

Q1 2023

Government Bond Data Report

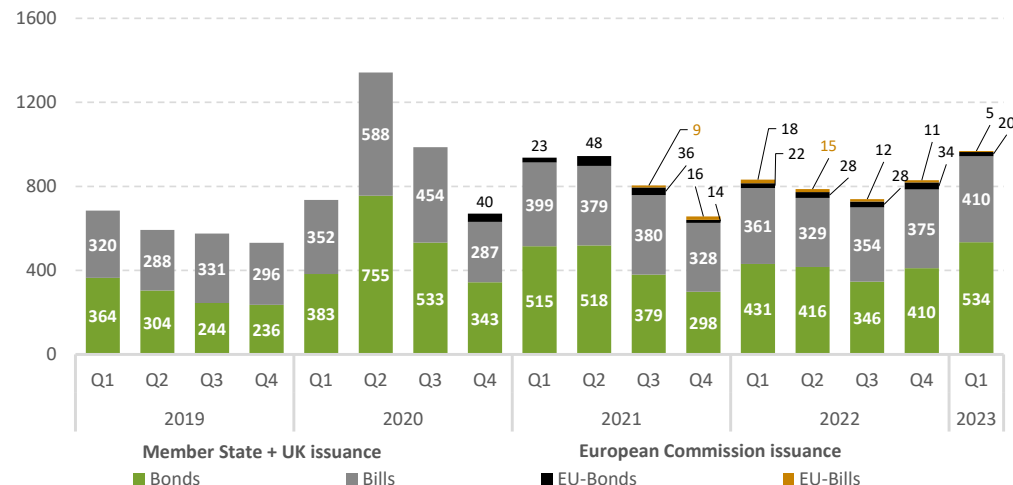
European market data update



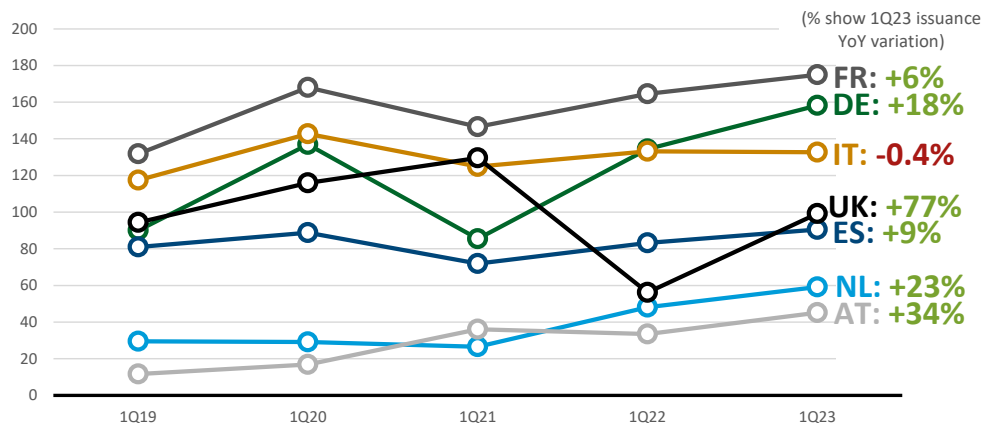
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Highlights and Market Environment

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



2. 1Q total (bond and bill) government issuance in selected countries (EUR bn, 1Q19-1Q23)



Source: ECB, National Debt Management Offices and UK Debt Management Office
¹Total EU+UK bond and bill issuance and percentage changes may show minor variations, including to that shown in Chart 1, due to rounding. ² URL: <https://www.reuters.com/markets/rates-bonds/uk-debt-agency-treads-careful-path-sell-near-record-volume-bonds-2023-03-15/>

EUR 969 bn bonds and bills issued in Q1 2023 as European quarterly issuance volumes increase 16% (YoY)

Total quarterly gross issuance in Europe (EU Member States, UK and EU Commission) was EUR 969 bn during Q1 2023, up 16% compared to Q1 2022 (YoY) and up 17% from Q4 2022 (QoQ) (see Chart 1).

Excluding institutional issuance from the EU Commission, EU Member States and the UK issued EUR 944 bn in bonds and bills during 1Q23¹, representing an increase of 20% (QoQ) and an increase of 19% (YoY).

The EU Commission issued an additional EUR 20 bn in EU-bonds and EUR 5 bn in EU-bills during Q1 2023, representing the lowest quarterly issuance since Q1 2021. The EU Commission accounted for 2.6% of total European sovereign issuance in Q1 2023, down from 5% in both 4Q22 and 2022 FY.

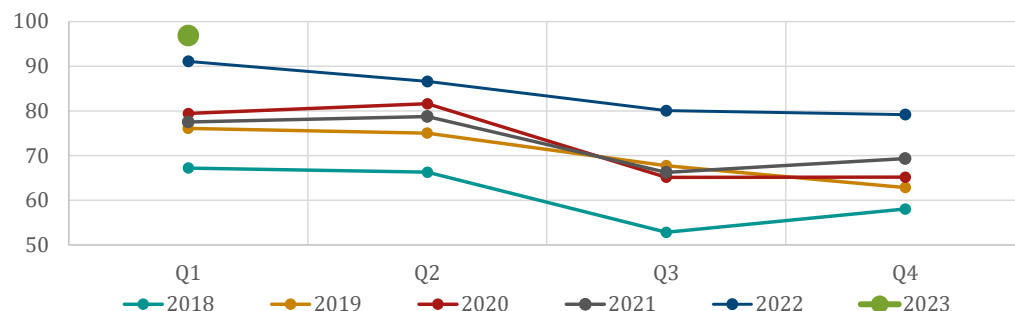
Among European countries, the UK had the largest increase in total (bond and bill) gross issuance during 1Q23, with first-quarter issuance up 77% YoY compared to 1Q22, driven by a surge in Gilt issuance (see Chart 2).

UK government bond and bill issuance is expected to increase significantly in the coming quarters, with the UK DMO [indicating](#) bond issuance will reach £241 bn in the 23/24 financial year, the second-highest volume on record after 20/21 when issuance reached £486².

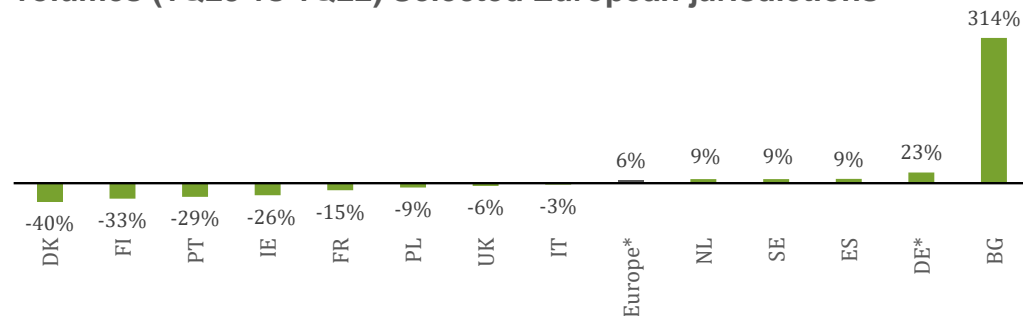
Within the Eurozone, Germany, France and Spain saw issuance volumes in 1Q23 increase as a result of higher levels of bond issuance compared to 1Q22, whereas the YoY increase in volumes in the Netherlands and Austria were driven virtually exclusively by a surge in bill issuance. Of European countries, first quarter issuance volumes declined in Italy, Ireland Cyprus and Estonia during 1Q23.

Once considering redemptions and buy-backs, a sharp increase in net issuance was also observed in the UK during 1Q23, with a lesser increase observed in the Eurozone (more information on issuance including both gross and net issued volumes can be found in the issuance section of this report on pp.8-10).

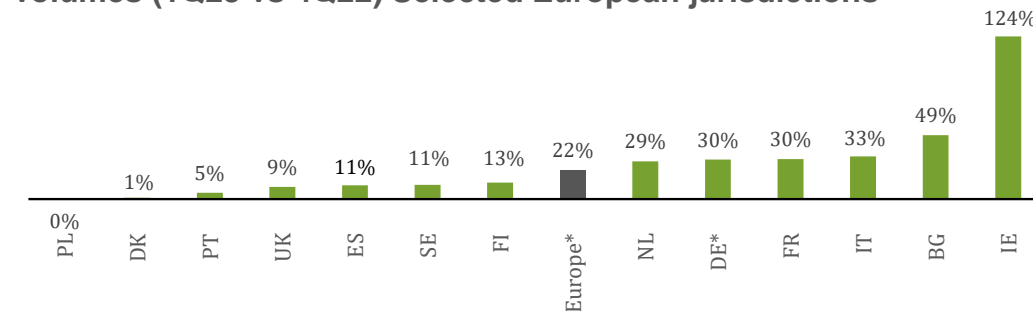
3. European Government bond average daily trading volumes (EUR bn)



4. Annual changes in Government Bond average daily trading volumes (1Q23 vs 1Q22) Selected European jurisdictions



5. Quarterly changes in Government Bond average daily trading volumes (1Q23 vs 4Q22) Selected European jurisdictions



Source: AFME with information from European DMOs and other agency sources and TraX data from MarketAxess. *Europe (EU+UK) total and German turnover is sourced from TraX data from MarketAxess as the quarterly variation of average daily trading volumes of government and sovereign bonds.

Highest average daily trading volume in European (EU+UK) government bonds during Q1 2023

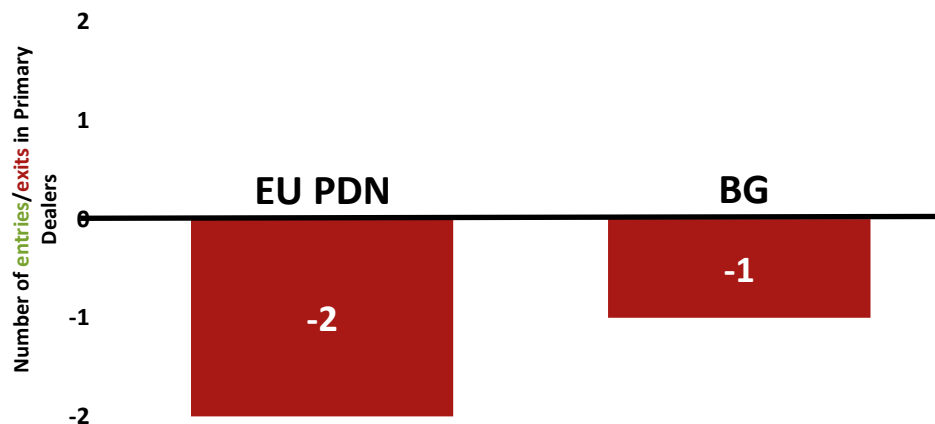
According to TraX data from MarketAxess, trading surged during Q1 2023, increasing 22% (QoQ) and 6% (YoY) and representing the highest average daily trading volume for any quarter since 2014.

Average daily trading volumes of European government bonds increased by 6% YoY during 1Q23, driven by a significant increase in trading in Bulgaria (314% YoY), Germany (23% YoY), Spain (9% YoY), Sweden (9% YoY) and the Netherlands (9% YoY). There was a decrease in trading in Denmark (-40% YoY), Finland (-33% YoY), Portugal (-29% YoY), Ireland (-26% YoY) and France (-15% YoY) (see Chart 4).

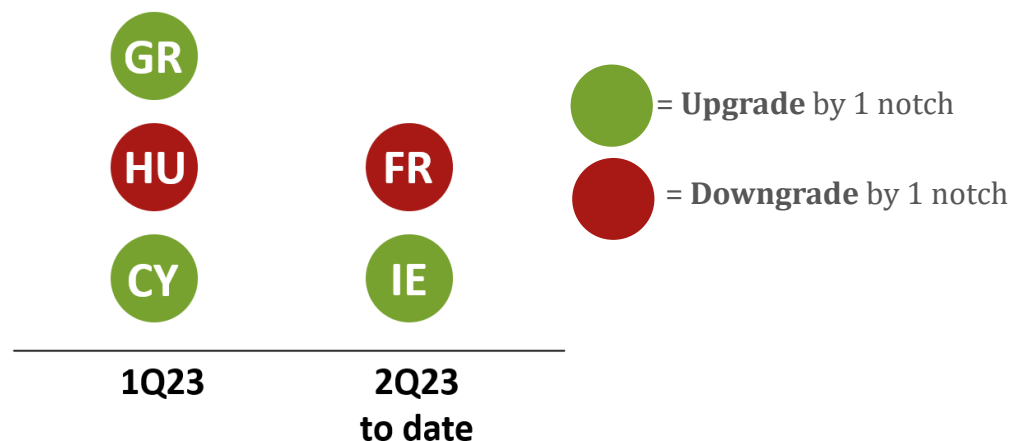
In Bulgaria, government bond trading increased significantly during 1Q23, increasing 314% YoY and 49% QoQ, with volumes driven by the parliamentary elections being held on 2 April 2023. There have been 5 general elections in Bulgaria since April 2021, with volatility in government bond trading in Bulgaria increasing during this period (see Chart 5).

Highlights and Market Environment

6. Number of Exits and Entries in European Primary Dealership (January 2023-April 2023)



7. European rating actions on long-term sovereign credit ratings (2023YtD)



Source: AFME HRF Table and National DMOs [chart 6]. Fitch, Moody's, S&P [chart 7].

