

afme/Contents Finance for Europe

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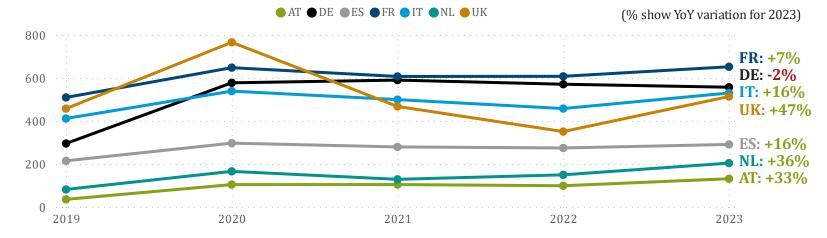
afme/ Highlights and Market Environment

1. European (EU+UK) government bond and bill issuance (EUR bn, 2019-2023)





2. Government bond and bill issuance in selected countries (EUR bn, 2019-2023)



Source: ECB, National Debt Management Offices and UK Debt Management Office.

EUR 776 bn bonds and bills issued in Q4 2023 as European quarterly issuance volumes decrease 7% (YoY)

Total quarterly gross issuance in Europe (EU Member States, UK and EU Commission) was EUR 776 bn during Q4 2023, down 7% compared to Q4 2022 (YoY) and down 11% from Q3 2023 (QoQ) (see Chart 1).

Excluding institutional issuance from the EU Commission, EU Member States and the UK issued EUR 743 bn in bonds and bills during 4Q23¹, representing a decrease of 6% (YoY) and a decrease of 13% (QoQ).

The EU Commission issued an additional EUR 23 bn in EU-bonds and EUR 10 bn in EU-bills during Q4 2023, which represented 4.2% of total European sovereign issuance in Q4 2023, up from 2.8% in Q3 2023.

In 2023FY, there has been a significant increase in nominal gross issuance across most major sovereign markets.

Total (bond and bill) issuance increased 33% YoY in Austria during 2023, with total issued volumes representing the largest issuance in any year to date in the Austrian sovereign market (see *Chart 2*).

In France and the Netherlands, total issuance increased 7% and 36% respectively, compared to 2022, with annual issuance in both countries reaching multi-year highs and exceeding previous highs recorded in 2020.

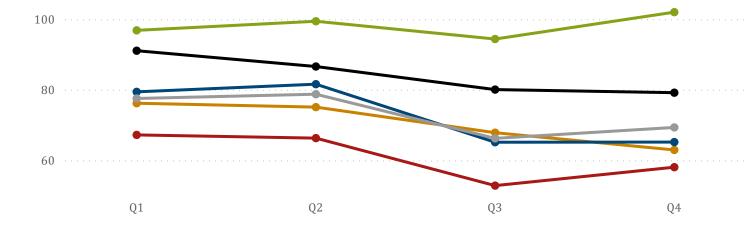
The largest relative increase in total issuance took place in the UK, where annual volumes were up by 47% YoY. Notably in Germany issuance decreased by 2%, representing the only major sovereign market where total issuance in 2023 fell year-on-year.

¹Total EU+UK bond and bill issuance and percentage changes may show minor variations, including to that shown in Chart.1, due to rounding.

afme/ Highlights and Market Environment

3. European Government bond average daily trading volumes (EUR bn)





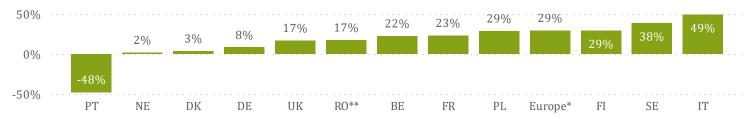
Highest average daily trading volume in European (EU+UK) government bonds during 2023 as Trax records over EUR 100 bn traded daily over Q4 2023

According to TraX data from MarketAxess, trading continued strong throughout Q4 2023, increasing 8% (QoQ) and 29% (YoY) and representing the highest average daily traded volume on record for a given quarter.

In 2023FY, average annual trading volumes were up 17%, compared to 2022, and up 35% compared to 2021. Average daily trading volumes in 2023FY are the highest on record (since 2014) following consistently high trading volumes reported in all quarters of 2023 (see Chart 3).

afme/ Highlights and Market **Environment**

4. Annual changes in Government Bond average daily trading volumes (4023 vs 4022) Selected European jurisdictions



5. Quarterly changes in Government Bond average daily trading volumes (4Q23 vs 3Q23) Selected European jurisdictions



6. Annual aggregate changes in Government Bond average daily trading volume (2023 vs 2022) Selected European jurisdictions



Source: AFME with information from European DMOs and other agency sources and MarketAxess TraX. *Europe (EU+UK) total and German turnover is sourced from MarketAxess TraX as the quarterly variation of average daily volumes of government and sovereign bonds. Respective percentage changes for Bulgaria for Chart 4 (608%) and for Chart 6 (624%) not shown as to not distort axis.

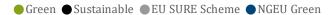
European government bond trading increased 29% YoY and 8% QoQ in 4Q23

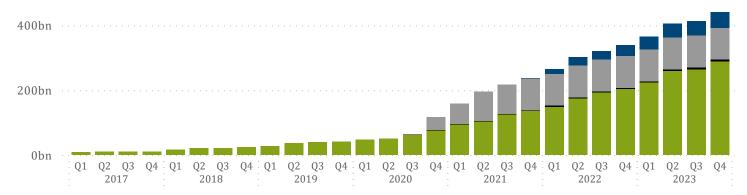
Average daily trading volumes of European government bonds were supported by a significant increase in trading in Bulgaria (608% YoY – not shown in Chart.4 as to not distort axis), Italy (49% YoY), Sweden (38% YoY), Finland (29% YoY), Poland (29% YoY), France (23% YoY), Belgium (22% YoY) and the UK (17% YoY). There was a decrease in trading in Portugal (-48% YoY) (see Chart 4)

Annual aggregated European government bond trading volume (2023FY) increased by 17% compared to 2022 and 35% compared 2021 (see Chart 6).



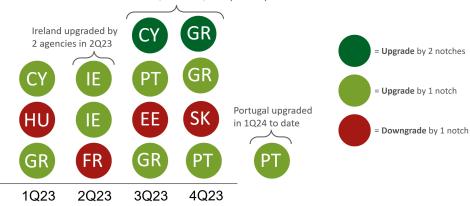
7. European outstanding ESG sovereign bonds (EUR bn, 2017-2023)





8. European rating actions on long-term sovereign credit ratings (2023 and 2024 YtD)

Cyprus and Greece were both upgraded by 2 notches in single rating actions in 3Q23 and 4Q23 respectively



Source: Refinitiv Eikon [Chart 7]. Fitch, Moody's, S&P [Chart 8].

Outstanding amount of European government ESG bonds surpass EUR 441.6 bn as issuance picks up in Q4 2023.

Outstanding amount of ESG government bonds reached EUR 441.6 bn during 4Q23 (see Chart 7), with volumes driven by new green bonds issued by the Netherlands (EUR 5.2 bn) and Denmark (EUR 1.4 bn), and tap issuance by the UK (EUR 6.1 bn), the European Commission (EUR 4.7 bn), France (EUR 3.5 bn), Spain (EUR 2.0 bn), Italy (EUR 1.7 bn) and Belgium (EUR 0.8 bn). Austria issued an additional EUR 1.9 bn in green bills during 4Q23.

