

3Q 2020

# Government Bond Data Report

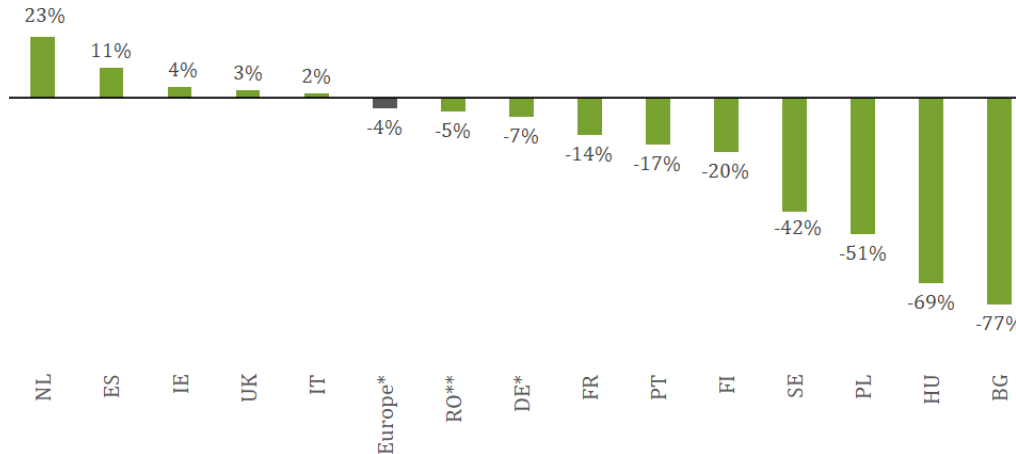
European market data update



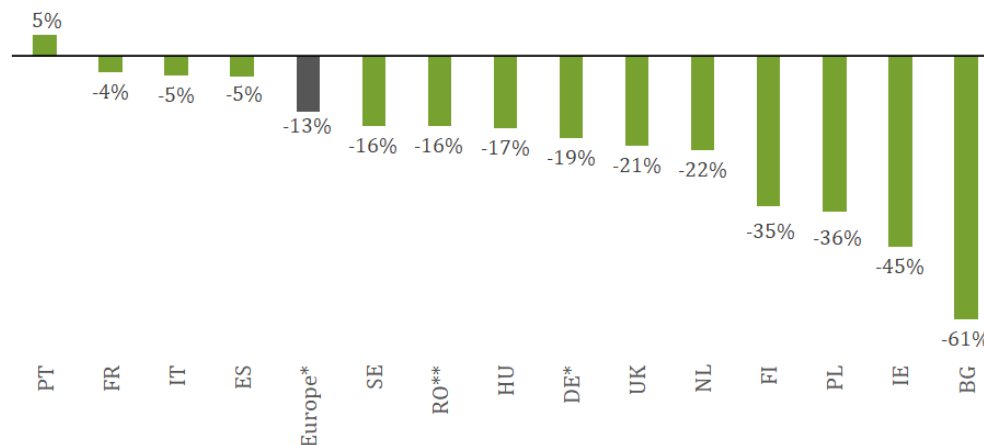
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## Highlights and Market Environment

### 1. Annual changes in Government Bond average daily trading volumes (3Q20 vs 3Q19) Selected European jurisdictions



### 2. Quarterly change in Government Bond average daily trading volumes (3Q20 vs 2Q20) Selected European jurisdictions

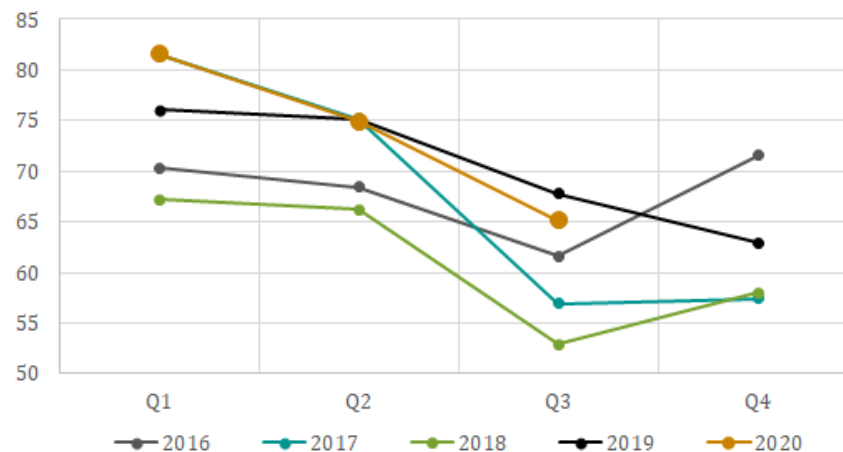


Source: AFME with information from European DMOs and other agency sources and Trax, a MarketAxess subsidiary. \*Europe (EU+UK) total and German turnover is sourced from Trax Facts as the quarterly variation of average daily volumes of government and sovereign bonds. \*\*Romanian turnover volume calculated using outstanding volumes in Section 3.

**European government bond trading decreased 3.8% YoY and 13.0% QoQ in 3Q20**

Average daily trading volumes of European government bonds decreased by 3.8% YoY during 3Q20, driven by a significant decrease in trading in Hungary (-69.0% YoY), Poland (-50.7% YoY), Portugal (-17.4% YoY) and France (-13.6% YoY). There was an increase in trading in the Netherlands (22.6% YoY) and Spain (11.4% YoY) and the UK (3.0% YoY), (see charts 1 and 2).

## 3. Seasonality of European government bond trading (quarterly trading volumes, average daily, EUR bn)



## 4. European outstanding green, social and sustainable (ESG) bonds (2016-2020, EUR bn)



Source: Trax, a MarketAxess subsidiary [chart 3], Thomson Reuters Eikon [chart 4].

## European Government Bond trading volume reaches EUR 65.2bn during Q3 2020

European trading activity continues to be robust with Q3 2020 recording the second-highest third quarter trading volume in 5 years, after Q3 2019.

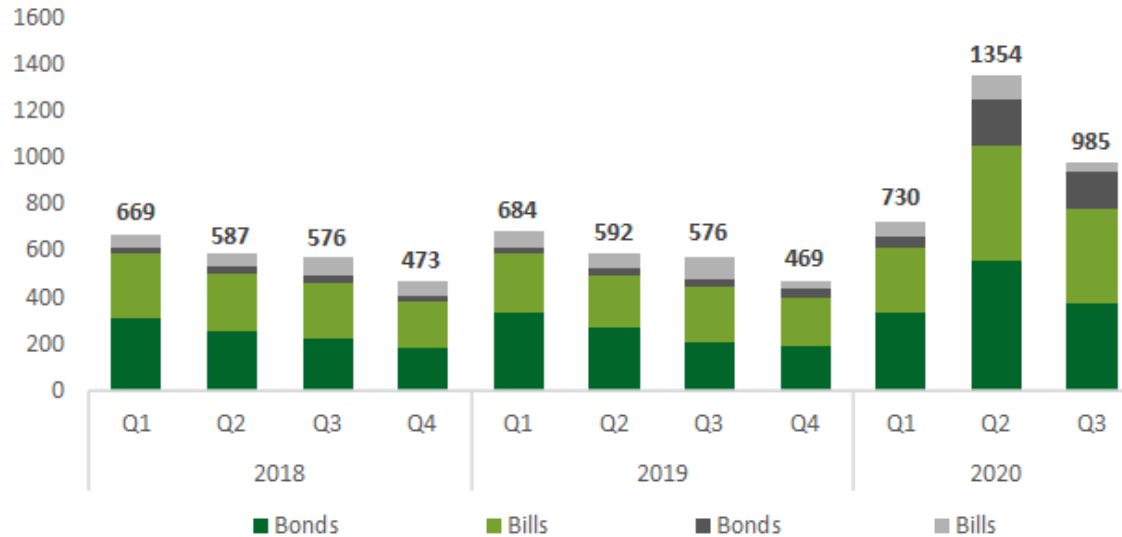
## Highest quarterly issuance of European green government bonds on record

During Q3 2020, an additional volume of EUR 10.8 bn of green sovereign securities were issued in Europe, driven by the inaugural issuance of the green German bund (EUR 6.5bn), the new Hungarian green bond (EUR 0.2bn) and the re-opening of the French, Irish and Belgian green government bonds (combined additional volume of EUR 4.1bn). The volume outstanding of green sovereign bonds in Europe now stands at EUR 61.2 bn, which represents an increase of 50% from the start of 2020.

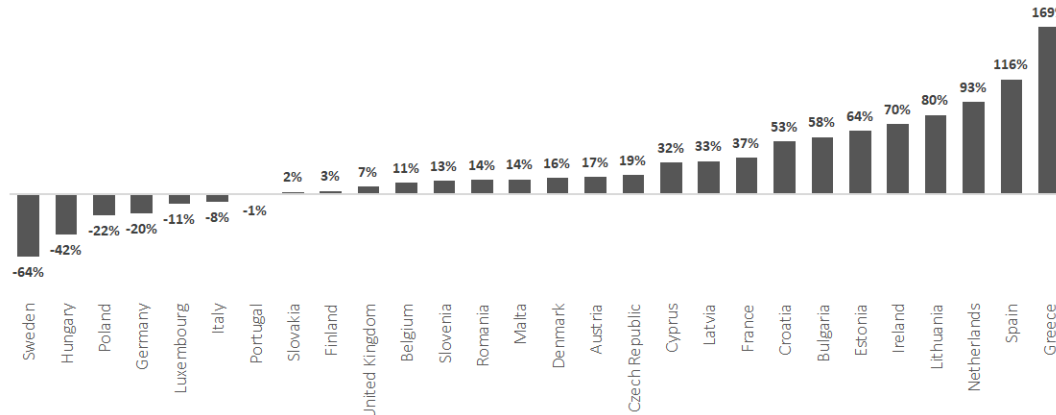
## Inaugural social and sustainable government bonds drive European sovereign ESG outstanding volume to EUR 80 bn

The EU SURE bond issuance of EUR 17bn is the first government bond in Europe labelled as social, while the first sustainable government bond was issued in Luxembourg during Q3 2020, with both auctions experiencing record levels of over-subscription.

### 5. Quarterly European (EU+UK) bond and bill issuance (2018-2020, EUR bn)



### 6. Annual change in weighted average years to maturity for outstanding government bonds 3Q19 to 3Q20



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

## EUR 985 bn of European bonds and bills issued during Q3 2020

There has been a partial normalisation of issuance volumes of European bonds and bills during Q3 2020, whilst still greater than pre-pandemic levels, volumes have fallen 27.3% (QoQ) after the highest quarterly issuance volume ever recorded in Europe during Q2 2020. The significant funding demands of the UK government has meant the country now comprises of a larger share of total European bond and bill issuance than what has been observed in recent years.

The initial issuance of the EU SURE scheme, of EUR 17 bn, marks the beginning of a new chapter in European debt markets, and the first instalment of EUR 30 bn of debt securities due to be issued by the European Commission (on behalf of the EU) during 2020. Notably, the first EU SURE issuance had the highest bid-cover ratio of any auction in international finance history, suggesting there is strong investor appetite for further issuance.

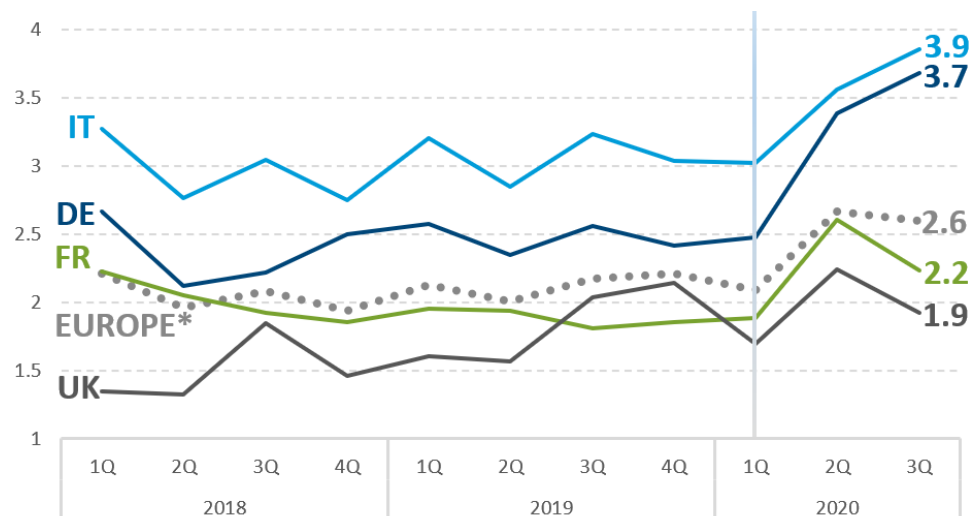
## Record maturity transformation of European outstanding government debt

Longer maturity profiles are a defining feature of debt issuance during Q3 2020, as European countries utilise the current record-low interest rates to harness sustainable financing channels for the immediate fiscal demands of overcoming the economic shock caused by the pandemic.

