

Government Bond Data Report

European market data update

Q2: 2019



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Highlights and Market Environment

This report provides a comprehensive data source with updated statistics on the Government bond² primary and secondary markets in Europe (EU28).

Among the main findings of this report are:

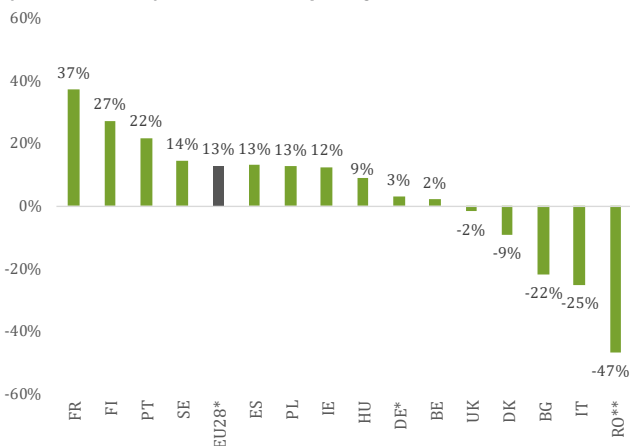
- **Average daily trading volumes** of European government bonds increased 13% YoY during 2Q19, driven by a significant increase in trading of French (37% YoY), Finnish (27% YoY) and Portuguese (22% YoY) bonds. Notably, there was a significant reduction in trading of Romanian (-47% YoY), Italian (-25% YoY) and Belgian (-22% YoY) government bonds.
- **European Government bond and bills gross issuance** totalled €590.8 bn in 2Q19, an increase of 0.7% from the volume issued in 2Q18 (€586.9 bn) and 14% below the volume issued in 1Q19 (€686 bn).
- **The average bid-cover ratio** (demand/amount allocated)³ was 2.33 in 2Q19, an increase of 17bps from 2Q18 and also from 1Q19. This is the highest average bid-cover ratio recorded in Europe since Q3 2014. The most substantial quarterly increase in bid-cover ratio was in France of 36bps whilst Sweden had the greatest quarterly reduction of -68bps.
- During 2Q19 there were **4 long-term credit rating upgrades for EU countries** (following 5 in 1Q19) and no downgrades, bringing the year to date total to 9 upgrades and no downgrades.

	2015	2016	2017	2018	1Q 2019	2Q 2019
Gross Issuance (€ bn)	2595.3	2553.8	2480.7	2304.0	686.0	590.8
Bonds (€bn)	1209.7	1184.7	1231.2	1085.8	363.5	303.1
Bills (€bn)	1385.6	1369.1	1249.6	1218.1	322.6	287.7
Outstandings (€ tn)	9.73	9.60	9.68	9.88	10.07	10.06
Bid-cover ratio	2.22	2.16	2.13	2.15	2.16	2.33
Average daily turnover (% YoY change)	-8.4%	-7.2%	-0.3%	-9.8%	13.0%	12.7%

“EU government bond trading volume¹ has increased 13.2% year-on-year but decreased -1.3% between 1Q19 and 2Q19”

1. Annual changes in Government Bond average trading volumes

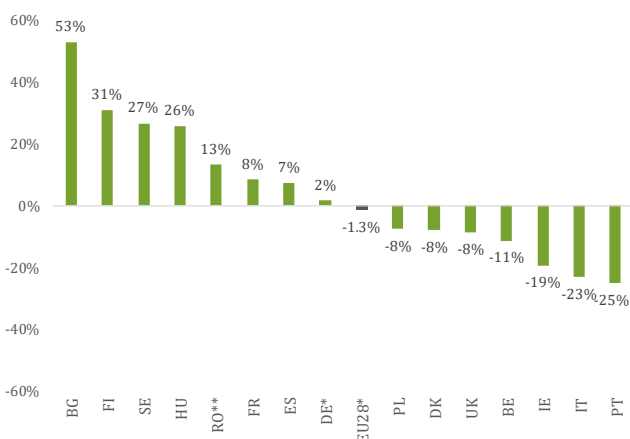
(2Q19 vs 2Q18) Selected European jurisdictions



Source: AFME with information from European DMOs and other agency sources and Trax, a MarketAxess subsidiary. See section 5 for details on aggregation basis and sources. *Europe 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.