Net loss of 3 primary dealers in Europe from January 2023 to April 2023

From January 2023 to April 2023, there were 3 exits and no entries of banks to European Primary Dealer systems, affecting the Bulgarian sovereign debt market and the European Commission Primary Dealer Network (EU PDN) (see Chart 6).

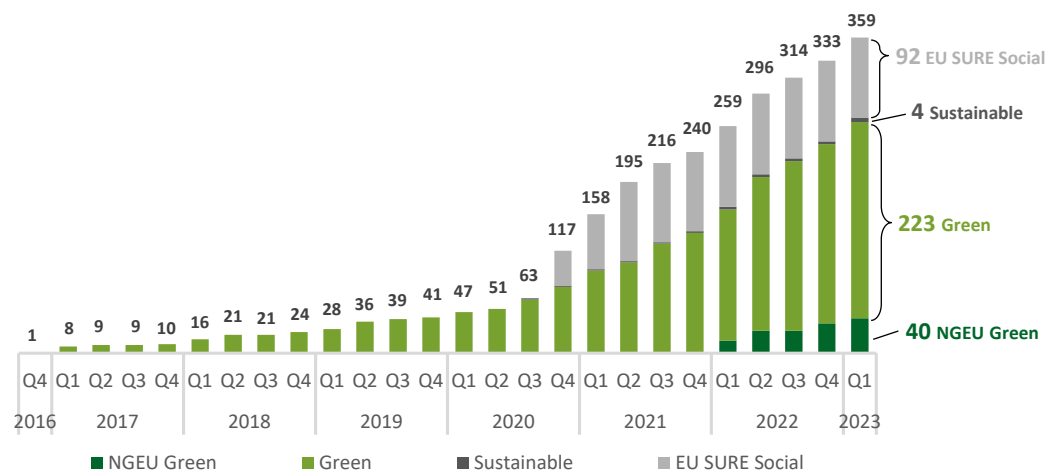
This follows 4 exits and 2 entries of banks in European primary dealership between September 2022 to January 2023.

After the most recent exits, the EU PDN now has 39 primary dealers, the lowest since June 2021 when the network was inaugurated. Bulgaria now has 7 primary dealers, the lowest number since January 2016.

During 1Q23 there were 2 upgrades and 1 downgrade in long-term credit rating changes for European nations

This was followed by 1 further upgrade and 1 downgrade in 2Q23 to date, bringing the 2023 year-to-date total to 3 upgrades and 2 downgrades (see Chart 7).

8. European outstanding ESG sovereign bonds (EUR bn, 2016-2023)



Source: Refinitiv Eikon and European Commission [chart 8]

Outstanding amount of European government ESG bonds surpass EUR 359 bn as 8 sovereigns and the European Commission issue during Q1 2023

Outstanding amount of ESG government bonds reached EUR 359 bn during 1Q23 (see chart 8), with green volumes driven by tap issuance by the European Commission (EUR 6.0 bn), the UK (EUR 5.8 bn), France (EUR 3.2 bn), Germany (EUR 3.0 bn), Italy (EUR 2.4 bn), Belgium (EUR 0.9 bn), Hungary (EUR 0.05 bn) and additional green bond references issued in Ireland (EUR 3.5 bn) and Austria (1.4 bn).

Austria became the first sovereign worldwide to issue green commercial paper in March 2023 after issuing the first sovereign green bill in October 2022. Short term green debt in Austria is rolled over into subsequent green issues at the point of maturity. In total, there was a combined volume of EUR 1.4 bn in green bill and green commercial paper issuance in Austria during Q1 2023.

Slovenia issued the second and largest sustainable sovereign bond for the country to date, adding EUR 1.25 bn in sustainable volumes to ESG government bond market in Europe

Most recently in 2Q23 to date, Germany has issued a EUR 4.5 bn 30Y green bund while the European Commission has issued a further EUR 1.7 bn in green bond volumes via tap issuance of an existing NGEU green bond

Major upcoming regulatory, legislative and policy initiatives

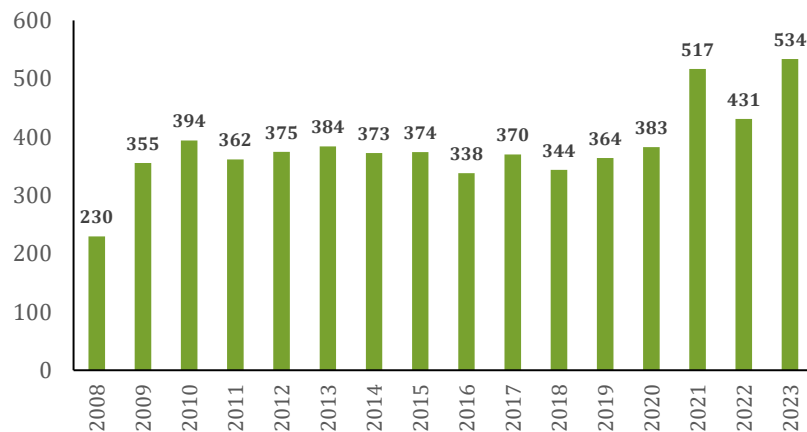
There are several regulatory initiatives currently being considered at the European and national level with expected impact on the government bond markets. Some of the key initiatives recently implemented or soon to be applied include:

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

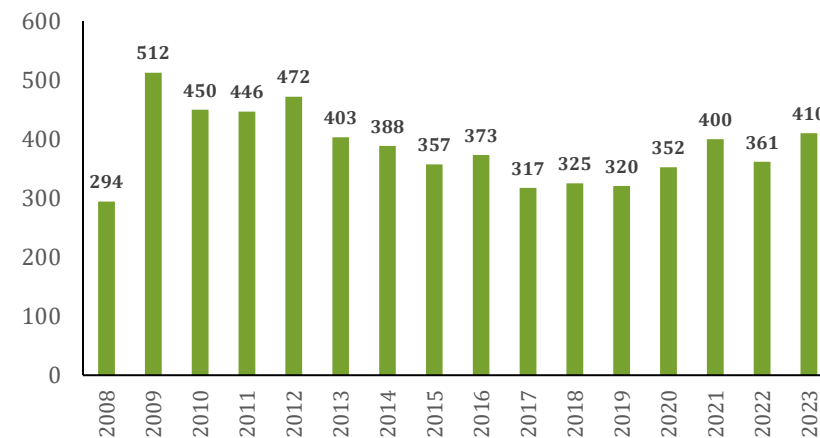
AFME and its members actively contribute on all of these and other initiatives.

Issuance

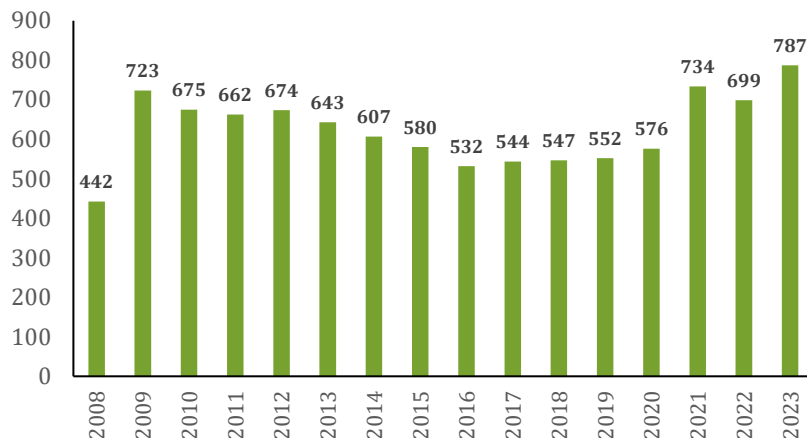
1.1 European (EU+UK) Government Bond gross issuance (Q1, EUR bn)



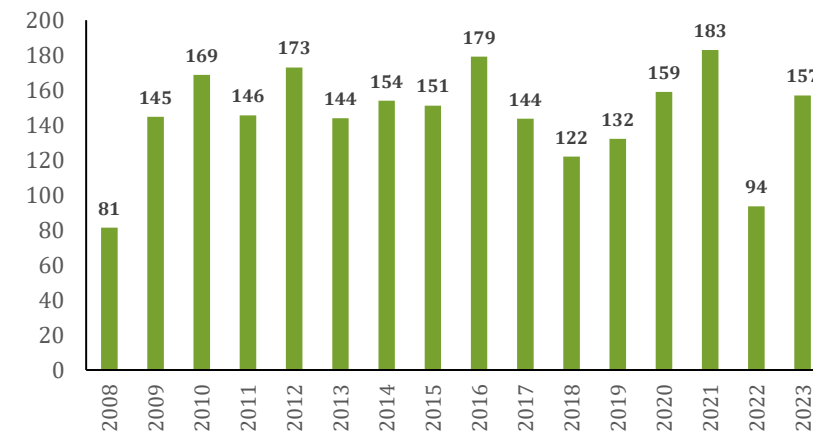
1.2 European (EU+UK) Treasury Bills gross issuance (Q1, EUR bn)



1.3 Eurozone bonds and bills gross issuance (Q1, EUR bn)

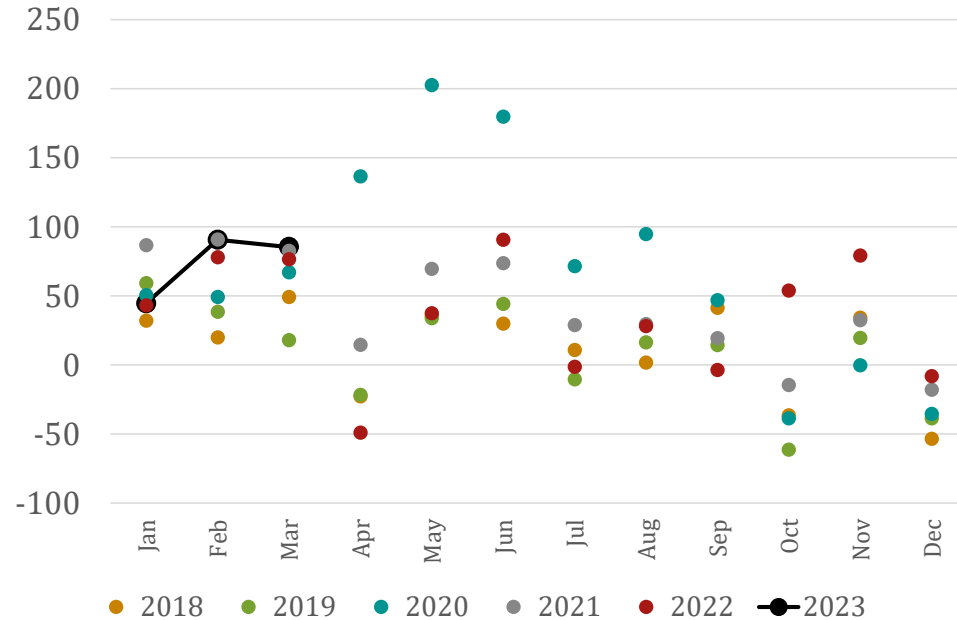


1.4 Non-Eurozone bonds and bills gross issuance (Q1, EUR bn)

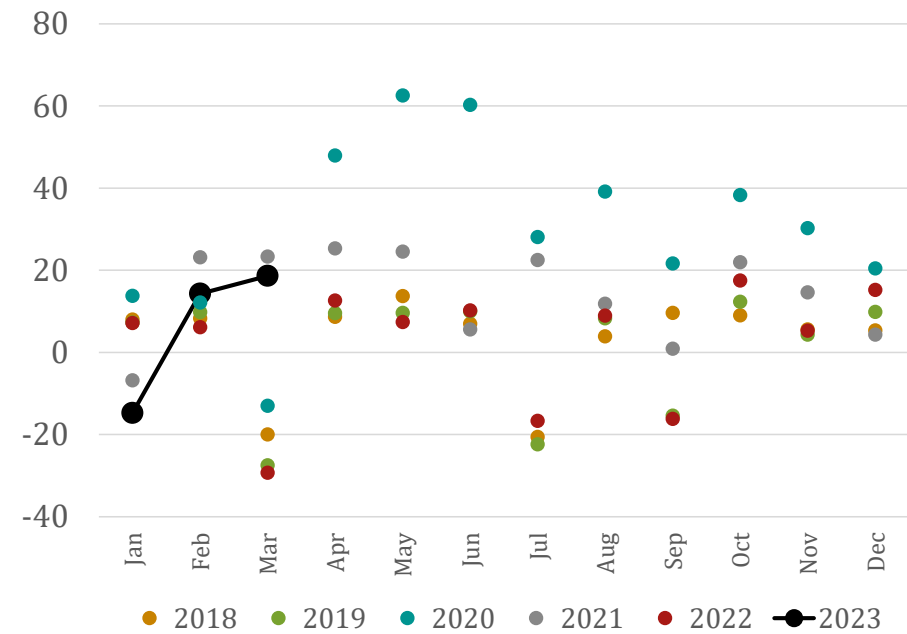


Source: ECB, National Debt Management Offices and UK Debt Management Office. **Data on this page excludes EU Commission issuance (ie. NGEU, SURE) and includes debt issued from EU Member States and the UK only.**