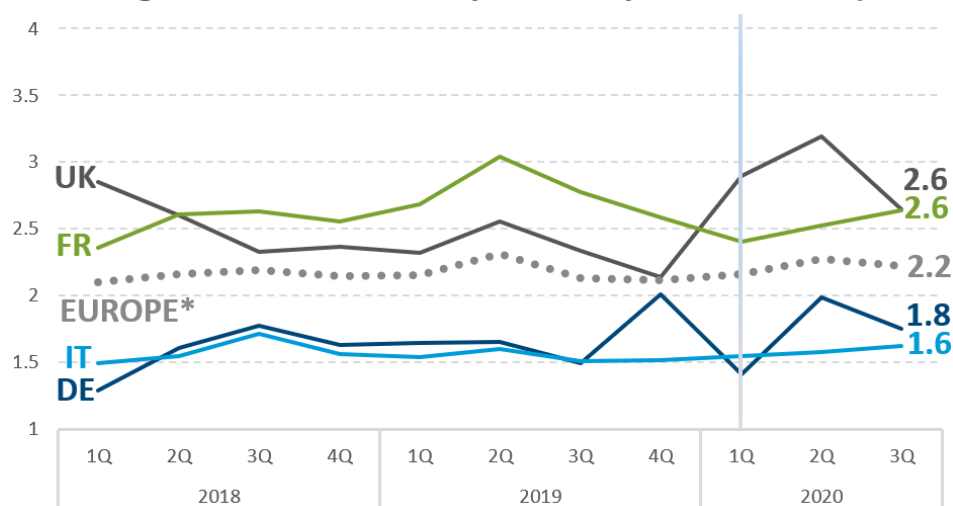


## Highlights and Market Environment

### 7. Average auction size: Italy, Germany, France, Europe\* and UK (EUR bn)



### 8. Average bid-cover ratio: Italy, Germany, France, Europe\* and UK



Source: Thomson ReutersEikon. \*Europe is a weighted Average of UK, DE, FR, ES, IT, BE, SE, NL, DK and AT bonds and bills.

## Average European auction size reaches seven-year high

In order to fulfil larger funding requirements of European governments, average European auction size reached EUR 2.6 bn during Q3 2020, representing the largest average volume since 2013. This was driven by average auction size increasing significantly in both Italy and Germany.

In France and the UK, average auction size has fallen from record-highs observed in Q2 2020, while remaining above pre-pandemic levels. In order to administer higher levels of debt issuance, the UK has increased the number of auctions being held. The number of auctions in France and Germany has remained constant, in Italy the number of auctions has declined quarter-on-quarter.

## Bid-Cover ratios of European countries remain steady

Investor appetite has remained steady in Q3 2020, with the average bid-cover ratio being in the normal-to-high range of near-term trends, both at the European and country level.

This has been driven in part by record purchases under the ECB purchase programme, with holdings of public sector securities under Pandemic Emergency Purchase Programme (PEPP) increasing by EUR 126.8 bn in Aug-Sep 2020.

## 9. European rating actions on long-term sovereign credit ratings (2020 YtD)

| Issuer         | Rating Action                        | Date   | Rated by | Rationale   |
|----------------|--------------------------------------|--------|----------|---|
| Greece         | Upgrade to BB (stable) from BB-      | Jan-20 | Fitch    | GDP growth and fiscal prudence leading to government debt remaining at sustainable levels   |
| Latvia         | Upgrade to A+ (stable) from A        | Feb-20 | S&P      | Effectively containing fiscal deficits, setting government debt to GDP on a firm declining trajectory   |
| Lithuania      | Upgrade to A+ (stable) from A        | Feb-20 | S&P      | Strong economic expansion, robust growth prospects and fiscal performance leading to a gradual reduction in net general government debt   |
| Lithuania      | Upgrade to A (stable) from A-        | Feb-20 | Fitch    | Real GDP growth, decreasing government debt and debt servicing costs, and growing government sector and current account surplus   |
| United Kingdom | Downgrade to AA- (negative) from AA  | Mar-20 | Fitch    | Significant weakening of public finances caused by the Covid-19 pandemic and a fiscal loosening stance that was instigated before the crisis                                      |
| Italy          | Downgrade to BBB- (stable) from BBB  | Apr-20 | Fitch    | Significant impact of global Covid-19 pandemic on Italy's economy and fiscal position   |
| Slovakia       | Downgrade to A (stable) from A+      | May-20 | Fitch    | Weaker external demand, and depressed domestic demand due to the Covid-19 pandemic  |
| Slovenia       | Upgrade to A3 (positive) from Baa1   | Oct-20 | Moody's  | Improvement in debt affordability metrics and significant improvement in health of banking system   |
| Bulgaria       | Upgrade to Baa1 (positive) from Baa2 | Oct-20 | Moody's  | Reduced exposure to foreign currency debt risk, large fiscal reserves and expectations that positive fiscal and debt dynamics will preserve the government's strong balance sheet |
| United Kingdom | Downgrade to Aa3 (negative) from Aa2 | Oct-20 | Moody's  | Reduction in growth prospects, fiscal strength and weakening fiscal governance  |
| Greece         | Upgrade to Ba3 (stable) from B1      | Nov-20 | Moody's  | Strong growth prospects and ongoing reforms supporting a sustainable improvement in institutional strength  |

Source: Fitch, Moody's, S&P. Year to date implies rating actions as of November 2020.  
**Red** indicates a downgrade in long-term sovereign credit rating.

**During 3Q20 there were no long-term credit rating changes for European countries**

This follows 4 upgrades and 1 downgrade in 1Q20, no upgrades and 2 downgrades in 2Q20, bringing the year-to-date total to 7 upgrades and 4 downgrades (so far in 4Q20 there have been 3 further upgrades and 1 downgrade).

## 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:

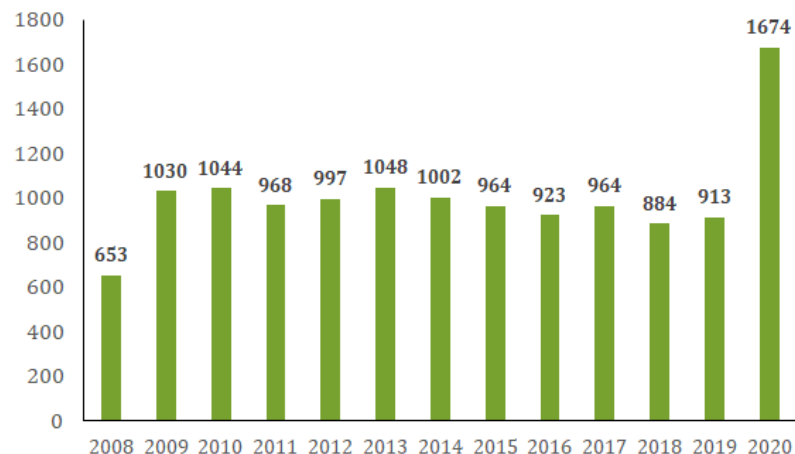
- Basel III
- CSDR
- Fundamental Review of the Trading Book (FRTB)
- Prospectus Regulation

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

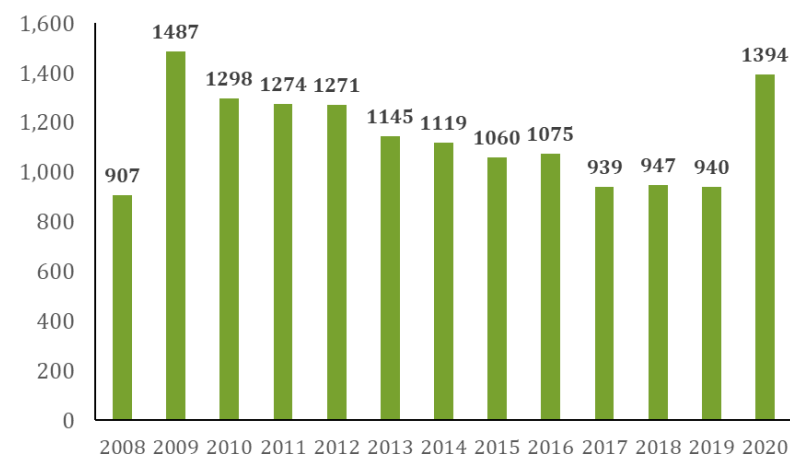


# Issuance

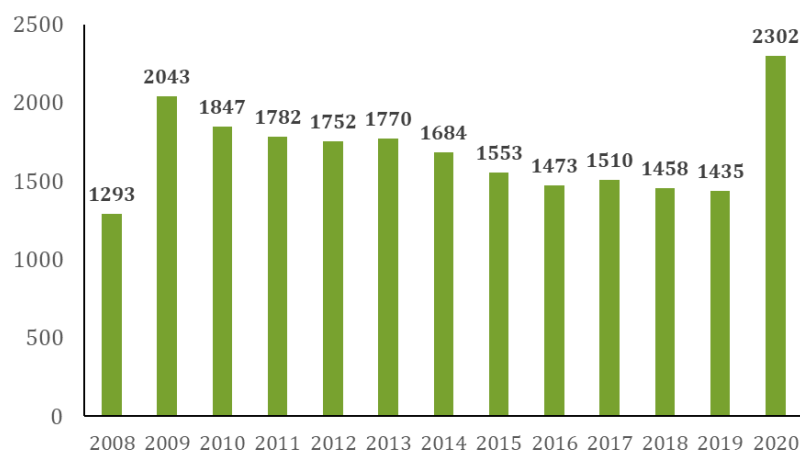
**1.1 European (EU+UK) Government Bond gross issuance year-to-date (YtD, EUR bn)**



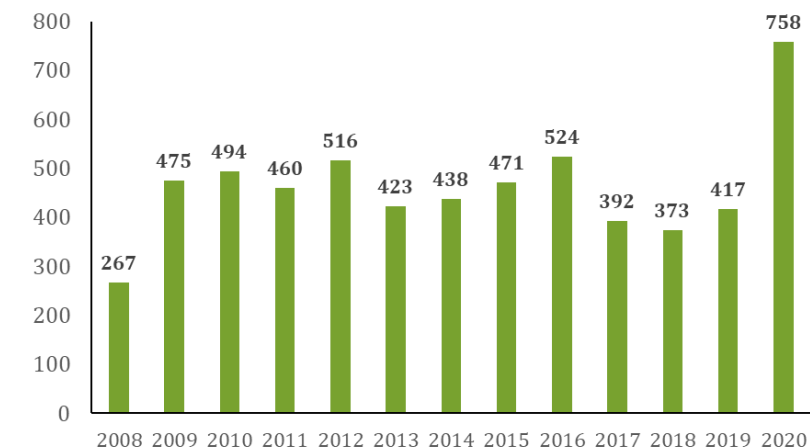
**1.2 European (EU+UK) Treasury Bills gross issuance (YtD, EUR bn)**



