

Q2 2023

# Government Bond Data Report

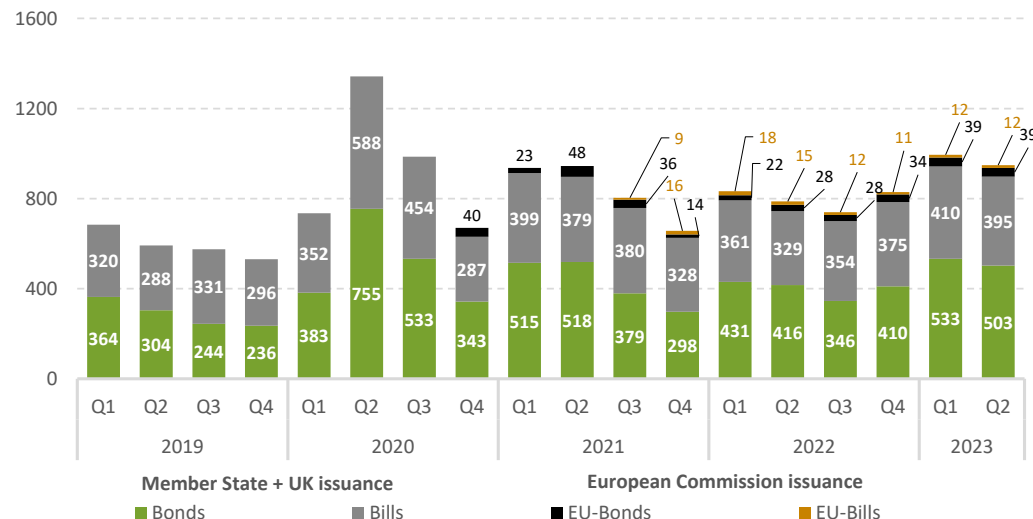
European market data update



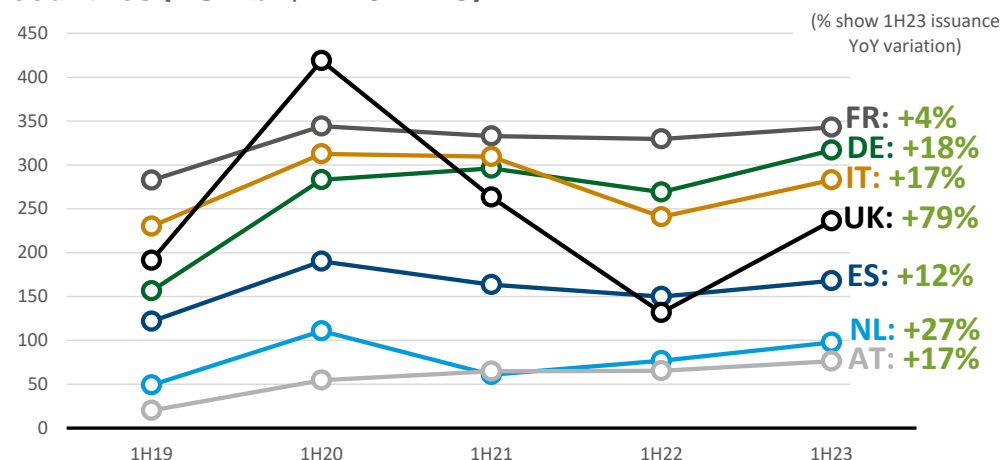
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# Highlights and Market Environment

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



## 2. 1H total (bond and bill) government issuance in selected countries (EUR bn, 1H19-1H23)



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

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

EUR 949 bn bonds and bills issued in Q2 2023 as European quarterly issuance volumes increase 20% (YoY)

Total quarterly gross issuance in Europe (EU Member States, UK and EU Commission) was EUR 949 bn during Q2 2023, up 20% compared to Q2 2022 (YoY) and down 5% from Q1 2023 (QoQ) (see Chart 1).

Excluding institutional issuance from the EU Commission, EU Member States and the UK issued EUR 898 bn in bonds and bills during 2Q23<sup>1</sup>, representing an increase of 21% (YoY) and a decrease of 5% (QoQ).

The EU Commission issued an additional EUR 39 bn in EU-bonds and EUR 12 bn in EU-bills during Q2 2023, which represented 5.3% of total European sovereign issuance in Q2 2023, up from 5.2% in both 1Q23 and 2022 FY.

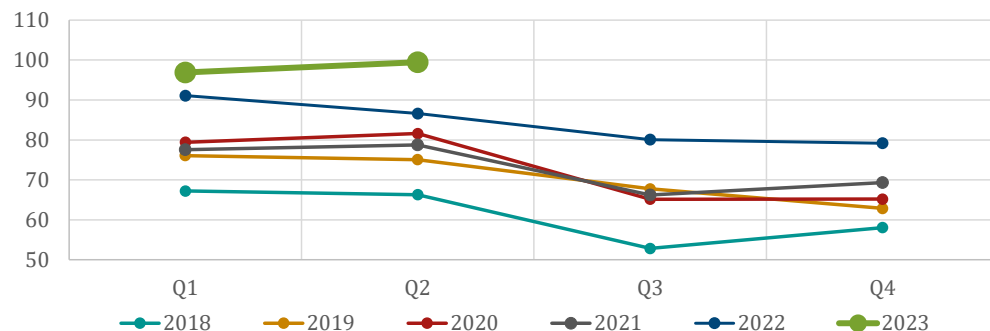
Almost all European countries have experienced a nominal surge in gross bond and bill issuance during the first half of 2023. For most countries, this has marked a reversal in the post-pandemic normalisation of issuance volumes observed in 2021-22.

The largest increase in total (bond and bill) issuance was in the UK, with volumes up 78% in H1 2023, compared to the first half of 2022, but volumes remained below H1 volumes observed in 2020 and 2021. In Germany and Austria, issued volumes rose to record-highs in the first six months of 2023, outsizing first-half issuance observed during the pandemic.

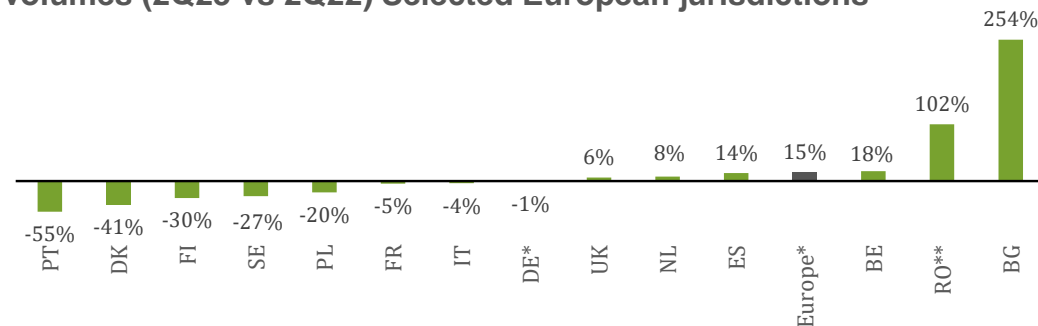
Bond and bill issuance in Spain and France has remained more stable, rising 12% and 4% during 1H23 compared to 1H22, with total issued volumes comparable to previous years.

## Highlights and Market Environment

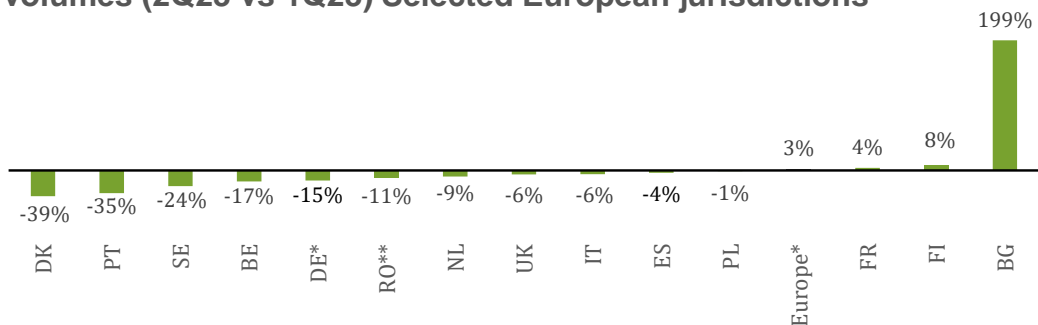
### 3. European Government bond average daily trading volumes (EUR bn)



### 4. Annual changes in Government Bond average daily trading volumes (2Q23 vs 2Q22) Selected European jurisdictions



### 5. Quarterly changes in Government Bond average daily trading volumes (2Q23 vs 1Q23) 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.

## Highest average daily trading volume in European (EU+UK) government bonds during Q2 2023

According to MarketAxess TraX, trading volumes continued to be robust during Q2 2023, increasing 3% (QoQ) and 15% (YoY).

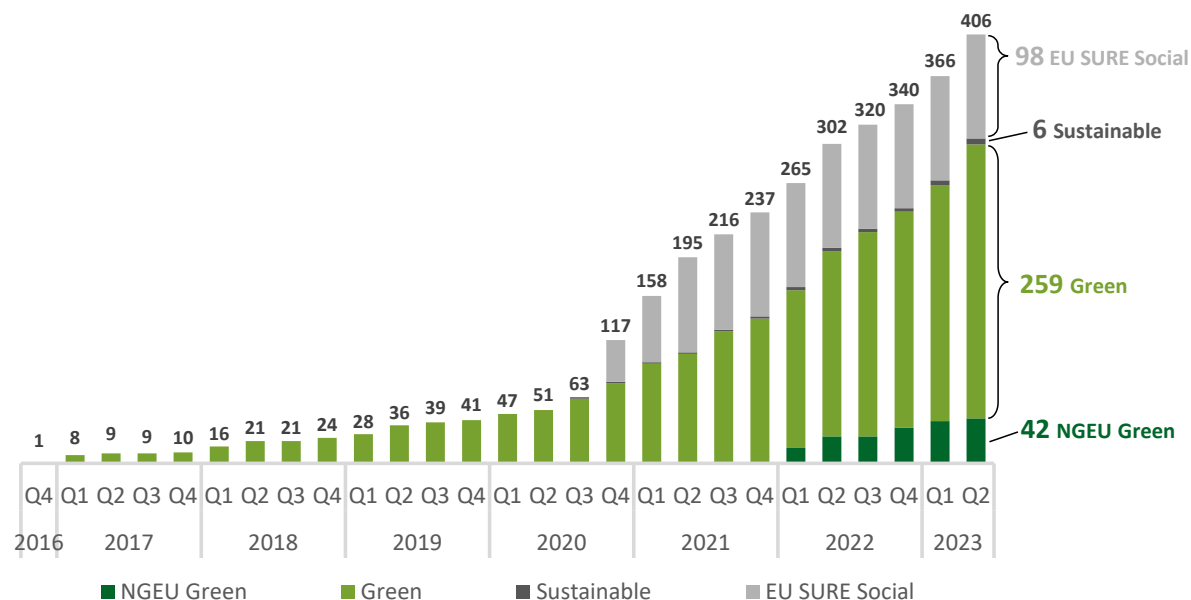
Sovereign bond trading, as recorded by MarketAxess TraX, has surged during H1 2023 with trading taking place in Q2 and Q1 this year representing the highest and second-highest average daily trading volumes, respectively, for any quarter since 2014 (see Chart 3).

According to Tradeweb, European sovereign trading volumes increased 14% (YoY) during 2Q23. In comparison, average daily traded volumes for most major European markets, on an individual basis, have increased by a lesser degree, or declined slightly, in 2Q23 (see Chart 4). As such, the increase in total European trading may be driven by a shift towards electrification of trading in the European sovereign market, rather than an overall increase in volumes. Additionally, given the differences in the aggregation basis across jurisdictions, trading data is not fully comparable between countries and sources.

**Average daily trading volumes** of European government bonds increased by 15% YoY during 2Q23, driven by a significant increase in trading in Bulgaria (254% YoY), Romania (102% YoY), Belgium (18% YoY), Spain (14% YoY), the Netherlands (8% YoY) and the UK (6% YoY). There was a decrease in trading in Portugal (-55% YoY), Denmark (-41%), Finland (-30% YoY), Sweden (-27% YoY), Poland (-20% YoY) and France (-5% YoY).

In Bulgaria, government bond trading increased significantly during 2Q23, with volumes up 254% (YoY) and 199% (QoQ). Very high levels of trading in Bulgaria continue to be driven by parliamentary elections held in April (the fifth election in 2 years) and domestic efforts to form a coalition government (which was voted in during early June) (see Chart 5).

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



Source: Refinitiv Eikon and European Commission

**Outstanding amount of European government ESG bonds surpass EUR 406 bn as issuance by EU Member States and the UK reaches highest-ever quarterly volume.**

Outstanding amount of ESG government bonds reached EUR 406 bn during 2Q23 (see chart 6), with volumes driven by new green bonds issued by Germany (EUR 11.8 bn), Italy (EUR 10.0 bn) and Austria (EUR 3.0 bn) with additional tap issuance by the UK (EUR 7.0 bn), France (EUR 2.6 bn), Spain (EUR 1.4 bn) and the European Commission (EUR 1.7 bn) (see Chart 6).

Austria continued rolling over green bill volumes at the point of maturity, issuing an additional EUR 1.5 bn in green bills during 2Q23.