1.5 Euro area net sovereign debt issuance (EUR bn)



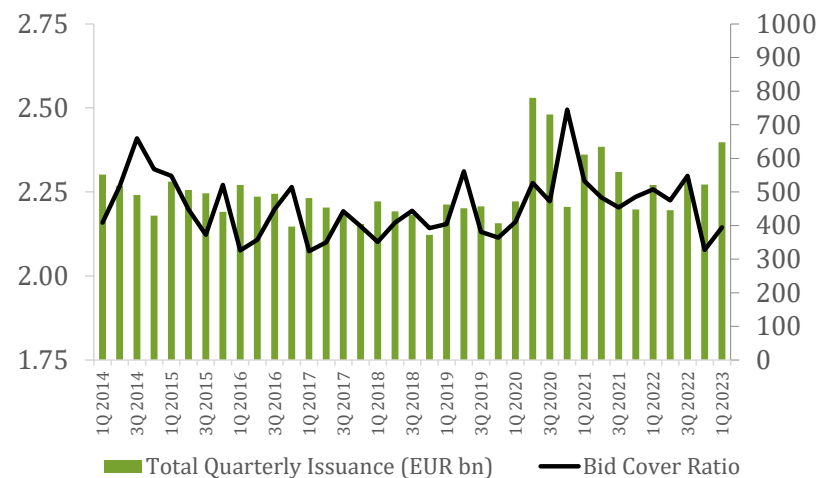
1.6 UK Gilts net issuance (GBP bn)



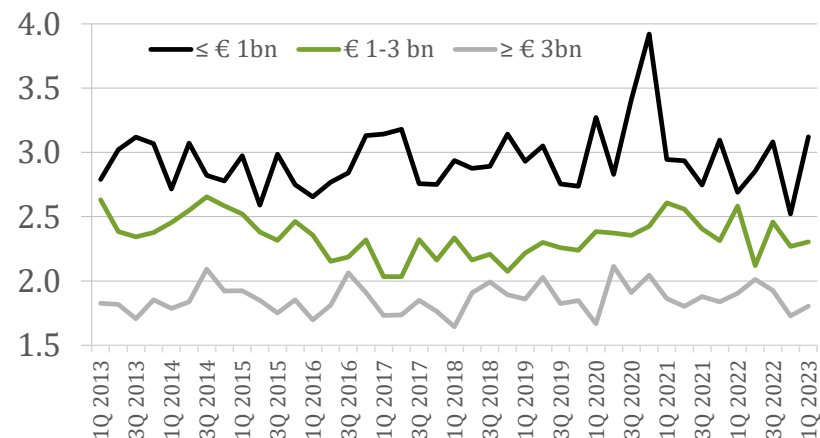
Source: ECB and UK Debt Management Office.

Recent Auctions and Primary Dealers

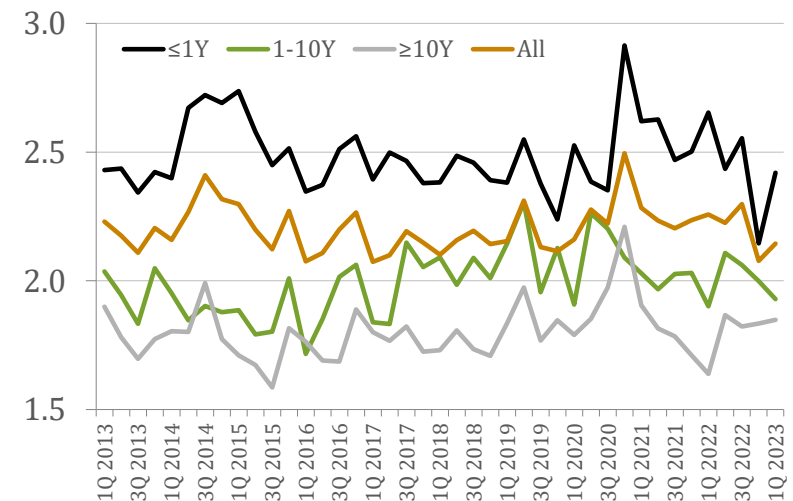
2.1 Average bid-cover ratios and issued volumes in selected jurisdictions (EUR bn)



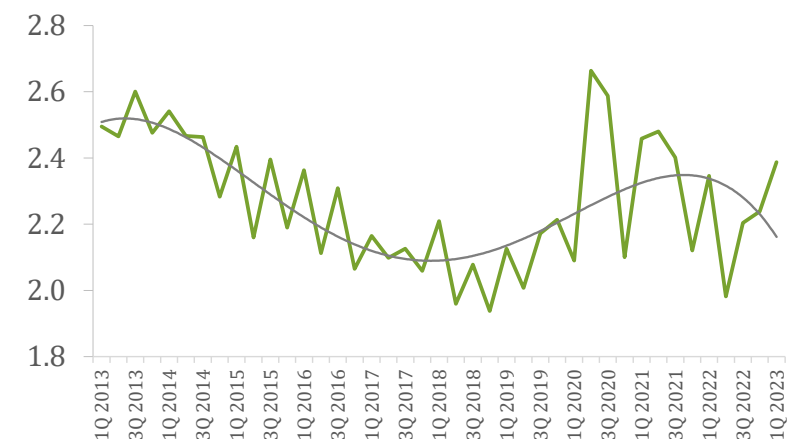
2.3 Average bid-cover ratios by size of issued instruments



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

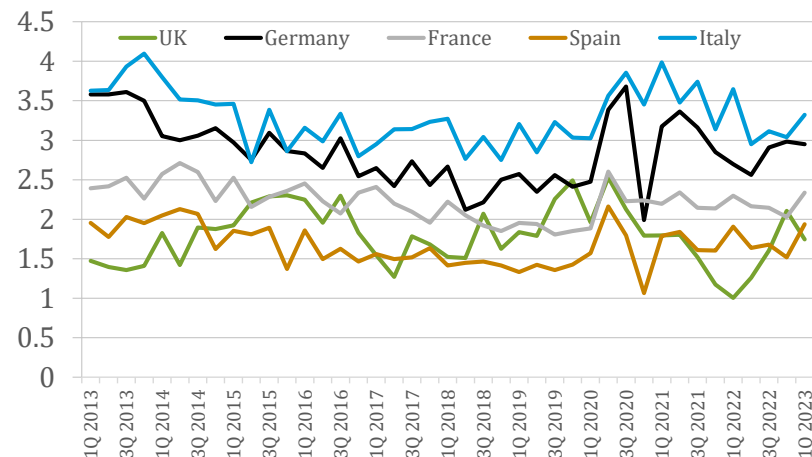


2.4 Average auction size in selected European jurisdictions (EUR bn)

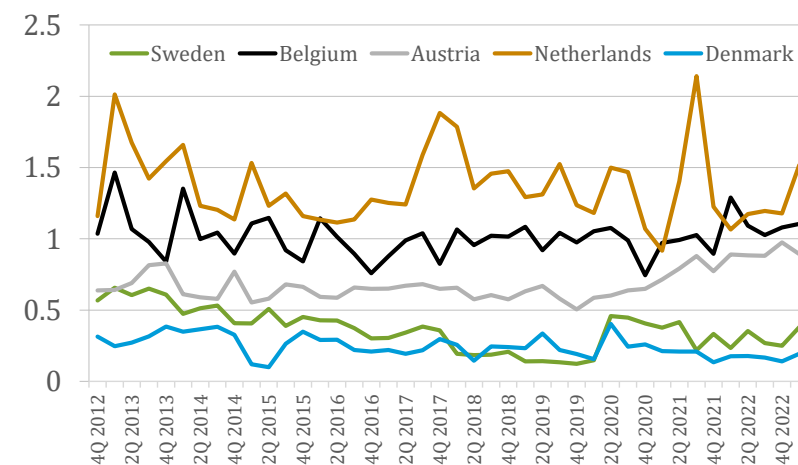


Source: Refinitiv Eikon. Weighted Average of UK, DE, FR, ES, IT, BE, SE, NL, DK and AT bonds and bills. In chart 2.4 polynomial trendline shown in grey.

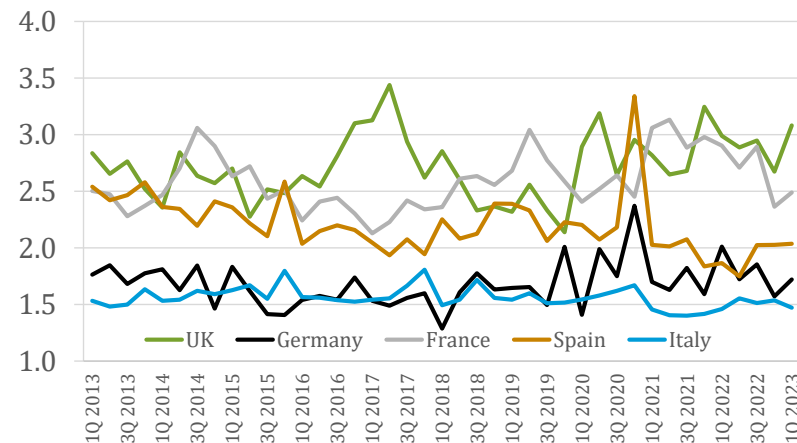
2.5 Average auction size in selected jurisdictions (EUR bn)



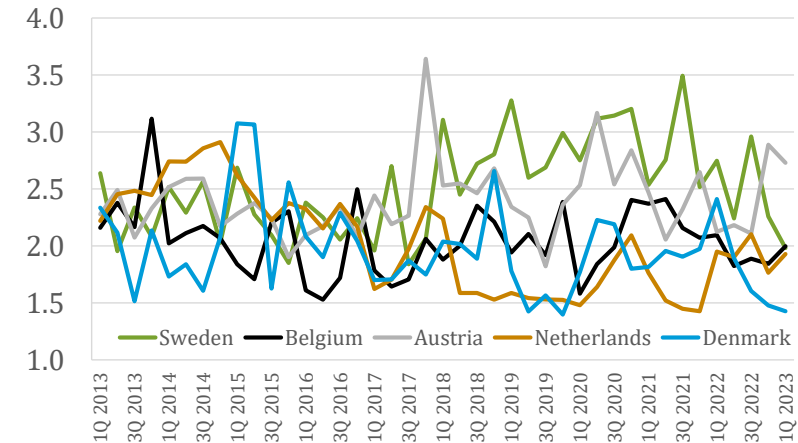
2.6 Average auction size in selected jurisdictions (EUR bn)