**1.3 Eurozone bonds and bills gross issuance year-to-date (YtD, EUR bn)**

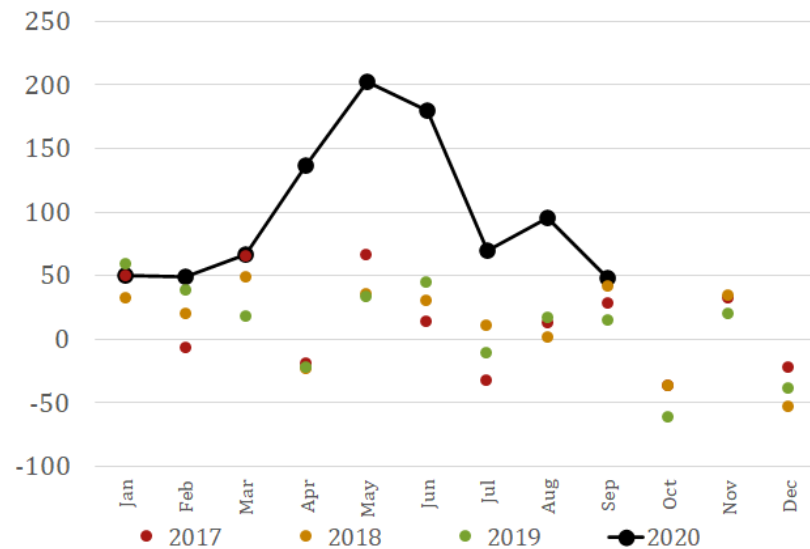


**1.4 Non-Eurozone bonds and bills gross issuance (YtD, EUR bn)**

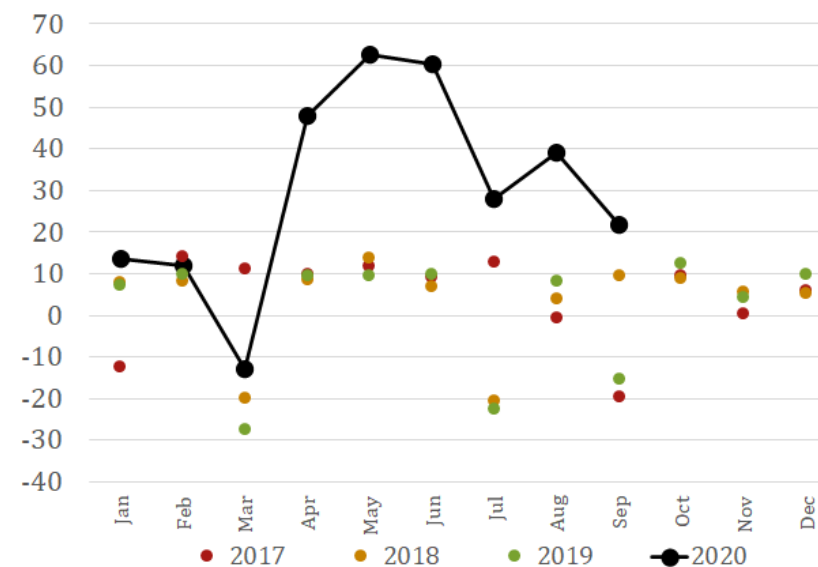


Source: ECB, National Debt Management Offices and UK Debt Management Office. **YtD implies gross issuance in each year taking place during Q1, Q2 and Q3.**

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



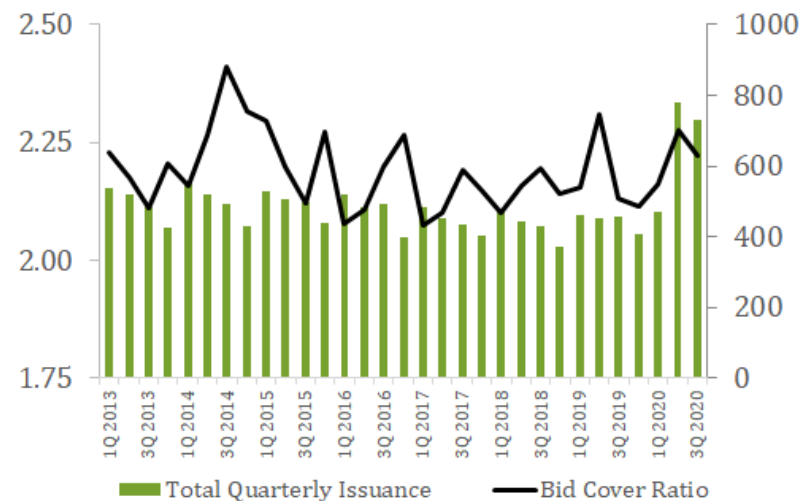
**1.6 UK Gilts net issuance (GBP bn)**



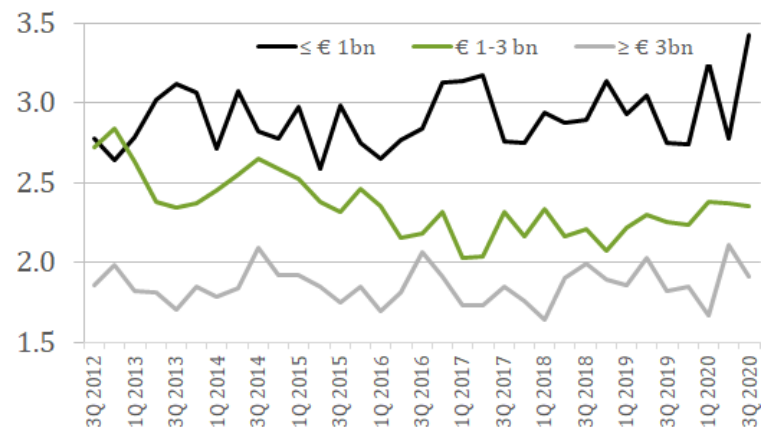
Source: ECB and UK Debt Management Office

# Recent Auctions and Primary Dealers

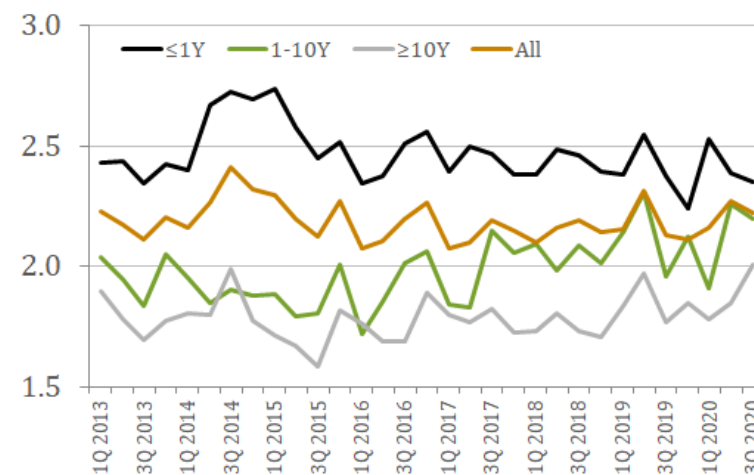
**2.1 Average bid-cover ratios and issued volumes in selected jurisdictions (EUR bn)**



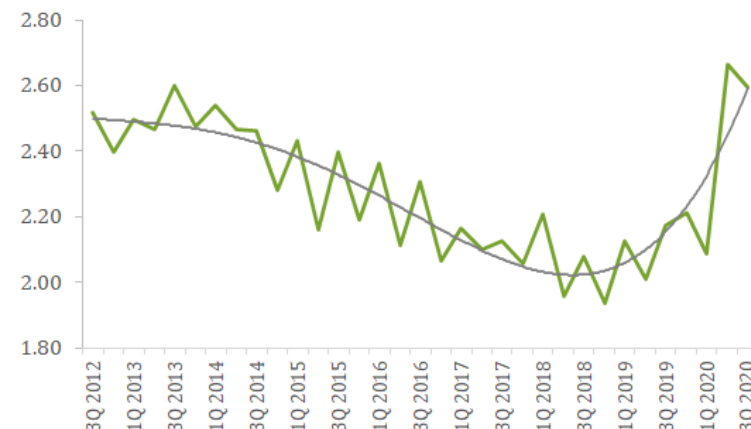
**2.3 Average bid-cover ratios by size of issued instruments**



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

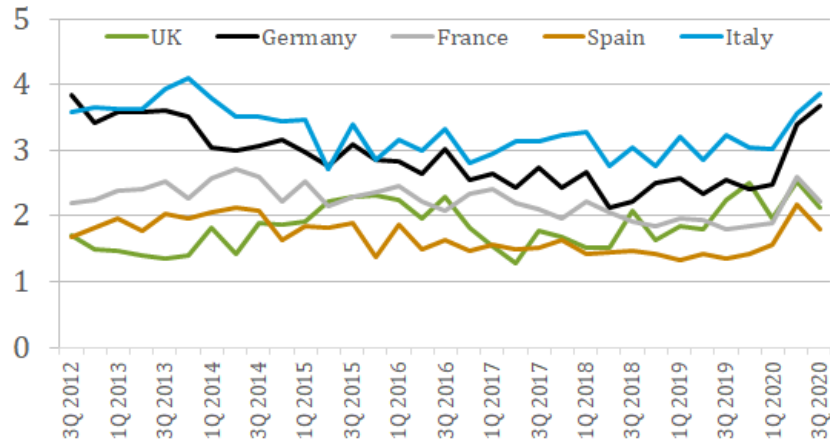


**2.4 Average auction size in selected European jurisdictions (EUR bn)**

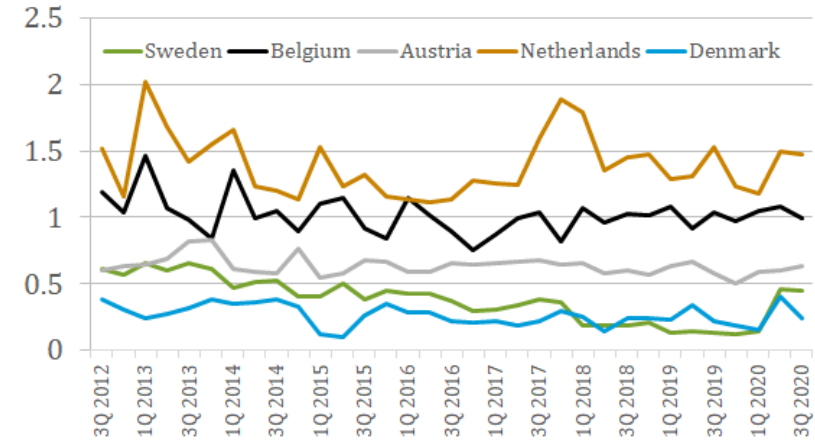


Source: Thomson Reuters Eikon. Weighted Average of UK, DE, FR, ES, IT, BE, SE, NL, DK and AT bonds and bills. In chart 2.4 polynomial trendline shown in grey.

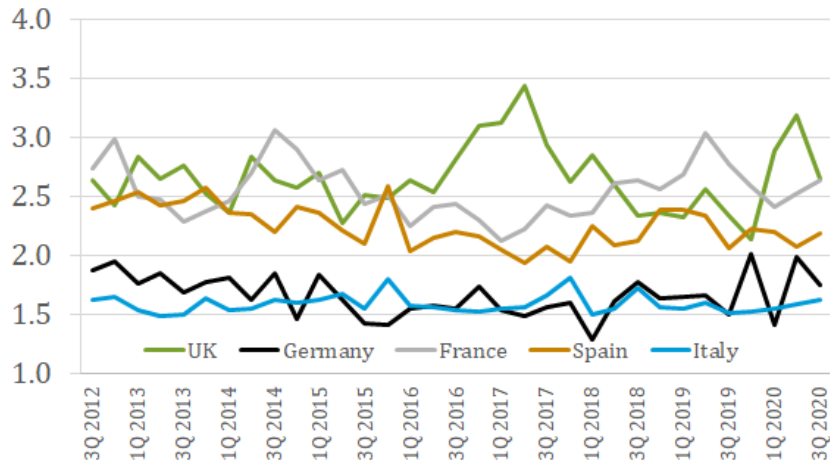
**2.5 Average auction size in selected jurisdictions (EUR bn)**



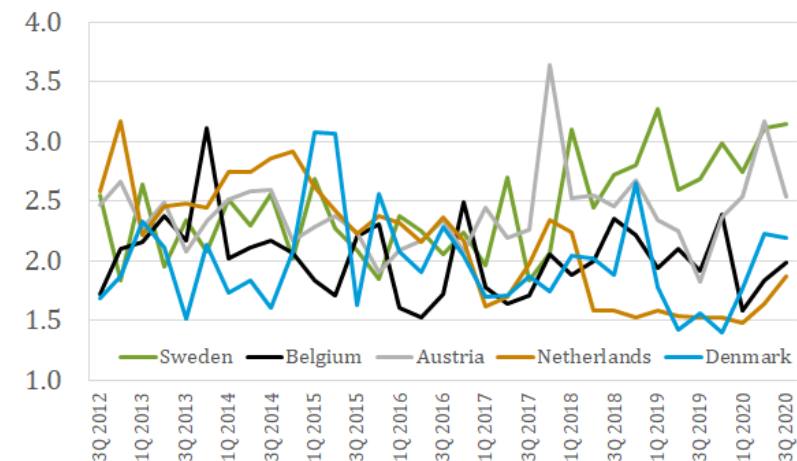
**2.6 Average auction size in selected jurisdictions (EUR bn)**



