic scope for a reduction in risk levels within the market segments under our remit if the current improvements in the economic environment and the comparatively low volatilities in the market prove resilient. This resilience will critically depend, in particular, on the ability of markets to withstand a reduction in public policy support on the monetary or fiscal side without material disruptions. Market corrections and soaring volatility around the newsflow related to Chinese construction corporation Evergrande illustrate the sensitivity of markets. Corporate indebtedness persists, especially in HY where bond valuations climbed further. Uncertainty on the continuation of fiscal support measures, as well as expectations on monetary policy tapering, could weigh on pre-existing vulnerabilities in financial markets. Supply shortages in energy and commodities add to market nervousness, fuelling concerns on inflation expectations. Going forward, institutional and retail investors should be ready to sustain further, potentially significant market corrections as market risks remain very high.



Note: Assessment of the main risks by risk segments for markets under ESMA's remit since the last assessment, and outlook for the forthcoming quarter. Assessment of the main risks by risk categories and sources for markets under ESMA's remit since the last assessment, and outlook for the forthcoming quarter. Risk assessment based on categorisation of the European Supervisory Authorities (ESA) Joint Committee. Colours indicate current risk intensity. Coding: green=potential risk, yellow=elevated risk, orange=high risk, red=very high risk. Upward arrows indicate an increase in risk intensities, downward arrows a decrease and horizontal arrows no change. Change is measured with respect to the previous quarter; the outlook refers to the forthcoming quarter. ESMA risk assessment based on quantitative indicators and analyst judgement.

Market assessment

Overall ESMA remit: Improved economic conditions over the summer offset concerns over the spreading COVID-19 Delta variant, before market sentiment slightly deteriorated in end-September. In 3Q21, asset valuations remained above pre-crisis levels with increased risk of price corrections and abrupt shifts in risk premia, as witnessed following the Evergrande newsflow. Looking ahead, the scars of the pandemic, its resurgence in 4Q21, and uncertainty around inflation and the continuation of fiscal and monetary policy support may exacerbate longterm vulnerabilities both for the financial and nonfinancial sectors. Market expectations on macroeconomic fundamentals will also play a key role in investor behaviour.

ESMA assesses the risks in its overall remit, securities markets, and in asset management as still very high. The same applies to liquidity and market risks. The outlook for the consumers segment is negative as well as that for credit and contagion risk. The most important risk drivers for the quarter are the economic outlook, inflation uncertainty, indebtedness in sovereign and private debt markets and political and event risks.

Securities markets: Equity markets continued to increase over the summer, with a contraction towards end-September linked to the events around the Chinese construction firm Evergrande and investor worries on rising inflation. The Eurostoxx ended the quarter flat (-0.7%), but still

stood 6% above pre-crisis levels (R.1). The difference in performance across EU national equity indices persisted, with some still not fully recovering the losses occurred during the pandemic (FR +12%; ES -7%). Across sectors, financial services stocks continued to outperform, while bank shares caught up albeit still standing below pre-crisis levels (-2.5%). Price-earnings ratios continued to grow, pointing towards overvaluation concerns in equity markets. In fixed income markets, EA sovereign bond yields rose amid concerns over potential monetary policy tapering. Corporate bond valuations increased further with HY at 49% above pre-crisis levels. IG valuations have grown at a slower pace (+9% higher than pre-crisis), with growth mostly driven by BBB-rated bonds. Crypto assets grew and remained highly volatile.

Infrastructures and services: EU infrastructures were resilient overall in 3Q21. Trading volumes stabilised close to the 3M moving average of EUR 13bn per day and never exceeded excess capacity (R.57). Following the introduction of the share trading obligation (STO), the proportion of turnover volumes in EEA stocks moved away from UK lit markets, where they continued to be limited at 3%. Settlement fails at EU CSDs were stable for equities, but still above pre-crisis levels, while those for both corporate and sovereign bonds declined below their 1Y moving average by 0.2pp and 0.4pp respectively (R.7). In derivatives markets, outstanding amounts of interest rate swaps (IRS) referencing the new

RFRs have increased since the beginning of the year (R.9). The emergence of new digital platforms with low barriers to opening accounts may pose risks to retail investors with little knowledge of trading in complex financial instruments.