2.7 Average bid-cover ratios by jurisdictions

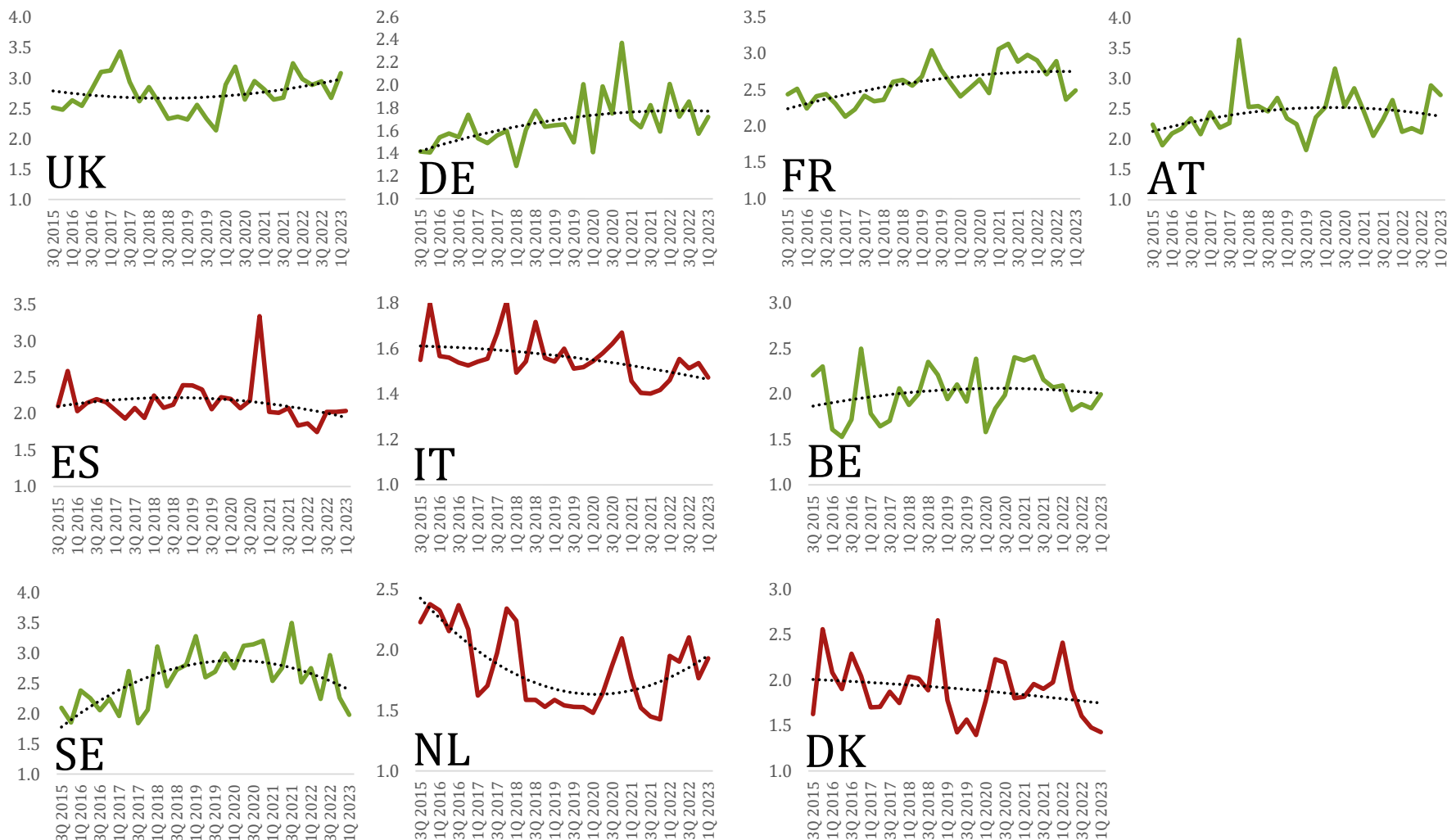


2.8 Average bid-cover ratios by jurisdictions



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

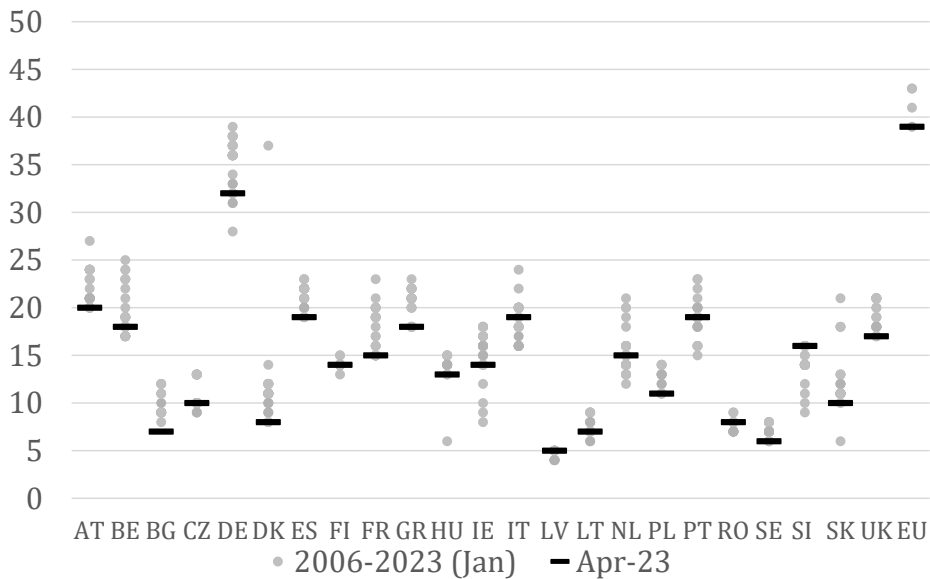
2.9 Average bid-cover ratios in selected jurisdictions: 2013-22



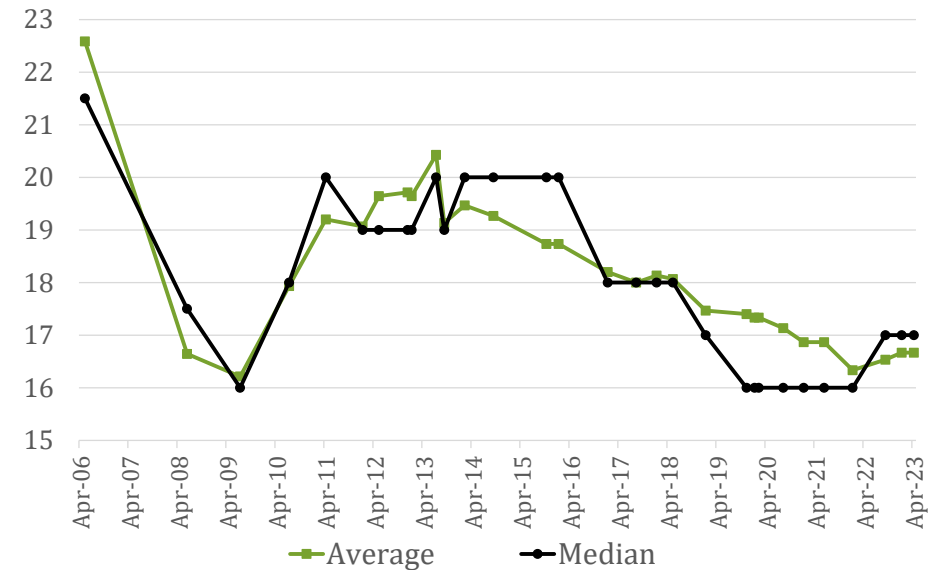
Source: Refinitiv Eikon. **Green** indicates end value of trendline above starting value, **red** indicates end value of trendline below starting value

Primary Dealers: European countries and EU

2.10 Number of primary dealers relative to historic number

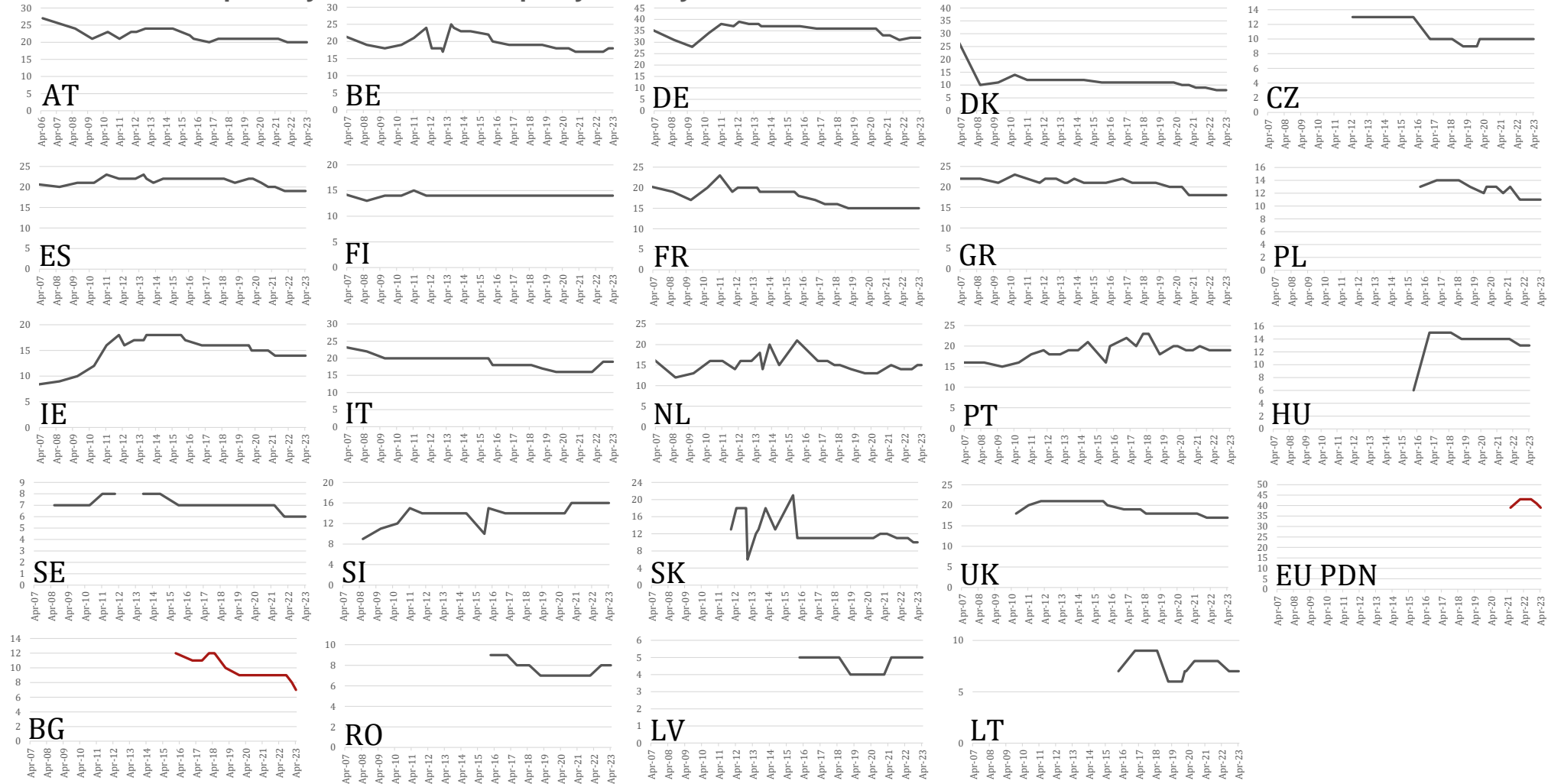


2.11 Average and median number of primary dealers in selected European countries



Source: AFME Primary Dealers Handbooks AFME HRF Table, national DMOs. Average and medians of AT, BE, DE, DK, ES, FI, FR, GR, IE, IT, NL, PT, SE, SI and UK. EU in Chart 2.10 refers to the EU Primary Dealer Network. Latest data as of April 2023.

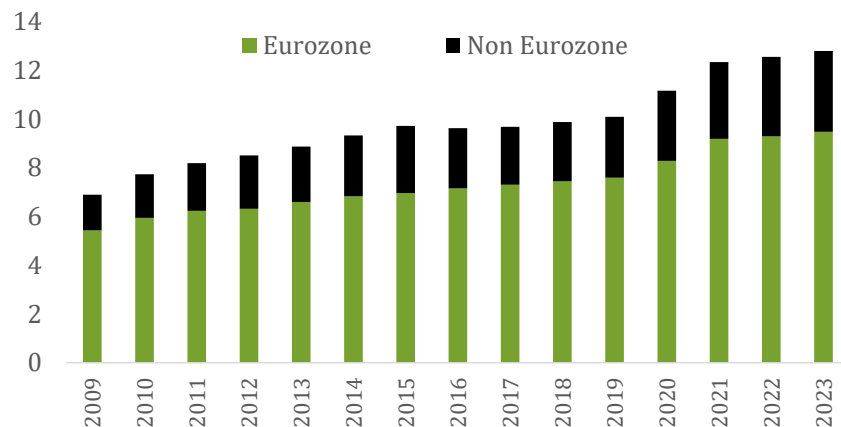
2.12 Number of primary dealers in Europe by country: 2006-23



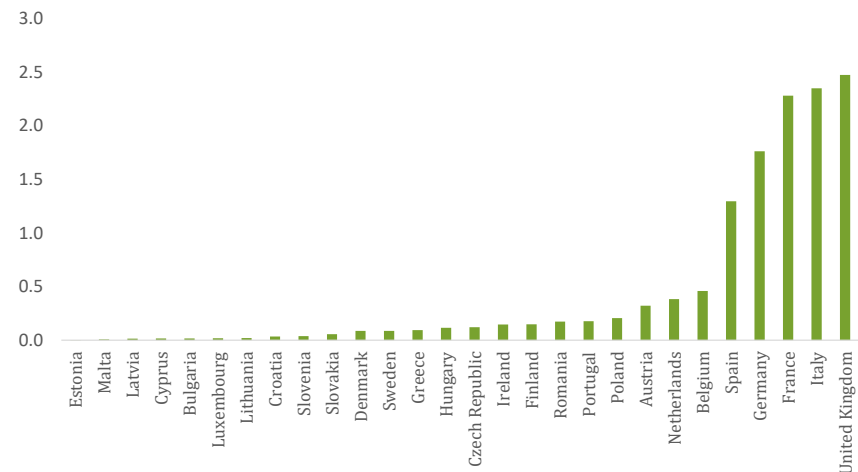
Source: AFME HRF Table and National DMOs. The gap in the line for Sweden indicates data was not recorded in the relevant period. **Chart colour indicates net change in PDs since January 2023.** **Green** indicates an increase; **red** indicates a decrease and **grey** indicates no change. Latest data as of April 2023.