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



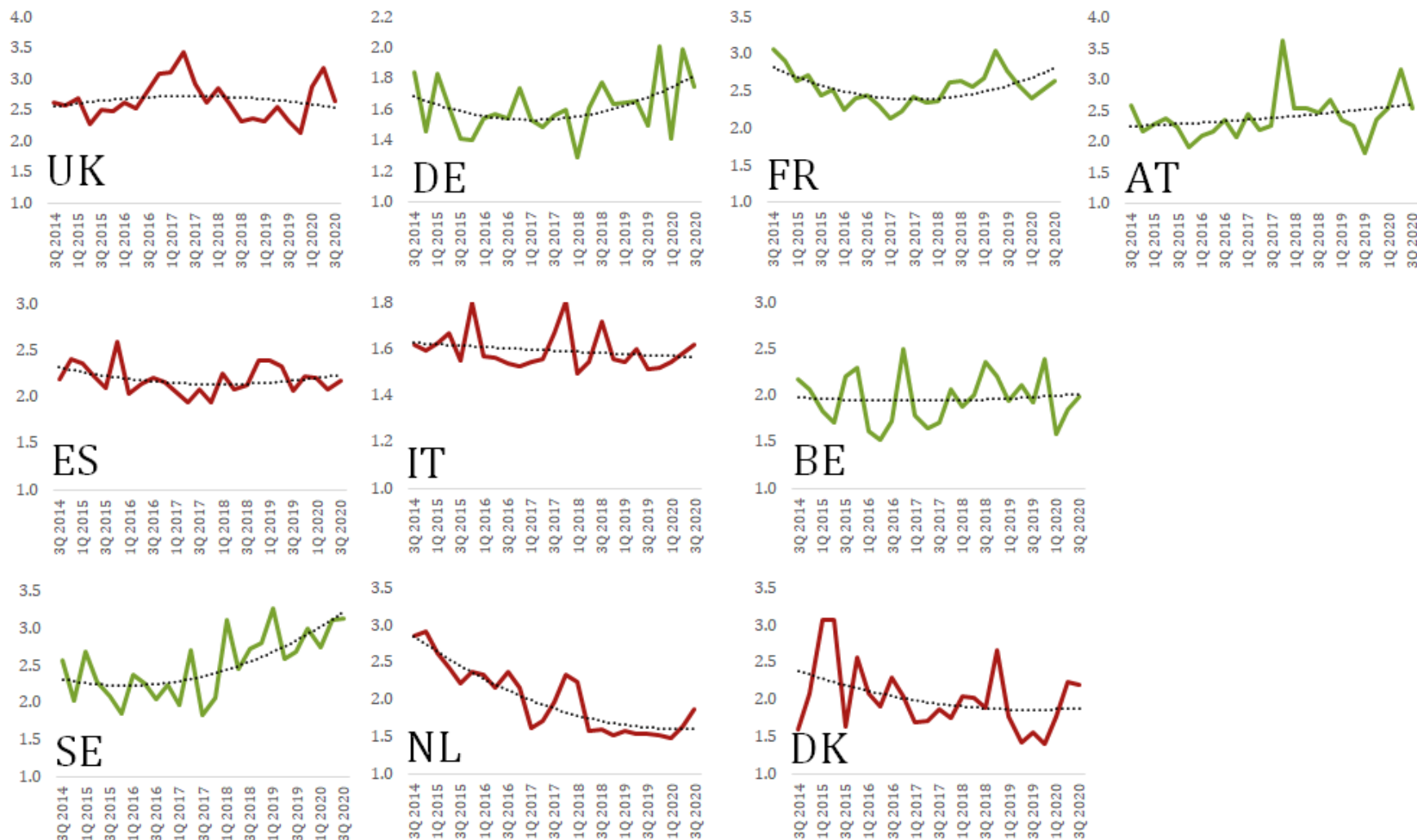
**2.8 Average bid-cover ratios by jurisdictions**



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

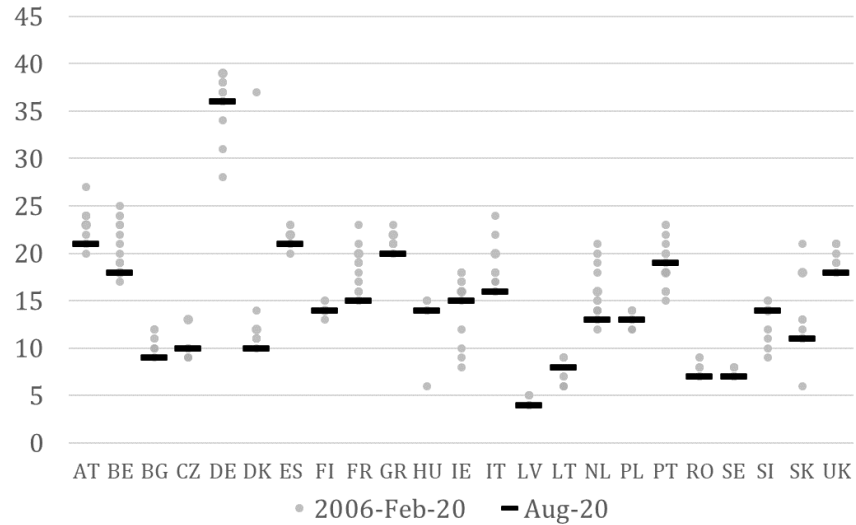


## 2.9 Average bid-cover ratios in selected jurisdictions: 2013-20

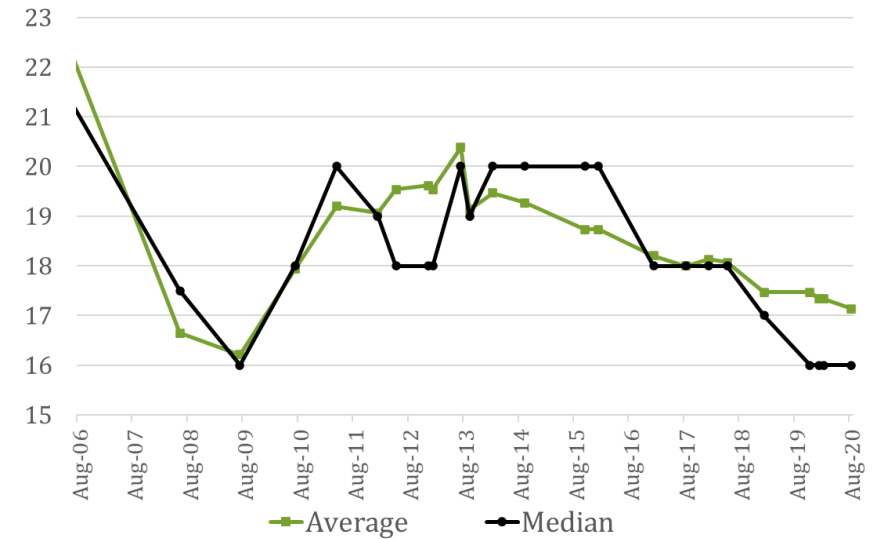


Source: Thomson Reuters Eikon. **Green** indicates end value of trendline above starting value, **red** indicates end value of trendline below starting value

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

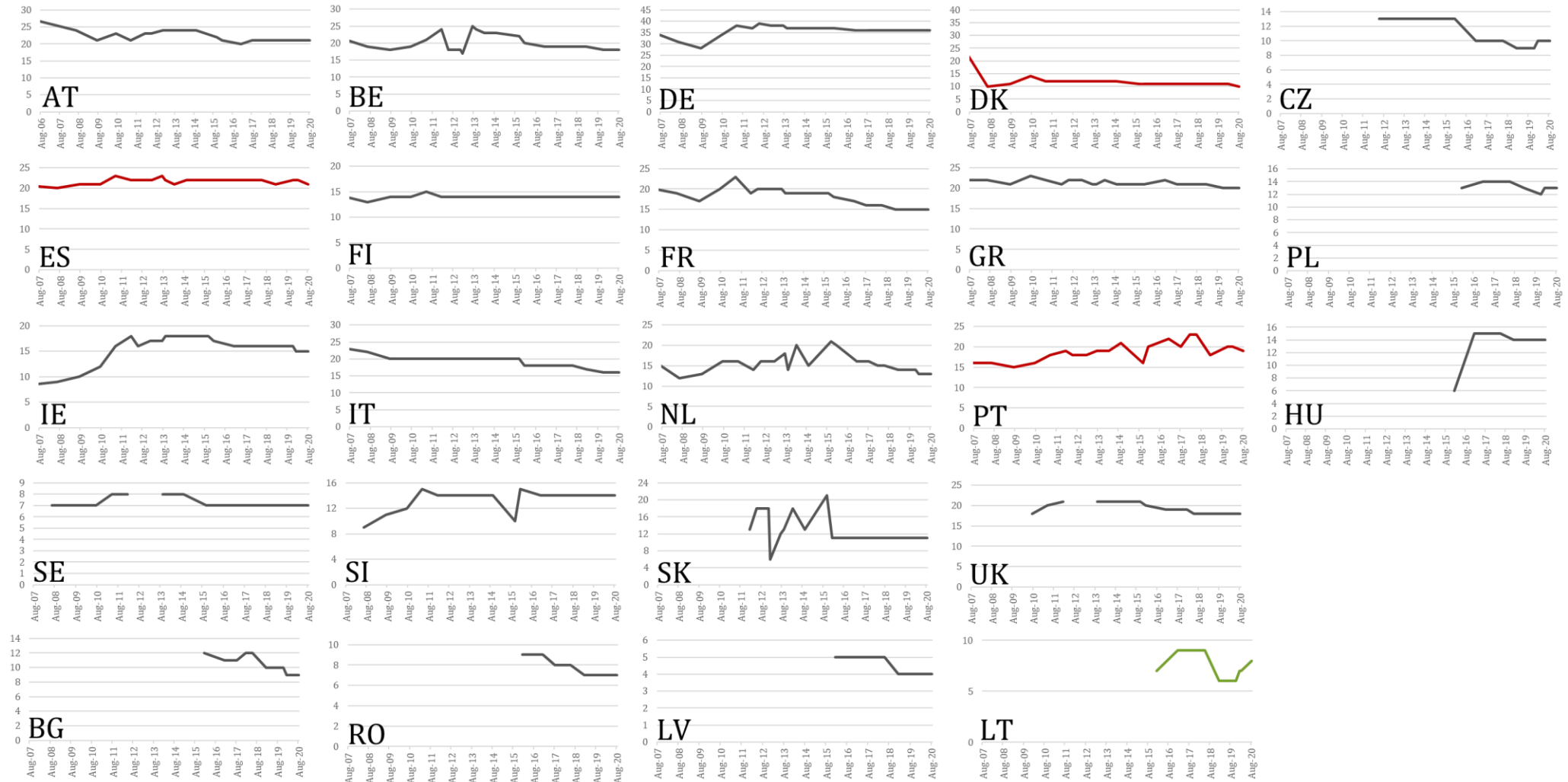


**2.11 Average and median number of primary dealers in selected European countries**



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.