The outstanding volume of ESG sovereign bonds grew by 7% in Europe as of December 2023, up from 2% during 3Q23 and down from 11% in 2Q23.

Across 2023FY the outstanding volume of European sovereign ESG bonds increased by 30%, compared to 43% during 2022.

During 4Q23 there were 3 upgrades and 1 downgrade in long term credit rating changes for European nations

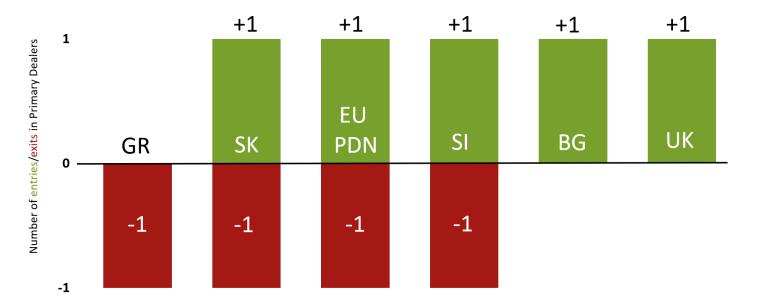
This follows 3 upgrades and 1 downgrade in 3Q23, and 2 upgrades and 1 downgrade in both 2Q23 and 1Q23, bringing the 2023 full-year total to 10 upgrades and 4 downgrades (see Chart 8).

Greece continued to increase the quality of its credit profile throughout 2023, with two of the main credit rating agencies upgrading the credit rating of the country to investment grade in Q4 2023.

Most recently, following a recent upgrade in the credit rating of Portugal taking place in March 2024, the country is now rated A-, which represents the strongest credit rating the country has held since 2010.



9. Changes in number of Primary Dealers across European countries and EU PDN (Oct-23 to Jan-24)



There were 4 exits and 5 entries to European Primary Dealership from Oct-23 to Jan-24 with a net change of +1

Changes in primary dealership from October 2023 to January 2024 affected sovereign debt markets in Greece, Slovakia, Slovenia, Bulgaria, the UK and the European Union Primary Dealer Network (EU PDN) (see Chart 9).

This follows 3 exits and 3 entries of banks to European primary dealer systems from April 2023 to October 2023.

The most recent changes included both one exit and one entry of primary dealers in Slovakia, Slovenia and the EU PDN, with a net change of zero across their respective systems.

The latest bank entry to the UK system represents the first net increase in the number of UK primary dealers since July 2010.



Major upcoming regulatory, legislative and policy initiatives

There are several regulatory initiatives currently being considered at the European and national level with expected impact on the government bond markets. Some of the key initiatives recently implemented or soon to be applied include:

- Basel III
- CSDR
- Fundamental Review of the Trading Book (FRTB)
- Prospectus Regulation
- MIFIR Review

AFME and its members actively contribute on all of these and other initiatives.



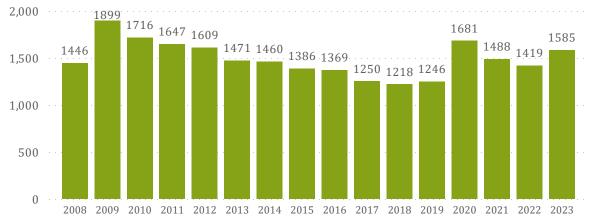
Issuance

afme/ Gross Issuance Finance for Europe

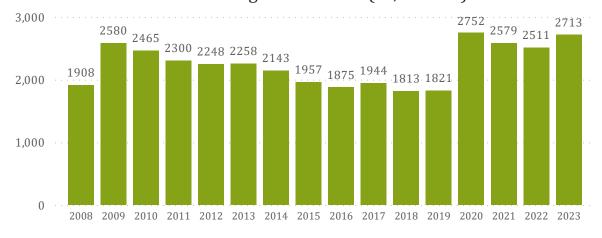
1.1 European (EU+UK) Government Bond gross issuance (FY, EUR bn)

2,000 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

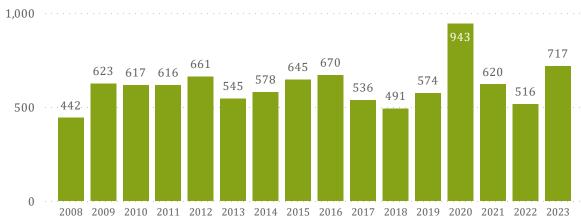
1.2 European (EU+UK) Treasury Bills gross issuance (FY, EUR bn)



1.3 Eurozone bonds and bills gross issuance (FY, EUR bn)

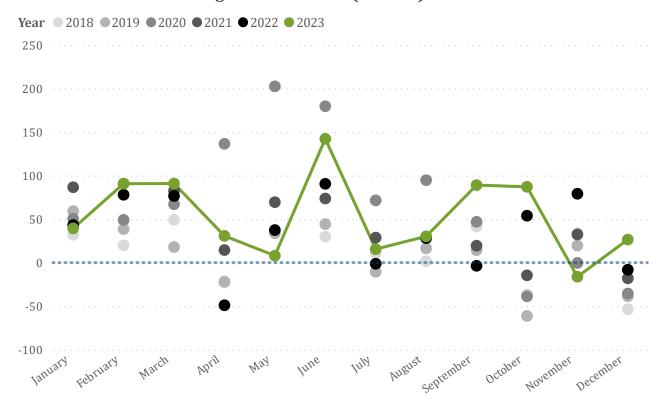


1.4 Non-Eurozone bonds and bills gross issuance (FY, EUR bn)

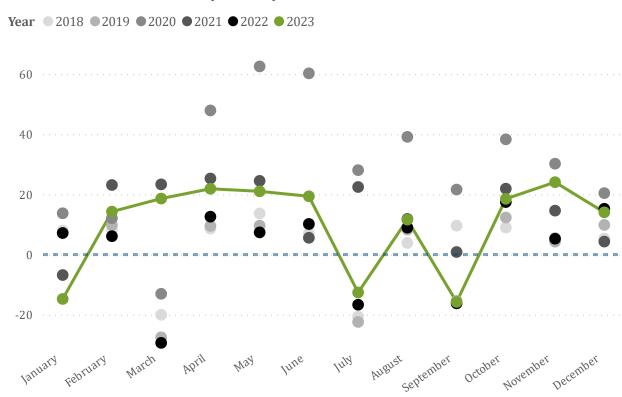


afme/ Net Issuance Finance for Europe

1.5 Euro area net sovereign debt issuance (EUR bn)



1.6 UK Gilts net issuance (GBP bn)

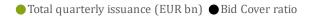


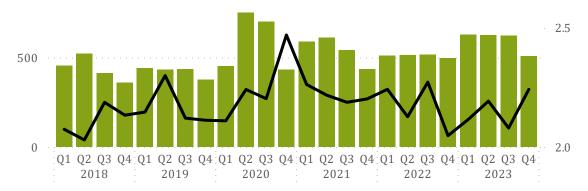


Recent Auctions and Primary Dealers

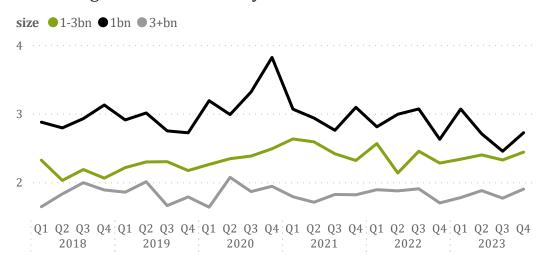
afme/ Recent Auctions Finance for Europe