Outstandings

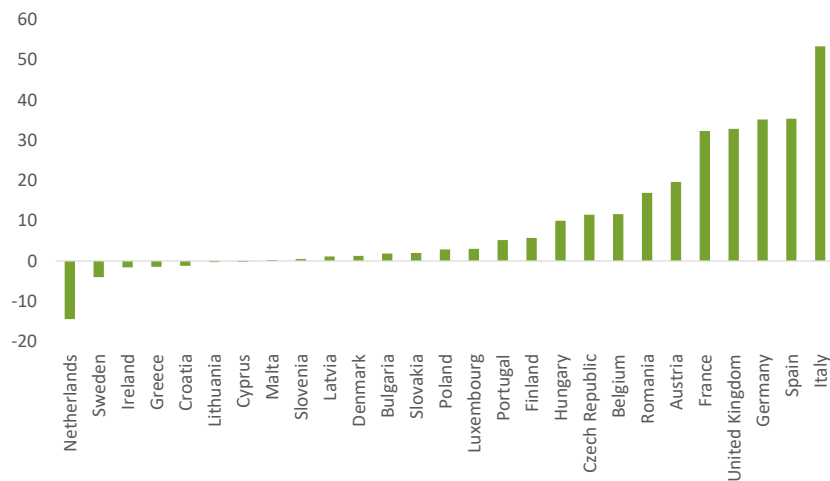
3.1 Outstanding debt securities issued by Central Governments (Nominal, EUR tn)



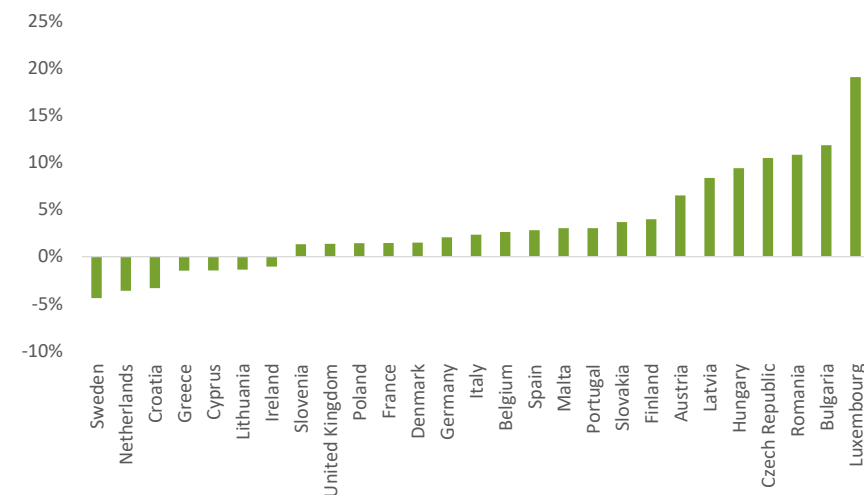
3.2 European government bonds outstanding by country (EUR tn)



3.3 Change in outstandings 4Q22 to 1Q23 (EUR bn)

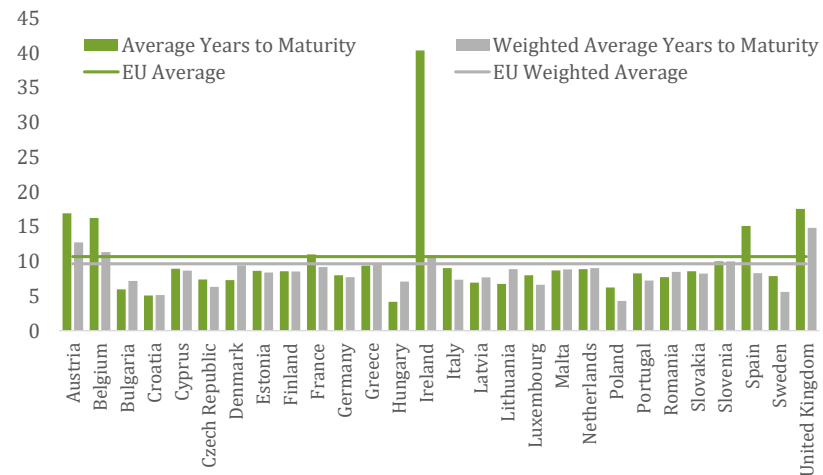


3.4 Change in outstandings from 4Q22 to 1Q23 (%)

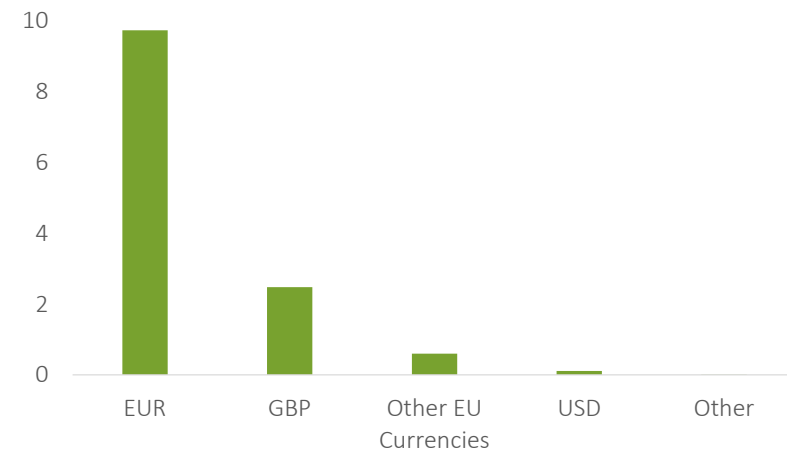


Source: ECB, Refinitiv Eikon and UK DMO.

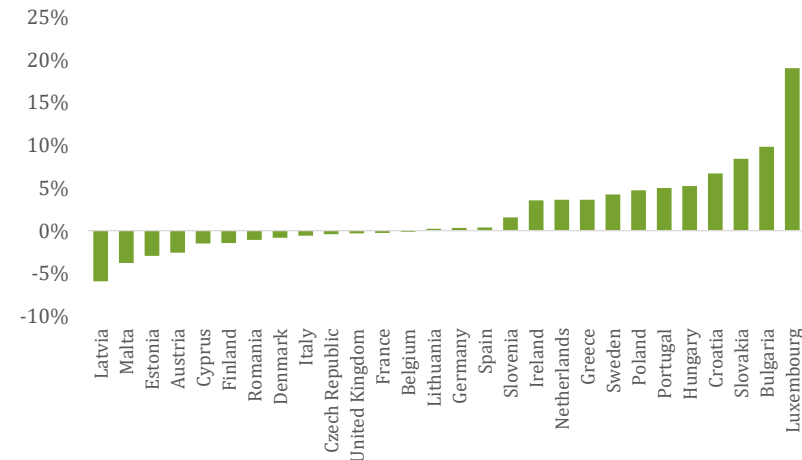
3.5 Average years to maturity for outstanding government bonds in European (EU+UK) countries



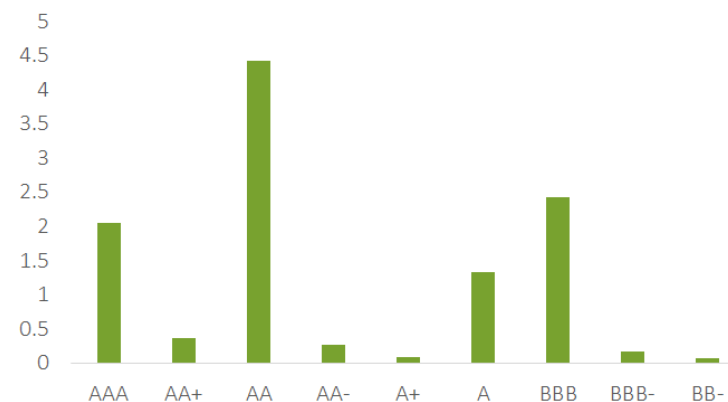
3.7 European government bonds outstanding by currency (EUR tn)



3.6 Quarterly change in weighted average years to maturity for outstanding government bonds 4Q22 to 1Q23



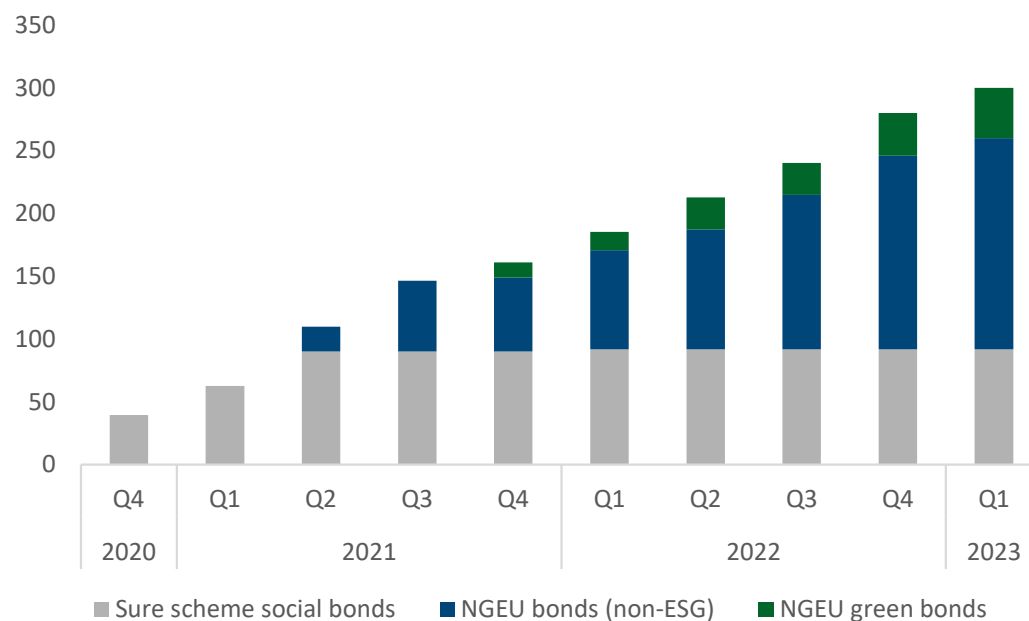
3.8 European government bonds outstanding by current rating of issuer (EUR tn)



Source: Refinitiv Eikon. For Charts 3.5 and 3.6 weighted average in by outstanding amount.

Outstandings: European Commission bonds

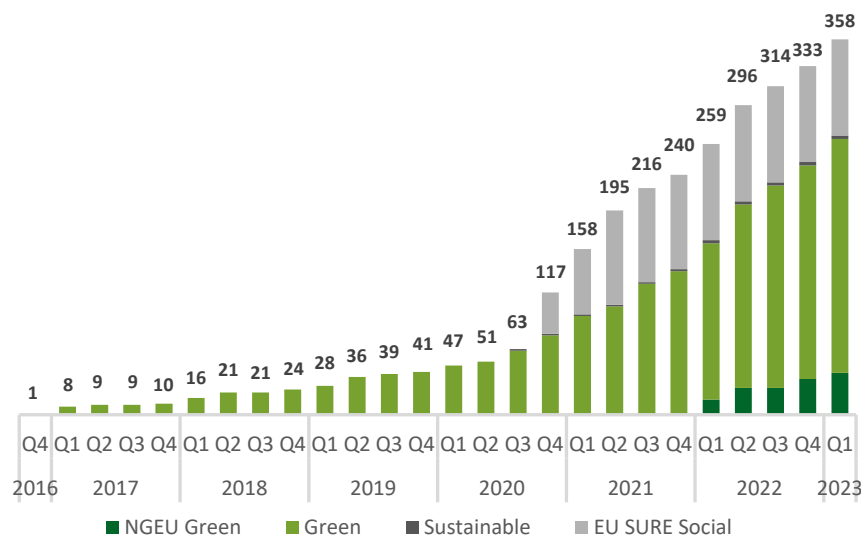
3.9 Outstanding bonds issued by the European Commission (EUR bn)



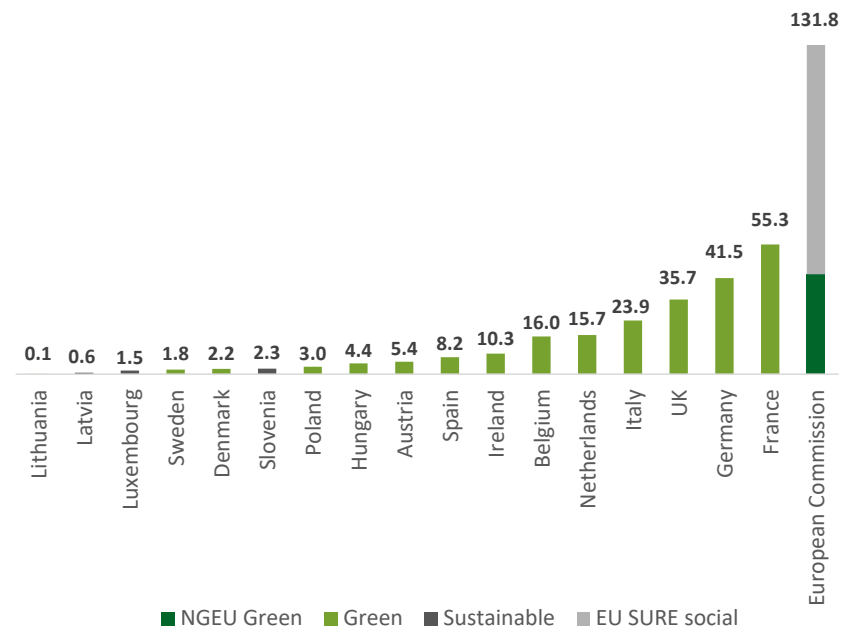
Source: European Commission. **NGEU** refers to bond issuance by the European Commission under the NextGenerationEU scheme.