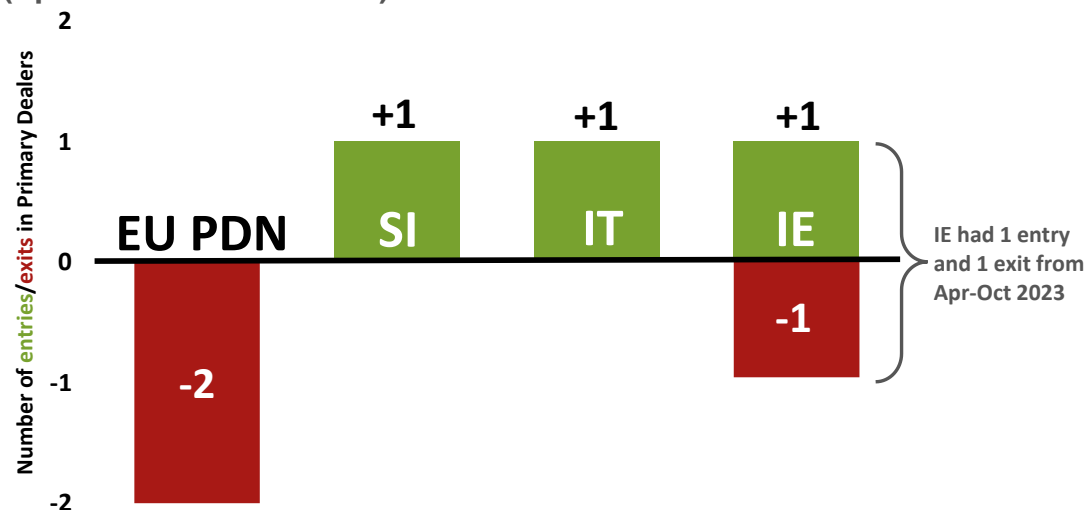
Cyprus became the sixteenth EU sovereign to enter ESG markets in April 2023, issuing an inaugural sustainable government bond (EUR 1.0 bn), representing the third of its kind in the EU, after the Luxembourgish and Slovenian sustainable bonds were issued in 2020 and 2021 respectively.

EU Member States (excluding the EU Commission) and the UK issued EUR 38.3 bn in total new ESG volumes during 2Q23, the highest quarterly amount on record. Once volumes issued by the EU Commission are considered, 2Q23 represents the third-largest quarterly volume on record, after 4Q20 and 1Q21. However, the inauguration of the EU Commission's SURE scheme was in 4Q20 and accounted for 65.4% of total European sovereign ESG issuance during 4Q20-1Q21. In comparison, the EU Commission accounted for just 4.2% of total ESG volumes issued by the sovereign sector in 2Q23.

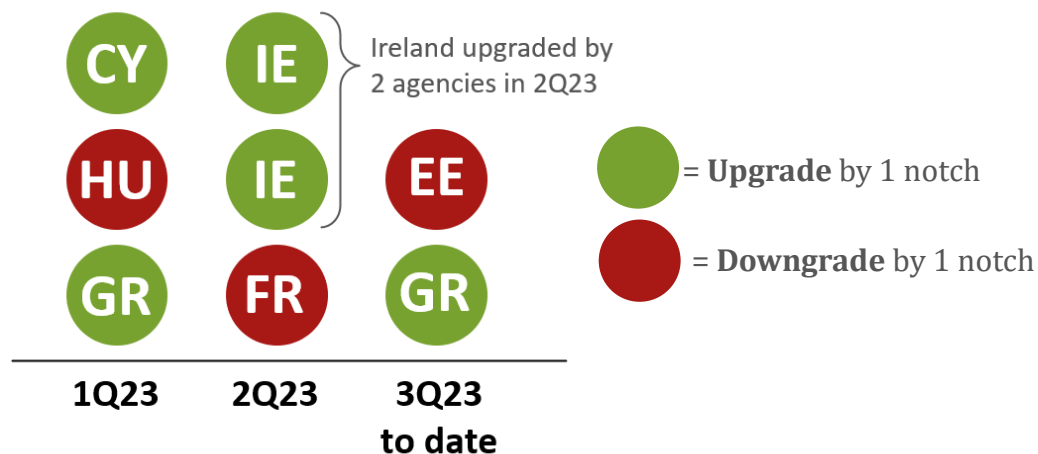


## Highlights and Market Environment

### 7. Number of Exits and Entries in European Primary Dealership (April 2023-October 2023)



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



Source: AFME HRF Table and National DMOs [Chart 7]. Fitch, Moody's, S&P [Chart 8].

### Net change of zero primary dealers in Europe from April 2023 to October 2023

From April 2023 to October 2023, there were 3 exits and 3 entries of banks to European Primary Dealer systems, affecting sovereign debt markets in Slovenia, Italy, Ireland and the European Primary Dealer Network (EU PDN) (see Chart 7).

This follows 3 exits and no entries of banks in European primary dealership between January 2023 and April 2023.

After the most recent changes, the EU PDN now has 37 primary dealers, the lowest since June 2021 when the network was inaugurated.

Italy has had the largest net increase in primary dealership among European countries in recent years, with 20 primary dealers active in the Italian sovereign market as of October 2023, up from 16 in January 2022.

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

This follows 2 upgrades and 1 downgrade in 1Q23, bringing the 2023 year-to-date total to 5 upgrades and 3 downgrades (there was 1 further upgrade and 1 downgrade in 3Q23 to date) (see Chart 8).

## 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:

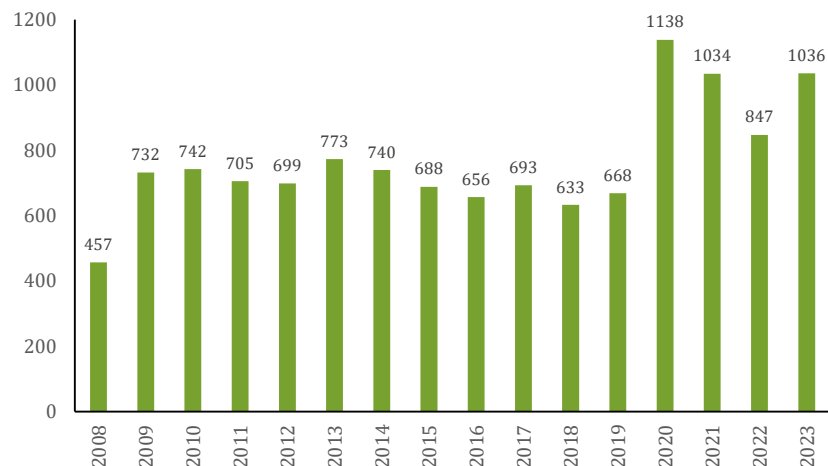
- Basel III
- CSDR
- Fundamental Review of the Trading Book (FRTB)
- Prospectus Regulation
- MIFIR Level 2 Changes

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

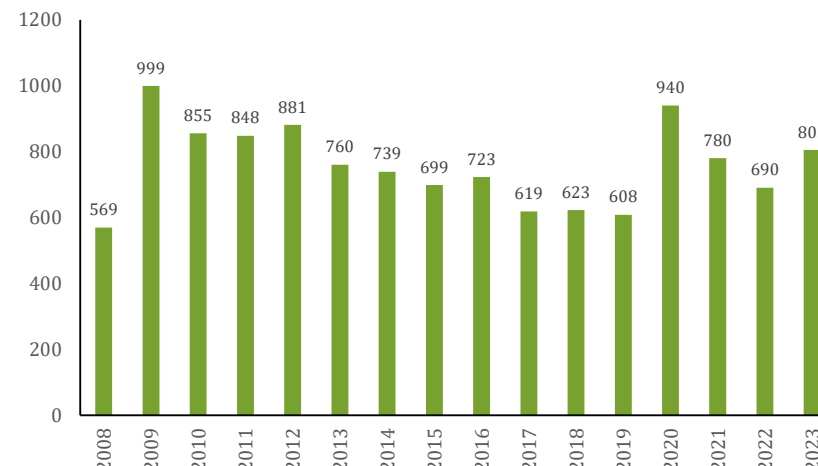
# Issuance



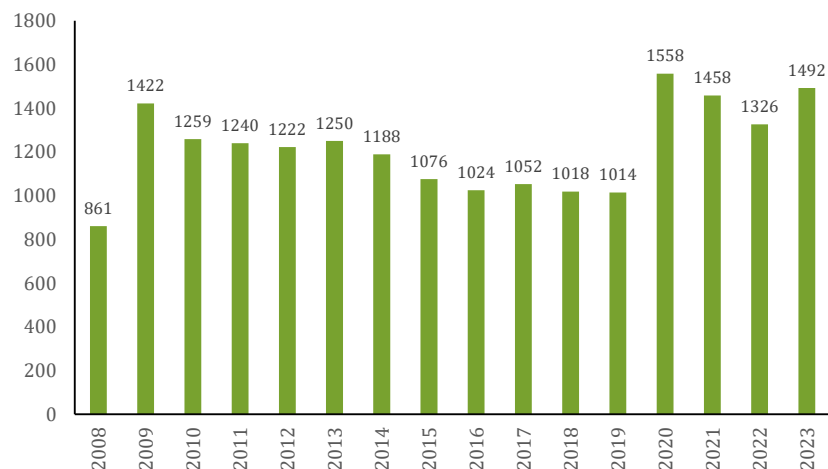
## 1.1 European (EU+UK) Government Bond gross issuance (H1, EUR bn)



## 1.2 European (EU+UK) Treasury Bills gross issuance (H1, EUR bn)



## 1.3 Eurozone bonds and bills gross issuance (H1, EUR bn)

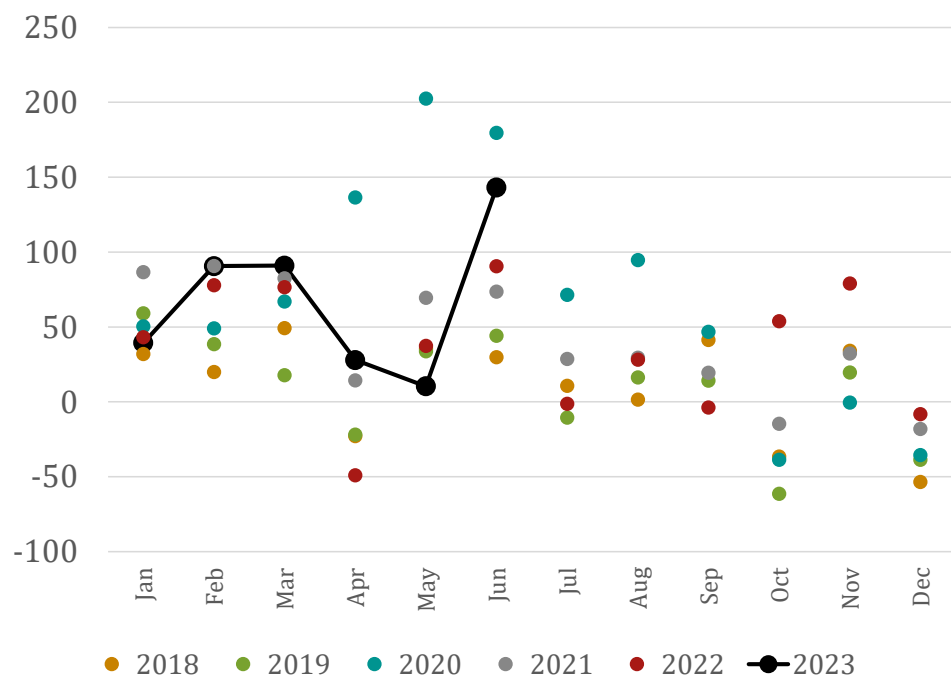


## 1.4 Non-Eurozone bonds and bills gross issuance (H1, EUR bn)

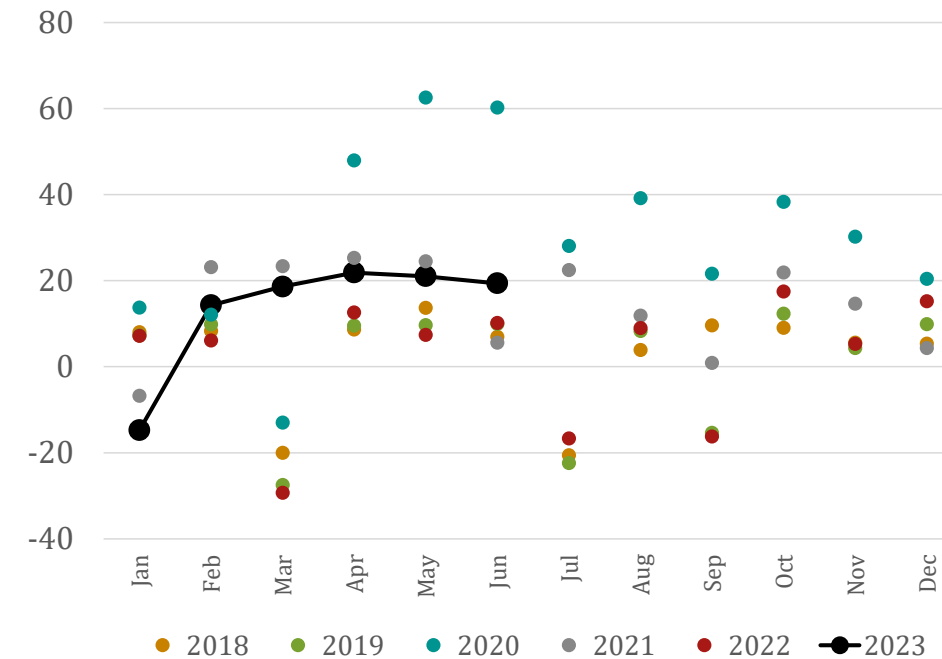


Source: ECB, National Debt Management Offices and UK Debt Management Office. Data on this page excludes EU Commission issuance (ie. NGEU, SURE) and includes debt issued from EU Member States and the UK only.