2.1 Average bid-cover ratios and issued volumes in selected jurisdictions (EUR bn)

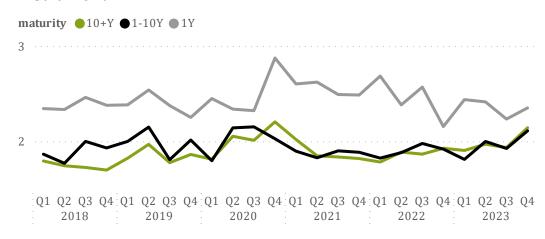




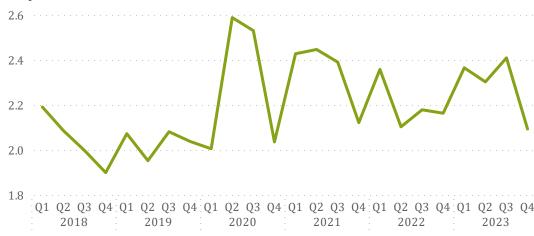
2.3 Average bid-cover ratios by size of issued instruments



2.2 Average bid-cover ratios by tenor (years) of issued instrument

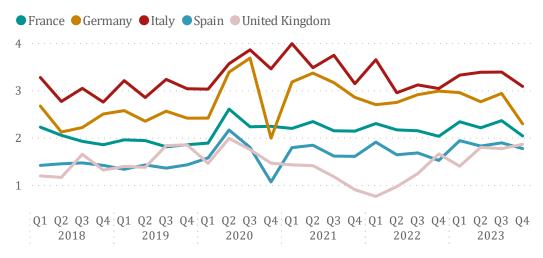


2.4 Average auction size in selected European jurisdictions (EUR bn)



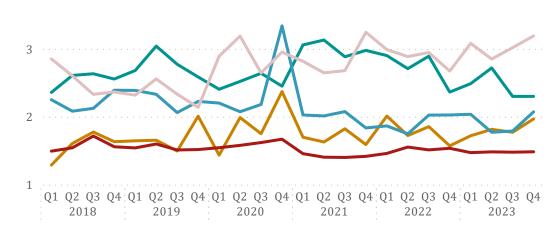
afme/ Recent Auctions Finance for Europe

2.5 Average auction size in selected jurisdictions (EUR bn)



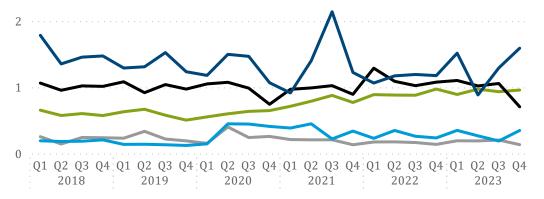
2.7 Average bid-cover ratios by jurisdictions

● France ● Germany ● Italy ● Spain ● United Kingdom

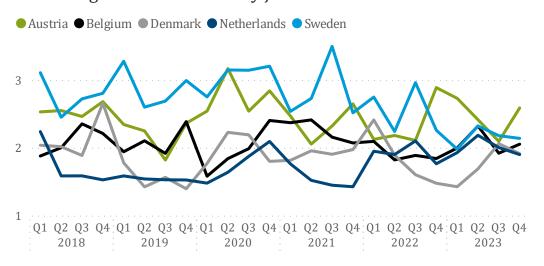


2.6 Average auction size in selected jurisdictions (EUR bn)





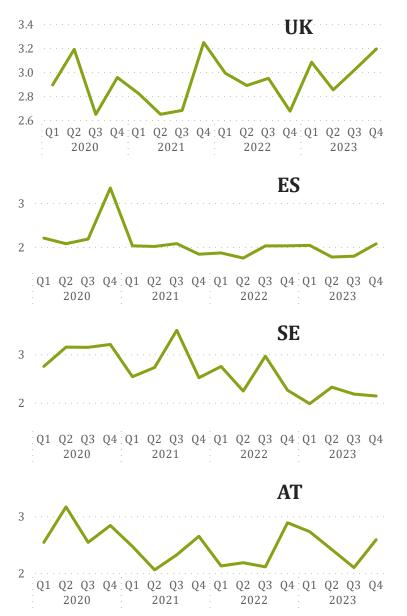
2.8 Average bid-cover ratios by jurisdictions

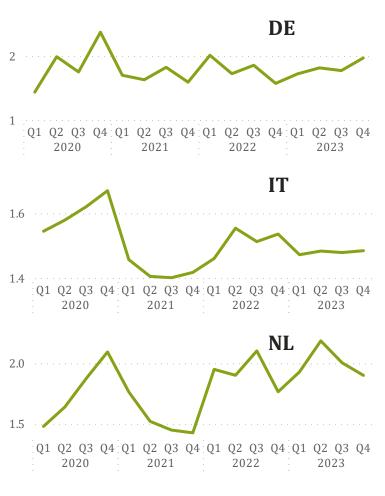


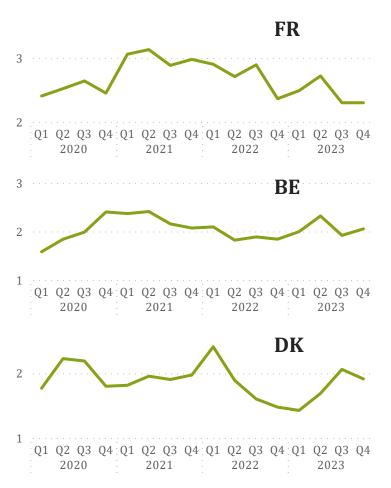
Source: Refinitiv Eikon. Weighted Average of UK, DE, FR, ES, IT, BE, SE, NL, DK and AT bonds and bills.

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2.9 Average bid-cover ratios in selected jurisdictions: 2020-23

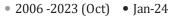


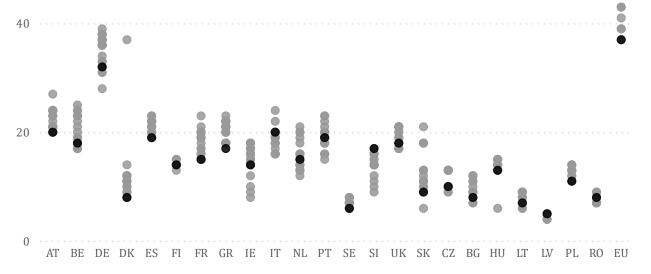




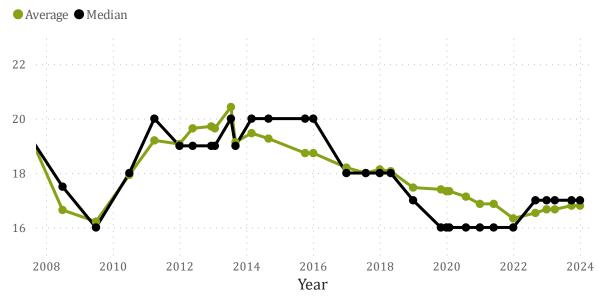
Source: Refinitiv Eikon.