Asset management: Global investment fund flows remained positive in 3Q21 (R.12) linked to positive performance, which reflected the trends of the underlying asset classes (R.13). Asset quality is a concern for bond funds, especially HY, which further increased their exposure to credit risk through lower quality portfolio holdings (R.18). Moreover, duration exposures could expose bond funds to interest rate shocks. However, bond fund maturity has slightly declined to 7Y (R.19). MMFs experienced outflows, possibly linked to increased investor risk appetite. (R.20). AuM of EU ETFs continued to grow linked to inflows and ETF performance, reaching a total size of EUR 1.2tn, and to experience positive returns (R.22).

Retail investors: Current investor sentiment increased further, but retail investors have started to be more cautious about future expectations (R.25). Retail participation in capital markets rose in 2021, driven by larger purchases of equity and investment funds shares, and other financial assets (R.24). The pandemic has also boosted the use of leveraged products (LPs) and LPs with knock-out features (R.18).1 The wide availability of technological tools drove increased retail trading, encouraged by new trading applications offering 'zero-commission' investing and gamified features. The large increase in retail trading and investing has been associated with large price increases in crypto assets and was also mirrored in the rising number of complaints reported to NCA, mostly concerning equities (R.26). Investor appetite for sustainable investment products increases greenwashing risk in the absence of disclosure requirements and labelling.

Risk drivers

Macroeconomic environment: The economic outlook improved overall in 3Q21 as COVID-19 vaccination campaigns accelerated and containment measures gradually eased across jurisdictions. EU GDP is now forecast to grow by +4.8% in 2021 and +4.5% in 2022, with the volume of output projected to return to its precrisis levels already by the end of 2021.² However, the speed of the recovery differs across Member States. Uncertainty and risks remain high around the 4Q21 resurgence of COVID-19 in large parts of the EU. The outlook on inflation

has also been revised upwards, amid rising energy and commodity prices, and supply chain shortages in some input components and raw materials. The 1Y-1Y break-even inflation forward rate rose sharply to 1.8% (R.39).³

Interest-rate environment: The prolonged lowinterest rate environment reinforced the risktaking behaviour of investors in search for yield. This contributed to keep asset valuations at elevated levels, especially in the HY segment. Uncertainty over the monetary outlook may drive an increase in yields, leading to risks of market corrections.

Sovereign and private debt markets: Public indebtedness remained at elevated levels linked to fiscal support measures. As containment measures eased, corporate sector activity picked up in 3Q21 with increased profitability. However. debt levels for non-financial corporations remained high as market conditions continued to facilitate lower rated bonds issuance. The share of A and BBB-rated bonds was 60% of total outstanding rated debt (R.45). Corporate downgrades declined (R.51) and the share of ratings with negative outlook was lower, but still at 40% for HY (R.52). Debt sustainability concerns remain high, and any potential future phasing out of public support measures may result in a further deterioration of credit risk. Foreign credit risk exposures came to the forefront in September, when Evergrande warned investors that it could default on its debt, with limited spillovers into European markets.

Infrastructure disruptions: There were no major incidents on EU trading venues or CCPs, except for a minor outage in derivative trading reported at the end of June, and few circuit breakers were triggered in 3Q21 (R.56). Continued digital transformation is one key concern for financial infrastructures as, across the digital economy, cyber-criminals are developing new techniques to exploit vulnerabilities. Cyber incidents may threaten financial stability, given their potential to disrupt critical financial services and damage confidence in the system.

Political and event risk: Market reactions to the issues related to Evergrande have shown the continued importance of event risks, the reactivity of markets to such events, and the continued potential impact on investors and financial stability going forward. Regarding political risk, negotiations on a long-term extension of the US debt ceiling could also contribute to shaping the trends in financial markets. Moreover, sources of geopolitical instability still exist both in neighbouring and more distant regions.

¹ LPs with knock-out features are options that cease to exist if the underlying asset's price exceeds or falls below a specified price.