Outstandings: ESG Bonds

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



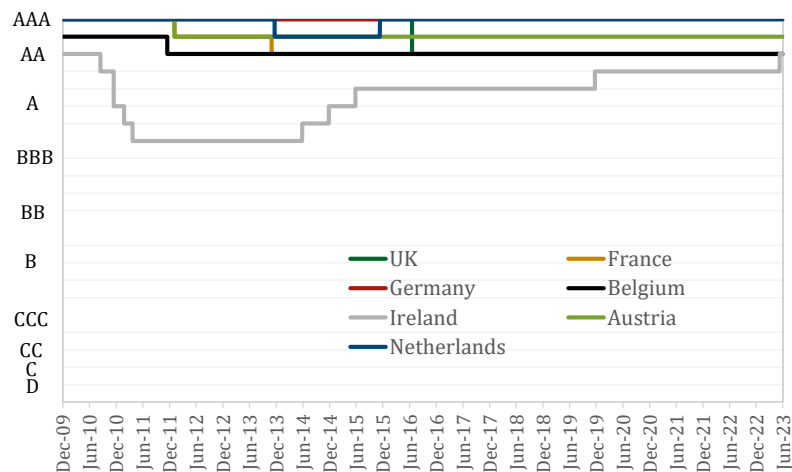
3.10 European outstanding ESG government bonds by country (EUR bn)



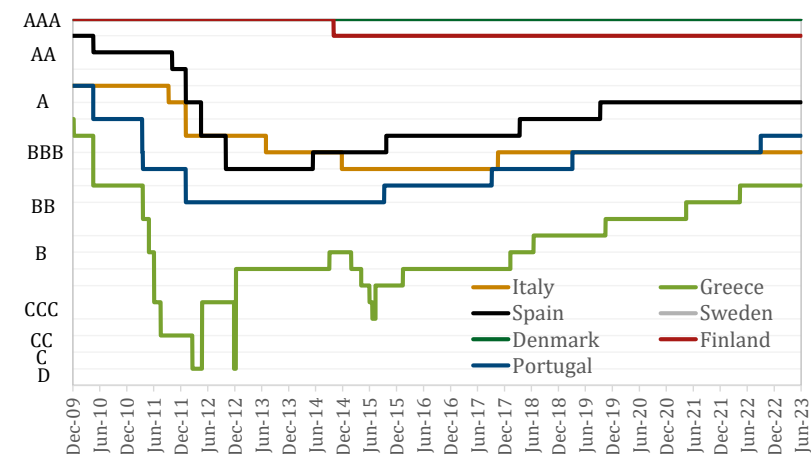
Source: Refinitiv Eikon, European Commission. All outstanding social bond volumes in Chart 3.9 are issued by the European Commission.

Credit Quality

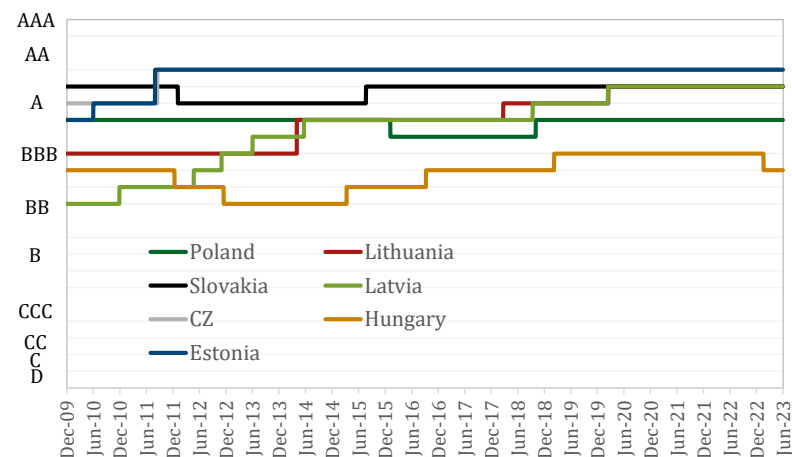
4.1 Long-term sovereign credit rating (Central and Northern Europe)



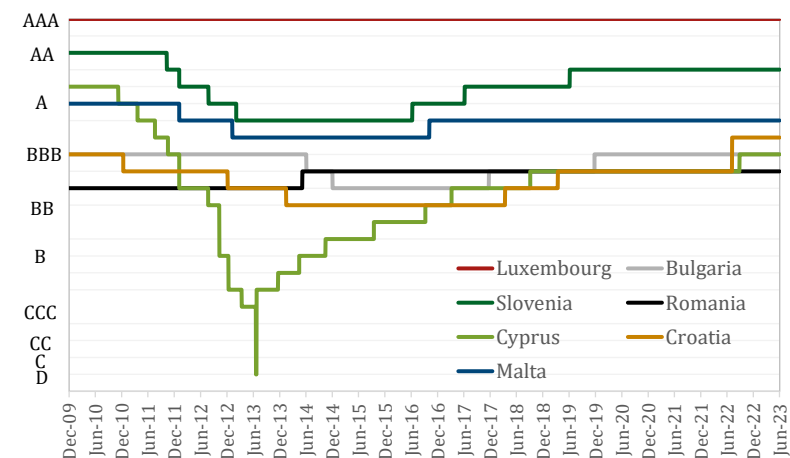
4.2 Long-term sovereign credit rating (Nordics and Southern Europe)



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 (2023 YtD)

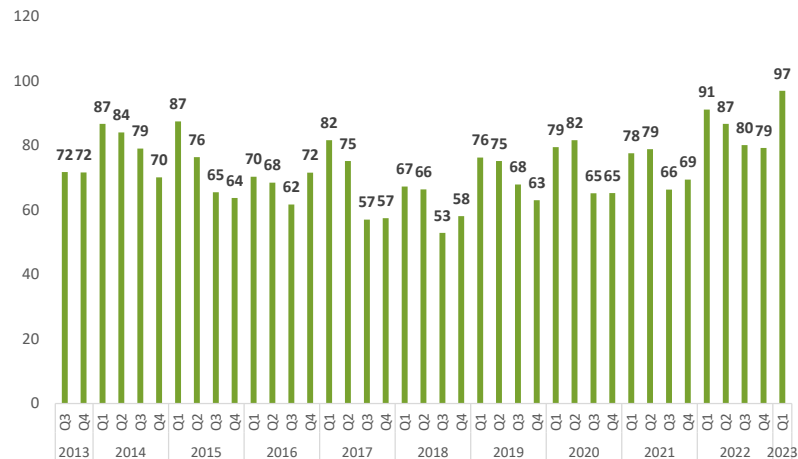
Greece	Upgrade to BB+ (stable) from BB	Jan-23	Fitch	Expected better deficit and debt outturns and projections in 2022-24, thanks to stronger nominal growth, budget over-execution and favourable debt-servicing structure, and an improvement in primary balance implied by the narrowing of the general government deficit.	1Q23
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.	
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 QtD
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	

Source: Fitch, Moody's, S&P

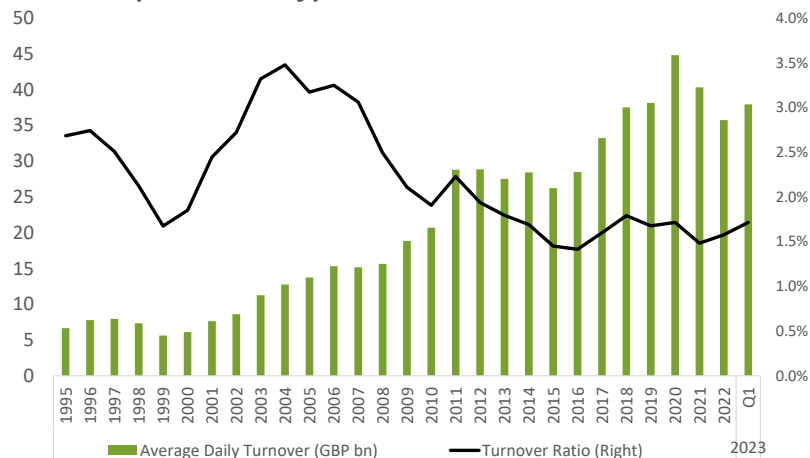
Secondary Market Trading Volumes and Turnover Ratios

Secondary Market Trading Volumes and Turnover Ratios

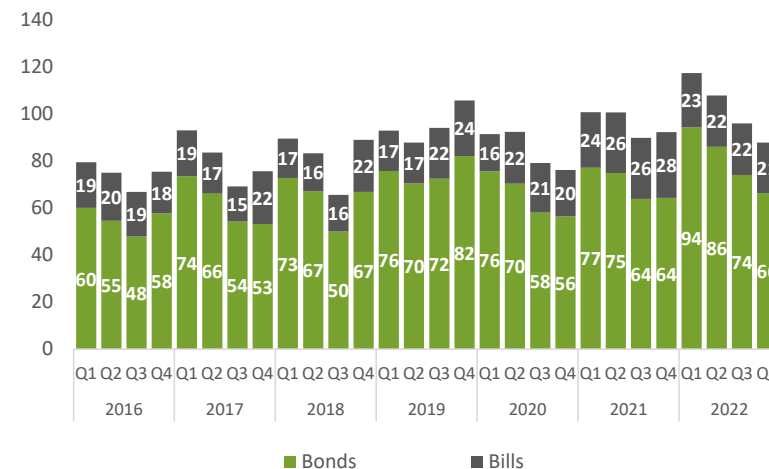
5.1 EU + UK: Average daily trading volumes (Government and sovereign bonds, EURbn)



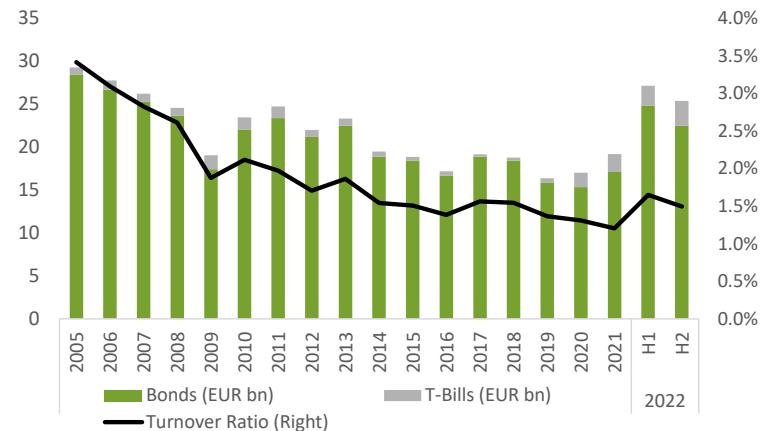
5.3 United Kingdom: Average daily trading volume (bonds only) and turnover ratio



5.2 Eurozone: Average daily trading volume (bonds and bills, EURbn)



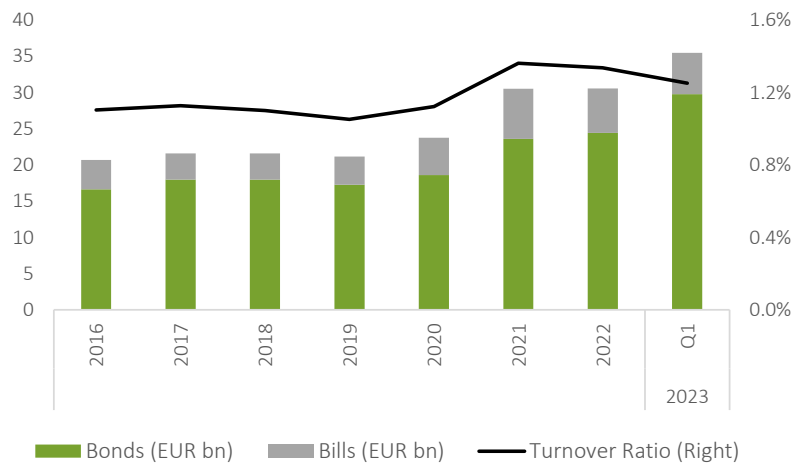
5.4 Germany: Average daily trading volume (aggregated bonds and bills) and turnover ratio



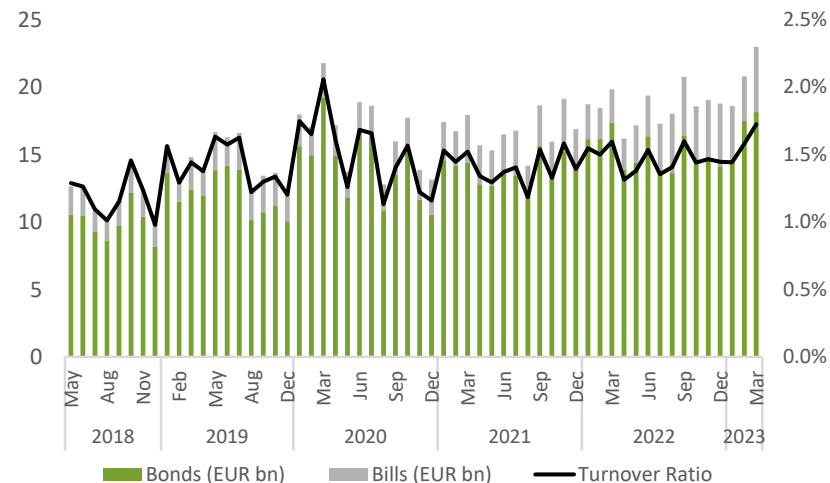
Source: TraX data from MarketAxess, EFC Sub-Committee on EDISM, UK Debt Management Office, Deutsche Finanzagentur, ECB. Individual country volumes do not sum to aggregated trading volume in Chart 5.1 EU+UK, given the differences in the aggregation basis across jurisdictions. The data is not fully comparable between countries. Full Methodology available on page 34 of this report.