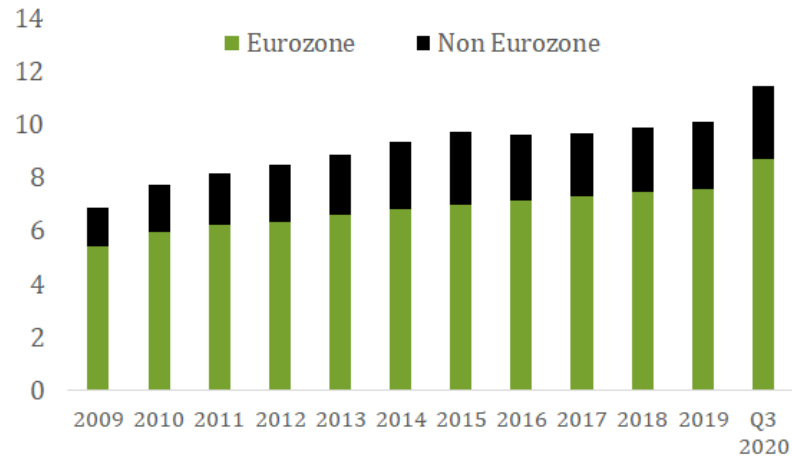
## 2.12 Number of primary dealers in Europe by country: 2006-20



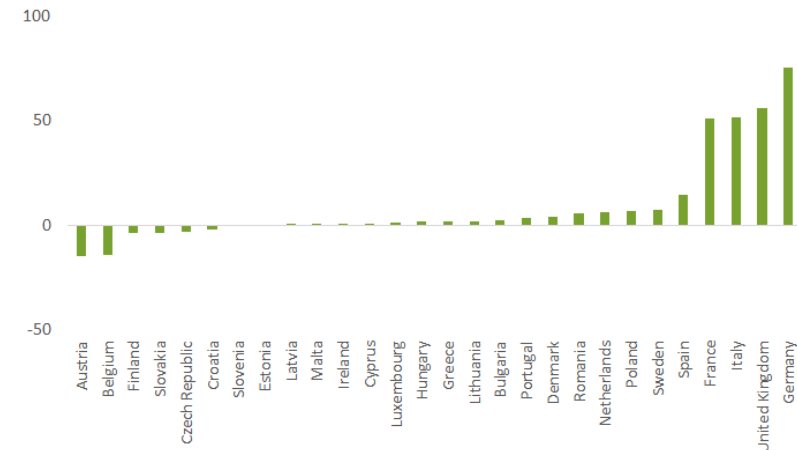
Source: AFME HRF Table and National DMOs. The gap in the lines for UK and Sweden indicates data not recorded in the relevant period. **Chart colour indicates change in PDs since February 2020.** **Green** indicates an increase: **red** indicates a decrease and **grey** indicates no change.

# Outstandings

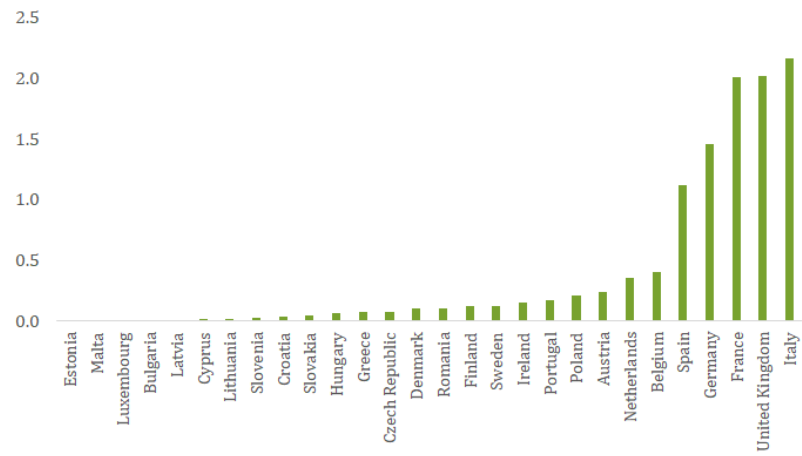
### 3.1 Outstanding debt securities issued by Central Governments (Nominal, EUR tn)



### 3.3 Change in outstandings 2Q20 to 3Q20 (EUR bn)



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

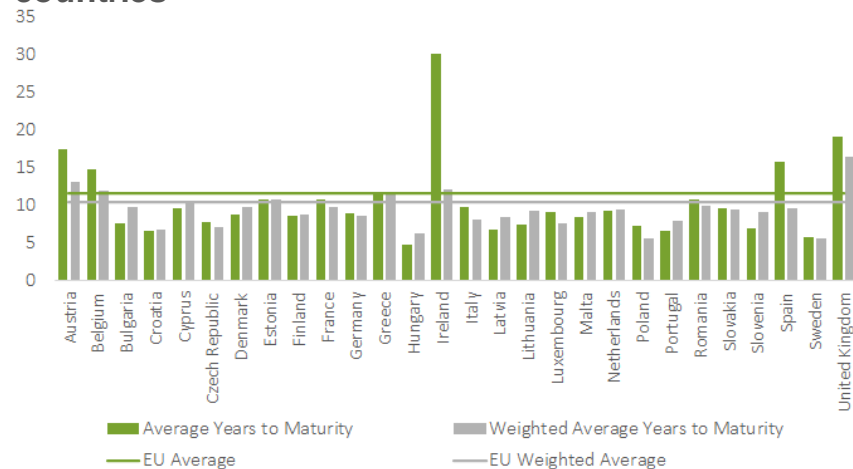


### 3.4 Change in outstandings from 2Q20 to 3Q20 (%)

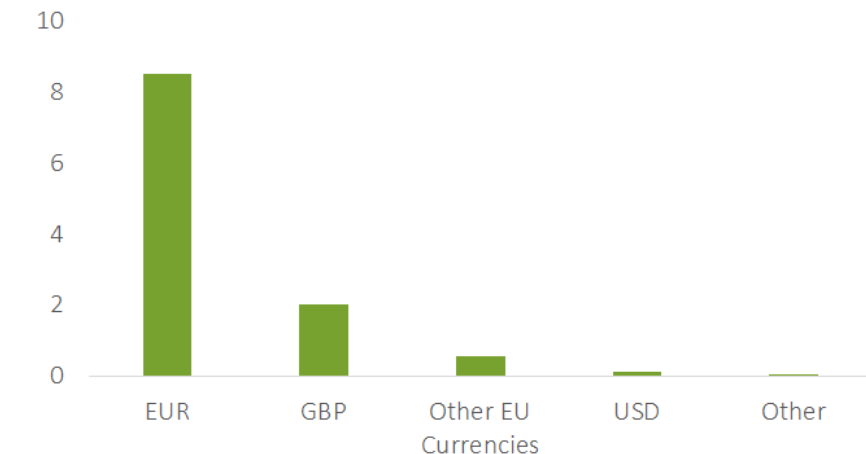


Source: ECB, Thomson Reuters Eikon and UK DMO.

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



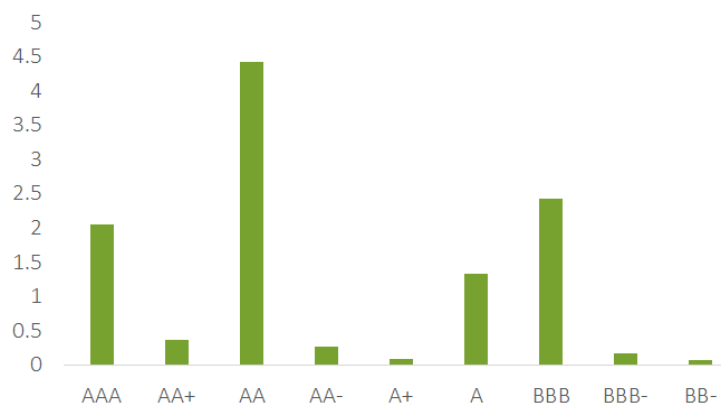
### 3.7 European government bonds outstanding by currency (EUR tn)



### 3.6 Quarterly change in weighted average years to maturity for outstanding government bonds 2Q20 to 3Q20



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

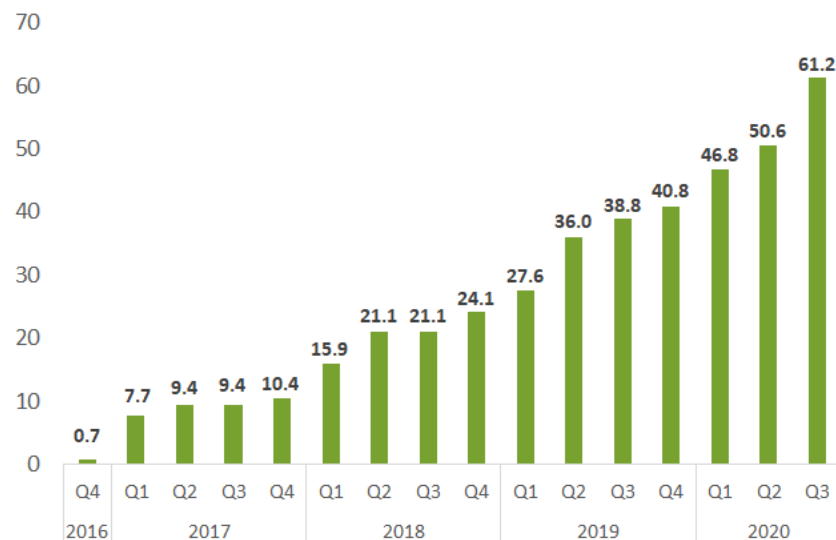


Source: Thomson Reuters Eikon. For Charts 3.5 and 3.6 weighted average in by outstanding amount.