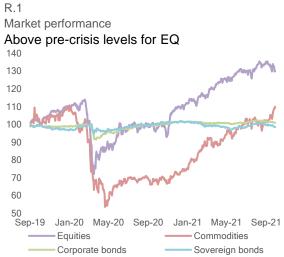
Summer 2021 Economic Forecast: Reopening fuels recovery

The 1 y-1y and 5y,5y inflation swap rates are used as a proxy for short- and long-term inflation expectations.

Key indicators

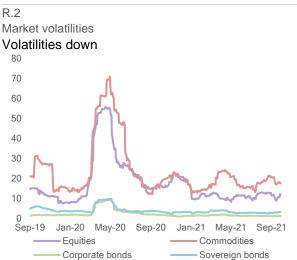
Markets

Securities markets



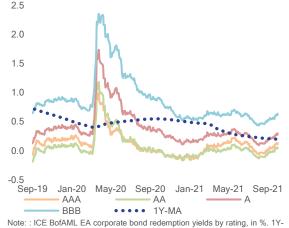
Note: Return indices on EA equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities). 01/09/2019=100.

Sources: Refinitiv Datastream, ESMA.



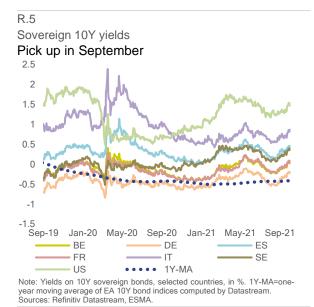
Note: Annualised 40D volatility of return indices on EA equities (Datastream regional index), global commodities (S&P GSCI) converted to EUR, EA corporate and sovereign bonds (iBoxx EUR, all maturities), in %. Sources: Refinitiv Datastream, ESMA.

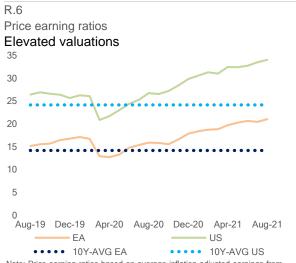
R.3 Corporate bond yields by ratings Reduced yields across ratings



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





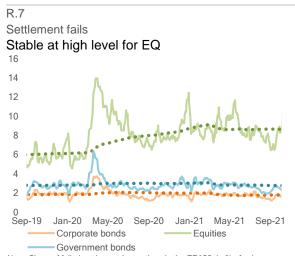


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Note: Price-earning ratios based on average inflation-adjusted earnings from the previous 10 years (cyclically adjusted price-earning ratios). Averages computed from the most recent data point up to 10 years before. Sources: Refinitiv Datastream, ESMA.

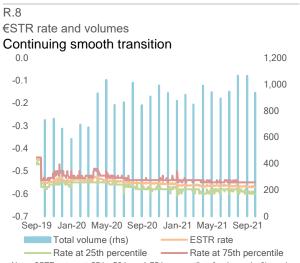
Markets

Infrastructures and services



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.

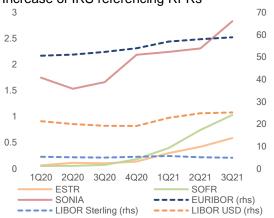
Sources: NCAs, ESMA.



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

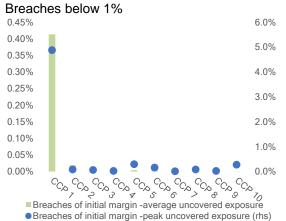
Sources: ECB, ESMA.

R.9 IRS referencing EONIA and Euribor by maturity Increase of IRS referencing RFRs



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

R.11 **CCP** 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 30 June 2021.

Sources: Clarus Financial Technology, PQD, ESMA.

R.10 Initial Margins held at EU CCPs Stable and higher than pre-crisis levels



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.