Secondary Market Trading Volumes and Turnover Ratios

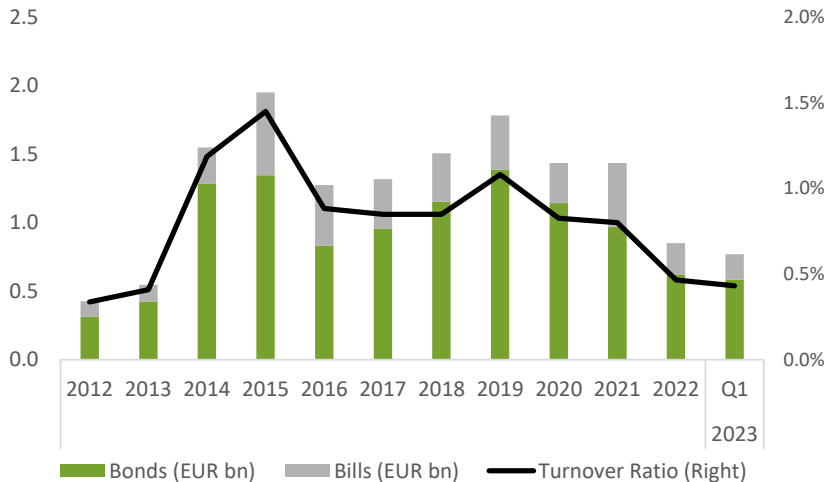
5.5 Italy: Average daily trading volume (bonds and bills) and turnover ratio



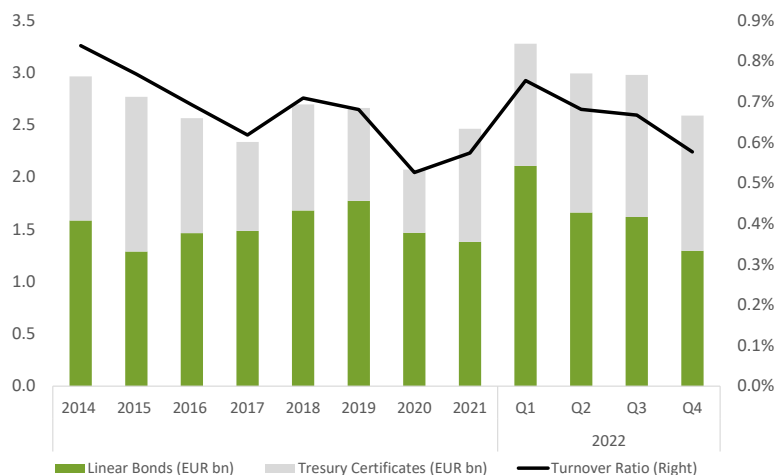
5.6 Spain: Average daily trading volume and turnover ratio



5.7 Portugal: Average daily trading volume and turnover ratio



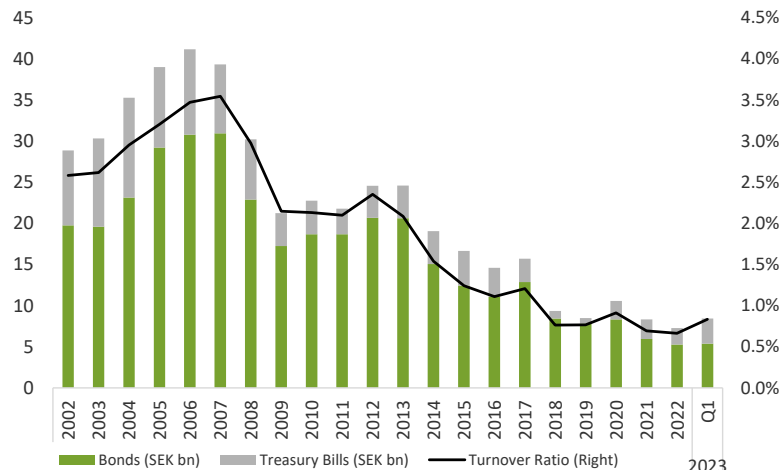
5.8 Belgium: Average daily trading volume and turnover ratio



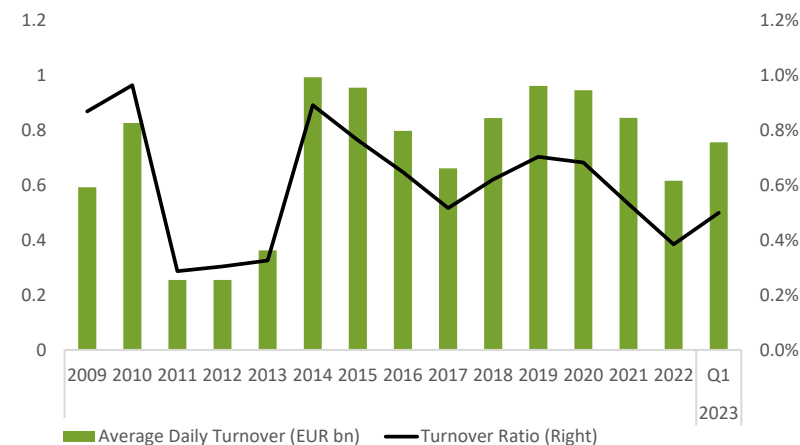
Source: ECB, Italian Dipartimento del Tesoro, BME Market Data and Tesoro Publico de Espana, Agência de Gestão da Tesouraria e da Dívida Pública (IGCP), ECB, Belgian Debt Agency. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

Secondary Market Trading Volumes and Turnover Ratios

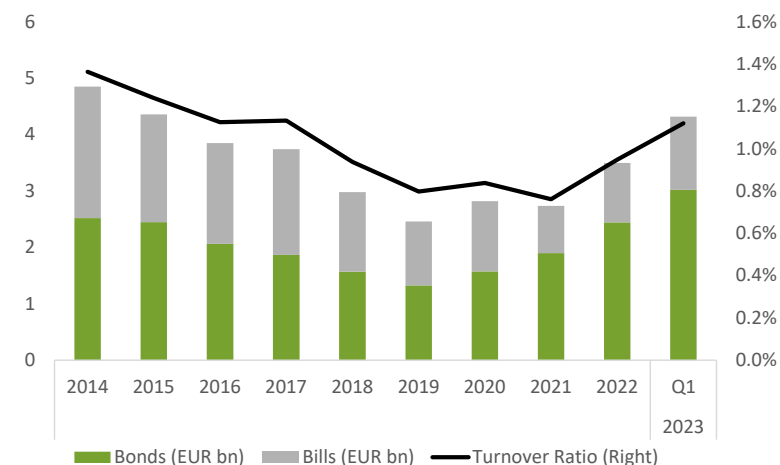
5.9 Sweden: Average daily trading volume and turnover ratio



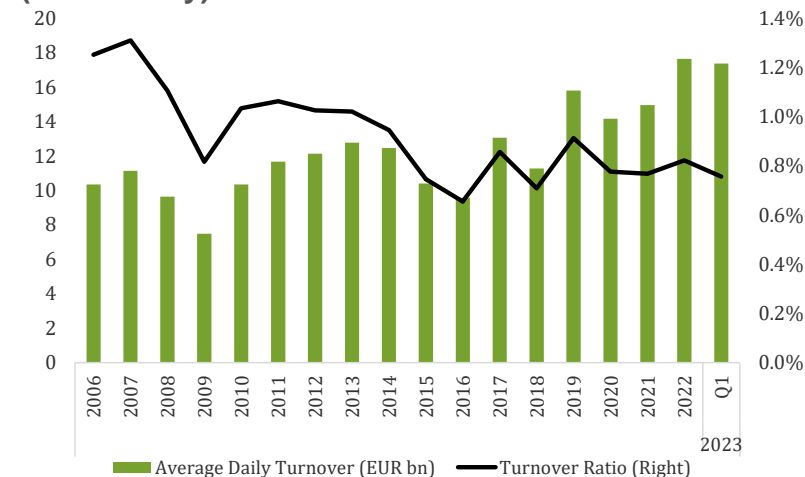
5.10 Ireland: Average daily trading volume (bonds only) and turnover ratio



5.11 Netherlands: Average daily trading volume and turnover ratio



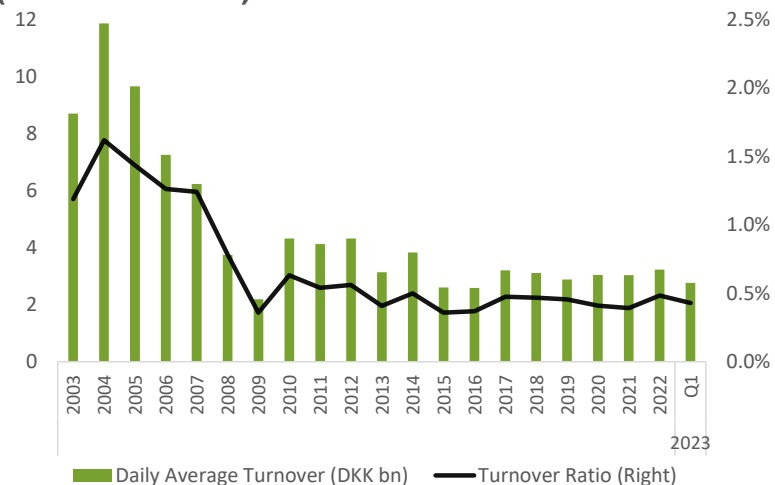
5.12 France: Average daily trading volume (bonds only) and turnover ratio



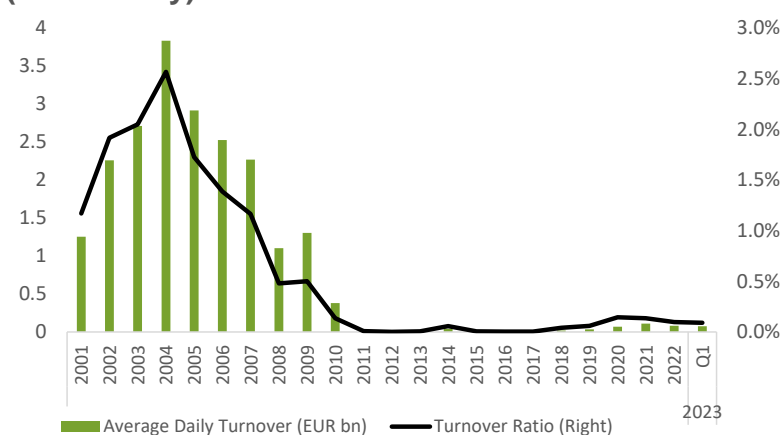
Source: ECB, Swedish National Debt Office (Riksgalden), Irish Stock Exchange, Ministerie van Financien, Agence France Tresor. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

Secondary Market Trading Volumes and Turnover Ratios

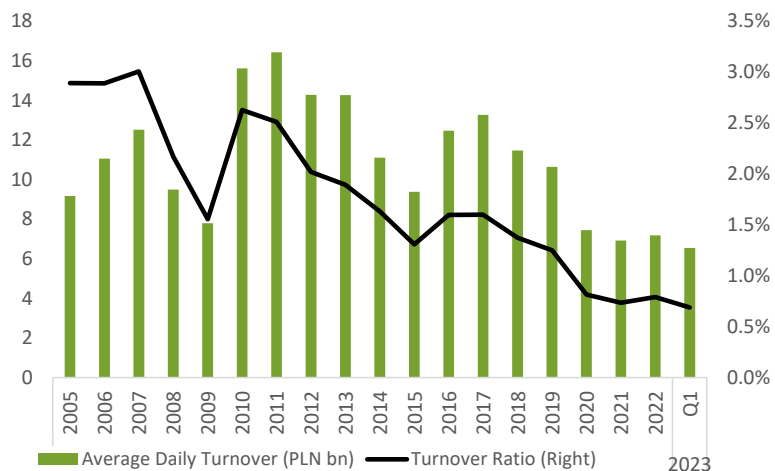
5.13 Denmark: Average daily trading volume (bonds and bills) and turnover ratio



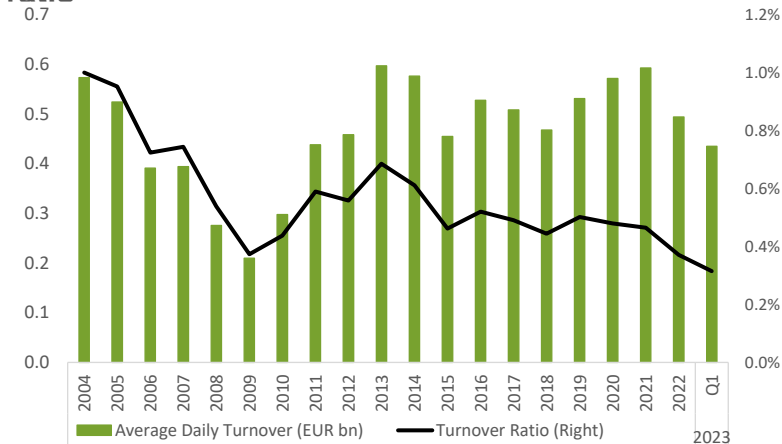
5.14 Greece: Average daily trading volume (bonds only) and turnover ratio



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



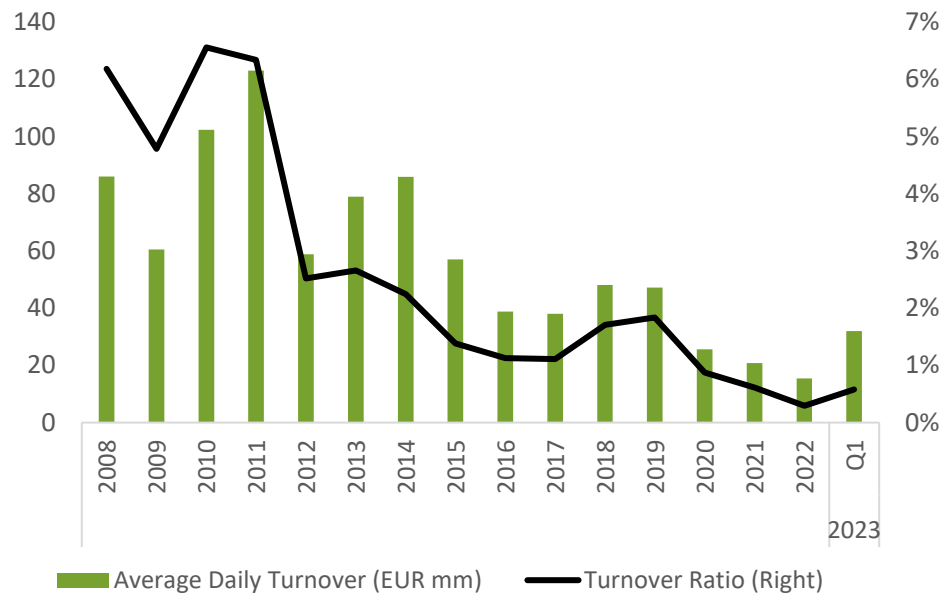
5.16 Finland: Average daily trading volume (aggregated bonds and bills) and turnover ratio