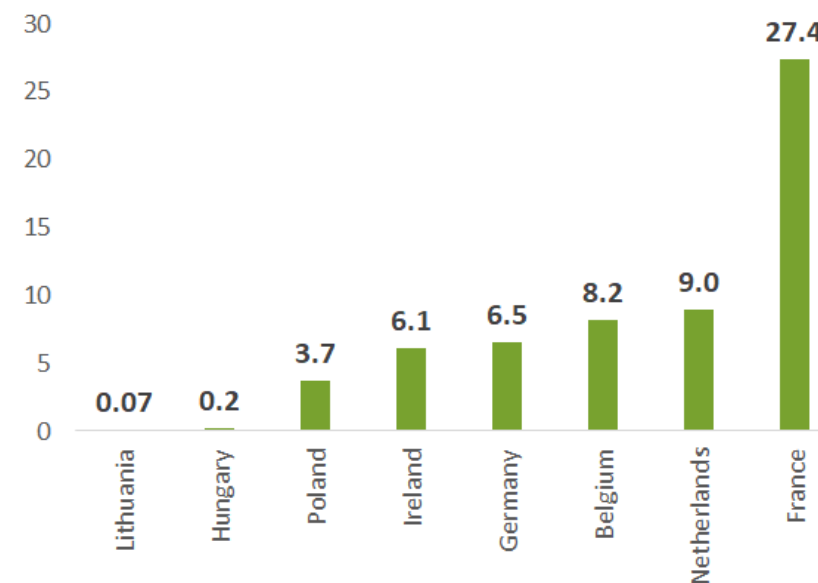


# Outstandings: Green Bonds

**3.9 European outstanding green government bonds (EUR bn)**

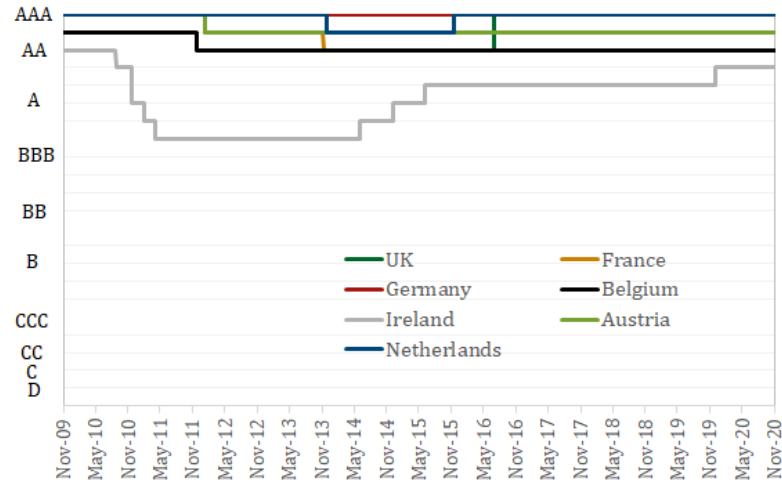


**3.10 European outstanding green government bonds by country (EUR bn)**

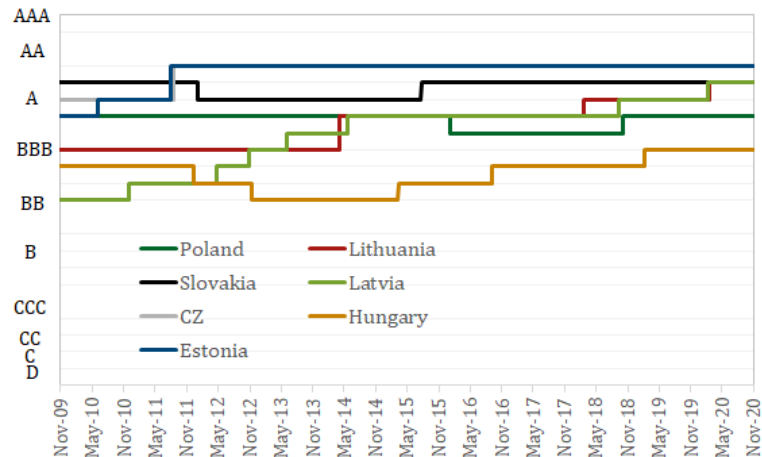


# Credit Quality

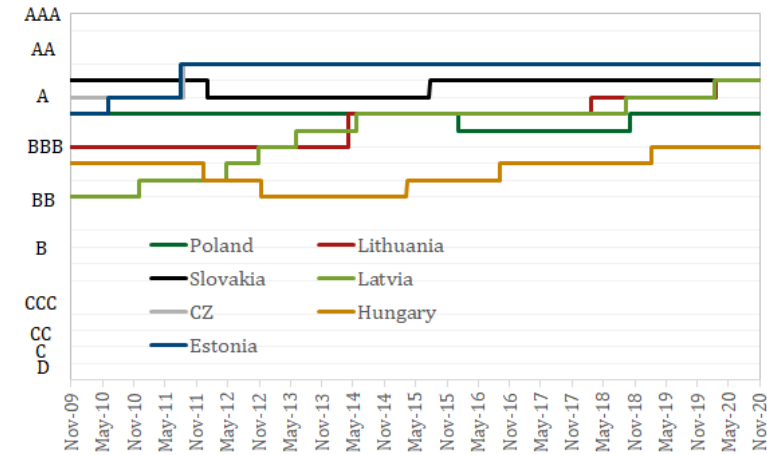
#### 4.1 Long-term sovereign credit rating (Central and Northern Europe)



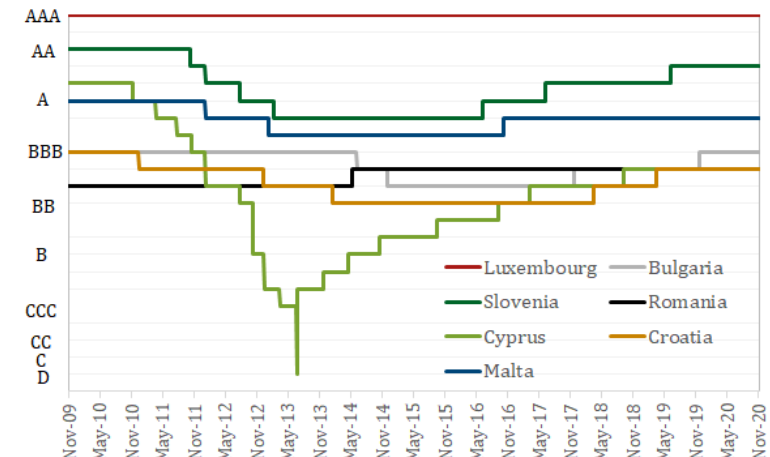
#### 4.3 Long-term sovereign credit rating (Visegrad 4 and Baltic states)



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



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



Source: Thomson Reuters Eikon

#### 4.5 European rating actions on long-term sovereign credit ratings (2020 YtD)

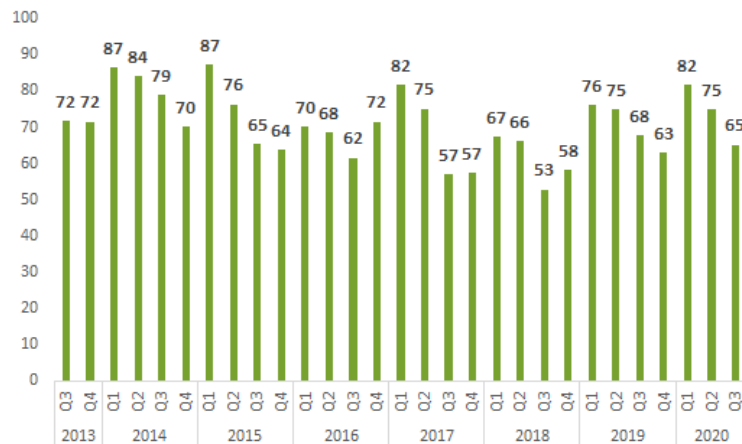
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Source: Fitch, Moody's, S&P

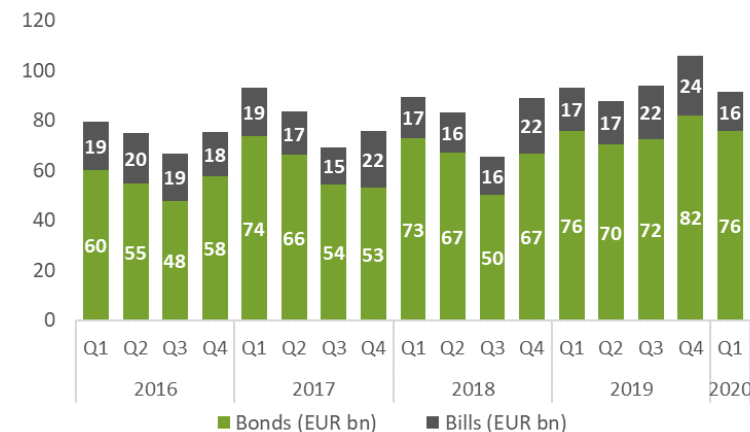
# Secondary Market Trading Volumes and Turnover Ratios

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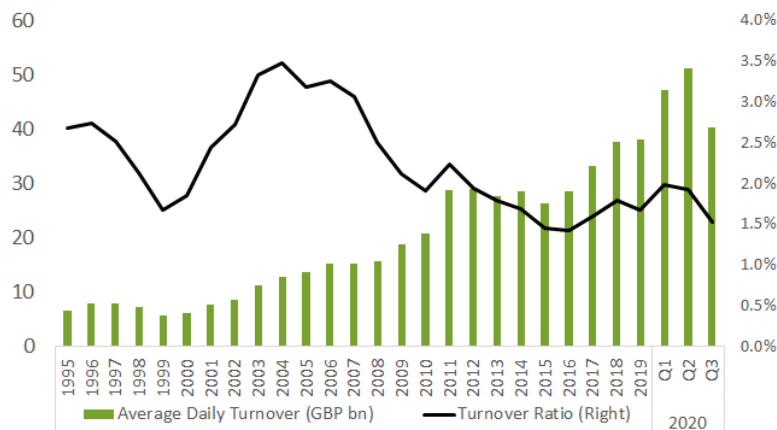
**5.1 EU28: Average daily trading volumes (Government and sovereign bonds, EURbn)**



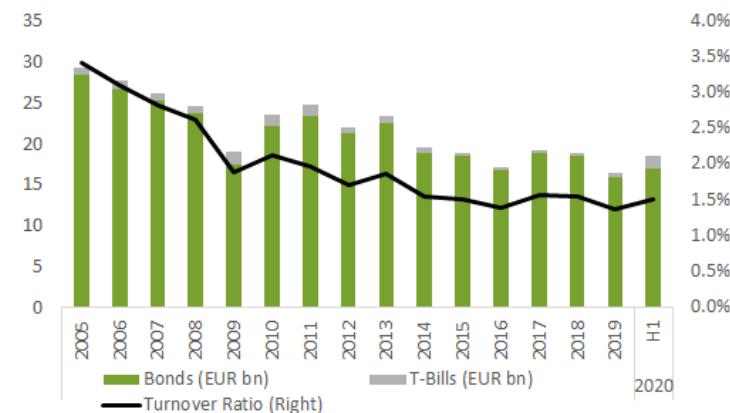
**5.2 Eurozone: Average daily trading volume (bonds and bills, EURbn)**



**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**

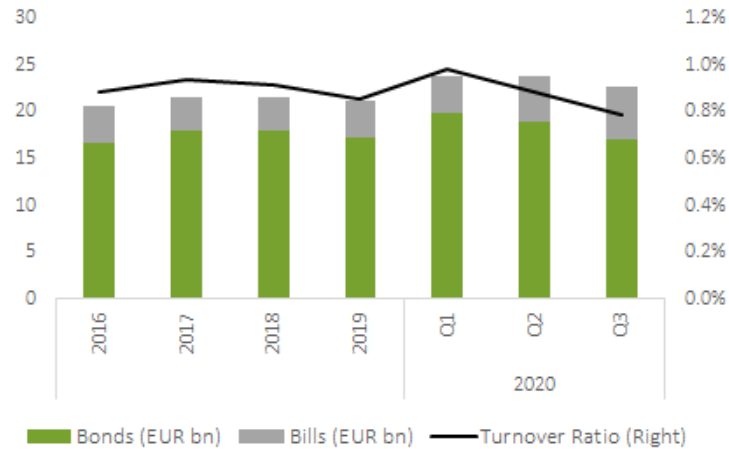


Source: Trax, a MarketAxess subsidiary. EEC Sub-Committee on EDSM. UK Debt Management Office. Deutsche Finanzagentur, ECB. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

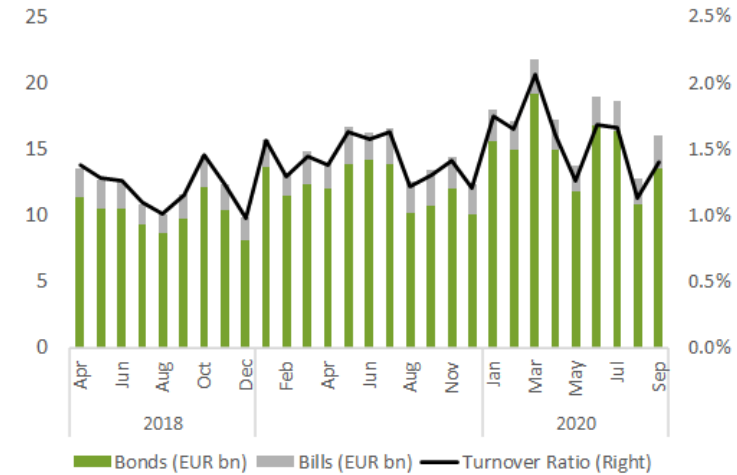


# Secondary Market Trading Volumes and Turnover Ratios

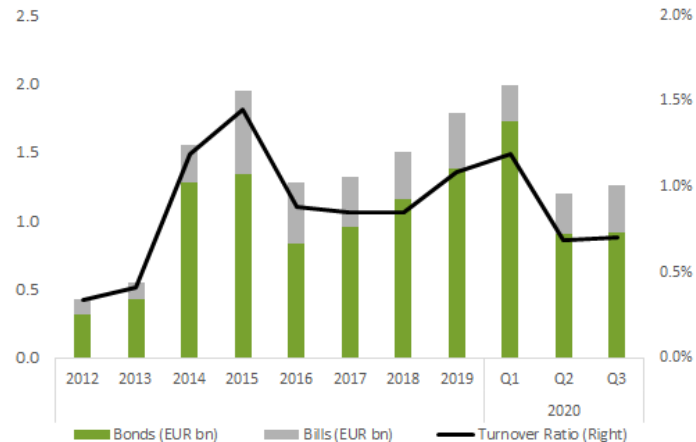
**5.5 Italy: Average daily trading volume (bonds and bills) and turnover ratio**



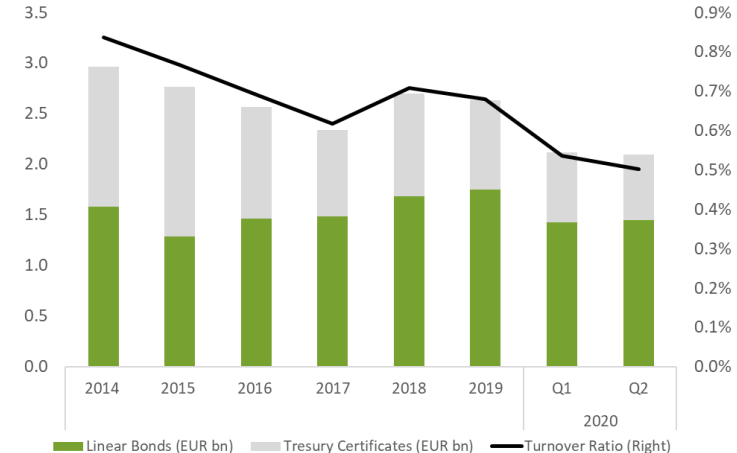
**5.6 Spain: Average daily trading volume and turnover ratio**