2.10 Number of primary dealers relative to historic number

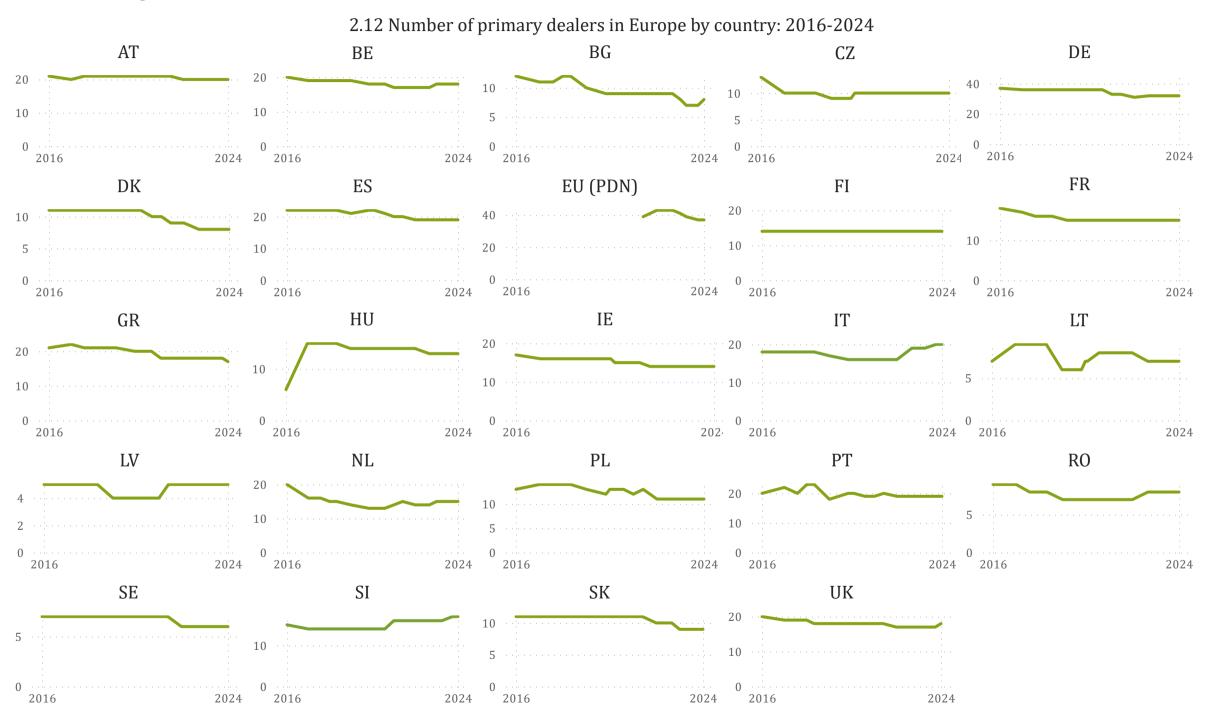




2.11 Average and median number of primary dealers in selected European countries



afme/ Primary Dealers

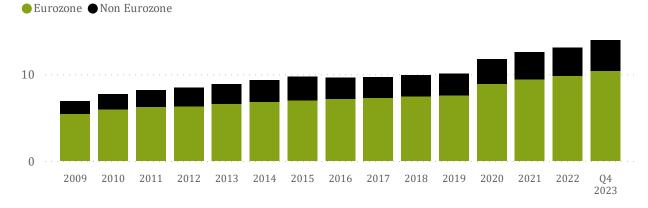




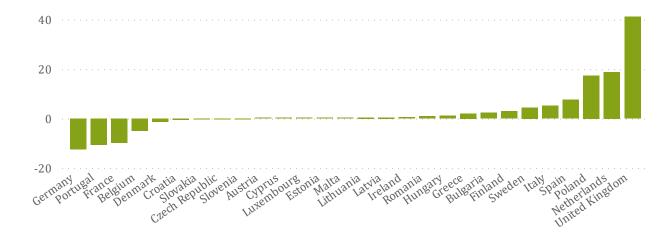
Outstandings

afme/ Outstandings

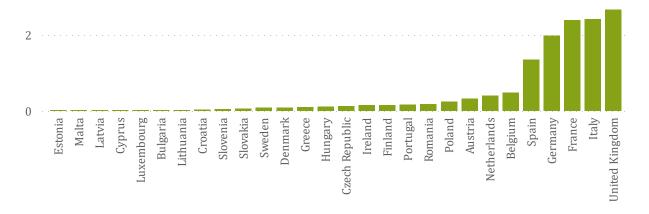
3.1 Outstanding debt securities issued by Central Governments (Nominal, EUR tn)



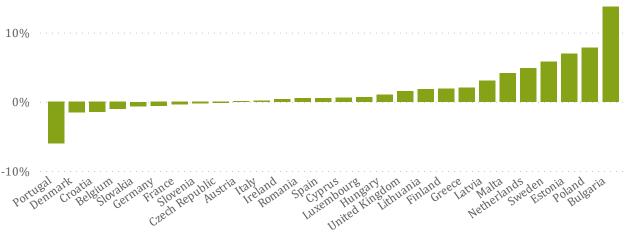
3.3 Change in outstandings from 3Q23 to 4Q23 (EUR bn)



3.2 European government bonds outstanding by country (EUR tn)



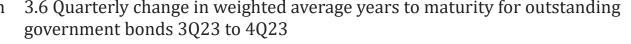
3.4 Change in outstandings from 3Q23 to 4Q23 (%)

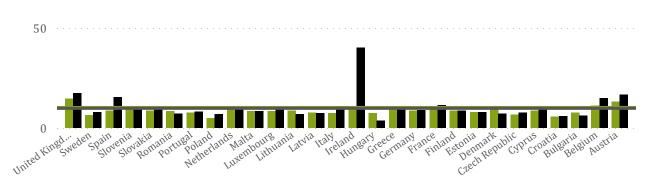


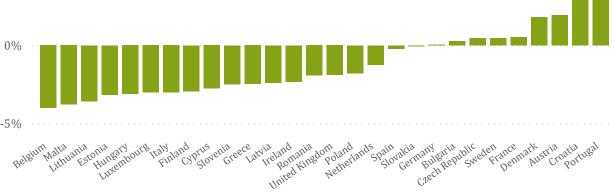


3.5 Average years to maturity for outstanding government bonds in European 3.6 Quarterly change in weighted average years to maturity for outstanding (EU+UK) countries