**1.5 Euro area net sovereign debt issuance (EUR bn)**



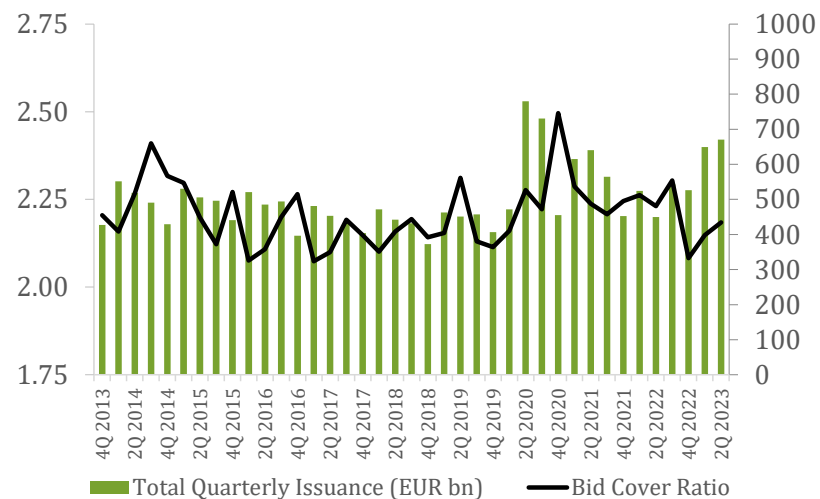
**1.6 UK Gilts net issuance (GBP bn)**



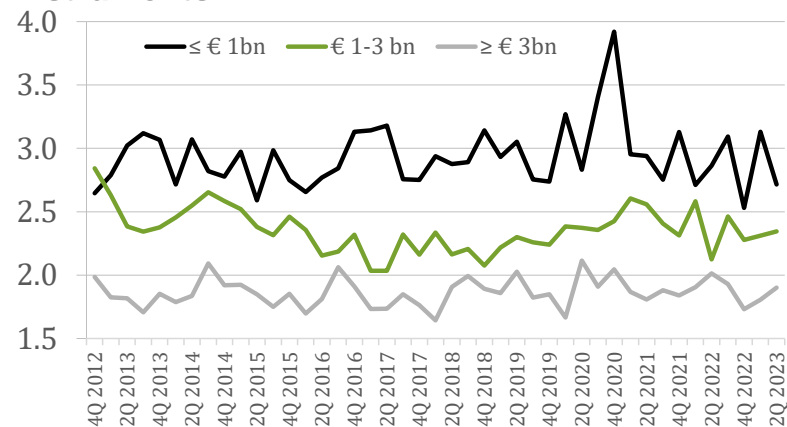
Source: ECB and UK Debt Management Office.

# Recent Auctions and Primary Dealers

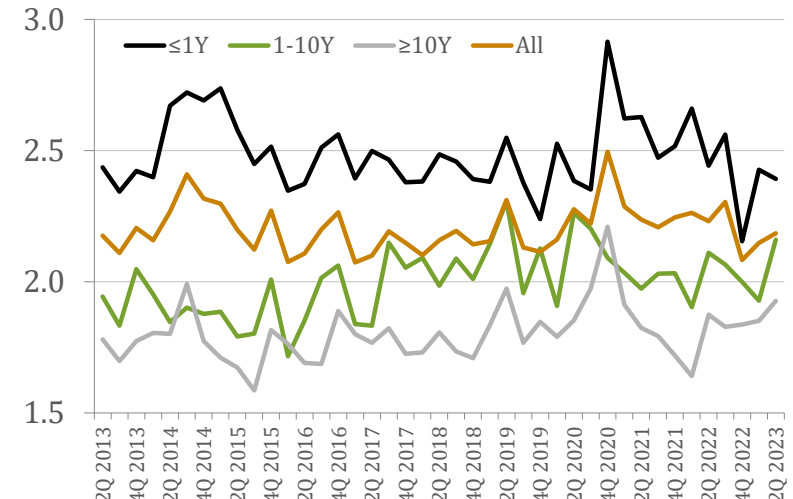
**2.1 Average bid-cover ratios and issued volumes in selected jurisdictions (EUR bn)**



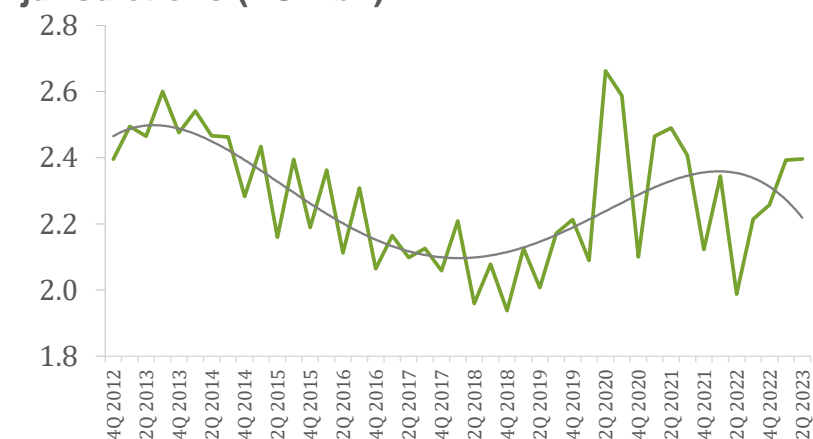
**2.3 Average bid-cover ratios by size of issued instruments**



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

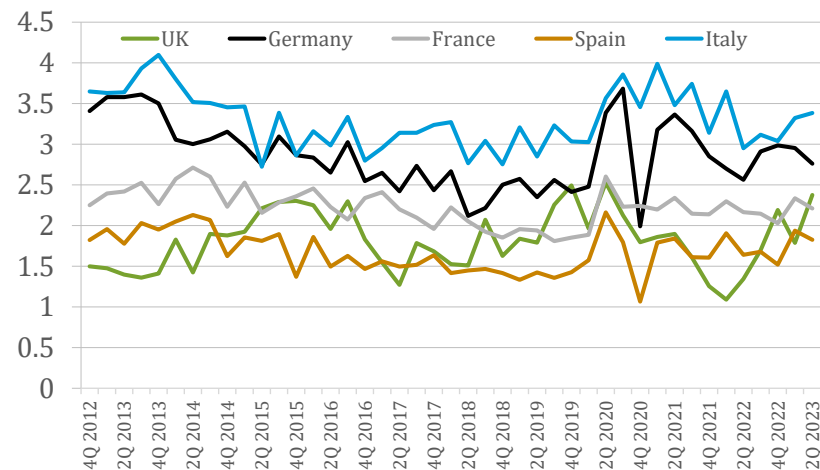


**2.4 Average auction size in selected European jurisdictions (EUR bn)**

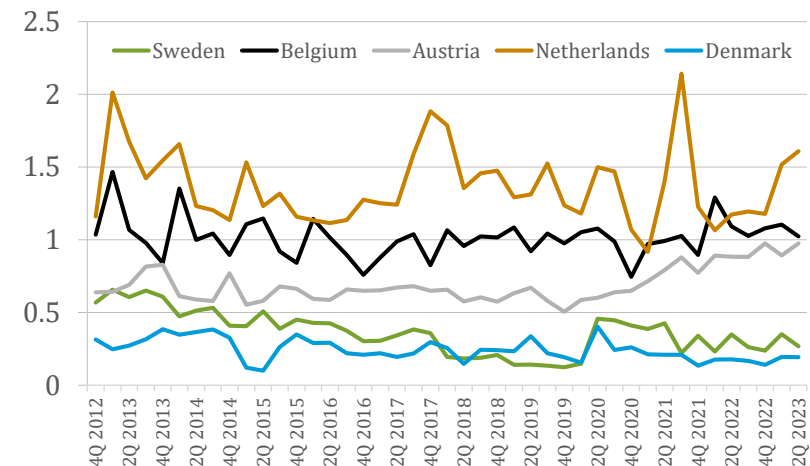


Source: Refinitiv Eikon. Weighted Average of UK, DE, FR, ES, IT, BE, SE, NL, DK and AT bonds and bills. In chart 2.4 polynomial trendline shown in grey.

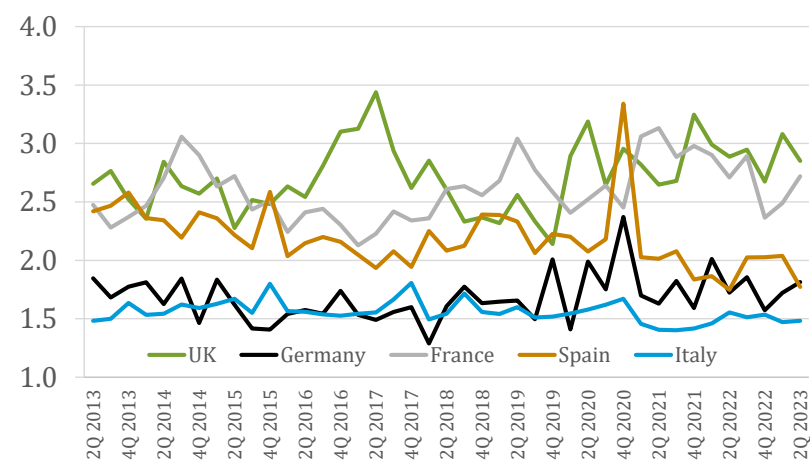
**2.5 Average auction size in selected jurisdictions (EUR bn)**



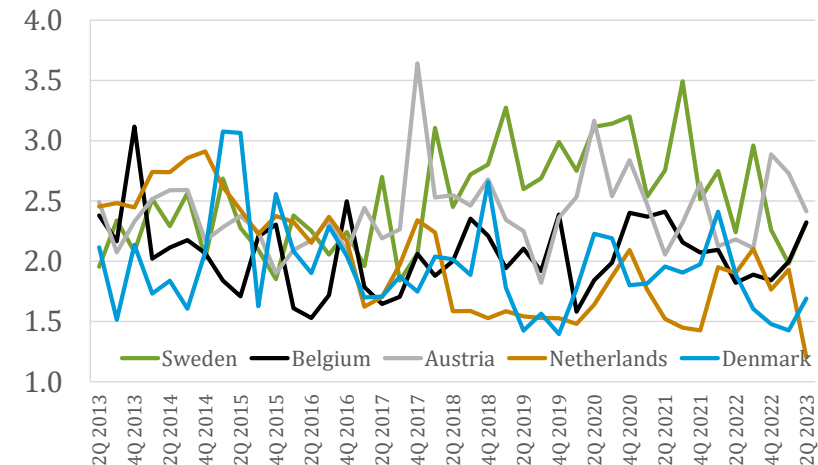
**2.6 Average auction size in selected jurisdictions (EUR bn)**