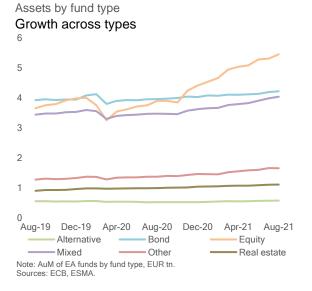
Markets

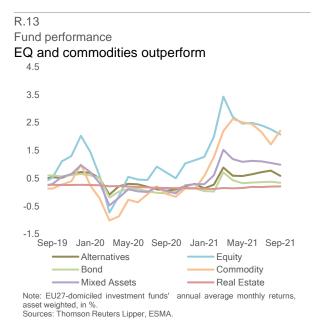
R.14

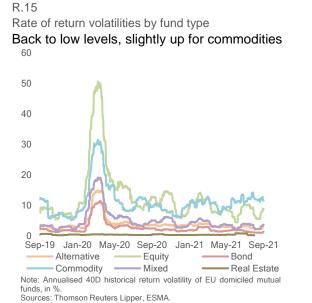
Asset management

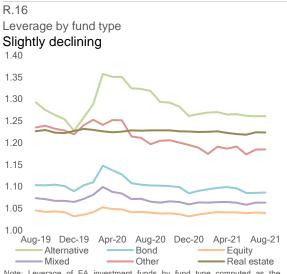












Note: Leverage of EA investment funds by fund type computed as the AuM/NAV ratio. Sources: ECB, ESMA

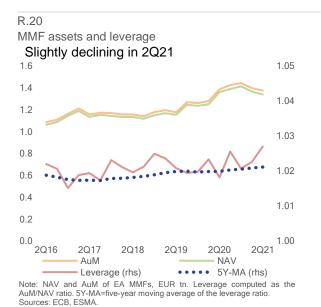
R.18 Bond funds credit risks Increased credit risk 5.5 5.0 4.5 BBB 3.5 Sep-19 Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21

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

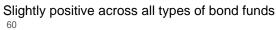
-HY

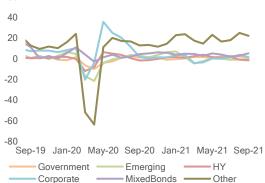
Mixed

-BF



R.17 EU bond fund net flows

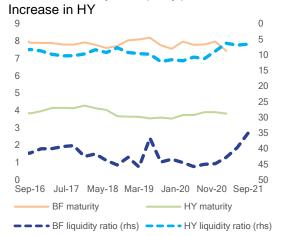




Note: Two-month cumulative net flows for bond funds, EUR bn. Funds investing in corporate and government bonds that qualify for another category are only reported once e.g. funds investing in emerging government bonds reported as Emerging; funds investing in HY corporate bonds reported as HY).

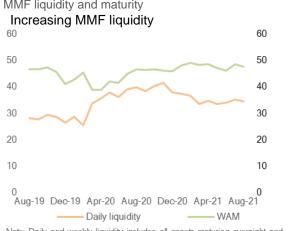
Sources: Thomson Reuters Lipper, ESMA.

R.19 Bond funds' maturity and liquidity profile

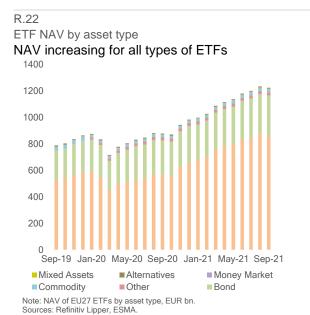


Note: Effective average maturity of fund assets in years; ESMA liquidity ratio (rhs, in reverse order). Sources: Refinitiv Lipper, ESMA

R.21 MMF liquidity and maturity



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 (lhs). Weighted average maturity (WAM) of Europe-domiciled MMFs, in days (rhs). Sources: Fitch Ratings, ESMA.

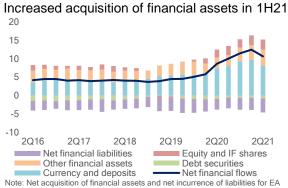


R.23 ETF net flows by domicile Inflows in EU and US 3 2 -1 -2 -3 Sep-19 Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21 ■EU ■US Note: ETF net flows by domicile, in % of NAV. Sources: Refinitiv Lipper, ESMA.