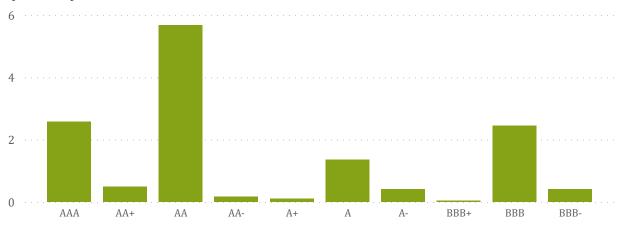




3.7 European government bonds outstanding by currency (EUR tn)

Euro British Pound Other EU Currencies US Dollar Other

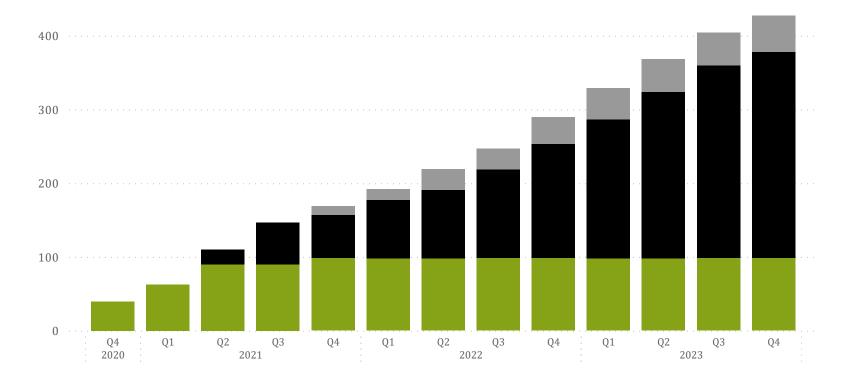
3.8 European government bonds outstanding by current rating of issuer (EUR tn)





3.9 Outstanding bonds issued by the European Commission (EUR bn)

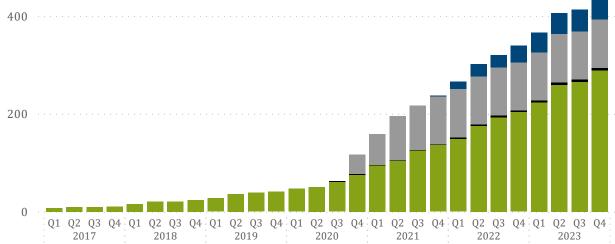
● Sure scheme social bonds ● NGEU bonds (non-ESG) ● NGEU green bonds



afme/ ESG Outstandings

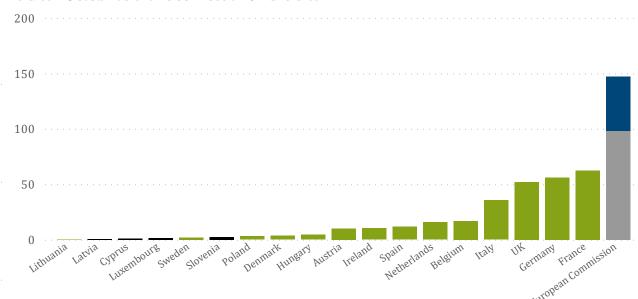
3.9 European outstanding ESG (green, social and sustainable) government bonds (EUR bn)

● Green ● Sustainable ● EU SURE scheme ● NGEU green



3.10 European outstanding ESG government bonds by country (EUR bn)

● Green ● Sustainable ● EU SURE social ● NGEU Green

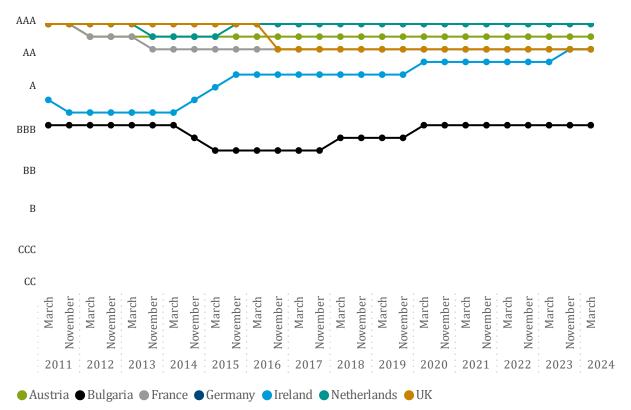




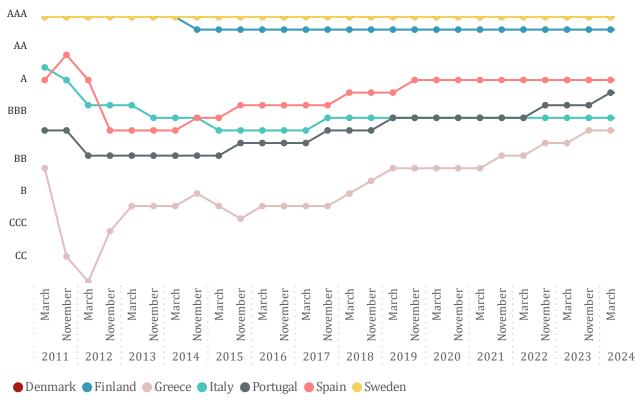
Credit Quality

afme/ Credit Quality Finance for Europe

4.1 Long-term sovereign credit rating (Central and Northern Europe)



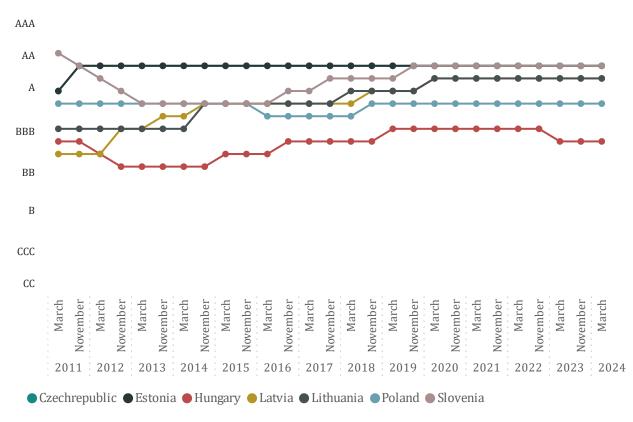
4.2 Long-term sovereign credit rating (Nordics and Southern Europe)



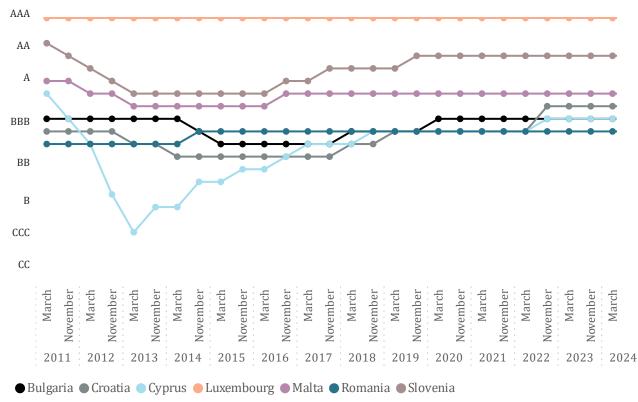
Source: Refinitiv Eikon

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4.3 Long-term sovereign credit rating (Visegrad 4 and Baltic states)