**2.7 Average bid-cover ratios by jurisdictions**

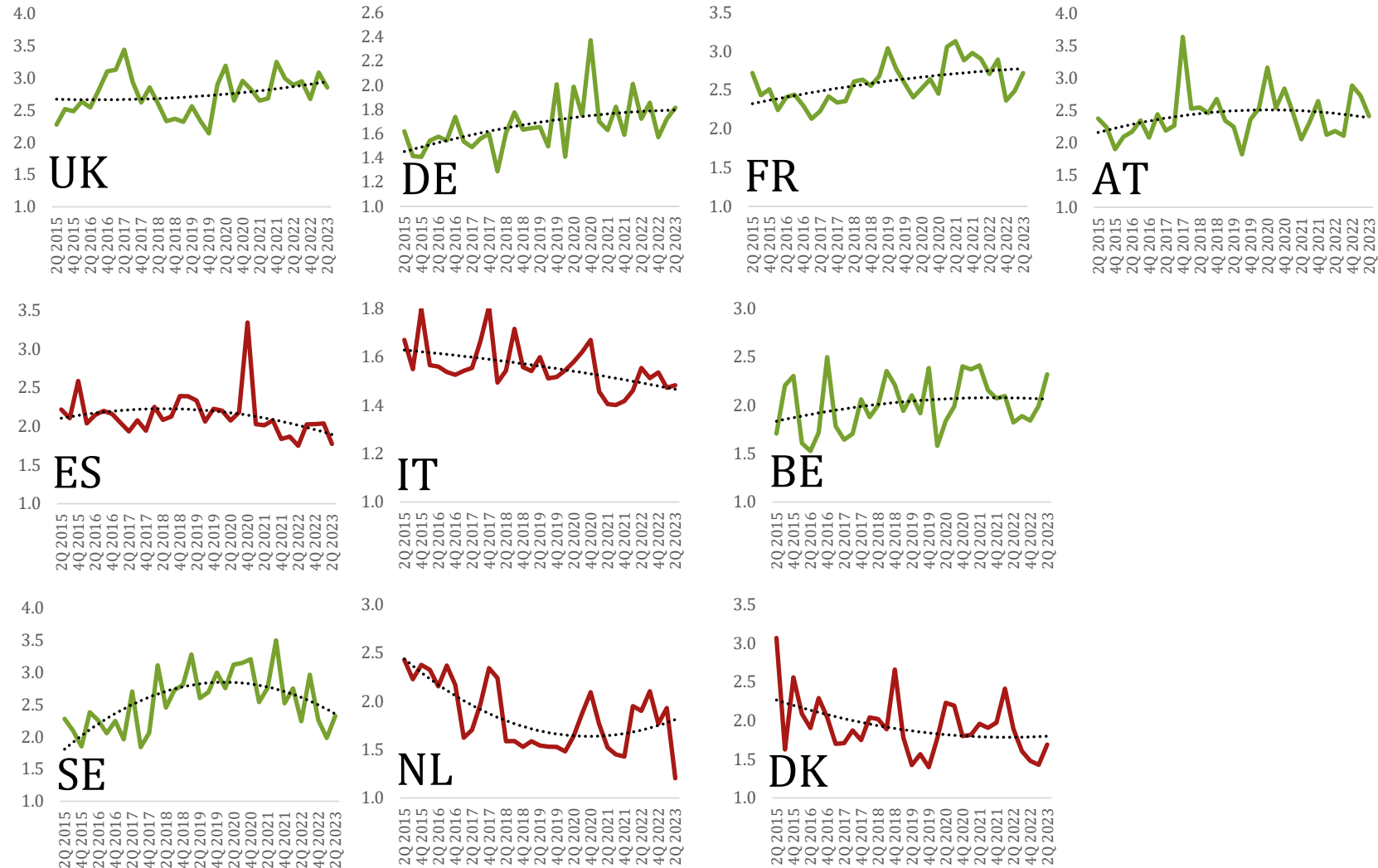


**2.8 Average bid-cover ratios by jurisdictions**



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: 2015-23

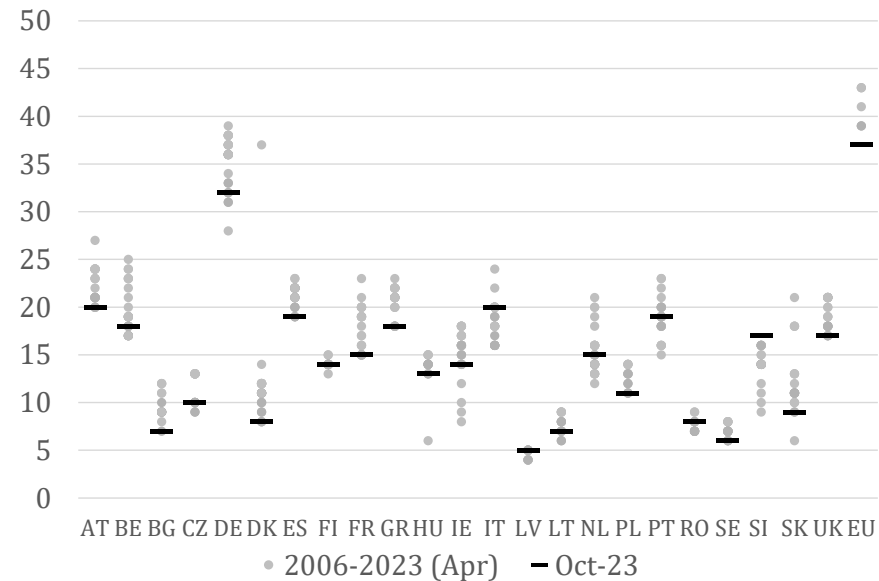


Source: Refinitiv Eikon. **Green** indicates end value of trendline above starting value, **red** indicates end value of trendline below starting value

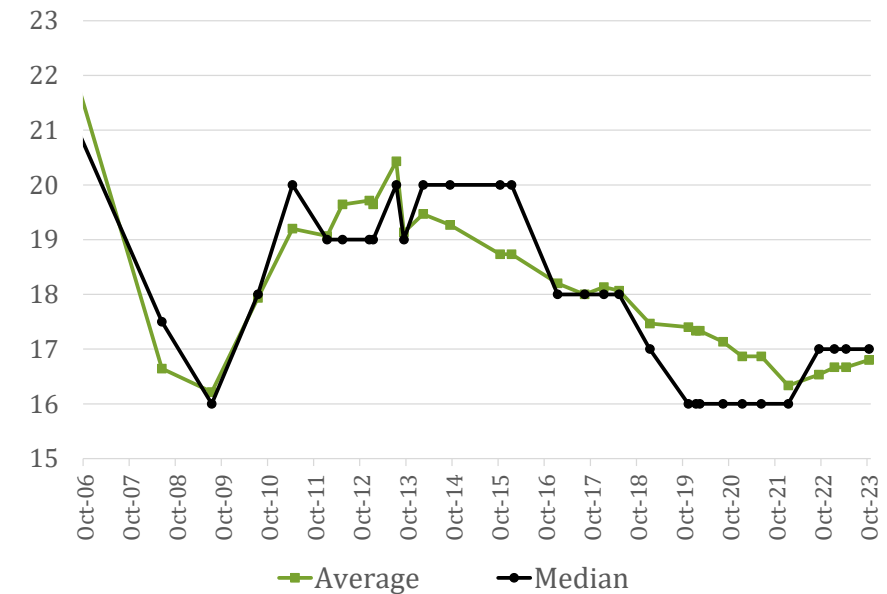


# Primary Dealers: European countries and EU

**2.10 Number of primary dealers relative to historic number**

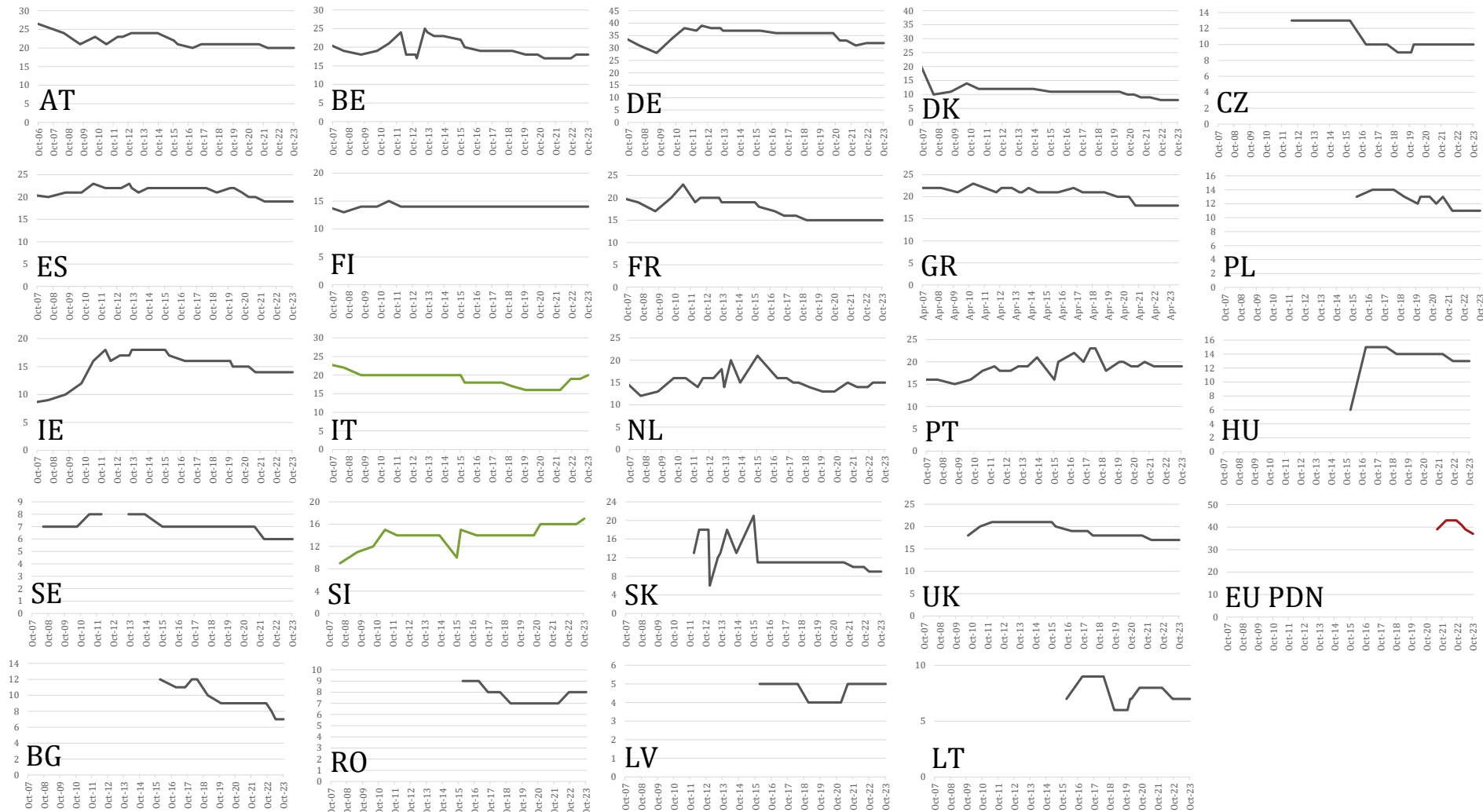


**2.11 Average and median number of primary dealers in selected European countries**



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 October 2023.

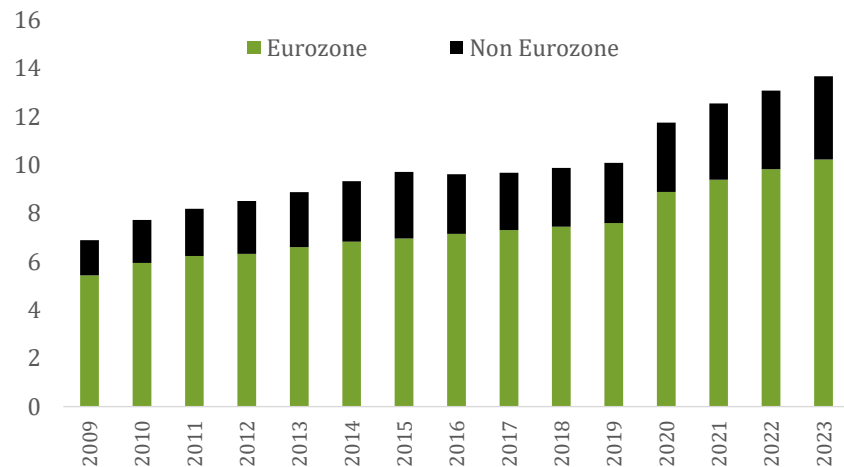
## 2.12 Number of primary dealers in Europe by country: 2006-23



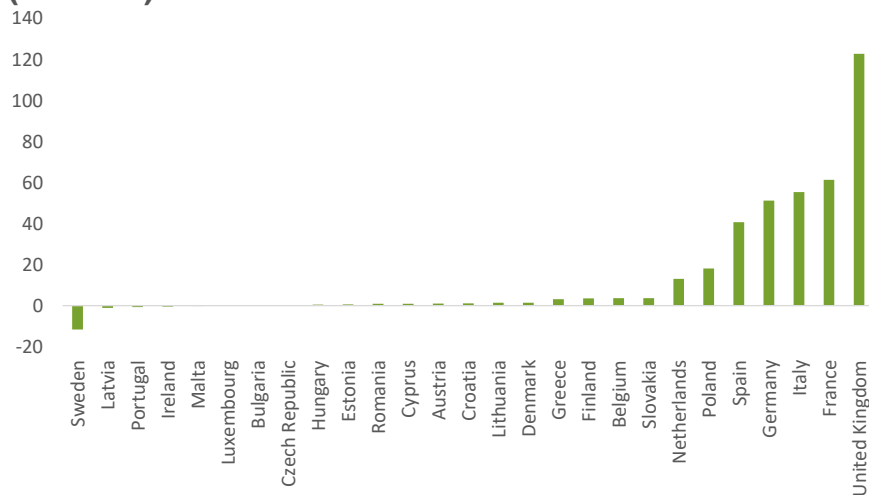
Source: AFME HRF Table and National DMOs. The gap in the line for Sweden indicates data was not recorded in the relevant period. **Chart colour indicates net change in PDs since April 2023.** **Green** indicates an increase; **red** indicates a decrease and **grey** indicates no change. Latest data as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

# Outstandings

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

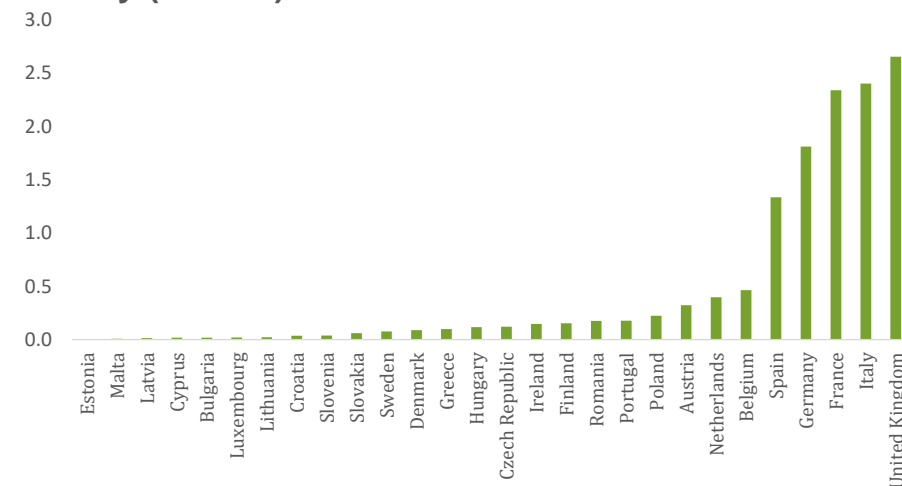


### 3.3 Change in outstandings 1Q23 to 2Q23 (EUR bn)

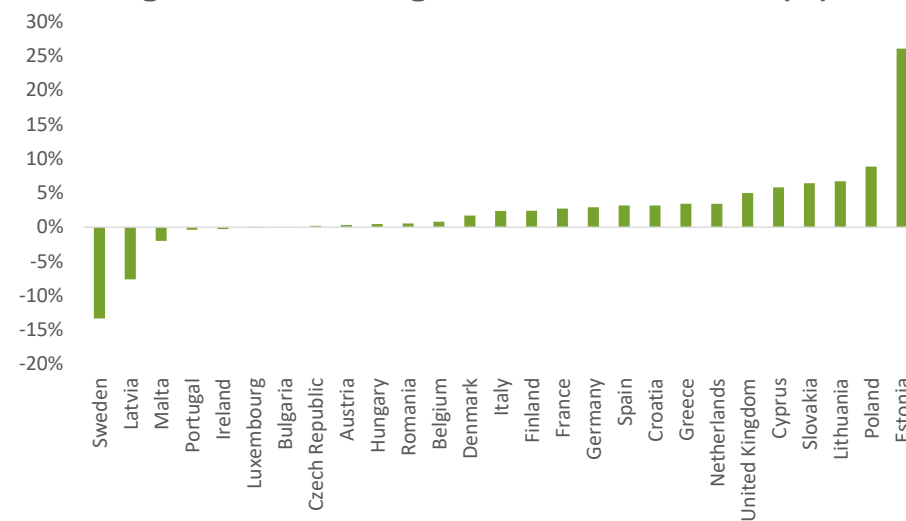


Source: ECB, Refinitiv Eikon and UK DMO.