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



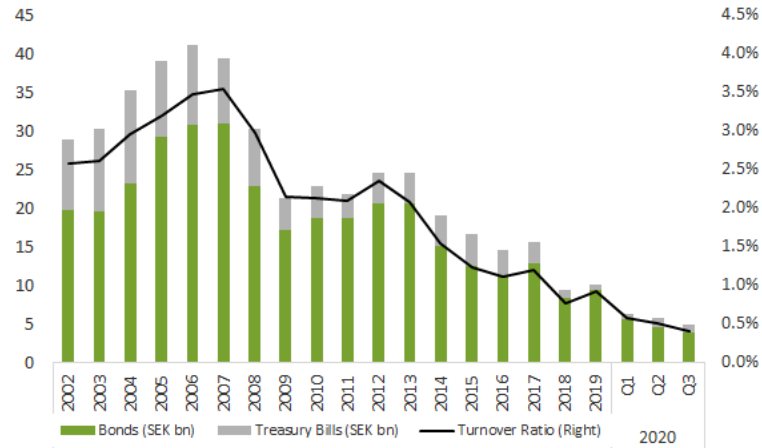
**5.8 Belgium: Average daily trading volume and turnover ratio**



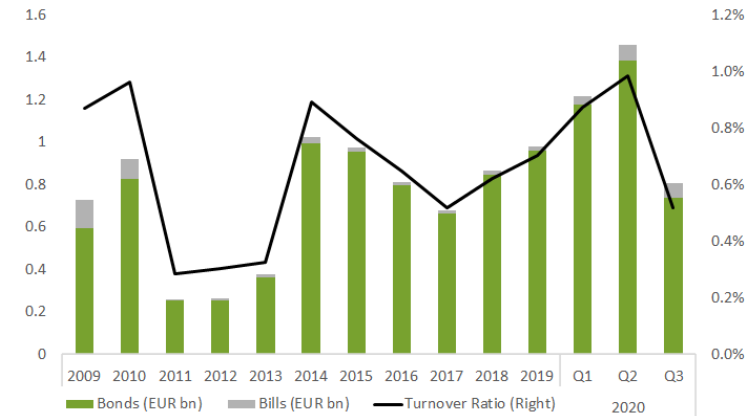
Source: ECB, Italian Dipartimento del Tesoro, BME Market Data and Tesoro Publico de Espana, Agência de Gestão da Tesouraria e da Dívida Pública (IGCP), ECB, Belgian Debt Agency. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries.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

# Secondary Market Trading Volumes and Turnover Ratios

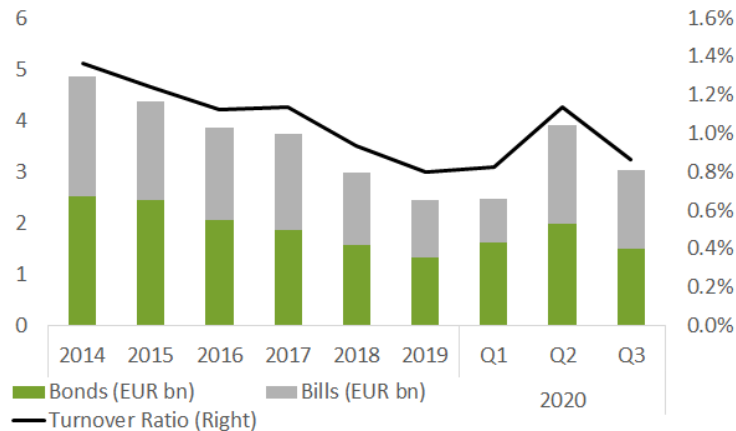
**5.9 Sweden: Average daily trading volume and turnover ratio**



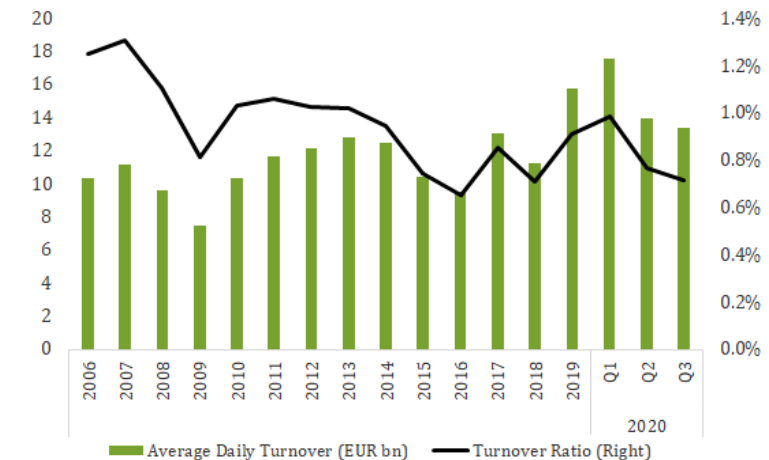
**5.10 Ireland: Average daily trading volume (aggregated bonds and bills) and turnover ratio**



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



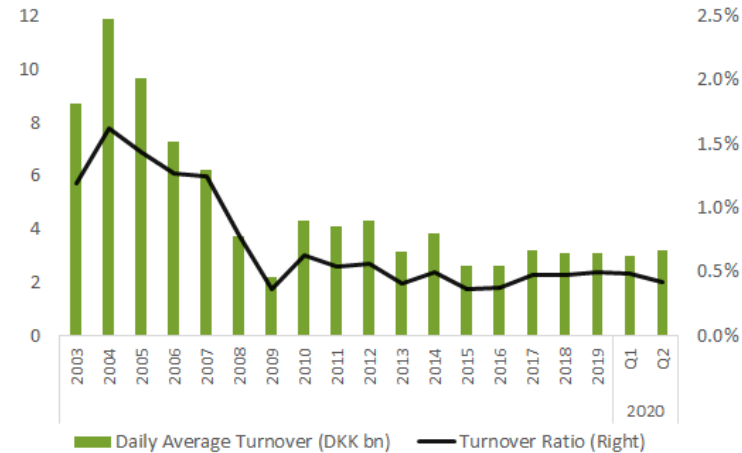
**5.12 France: Average daily trading volume (bonds only) and turnover ratio**



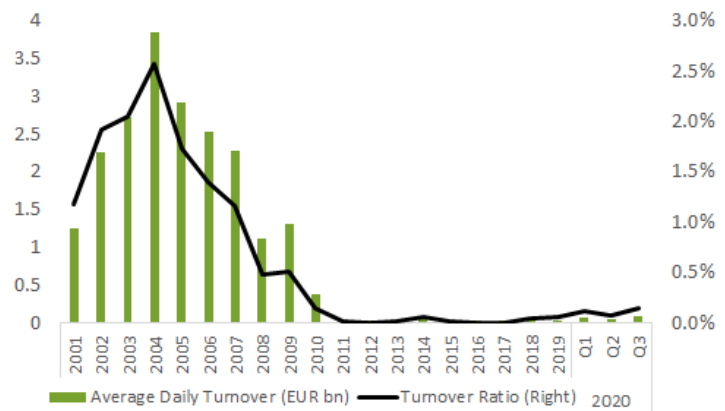
Source: ECB, Swedish National Debt Office (Riksgalden), Irish Stock Exchange, Ministerie van Financien, Agence France Tresor. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

# Secondary Market Trading Volumes and Turnover Ratios

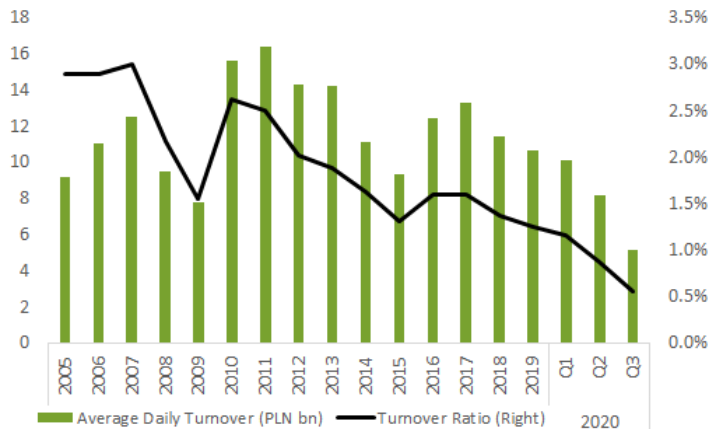
**5.13 Denmark: Average daily trading volume (bonds and bills) and turnover ratio**



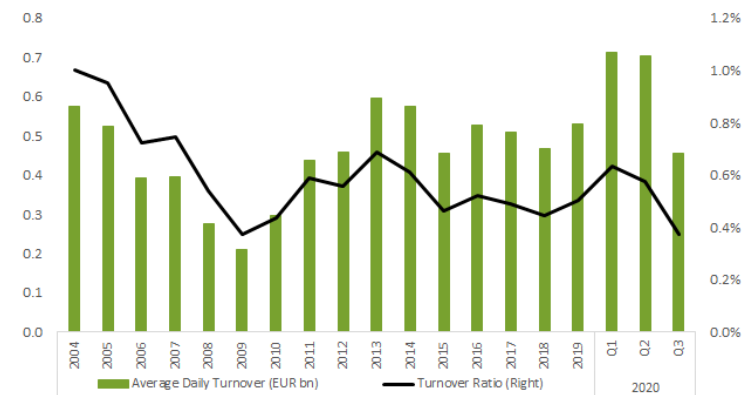
**5.14 Greece: Average daily trading volume (bonds only) and turnover ratio**



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



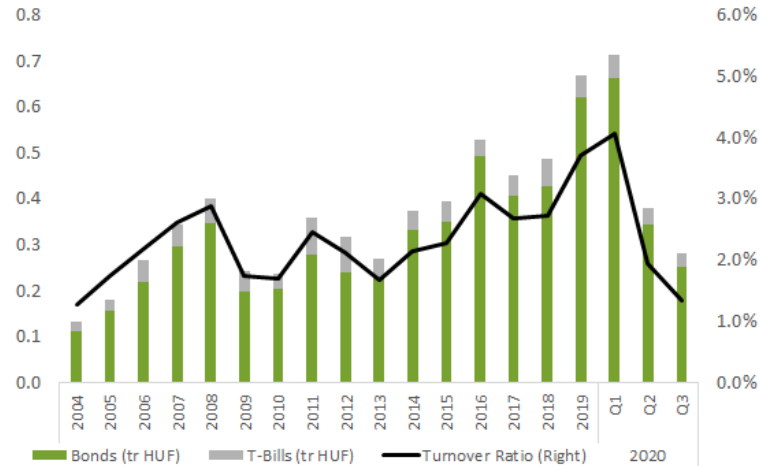
**5.16 Finland: Average daily trading volume (aggregated bonds and bills) and turnover ratio**



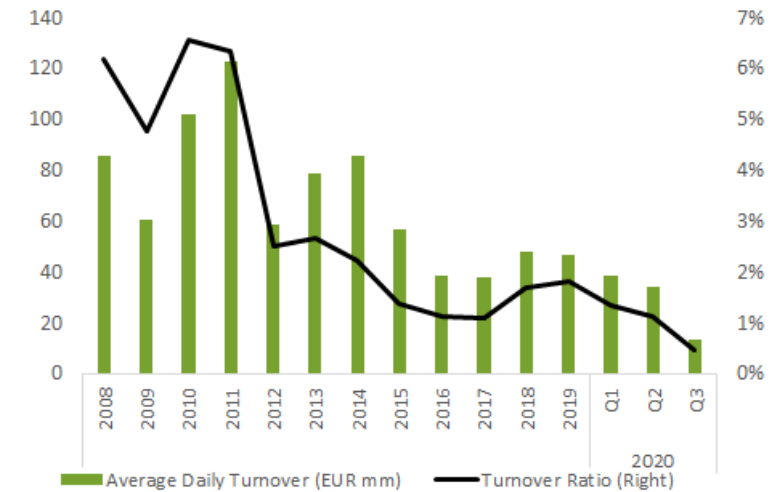
Source: Denmark: Nationalbank, Bank of Greece, ECB, National Depository for Securities (KDPW), WSE, Finland Valtiokontori. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