Markets

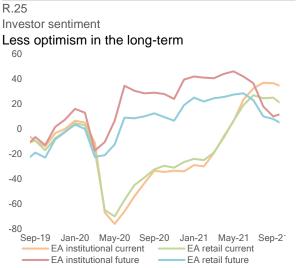
Consumers





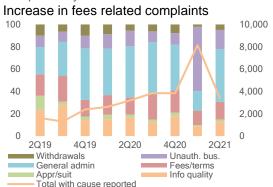
households as a share of their gross disposable income adjusted for changes in pension entitlements, based on a one-year rolling period, in %. IF shares=investment fund shares. Other financial assets=Insurance technical reserves, financial derivatives, loans granted and other accounts receivable. Net 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.



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

R.26 Complaints by cause



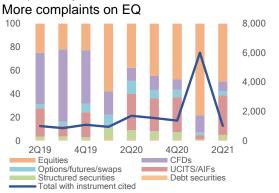
Note: Share of complaints for quarterly-reporting NCAs (n=14) received direct from consumers and via firms by underlying cause, excluding complaints with no cause recorded, %. 'Unauth. bus.'=Unauthorised business. 'Appr/suit'=Appropriateness or suitability assessment. 'Info quality'=Quality or lack of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

R.28 Structured retail products

Pandemic boosted LPs 45 100 40 80 35 30 60 25 20 40 15 10 20 5 0 0 2Q18 4Q18 2Q19 4Q19 2Q20 4Q20 2Q21 2017 4017 SRP **L**P LP with KO ••••• LP as % of SRP ••••• LP with KO as % of SRP

Note: Exchange turnover of Structured Retail Products (SRPs), Leveraged Products (LP), and LP with Knock-Out feature, EUR bn. EUSIPA data for AT, BE, FR, DE, IT, NL, SE (CH excluded). % shares on right scale. Sources: EUSIPA, ESMA

R.27 Complaints by financial instruments



Total with instrument cited

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

Risk categories

Liquidity risk

Composite equity illiquidity index

Small peak in 3Q21 0.40 0.38 0.36 0.34 0.32 Sep-19 Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21 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.

R.31 Corporate bond illiquidity index

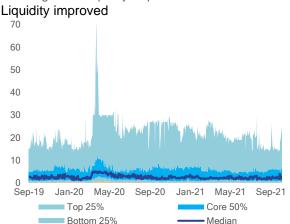


Note: Markit iBoxx EUR Corporate bond index bid-ask spread, in %, computed as a one-month moving average of the iBoxx components in the current composition. 1Y-MA=one-year moving average of the bid-ask spread.

Amihud liquidity coefficient index between 0 and 1. Highest value indicates less liquidity.

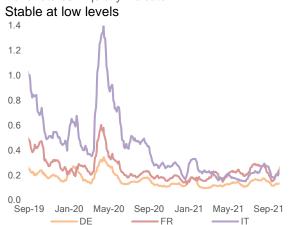
Sources: IHS Markit, ESMA

Sovereign bond liquidity dispersion

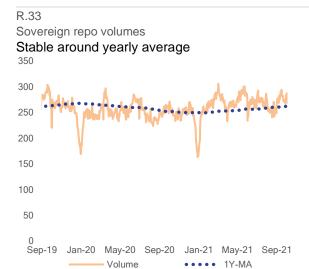


Note: Dispersion of liquidity measured as median across countries of the bid-ask yields difference for 10Y sovereign bonds, in bps. Lower figures mean more liquidity and vice-versa. 22 EEA30 countries are included. Sources: Refinitiv EIKON, ESMA.

R.32 Bond futures illiquidity indicator



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.



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.

R.34 Repo market specialness Slight increase 18 16 14 12 10 8 6 2 May-20 Jan-21 May-21 Sep-21 Sep-19 Jan-20 Sep-20 90th perc

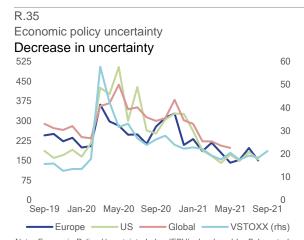
Note: Median, 75th and 90th percentile of weekly specialness, measured as the difference between general collateral and special collateral repo rates on government bonds in nine EUR repo markets (AT, BE, DE, ES, FI, FR, IT, NL and PT).
Sources: CME Group Benchmark Administration Limited, ESMA.