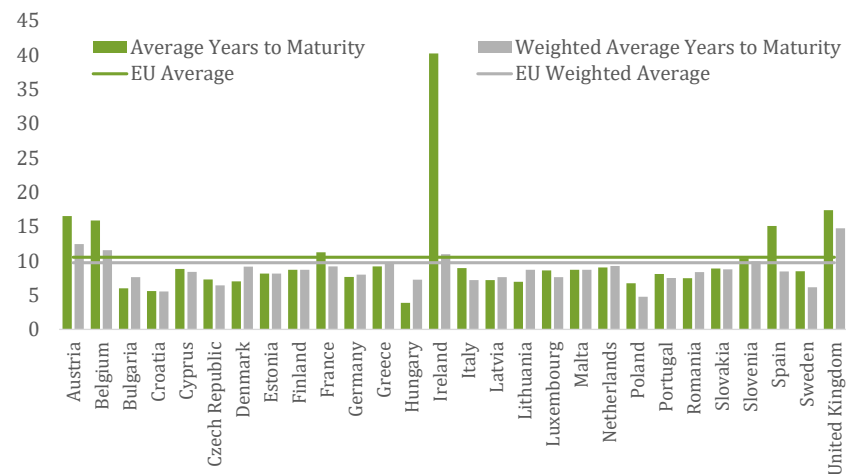
### 3.2 European government bonds outstanding by country (EUR tn)



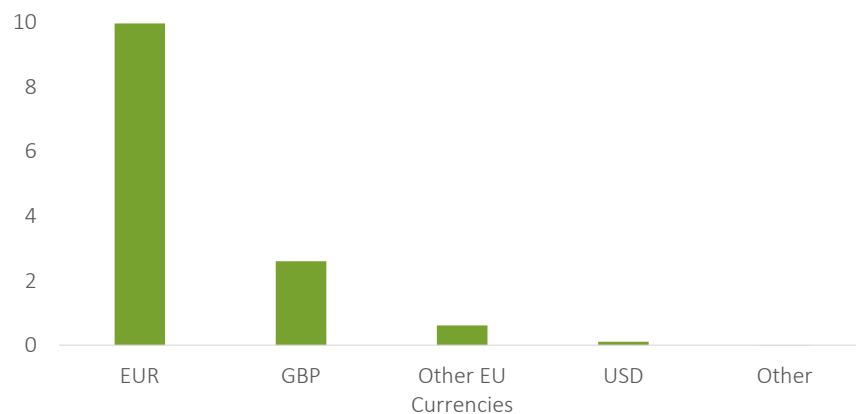
### 3.4 Change in outstandings from 1Q23 to 2Q23 (%)



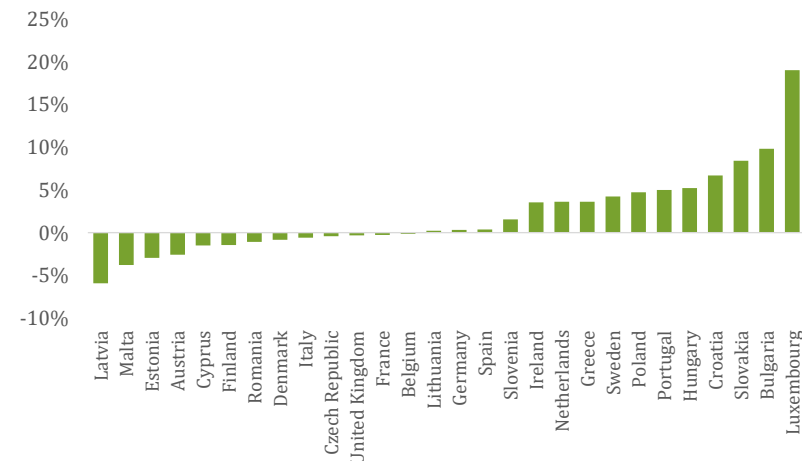
### 3.5 Average years to maturity for outstanding government bonds in European (EU+UK) countries



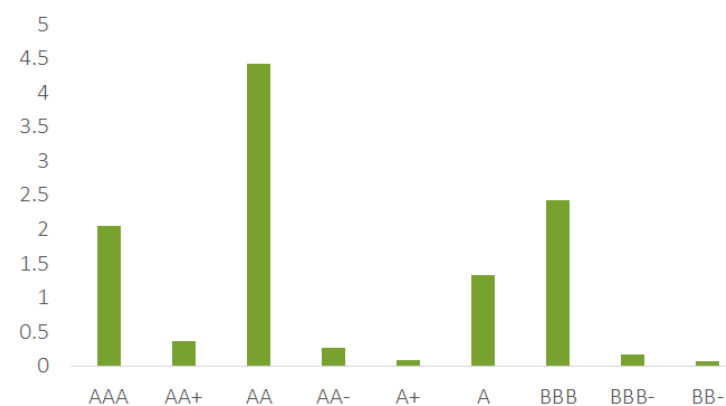
### 3.7 European government bonds outstanding by currency (EUR tn)



### 3.6 Quarterly change in weighted average years to maturity for outstanding government bonds 1Q23 to 2Q23



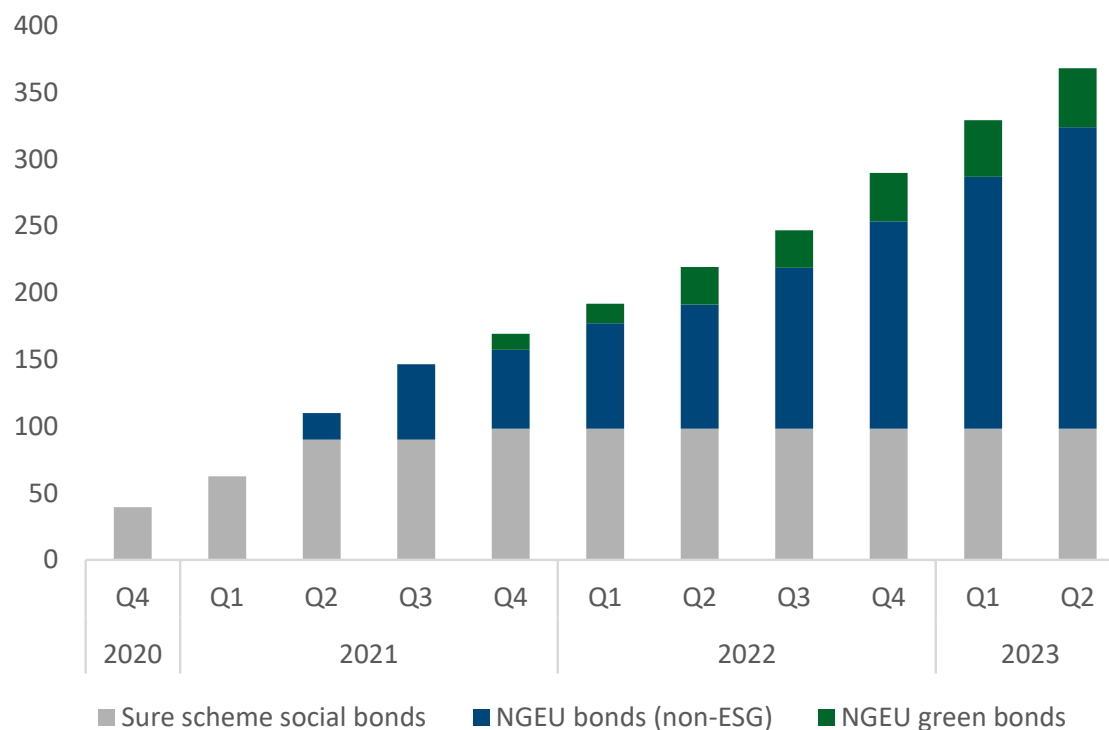
### 3.8 European government bonds outstanding by current rating of issuer (EUR tn)



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)**

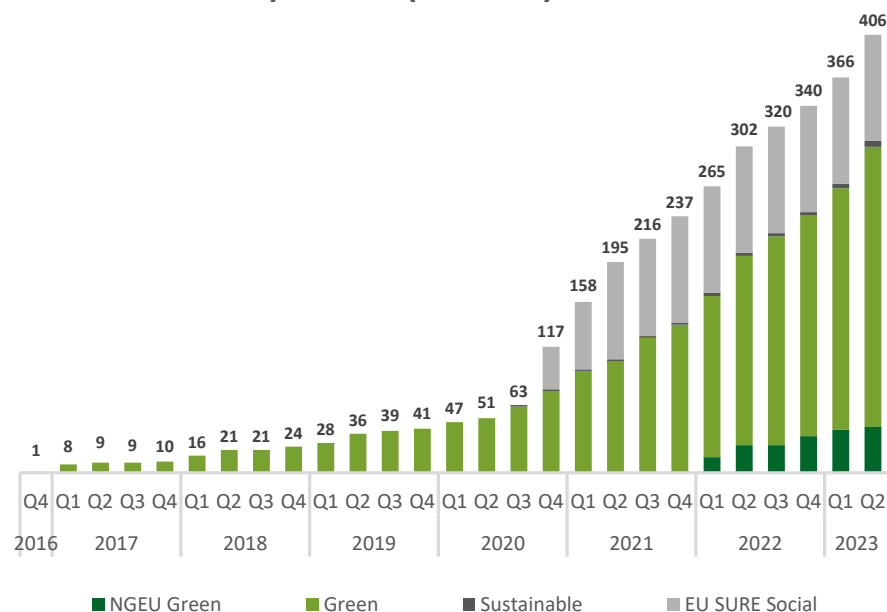


Source: European Commission. **NGEU** refers to bond issuance by the European Commission under the NextGenerationEU scheme.

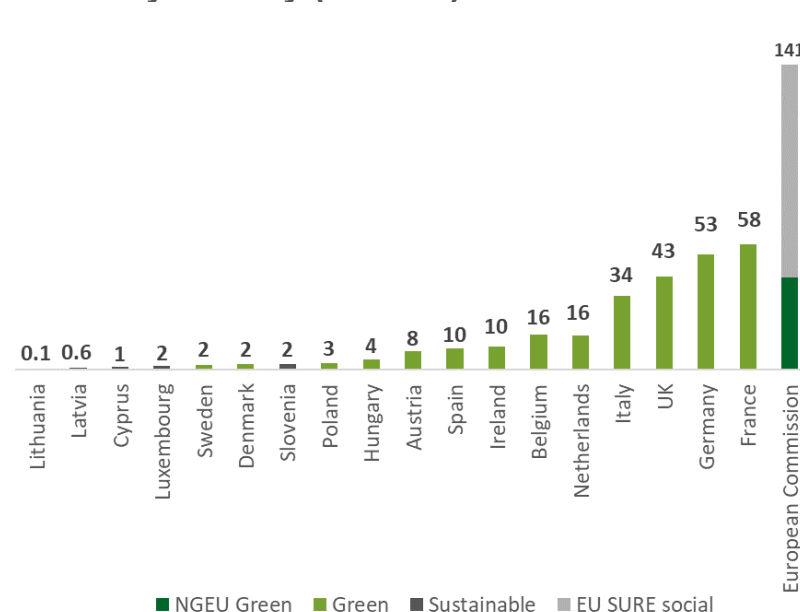


# Outstandings: ESG Bonds

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



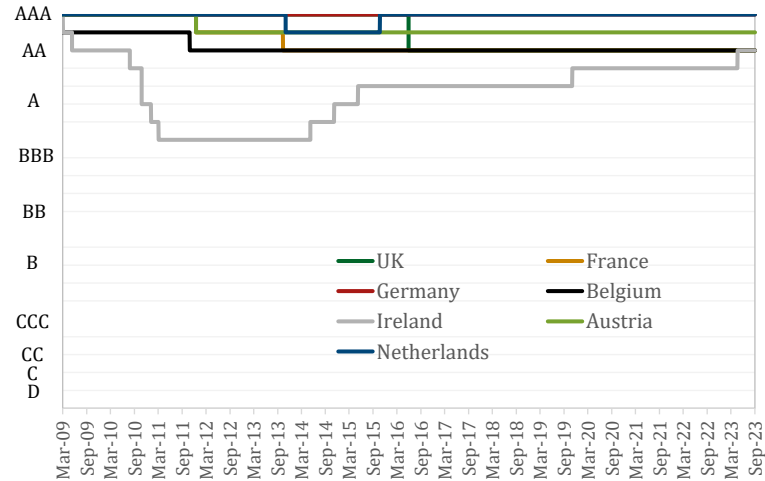
**3.10 European outstanding ESG government bonds by country (EUR bn)**



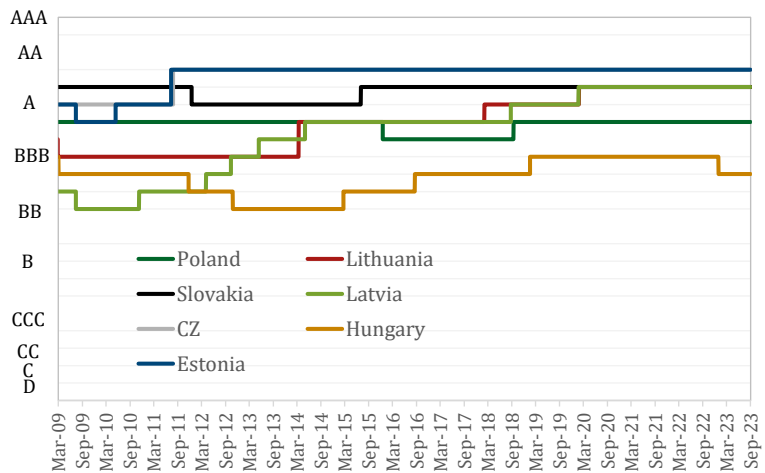
Source: Refinitiv Eikon, European Commission. All outstanding social bond volumes in Chart 3.9 are issued by the European Commission.