2. Quarterly change in Government Bond average trading volumes

(2Q19 vs 1Q19) Selected European jurisdictions



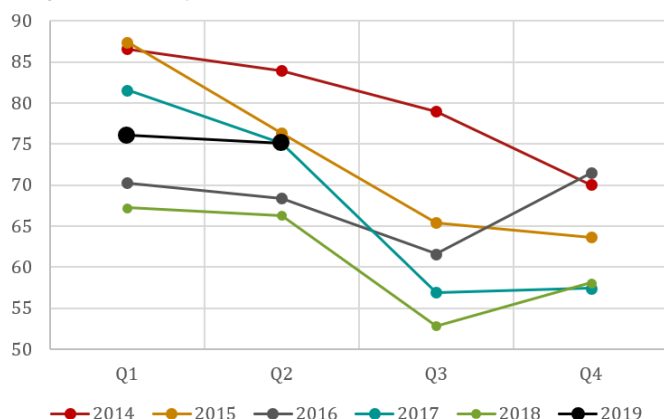
Source: AFME with information from European DMOs and other agency sources and Trax, a MarketAxess subsidiary. See section 5 for details on aggregation basis and sources. *Europe total and German turnover is sourced from Trax Facts as the quarterly variation of average daily volumes of government and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

¹ Total EU government bond trading volume data is sourced from Trax

² Fixed income securities issued by central governments. The report includes Bonds and Treasury Bills and excludes agencies and Central Bank origination.

³ Weighted average (by issuance volume) of bid-cover ratios in the United Kingdom, Spain, France, Italy, Germany, Belgium, Sweden, Netherlands, Denmark and Austria.

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



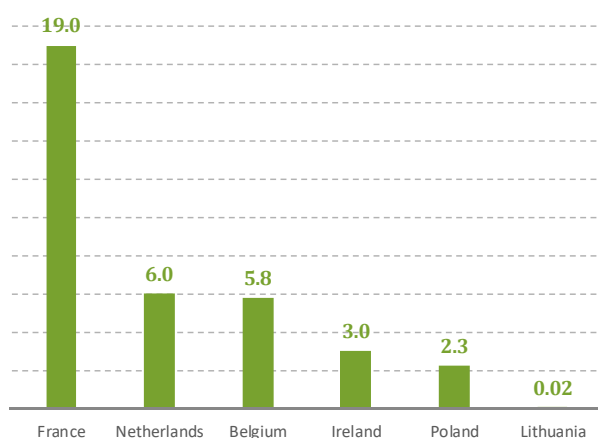
Source: Trax, a MarketAxess subsidiary

4. Outstanding amount of sovereign green bonds (2016Q4-2019Q2), €bn



Source: Thomson Reuters Eikon

5. Outstanding volume of sovereign green bonds by country (2019 Q2, €bn)



Source: Thomson Reuters Eikon

Highlights

EU Government Bond trading remains steady with 2Q 2019 turnover volume at a 2-year high

The recent annual increase in European government bond trading appears to be attributed to the major repricing of fixed income instruments over the last three quarters.

The 13.2% annual increase in government bond trading contrasts with the -15.4% decline (YoY) in the European equities market during 2Q19 according to CBOE and the -1.5% fall (YoY) in global FX trading, according to CLS markets.

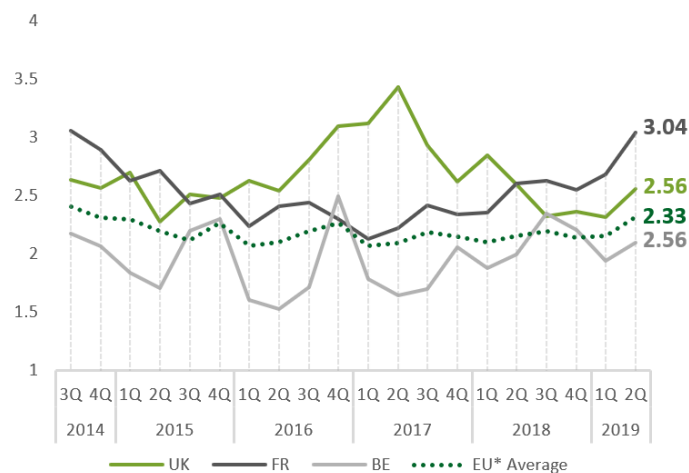
Outstanding green sovereign bonds see the largest quarterly increase on record