# Secondary Market Trading Volumes and Turnover Ratios

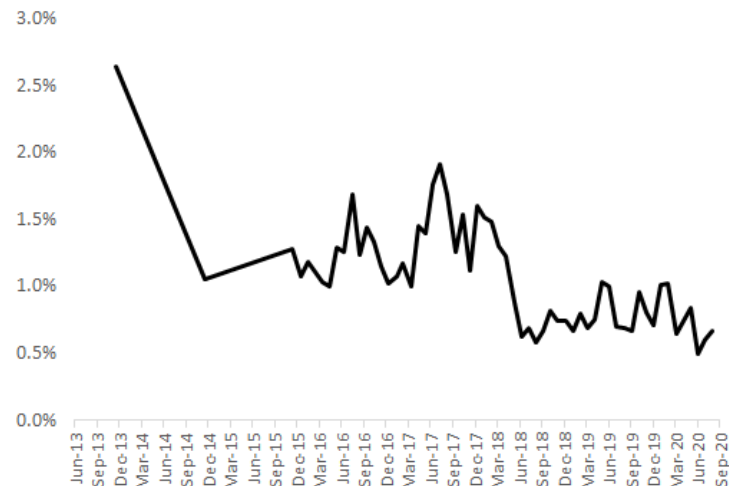
**5.17 Hungary: Average daily trading volume and turnover ratio**



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

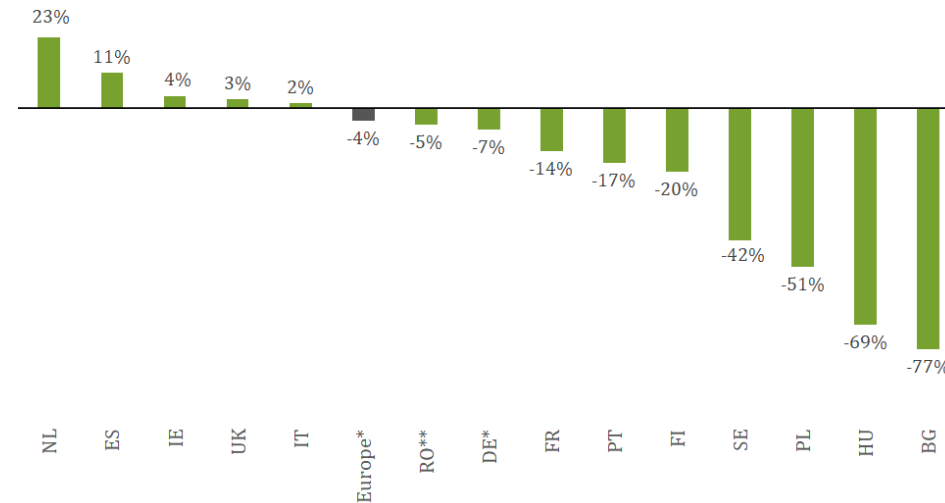


**5.19 Romania: Average daily turnover ratio**

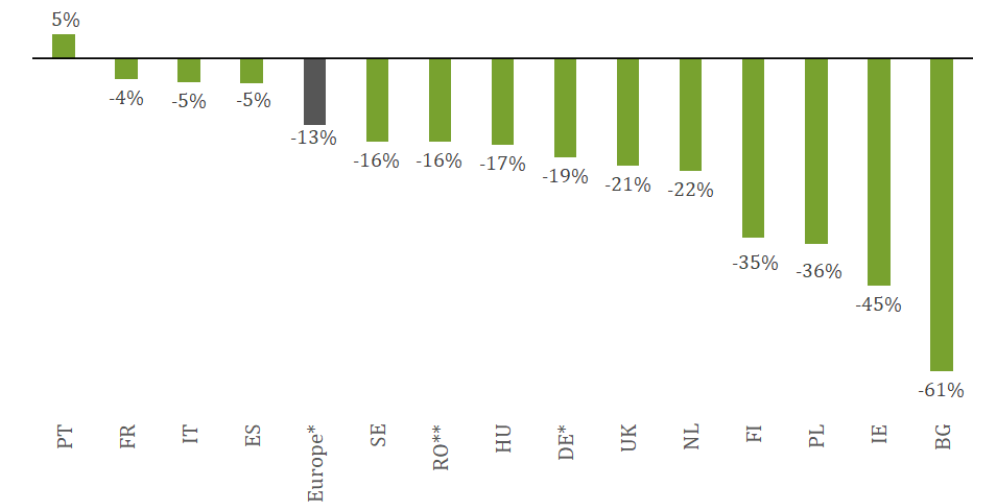


Source: ECB, AKK, Ministry of Finance of the Republic of Bulgaria, Ministerul Finantelor. **Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries. Full Methodology available on page 34 of this report.**

**5.20 Annual change in average daily turnover volumes of European government bonds: 3Q19 to 3Q20**



**5.21 Quarterly change in average daily turnover volumes of European government bonds: 2Q20 to 3Q20**

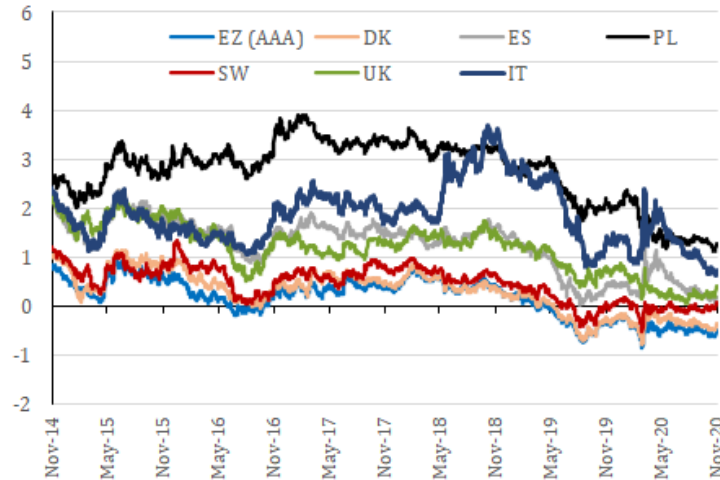


Source: AFME with information from European DMOs and other agency sources. See section 5 for details on aggregation basis and sources. \*Europe (EU+UK) total and Germany is sourced from Trax Facts as the quarterly variation of average daily volumes of government and sovereign bonds. \*\*Romanian turnover volume calculated using outstanding volumes in Section 3.

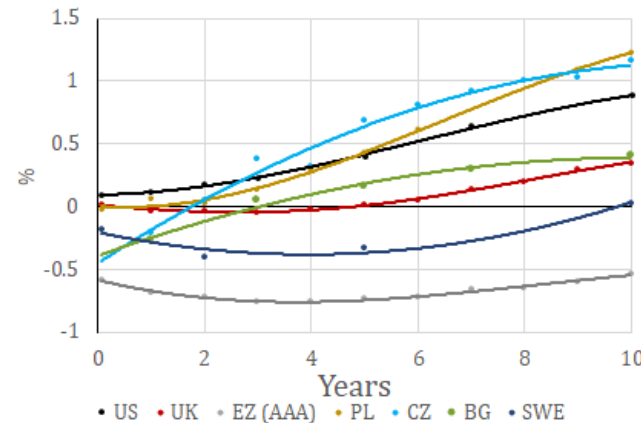
# Valuations



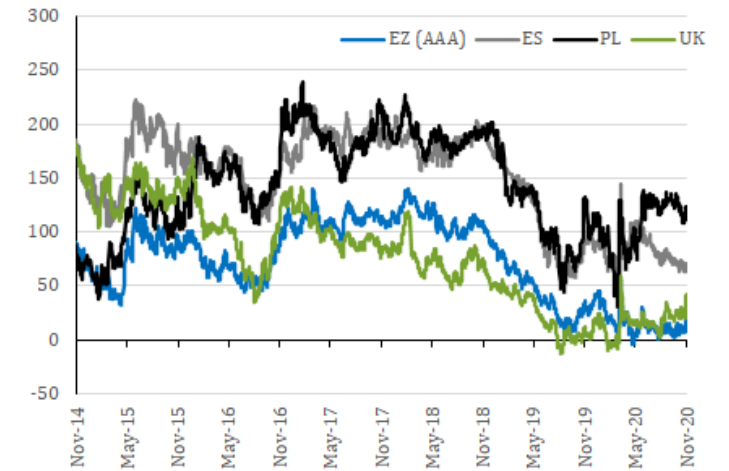
## 6.1 Selected European 10Y spot yields



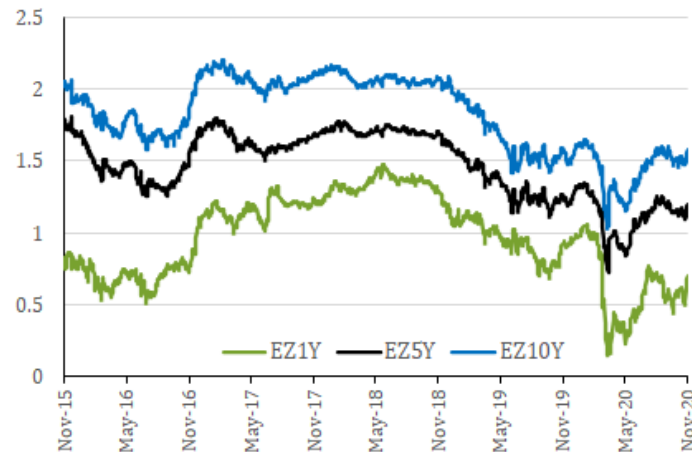
## 6.2 Sovereign spot yield curve of selected jurisdictions: 13 November 2020



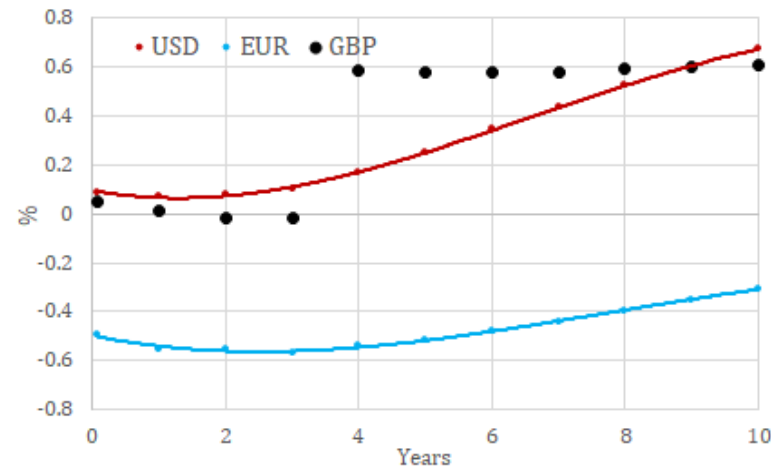
## 6.3 Slope: 1Y10Y spread (bps)



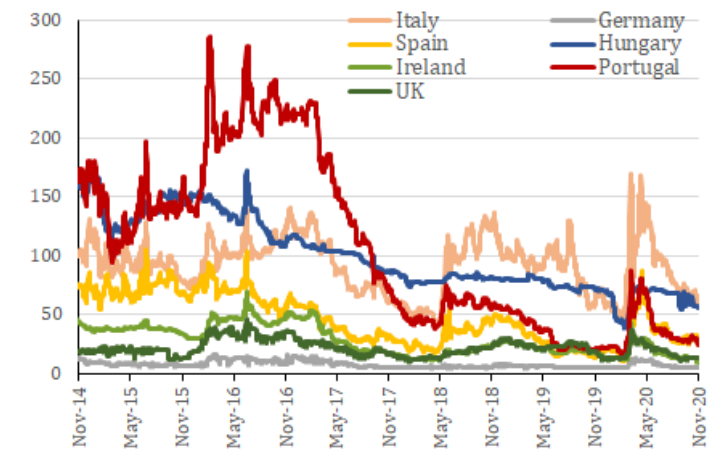
## 6.4 Market-implied inflation expectations (EuroZone)



## 6.5 Overnight index swap (OIS) yield curve: 13 November 2020



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



Source: ECB and Thomson Reuters 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 EU28:** 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 Hungary:** Turnover on MTS Hungary and Keler OTC.

**5.18 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.

**5.19 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.

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