# Credit Quality

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

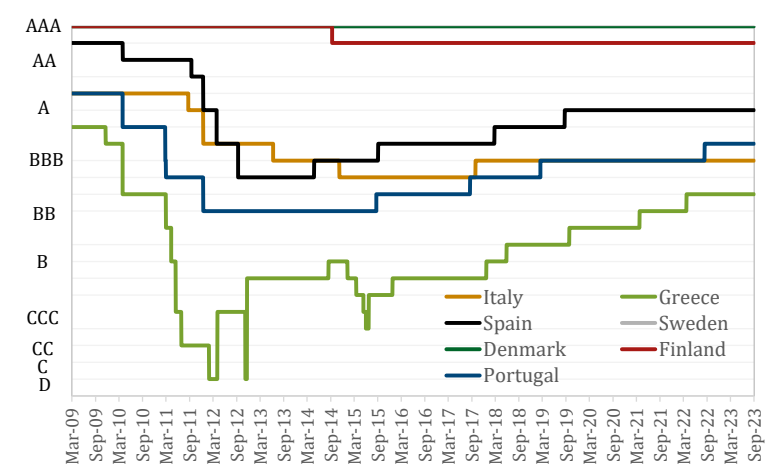


#### 4.3 Long-term sovereign credit rating (Visegrad 4 and Baltic states)

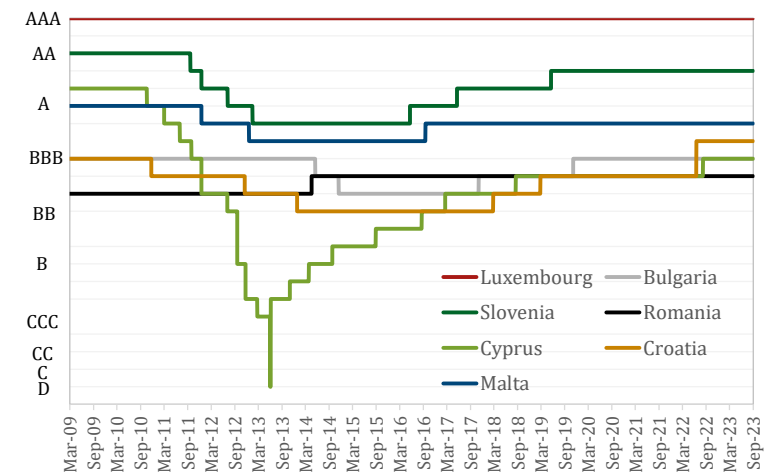


Source: Refinitiv Eikon

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



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



#### 4.5 European rating actions on long-term sovereign credit ratings (2023 YtD)

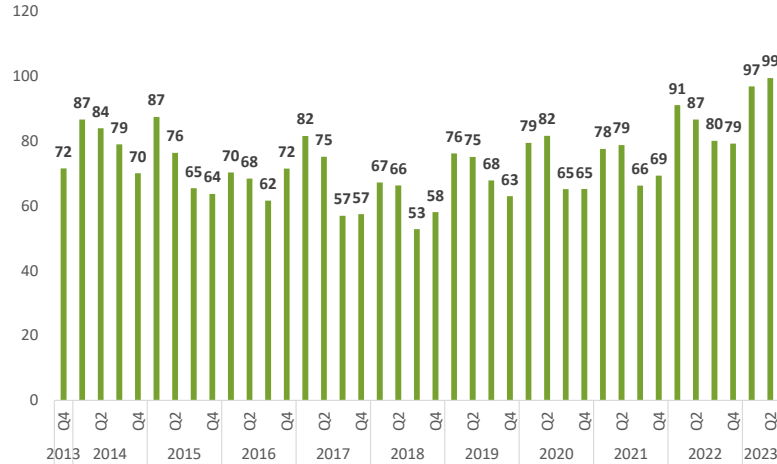
<b>Greece</b>	Upgrade to BB+ (stable) from BB	Jan-23	Fitch	Expected better deficit and debt outturns and projections in 2022-24, thanks to stronger nominal growth, budget over-execution and favourable debt-servicing structure, and an improvement in primary balance implied by the narrowing of the general government deficit.	1Q23
<b>Hungary</b>	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.	
<b>Cyprus</b>	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.	
<b>France</b>	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
<b>Ireland</b>	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.	
<b>Ireland</b>	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	
<b>Estonia</b>	Downgrade to A+ (stable) from AA-	Jul-23	Moody's	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 QtD
<b>Greece</b>	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.	

Source: Fitch, Moody's, S&P

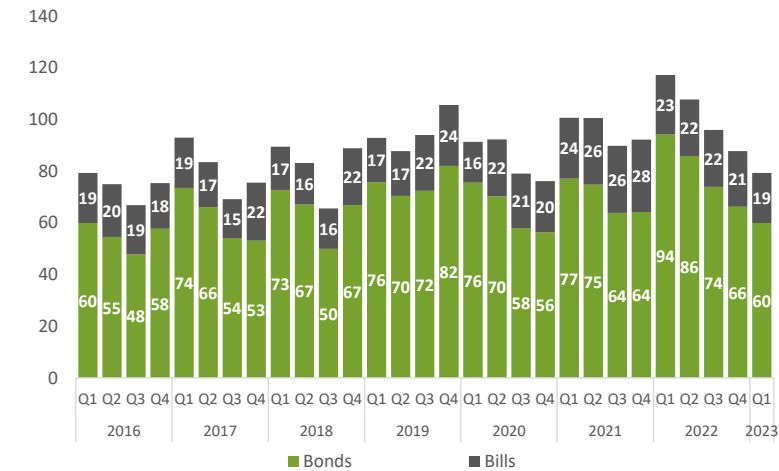
# Secondary Market Trading Volumes and Turnover Ratios

# Secondary Market Trading Volumes and Turnover Ratios

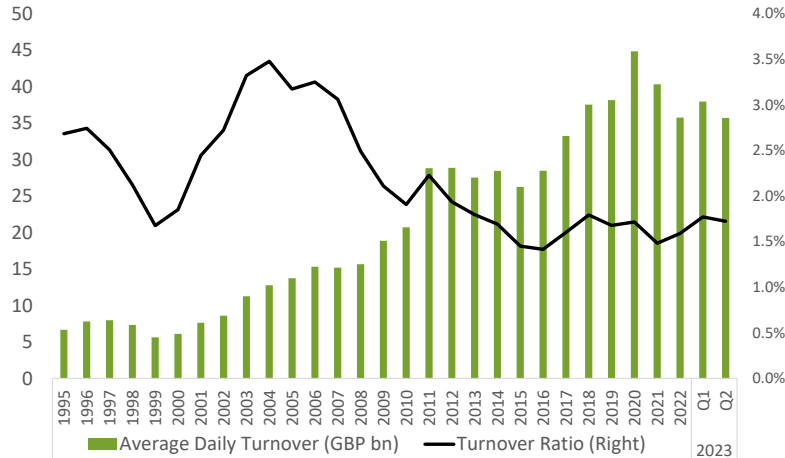
## 5.1 EU + UK: Average daily trading volumes (Government and sovereign bonds, EURbn)



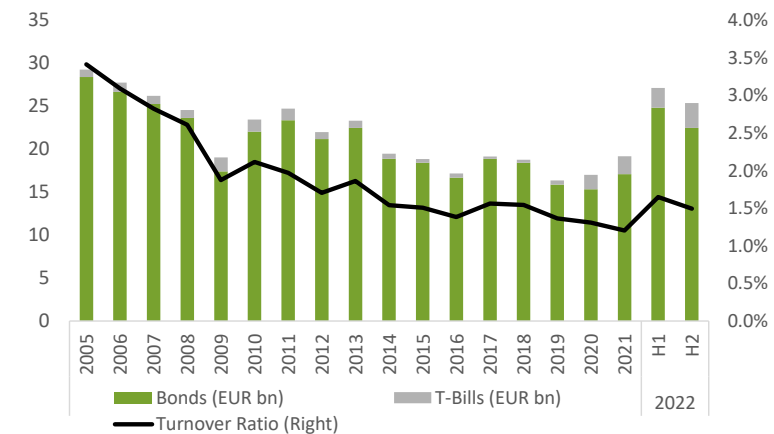
## 5.2 Eurozone: Average daily trading volume (bonds and bills, EURbn)



## 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

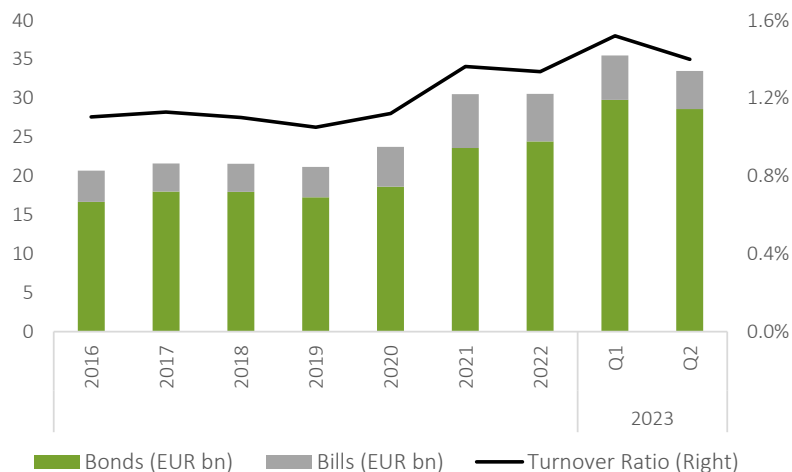


Source: TraX data from MarketAxess, EFC Sub-Committee on EDSM, UK Debt Management Office, Deutsche Finanzagentur, ECB. Individual country volumes do not sum to aggregated trading volume in Chart 5.1 EU+UK, given the differences in the aggregation basis across jurisdictions. The data is not fully comparable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

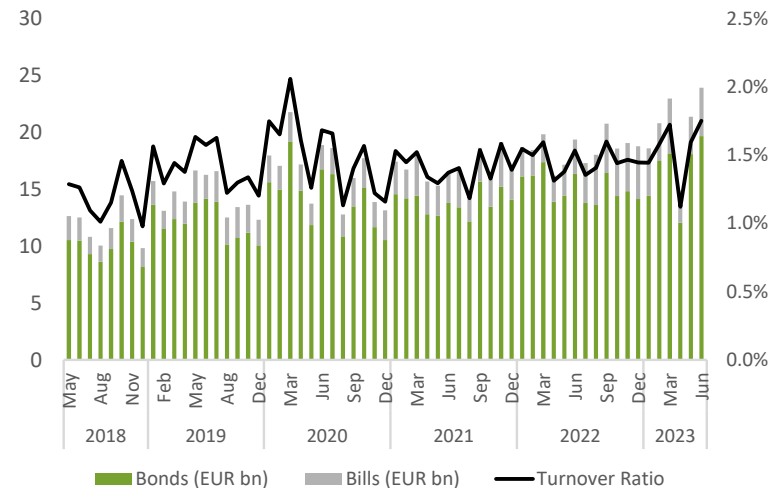


# Secondary Market Trading Volumes and Turnover Ratios

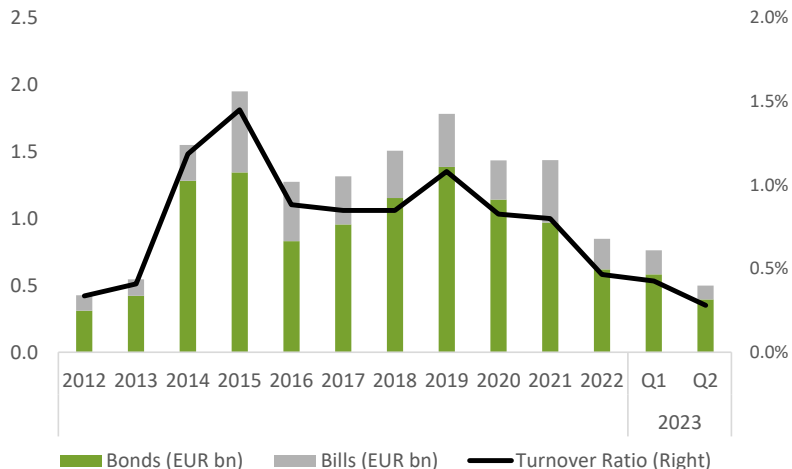
**5.5 Italy: Average daily trading volume (bonds and bills) and turnover ratio**