4.4 Long-term sovereign credit rating (Balkans, CY, MT and LU)



Source: Refinitiv Eikon



4.5 European rating actions on long-term sovereign credit ratings (2023FY and 2024 YtD)

Source: Fitch, Moody's S&P

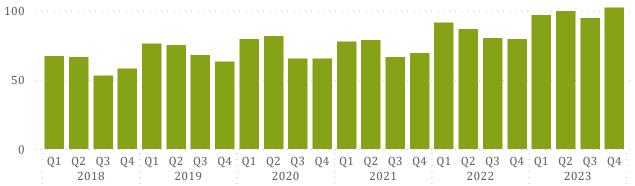
				Empeted better deficit and dalet cuttume and majoritims in 2022 24 throughts dranger assumed growth budget area promise and foresmalled dalet	
Greece	Upgrade to BB+ (stable) from BB	Jan-23	Fitch	Expected better deficit and debt outturns and projections in 2022-24, thanks to stronger nominal growth, budget over-execution and favourable debt- servicing structure, and an improvement in primary balance implied by the narrowing of the general government deficit.	
Hungary	Downgrade to BBB- (stable) from BBB	Jan-23	S&P	Persistently high inflation, exchange rate volatility and external pressures such as high energy prices, an uncertain economic outlook and rising interest costs against an already high stock of public debt posing challenges to the Hungarian government's consolidation plans.	1Q23
Cyprus	Upgrade to BBB (stable) from BBB-	Mar-23	Fitch	Significant improvement in public finances, with the general government balance turning from a deficit to surplus in 2022, beating forecasts. Public expenditure as a percentage of GDP has declined sharply due to the discontinuation of Covid-19 support measures while revenues rose at a faster pace than nominal GDP.	
France	Downgrade to AA- (stable) from AA	Apr-23	Fitch	Weak fiscal metrics due to relatively large fiscal deficits and only modest progress with fiscal consolidation. Expenditure pressures will remain high in the short term, due to being indexed to inflation and uncertainty surrounds the revenue trajectory which could be driven by temporary factors, including the economic rebound and high inflation	2Q23
Ireland	Upgrade to Aa3 (stable) from A1	Apr-23	Moody's	Significant improvement in key fiscal and debt metric and greater resilience to potential shocks. Expected solid economic growth and continued robust improvements in fiscal metrics. Expectation that risks to Ireland's credit profile from domestic, geopolitical and banking sector sources will be contained over the near to medium term.	
Ireland	Upgrade to AA (stable) from AA-	May-23	S&P	Solid tax revenue helping Ireland's post budgetary surpluses through 2026 despite spending pressure, continuing to put the government's net debt burden on a steep downward path. Despite being set to decelerate during 2023, the Irish economy is expected to outperform peers while avoiding a technical recession	
Estonia	Downgrade to A+ (stable) from AA-	Jul-23	Fitch	Deterioration in public finances with general government debt forecast to rise to 21.1% of GDP at end-2023 and remain on an upward path in the medium term, despite fiscal consolidation measures introduced in June. This reflects a loosening of the historically tight fiscal stance, aggravated by the war in Ukraine and the pandemic.	3Q23
Greece	Upgrade to Ba1 (stable) from Ba3	Sep-23	Moody's	A significant improvement in GDP growth, driven by investment and consumption, and high degree of political and policy certainty over the coming years, as a result of a large parliamentary majority held by the government, fostering the ongoing implementation of past reforms and the design of further structural reforms.	
Portugal	Upgrade to A- (stable) from BBB+	Sep-23	Fitch	Sustained fall in debt, which is expected to remain on a sharp downward trend with a high degree of commitment to fiscal consolidation from the current Portuguese government. Overperformance in fiscal metrics as a result of faster-than-expected reduction in spending as a proportion of GDP.	
Cyprus	Upgrade to Baa2 (stable) from Ba1	Sep-23	Moody's	Broad-based, sustained improvements in its credit profile because of past and ongoing economic, fiscal, and banking reforms. Significant private and public investments in combination with the implementation of further structural reforms in the context of NextGenerationEU (NGEU) support a solid medium-term growth outlook. Improvement in fiscal strength with an expected decline in debt burden in the next few years.	
Greece	Upgrade to BBB- (stable) from BB+	Oct-23	S&P	Improvement in Greece's public finances as a result of budgetary consolidation efforts and significant progress in addressing economic and fiscal imbalances since the debt crisis in 2009-2015. Expected structural economic and budgetary reforms, coupled with large EU funds, will support robust economic growth underpinning a continued reduction in government debt.	
Portugal	Upgrade to A3 (stable) from Baa2	Nov-23	Moody's	Sustained positive credit effects over the medium term of a series of economic and fiscal reforms, private sector deleveraging and ongoing strengthening of the banking sector. Portugal's medium-term outlook is supported by significant private and public investments as well as the implementation of further structural reforms, both linked to the country's National Recovery and Resilience Plan (NRRP).	4000
Greece	Upgrade to BBB- (stable) from BB+	Dec-23	Fitch	General government debt/GDP expected to remain on sharp downward trend, thanks to solid nominal growth, budget over-execution and a favourable debt-servicing structure. Policy risks assessed as relatively low, with a stable political backdrop and well-anchored fiscal prudence with Greece maintaining a high commitment to fiscal consolidation, the increases to the primary surplus expected over upcoming years.	4Q23
Slovakia	Downgrade to A- (stable) from A	Dec-23	Fitch	A deterioration in public finances and an unclear consolidation path, with forecasted general government debt by 2025 to exceed the pandemic high of 61.1% of GDP in 2021 and to remain on an upward path over the medium term. The fiscal deficit is expected to widen to 6.0% of GDP, from just 2.0% in 2022 with the significant deterioration in the fiscal position reflecting a looser fiscal stance aggravated by the war in Ukraine and the pandemic.	
Portugal	Upgrade to A- (positive) from BBB+	Mar-24	S&P	Continuous improvement in Portugal's external financial balance sheet and the corresponding reduction in external liquidity risks. A consistent decline in external debt over the past decade, leading to steep deleveraging and a shift in Portugal to current account surpluses. Continuation in this trend despite a temporary deterioration during the pandemic and energy price shocks, with expected current account surpluses, the transfer of Next Generation EU grants to Portugal, and continuing private sector deleveraging further improving the country's external position over 2024-2027.	1Q24 QtD



Secondary Market Trading Volumes and Turnover Ratios

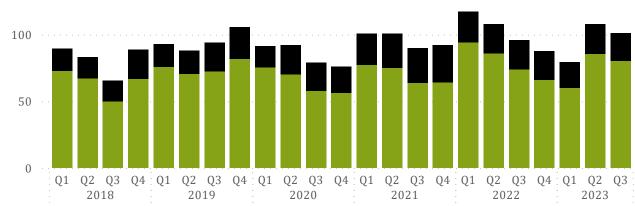
● Bonds ● Bills

5.1 EU + UK: Average daily trading volumes (Government and sovereign bonds, 5.2 Eurozone: Average daily trading volume (bonds and bills, EURbn) EURbn)



5.3 United Kingdom: Average daily trading volume (bonds only) and turnover ratio





5.4 Germany: Average daily trading volume (aggregated bonds and bills) and turnover ratio



Source: TraX data from MarketAxess, EFC Sub-Committee on ESDM, UK Debt Management Office, Deutsche Finanzagentur, ECB. Latest data for Germany as of H1 2023. Individual country volumes do not sum to aggregated trading volume in Chart 5.1 EU+UK, given the differences in the aggregation basis across jurisdictions. The data is not fully comparable between countries. Full Methodology available on page 36 of this report.