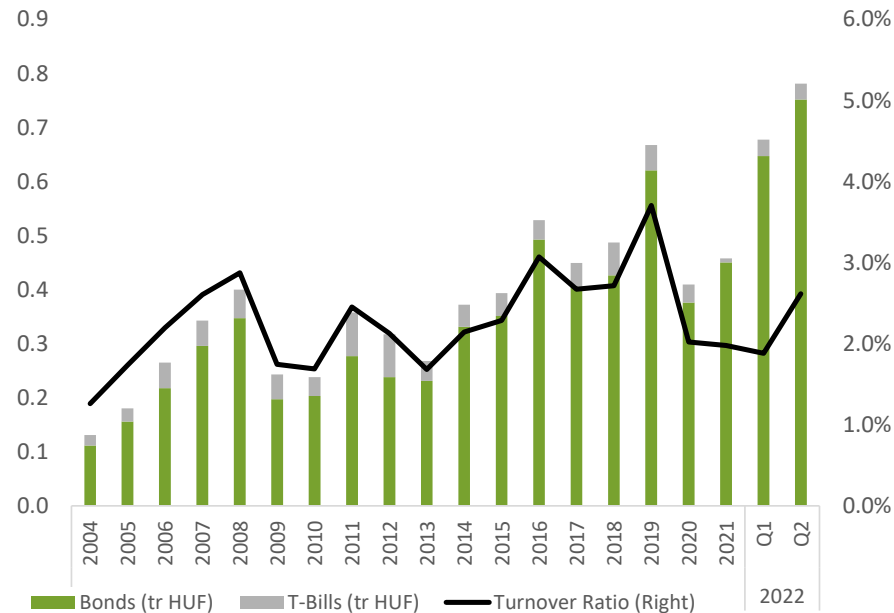
Source: Denmark's Nationalbank, Bank of Greece, ECB, National Depository for Securities (KDPW), WSE, Finland Valtiokonttori. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

Secondary Market Trading Volumes and Turnover Ratios

5.17 Bulgaria: Average daily turnover volume and turnover ratio

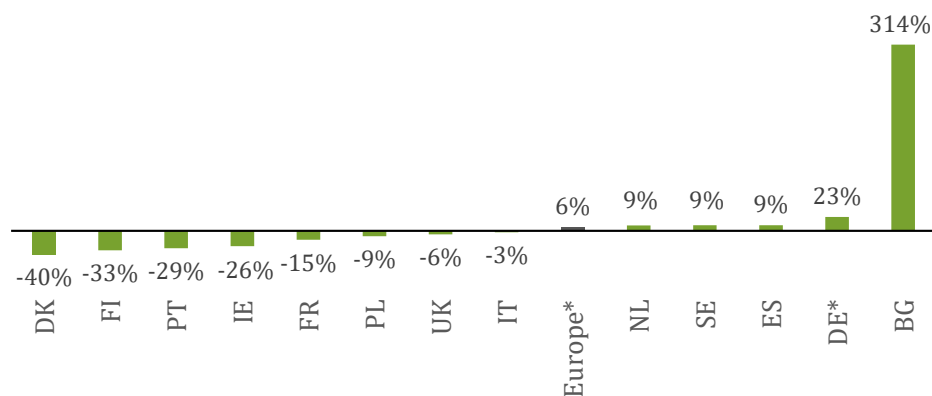


5.18 Hungary: Average daily turnover volume and turnover ratio

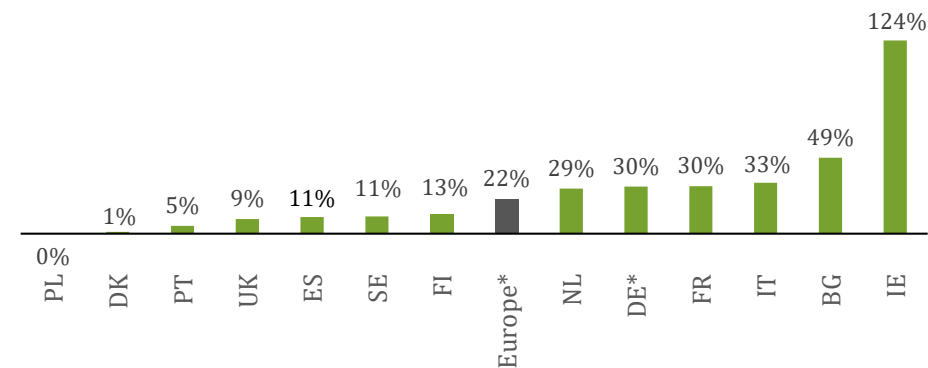


Source: ECB, AKK, Ministry of Finance of the Republic of Bulgaria, Ministerul Finantelor. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

5.20 Annual change in average daily turnover volumes of European government bonds: 1Q22 to 1Q23



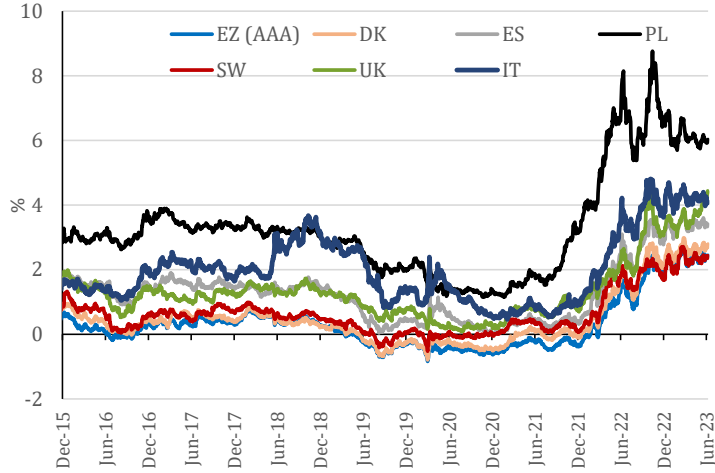
5.21 Quarterly change in average daily turnover volumes of European government bonds: 4Q22 to 1Q23



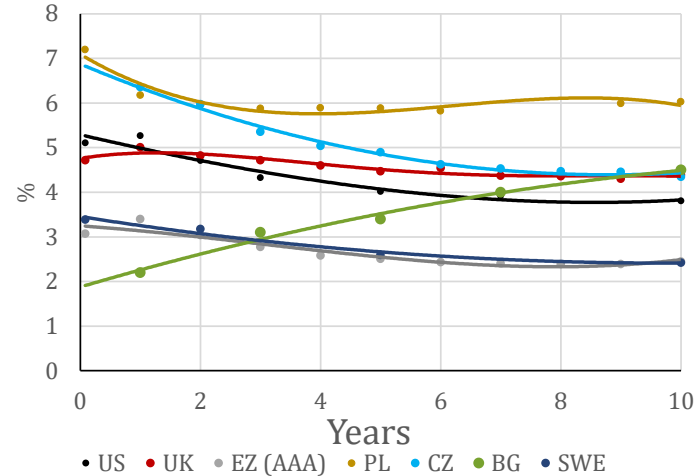
Source: AFME with information from European DMOs and other agency sources. See section 5 for details on aggregation basis and sources. *Europe (EU+UK) total and Germany is sourced from TraX data from MarketAxess, as the quarterly variation of average daily volumes of government and sovereign bonds.

Valuations

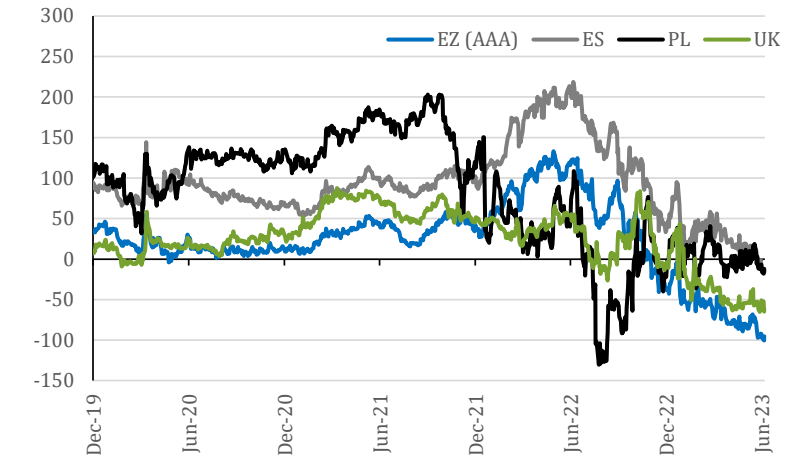
6.1 Selected European 10Y spot yields



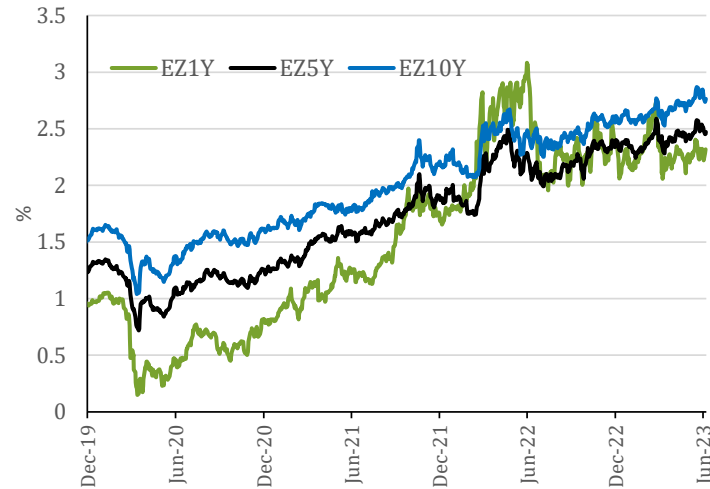
6.2 Sovereign spot yield curve of selected jurisdictions: 14 June 2023



6.3 Slope: 1Y10Y spread (bps)

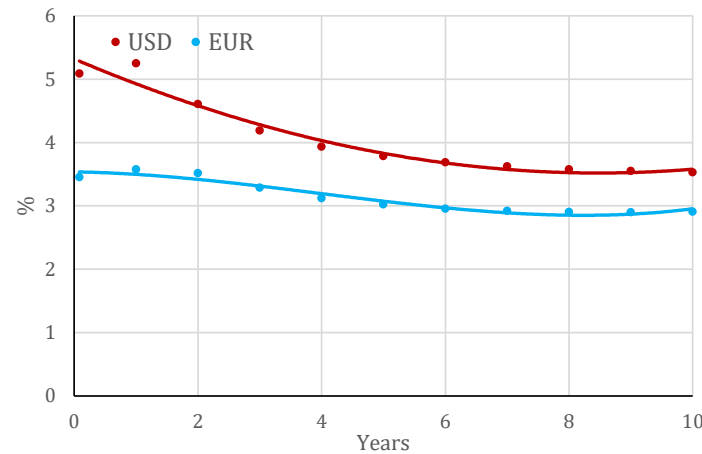


6.4 Market-implied inflation expectations (EuroZone)

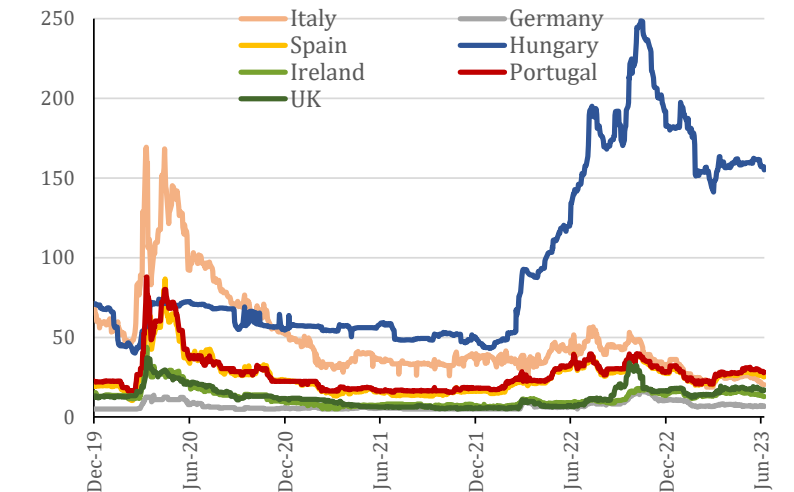


Source: ECB and Refinitiv Eikon.

6.5 Overnight index swap (OIS) yield curve: 14 June 2023



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



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 include s 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 Españoles. 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 Hungary: Turnover on MTS Hungary and Keler OTC.

5.19 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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