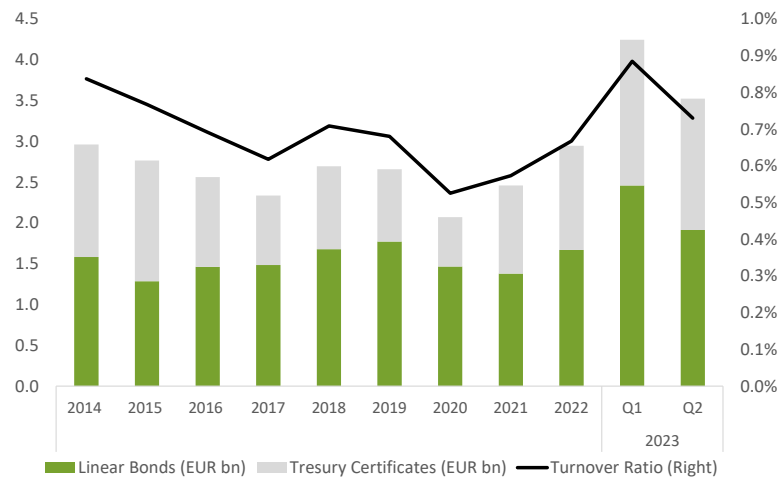
**5.6 Spain: Average daily trading volume and turnover ratio**



**5.7 Portugal: Average daily trading volume and turnover ratio**



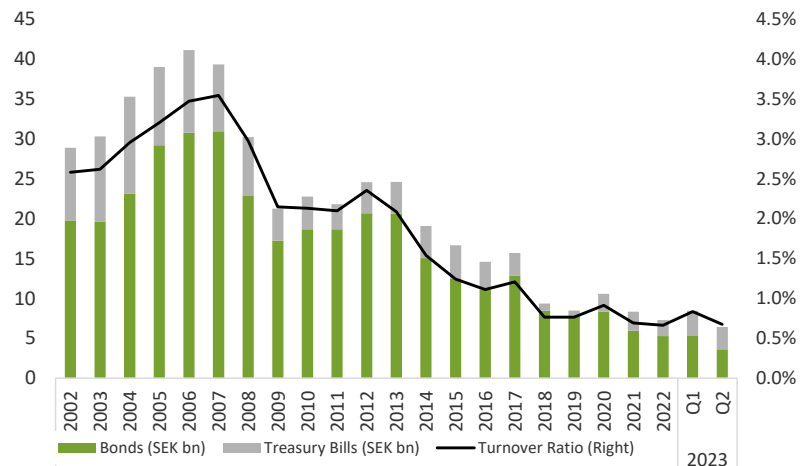
**5.8 Belgium: Average daily trading volume and turnover ratio**



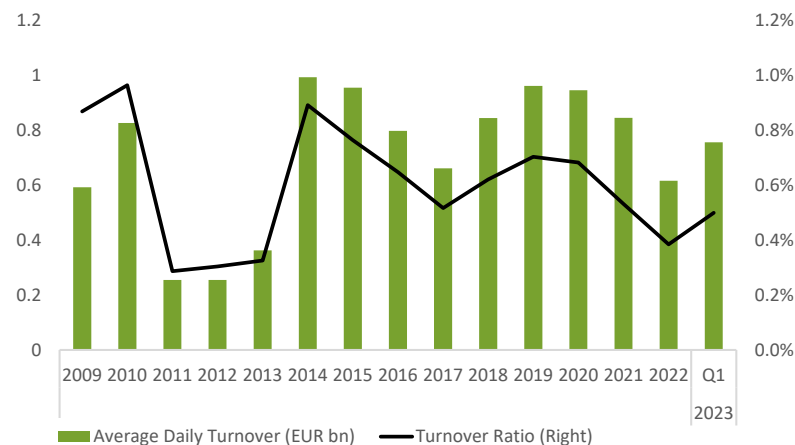
Source: ECB, Italian Dipartimento del Tesoro, BME Market Data and Tesoro Publico de Espana, Agência de Gestão da Tesouraria e da Dívida Pública (IGCP), ECB, Belgian Debt Agency. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries.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

# Secondary Market Trading Volumes and Turnover Ratios

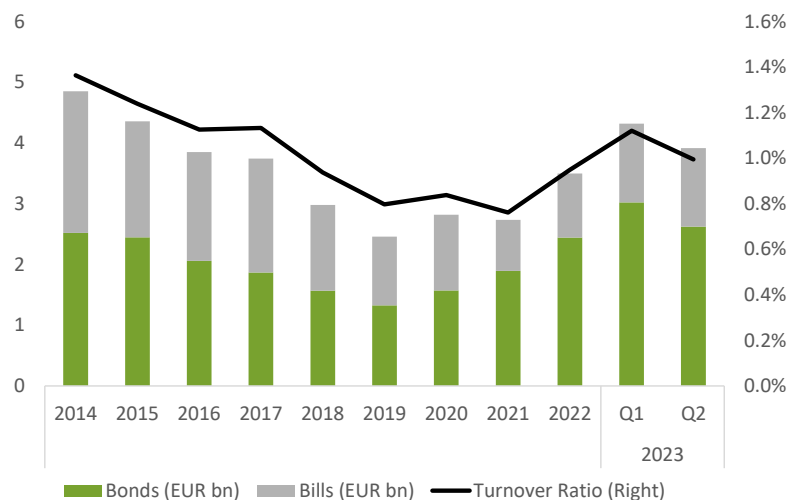
**5.9 Sweden: Average daily trading volume and turnover ratio**



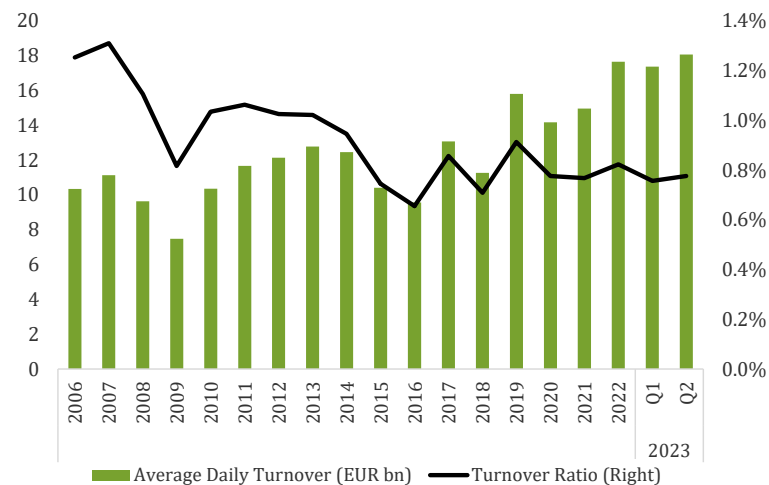
**5.10 Ireland: Average daily trading volume (bonds only) and turnover ratio**



**5.11 Netherlands: Average daily trading volume and turnover ratio**



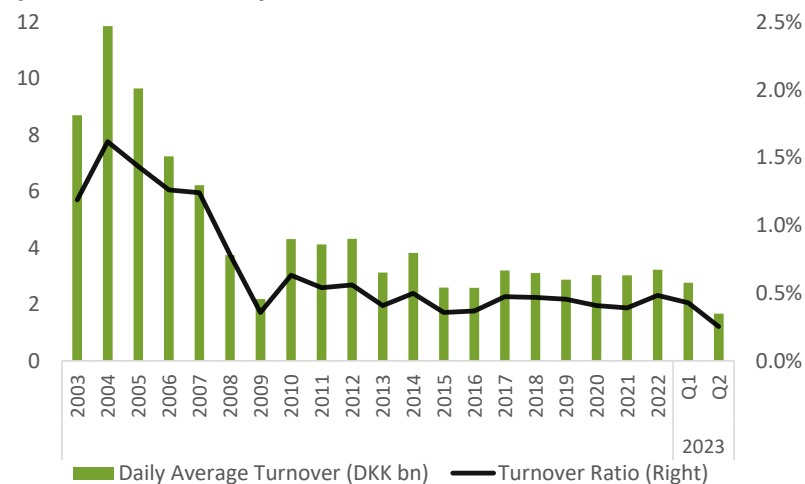
**5.12 France: Average daily trading volume (bonds only) and turnover ratio**



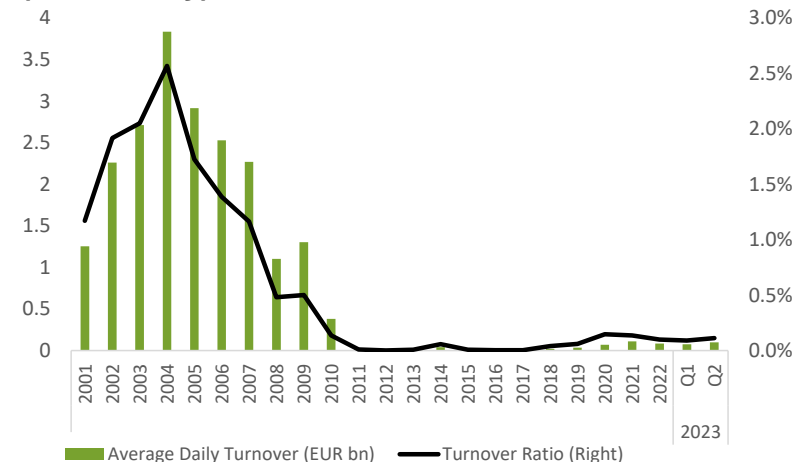
Source: ECB, Swedish National Debt Office (Riksgalden), Irish Stock Exchange, Ministerie van Financiën, Agence France Trésor. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

# Secondary Market Trading Volumes and Turnover Ratios

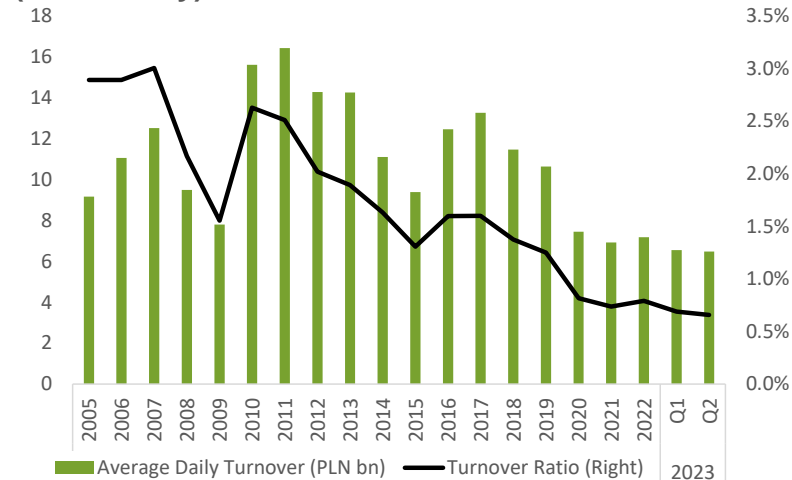
**5.13 Denmark: Average daily trading volume (bonds and bills) and turnover ratio**



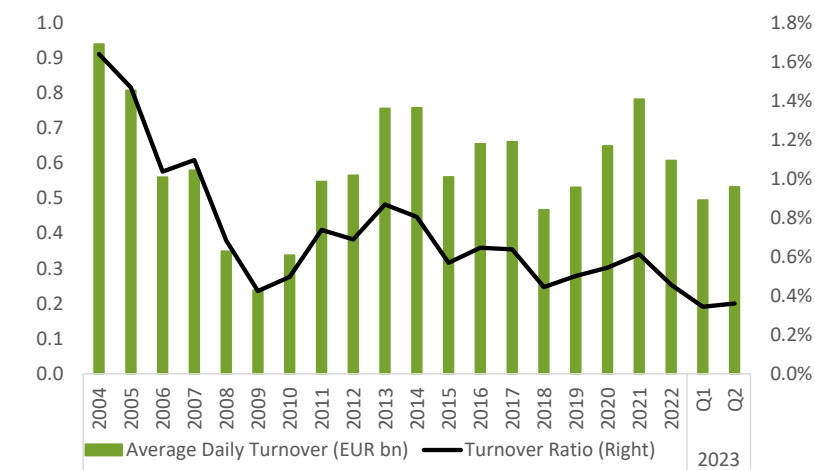
**5.14 Greece: Average daily trading volume (bonds only) and turnover ratio**



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



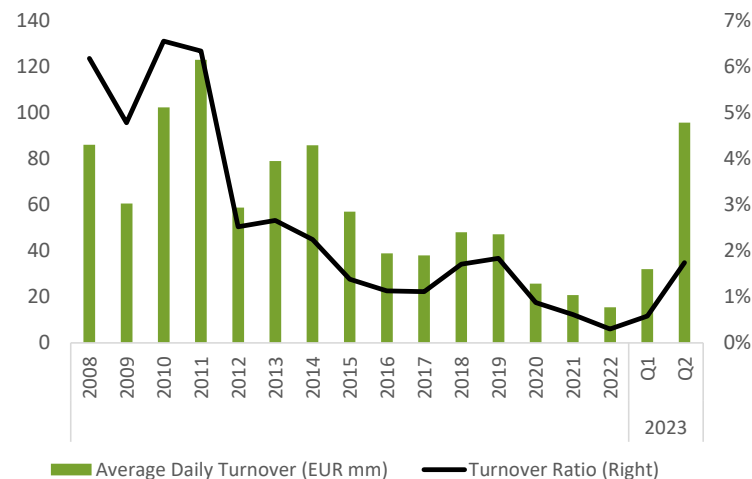
**5.16 Finland: Average daily trading volume (aggregated bonds and bills) and turnover ratio**