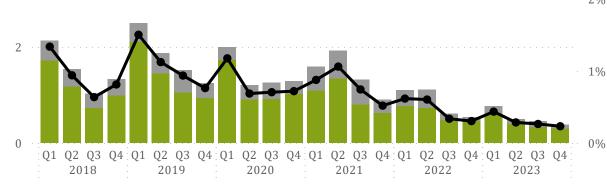
me/ Secondary Market Trading Volumes and Turnover **Ratios**

5.5 Italy: Average daily trading volume (bonds and bills) and turnover ratio



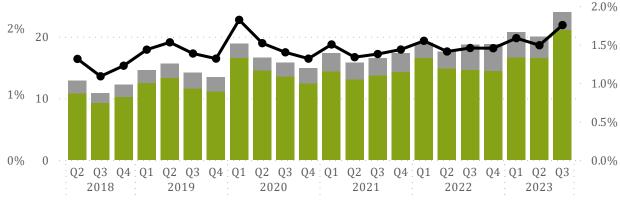
5.7 Portugal: Average daily trading volume and turnover ratio





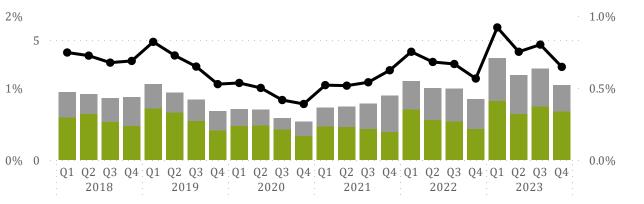
5.6 Spain: Average daily trading volume and turnover ratio





5.8 Belgium: Average daily trading volume and turnover ratio





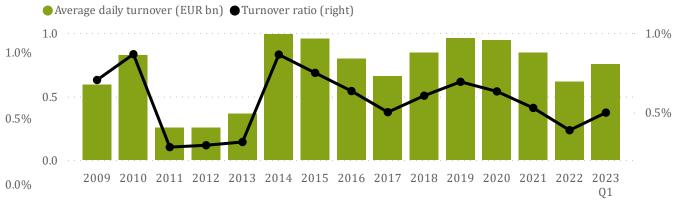
me/ Secondary Market Trading Volumes and Turnover **Ratios**

5.9 Sweden: Average daily trading volume and turnover ratio

● Bonds (SEK bn) ● Treasury bills (SEK bn) ● Turnover ratio (right)

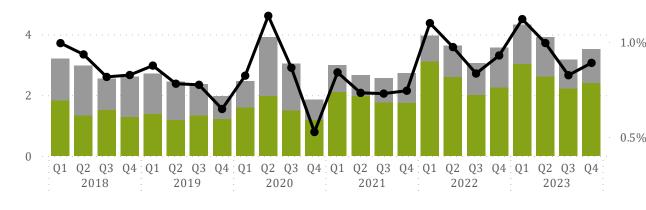


5.10 Ireland: Average daily trading volume (bonds only) and turnover ratio

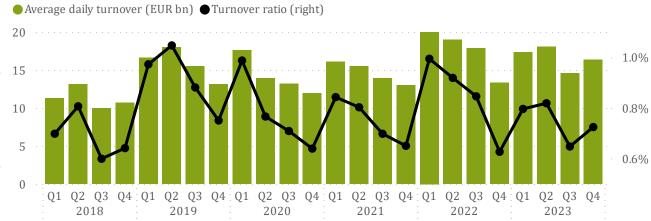


5.11 Netherlands: Average daily trading volume and turnover ratio

● Bonds (EUR bn) ● Bills (EUR bn) ● Turnover ratio (right)



5.12 France: Average daily trading volume (bonds only) and turnover ratio



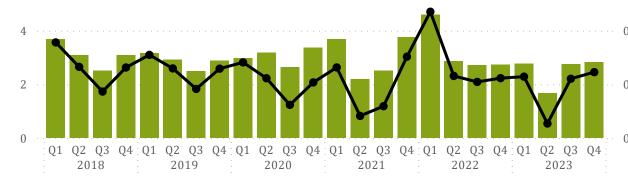
Source: ECB, Swedish National Debt Office (Riksgalden), Irish Stock Exchange, Ministerie van Financien, Agence France Tresor. Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 36 of this report.

Finance for Europe

me/ Secondary Market Trading Volumes and Turnover **Ratios**

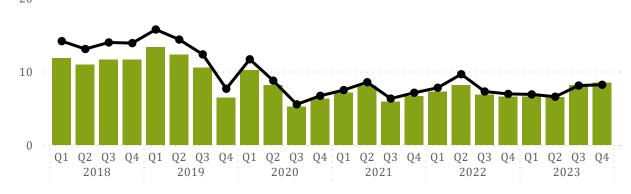
5.13 Denmark: Average daily trading volume (bonds and bills) and turnover ratio

● Daily average turnover (DKK bn) ● Turnover ratio (right)



5.15 Poland: Average daily trading volume (bonds only) and turnover ratio

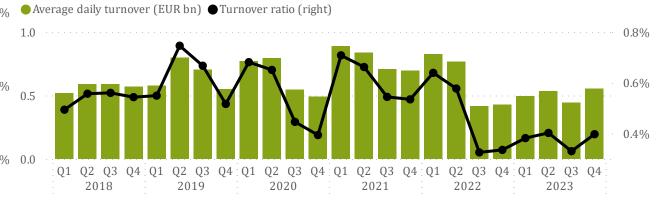
Average daily Turnover (PLN bn)Turnover ratio (right)



5.14 Greece: Average daily trading volume (bonds only) and turnover ratio



5.16 Finland: Average daily trading volume (aggregated bonds and bills) and turnover ratio

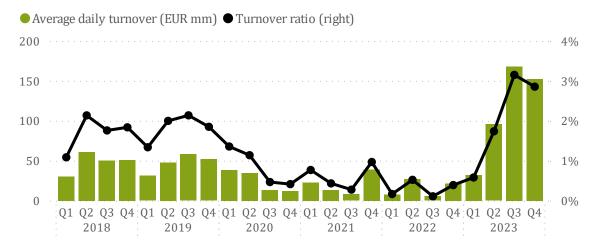


Source: Denmarks Nationalbank, Bank of Greece, ECB, National Depository for Securities (KDPW), WSE, Finland Valtiokonttor. Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 36 of this report