75th perc

Median

Risk categories

Market risk



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", "uncertaint" or "uncertainty" and one or more policy-relevant terms. Global aggregation based on PPP-adjusted GDP weights. Implied volatility of EURO STOXX 50 (VSTOXX), monthly average, on the right-hand side. Sources: Baker, Bloom, and Davis 2015; Refinitiv Datastream, ESMA. R.36 Financial instrument volatilities Still above pre-crisis levels, but stable 120 100 80 60 40

VSTOXX 1M VSTOXX 3M VSTOXX 12M VSTOXX 24M Note: EURO STOXX 50 implied volatilities, measured as price indices, in %.

Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21

Sep-19

Sources: Refinitiv Datastream, ESMA.

R.37 Exchange rates

EUR slightly depreciated over summer



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.

R.39 Inflation swap rates

Increased inflation expectations

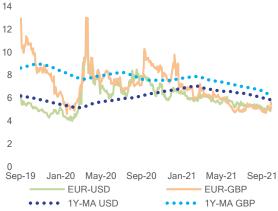


Note:1year-1year and 5year-5year inflation-linked swap rates.

Sources: Refinitiv Datastream, ESMA.

R.38 Exchange rate volatilities

Below yearly averages

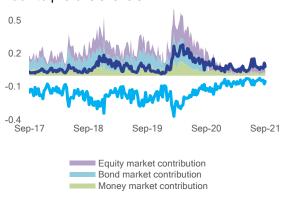


Note: Implied volatilities for 3M options on exchange rates, in %. 1Y-MA USD (resp. 1Y-MA GBP) is the one-year moving average of the implied volatility for 3M options on EUR-USD (resp. EUR-GBP) exchange rate. Sources: Refinitiv EIKON, ESMA.

Risk categories

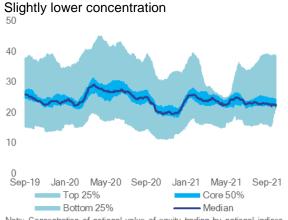
Contagion risk

Composite systemic stress indicator Back to pre-crisis levels



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

Sources: ECB, ESMA R.42 Equity market concentration



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

Sectoral equity indices correlation Differentiation across sectors 0.9 0.8 0.7 0.6 0.5 Sep-19 Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21 Banks - Financial services Non-financial corporation - Insurance Note: Correlations between daily returns of the STOXX Europe 600 and

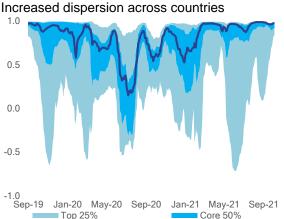
STOXX Europe 600 sectoral return indices. Calculated over 60-day rolling windows.

Sources: Refinitiv Datastream, ESMA.

Top 25%

Bottom 25%

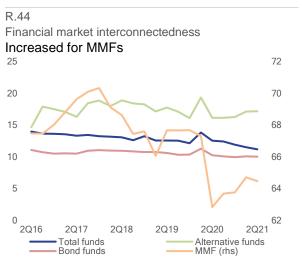
R.43 Dispersion in sovereign yield correlation



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.

Core 50%

Median

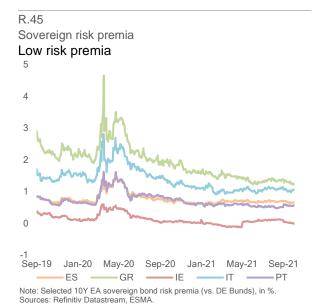


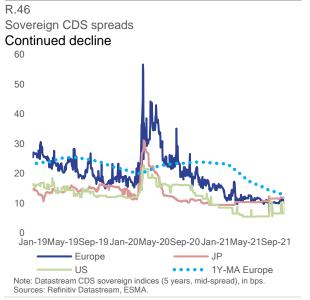
Note: EA loan and debt securities vis-à-vis MFI counterparts, as a share of total assets, investment funds and MMFs, in %. Total funds includes: bond funds, equity funds, mixed funds, real estate funds, hedge funds, MMFs and other non-MMF investment funds.