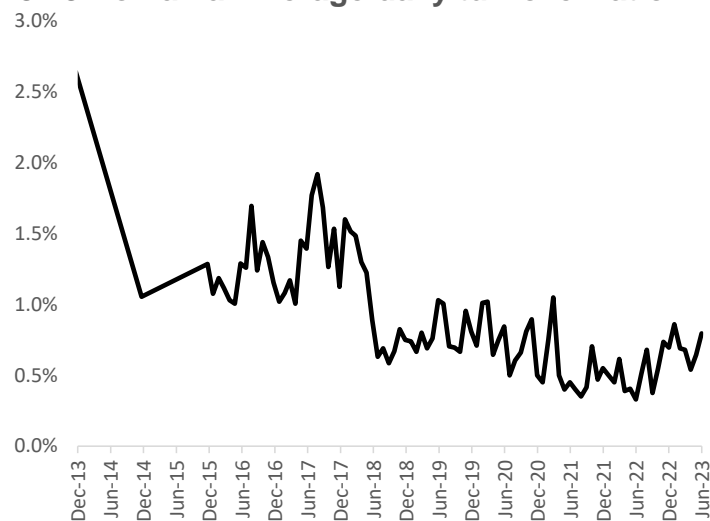
Source: Denmark's Nationalbank, Bank of Greece, ECB, National Depository for Securities (KDPW), WSE, Finland Valtiokonttori. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

# Secondary Market Trading Volumes and Turnover Ratios

**5.17 Bulgaria: Average daily turnover volume and turnover ratio**

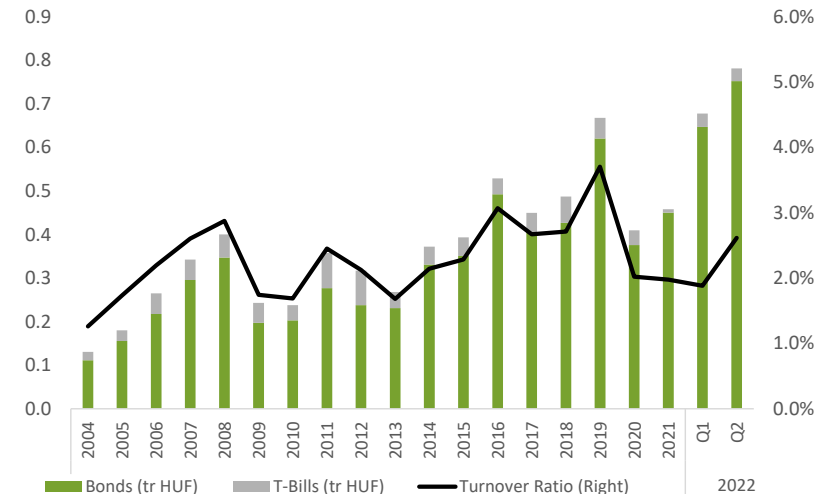


**5.19 Romania: Average daily turnover ratio**

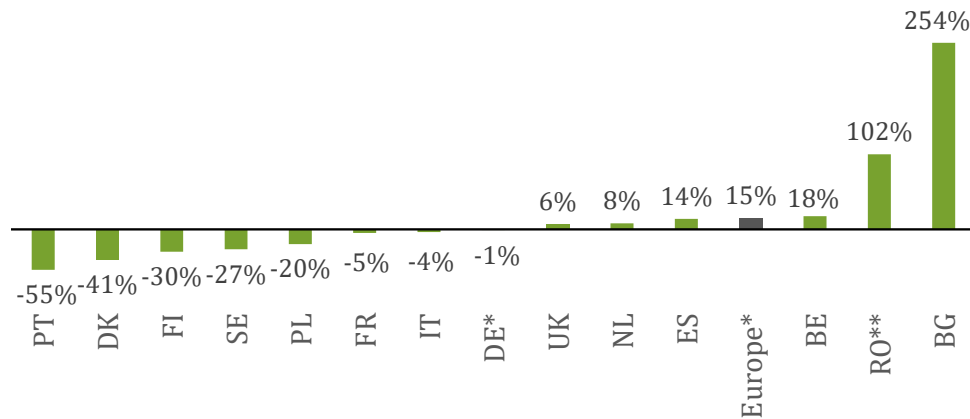


Source: ECB, AKK, Ministry of Finance of the Republic of Bulgaria, Ministerul Finantelor. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

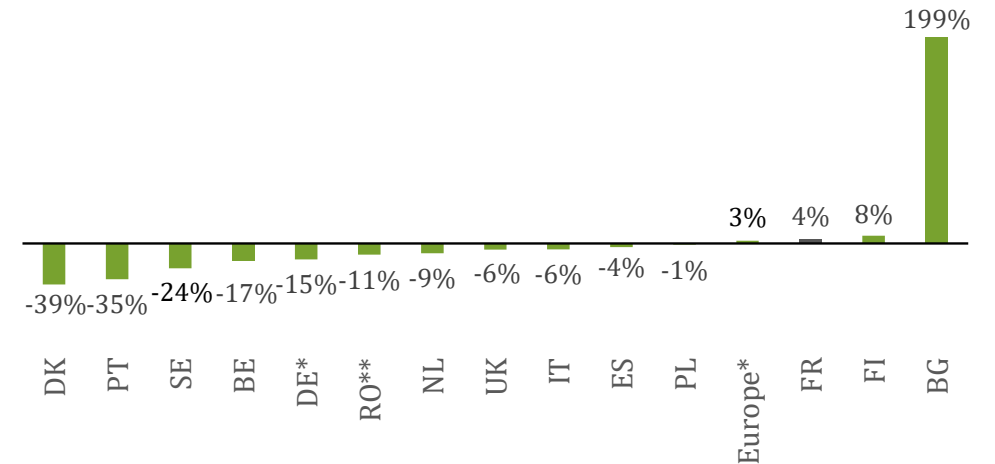
**5.18 Hungary: Average daily turnover volume and turnover ratio**



**5.20 Annual change in average daily turnover volumes of European government bonds: 2Q22 to 2Q23**



**5.21 Quarterly change in average daily turnover volumes of European government bonds: 1Q23 to 2Q23**

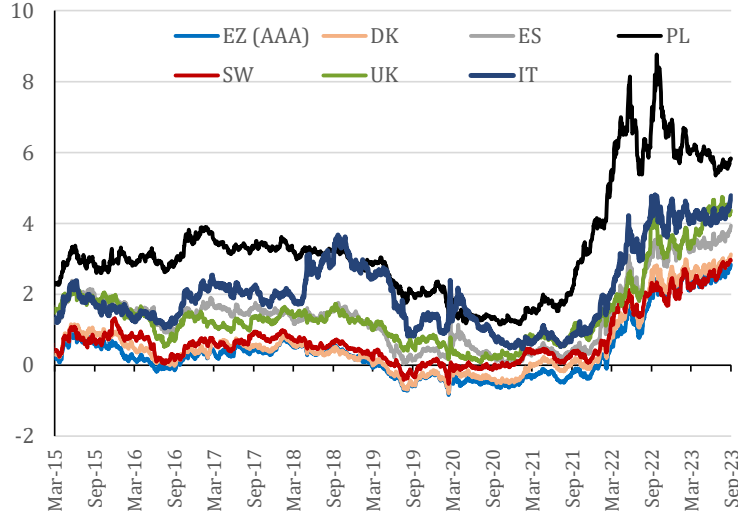


Source: AFME with information from European DMOs and other agency sources. See section 5 for details on aggregation basis and sources. \*Europe (EU+UK) total and Germany is sourced from TraX data from MarketAxess, as the quarterly variation of average daily volumes of government and sovereign bonds.

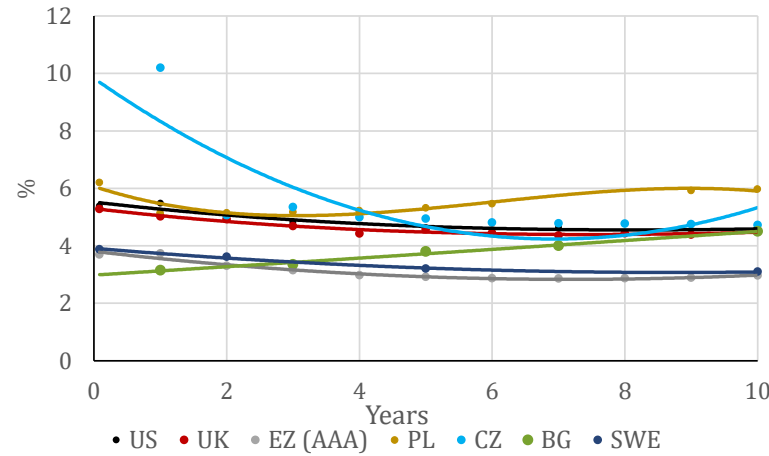
# Valuations



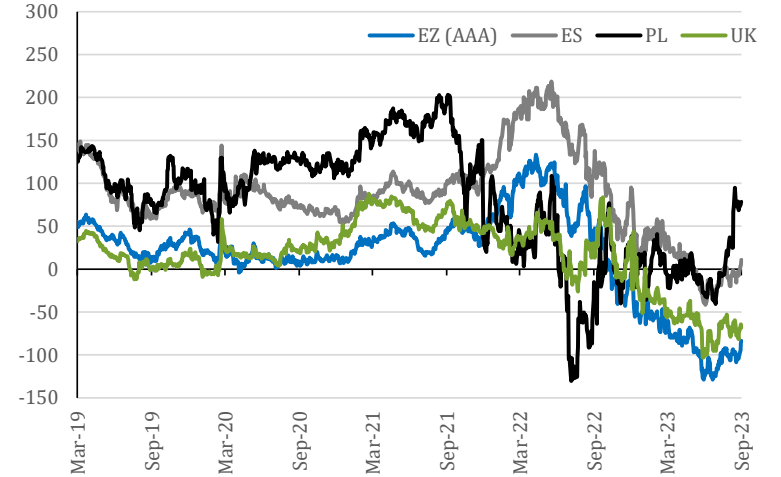
### 6.1 Selected European 10Y spot yields



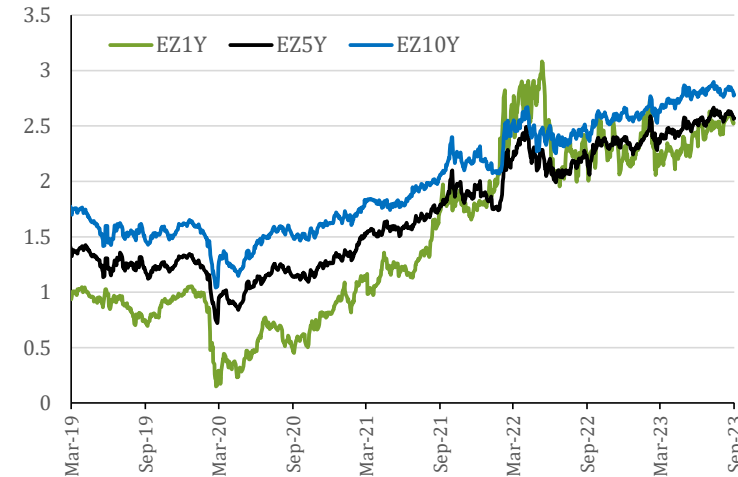
### 6.2 Sovereign spot yield curve of selected jurisdictions: 27 September 2023



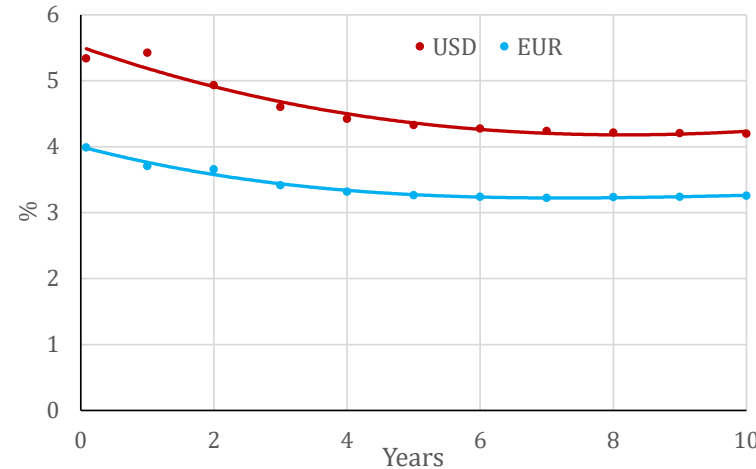
### 6.3 Slope: 1Y10Y spread (bps)



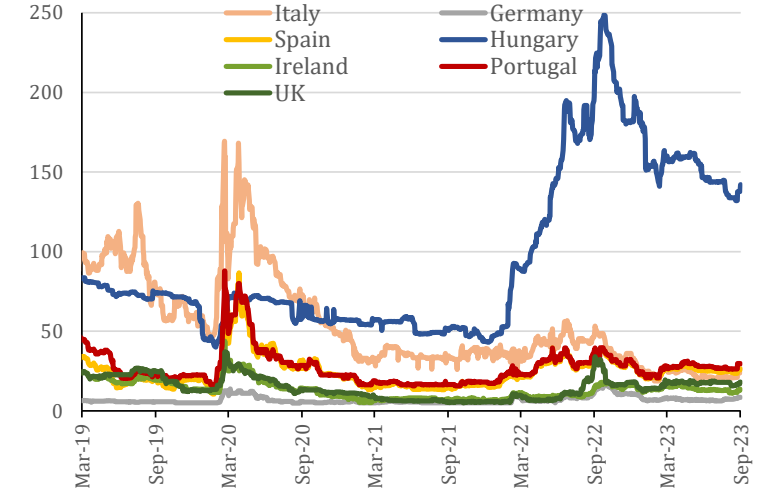
### 6.4 Market-implied inflation expectations (EuroZone)



### 6.5 Overnight index swap (OIS) yield curve: 27 September 2023



### 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 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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