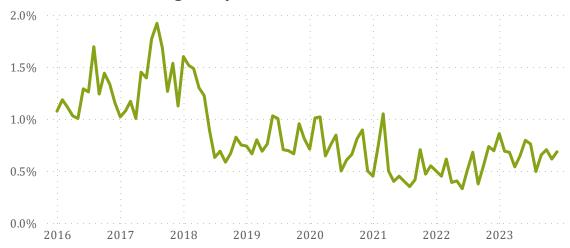


afme/ Secondary Market Trading Volumes and Turnover **Ratios**

5.17 Bulgaria: Average daily turnover volume and turnover ratio

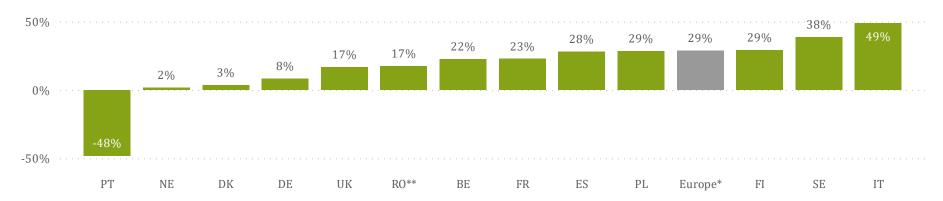


5.18 Romania: Average daily turnover ratio

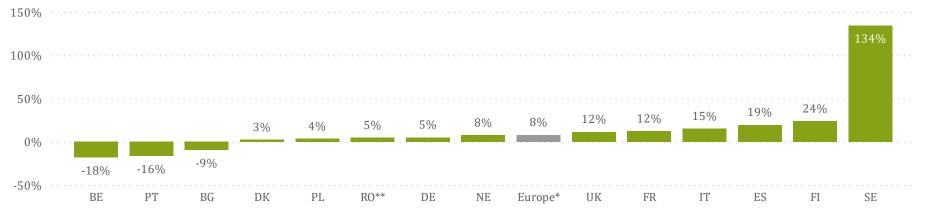


Ne/Secondary Market Trading Volumes and Turnover Ratios

5.20 Annual change in average daily turnover volumes of European government bonds: 4Q23 to 4Q22



5.21 Quarterly change in average daily turnover volumes of European government bonds: 3Q23 to 4Q23



Source: AFME with information from European DMOs and other agency sources. See section 5 for details on aggregation basis and sources. *Europe (EU+UK) total and Germany is sourced from TraX data from MarketAxess, as the quarterly variation of average daily volumes of government and sovereign bonds. Respective percentage changes for Bulgaria for Chart 5.20 (608%) not shown as to not distort axis.



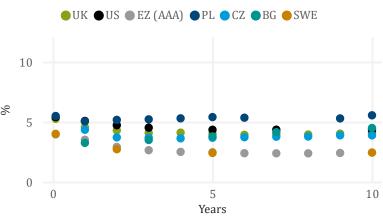
Valuations

afne/ Valuations Finance for Europe

6.1 Selected European 10Y spot yields



6.2 Sovereign spot yield curve of selected jurisdictions: 15 March 2024



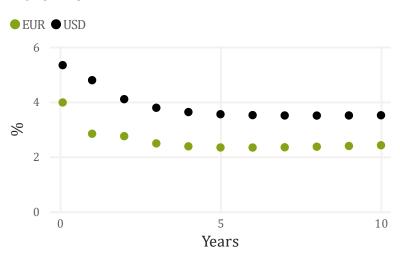
6.3 Slope: 1Y10Y spread (bps)



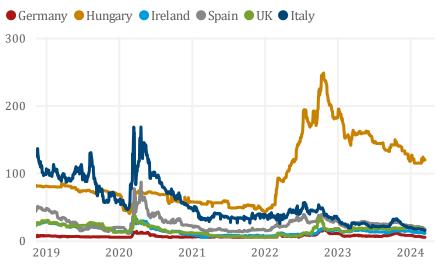
6.4 Market-implied inflation expectations (Eurozone)



6.5 Overnight index swap (OIS) yield curve: 15 March 2024



6.6 5Y Sovereign Credit Default Swap (CDS, bps)



Source: ECB and Refinitiv Eikon



Methodology for secondary Market Trading Volumes and Turnover Ratios in this report

Turnover ratios are calculated as the average daily trading volume relative to total outstandings. Cash trading only (excludes repo and derivatives transactions)

5.1 EU + UK: Secondary Market Volumes (please note this is restricted to 2013-Q3 onwards as split not available prior to this date. Volumes are calculated by converting the individual traded securities to EUR using the prevailing exchange rate on the date of each trade. ADV calculated by dividing the total converted volume by

the number of UK trading days for quarter. Data sourced from Trax. The aggregation of Trax data is agnostic of platform (meaning the trades can be conducted via BBG, TRAX or others) as it is sourced from dealers middle offices, rather than the actual trading venues. The data includes both dealer to dealer activity and dealer to client activity. Data does not consider transaction volume between clients and therefore relies on the degree of dealer intermediation.

- 5.2 Eurozone: Data is published by EFC Sub-Committee on ESDM, and is based on turnover data reported in the Euro Market Activity Report (EMAR), including turnover on a trade by trade basis traded by reporting dealers. A comprehensive list of reporting dealers can be found in the EMAR reports on the website of the Economic and Financial Committee's Sub Committee on EU Sovereign Debt Markets 5.3 United Kingdom: Turnover data reported to the DMO by the Gilt-edged Market Makers (primary dealers).
- 5.4 Italy: Turnover on all trading venues and OTC as per data provided to the Italian Dipartimento Del Tesoro by Primary Dealers through HRF ('single counted' volumes).
- 5.5 Germany: Turnover of both electronic and OTC trading. The traded volume is aggregated for a representative part of the members of the Bund Issues Auction Group with trades with all counterparties, Includes Bubills, Schaetze, Bobls, Bunds and inflation-linked securities, Capital and coupon strips as well as US-dollar bonds are excluded.
- 5.6 Portugal: Turnover of electronic and OTC trading reported on MTS-Portugal, BrokerTec and eSpeed.
- 5.7 Spain: Due to data reconciliation activities of the Bank of Spain, data from April 2018 is from BME Market Data, a subsidiary of Bolsas y Mercados Epañoles. Turnover is derived from settlement data from Iberclear.
- **5.8 Finland:** Turnover of customer trades, MTS Finland and Euro MTS.
- **5.9 Belgium:** Turnover is total outright transactions.
- **5.10 Sweden:** Turnover is total outright transactions
- **5.11 Ireland:** Turnover on Irish Stock Exchange.
- **5.12 Netherlands:** Turnover is customer and interdealer trading. Total outright transactions, including electronic and OTC trading.
- **5.13 France:** Turnover of voice and electronic trading (not including PSPP transactions or trading without an SVT).
- 5.14 Denmark: Turnover of MTS, TradeWeb, Bondvision and trades reported to Nasdaq OMX (including voice trading).
- **5.15 Greece:** Turnover on Electronic Secondary Securities Market (HDAT).
- 5.16 Poland: Turnover is total outright transactions. Data from KDPW are presented according to the date of the settlement, while data from WSE are presented according to the date of conclusion of a transaction.
- 5.17 Bulgaria: Turnover ratio of the government securities issued on domestic market. Official values reported as average monthly turnover ratios, which have been converted assuming 20 business days per month.
- 5.18 Romania: Turnover ratio of the government securities issued on domestic market. Official values reported as average monthly turnover ratios, which have been converted assuming 20 business days per month. Turnover volume not available.

For a description of the methodology of this report please visit https://www.afme.eu/reports/data/details/Summary-of-the-Methodologies

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