Sources: ECB, ESMA.

Risk categories

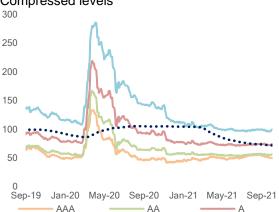
Credit risk





R.47 Corporate bond spreads

Compressed levels

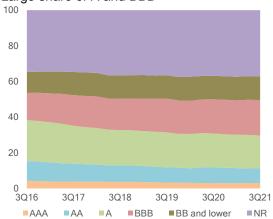


••••• 1Y-MA Note: ICE BofAML EA corporate bond option-adjusted spreads by rating, in bps. 1Y-MA=one-year moving average of all indices. Sources: Refinitiv Datastream, ESMA.

Long term corporate debt outstanding

Large share of A and BBB

BBB



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.

Net sovereign debt issuance

Positive net sovereign issuance 200 450 150 300 100 150 50 Λ Λ -50 -150 -100 -300 -150 -200 -450 ASS SESTINATION TO THE HEARTH SEE SECOND SESSION OF THE SECOND SE 1Y low

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 FIKON FSMA

R.48

Covered bond spreads

Stable at higher levels in September

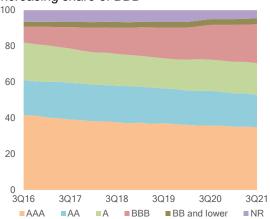


Note: iBoxx EUR covered bond option-adjusted spreads by rating, in bps. 1Y-MA=one-year moving average of all indices. Sources: Refinitiv Datastream, ESMA.

R.50

Long term sovereign debt outstanding

Increasing share of BBB



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

R.52

Debt redemption profile

Current financing need for financials 200 525 450 100 375 0 300 225 -100 150 -200 75 -300 3Q21 3Q22 3Q25 3Q26 3Q23 3Q24 Non-financials Financials - 1Y-change non-fin (rhs) - 1Y-change fin (rhs)

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.

R.54

R.53 Corporate issuer downgrades



Note: Number of EU27+UK corporate issuers with at least one bond downgraded and ratio of dowgraded corporate issues over upgrades and downgrades (3 weel moving average). Issuers with same reported parent treated as one issuer. Sources: ESMA, RADAR

Ratings outlook by rating Corporate ratings' outlook slightly improved 80% 60% 40%

30%

25%

20%

15%

10%

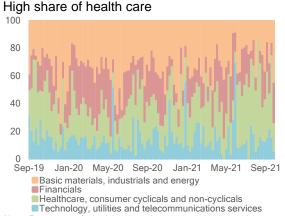
20% 5% BBB BB В CCC ДД Evolving Outlook ■ Negative Outlook Positive Outlook Stable Outlook ♦% with outlook (r.h.s)

Note: Distribution of outlooks for corporate non financial instruments (ISINs) with outlook rated by the Big 5 (Fitch, Moody's, S&P, Scope and DBRS) by category value over the total ratings per category value. Cutoff date 30/9/2021. Sources: RADAR, ESMA.

Risk categories

Operational risk

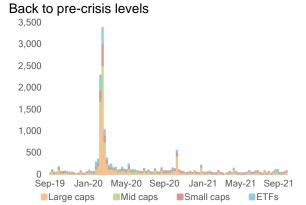
R.55 Circuit-breaker trigger events by sector



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

R.56

Circuit-breaker trigger events by market capitalisation



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

Sources: Morningstar Real-Time Data, ESMA

R.57 Trading system capacity proxy

Slight increase in September Sep-19 Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21 Trading volume • • • • • 3M-MA Volume Capacity (rhs) • • • • • All-time high (rhs)

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