A total of €8 bn in sovereign green bonds were issued in 2Q19, the greatest quarterly change to date. This was driven by increased volumes via re-opening of a green bond in France and a €6 bn bond brought to the market by the Netherlands, increasing the total outstanding amount of EU sovereign green bonds to €36 bn. (see chart 4)

This is the first time the Dutch government has issued a green bond. Not only is the first AAA rated sovereign green bond but it is also the first bond in the EU to achieve Climate Bonds Initiative (CBI) certification. The Netherlands is now the second largest issuer in the EU of sovereign green bonds. (see chart 5)

EU volumes are highly concentrated in a few countries, with France accounting for 53% of outstanding volumes. Furthermore, while the sovereign green bond market has experienced significant growth in outstanding amounts since its establishment in Q4 2016, it still only represents 0.4% of the total volume of outstanding EU government bonds.

6. Average bid-cover ratios in selected jurisdictions (€ bn)



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

Average bid-cover ratio for EU countries reaches five-year high

This was driven by large increases in the average bid-cover ratio in France (13.4% QoQ), the UK (10% QoQ) and Belgium (8.3% QoQ). (see chart 6).

In France, an auction of €430m of treasury bills had a bid-cover ratio of 8.06, the largest oversubscription sovereign auction in France since 2014 and the second highest French bid-cover ratio on record.⁴

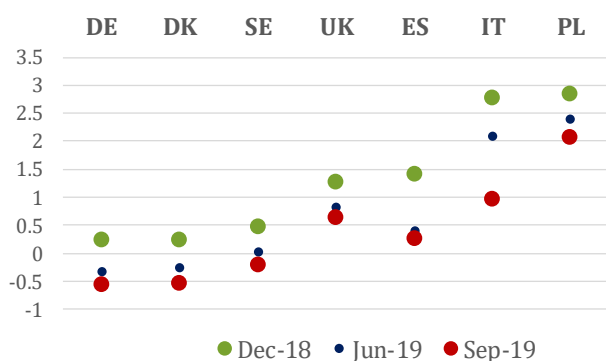
Government bond yields reach new lows

The ECB and other major central banks have announced new monetary stimulus programmes by cutting interest rates and restarting asset purchases.

Germany's 10-year bond yield has declined over the last nine months from 0.246% at the end of December 2018 to -0.567% in September 2019. Similar declines have been observed in other European government bonds, with average yield declines of c100 bps over the last nine months. See chart 7.

As shown in section 6, in the euro area, market-implied inflation expectations reached 3-year lows in September (chart 6.4 in the report) while yield curves in the US, the eurozone and the UK flattened to levels not seen in more than a decade (charts 6.2 and 6.3 of the report).

7. European 10Y government bond yields (%)



Source: Thomson Reuters

Major upcoming regulatory, legislative and policy initiatives

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

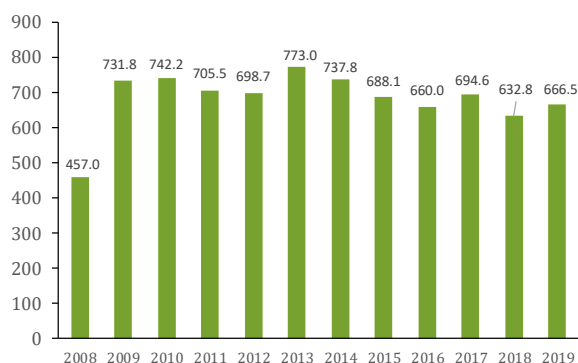
- Basel III
- CSDR
- Fundamental Review of the Trading Book (FRTB)
- Prospectus Regulation

AFME and its members are actively engaged on all of these initiatives.

⁴ AFME records date back to 2010

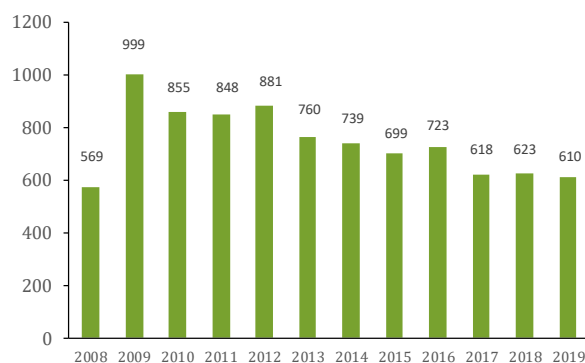
1. Issuance

1.1 EU Government Bond gross issuance (EUR bn). Year-to-date (1H)



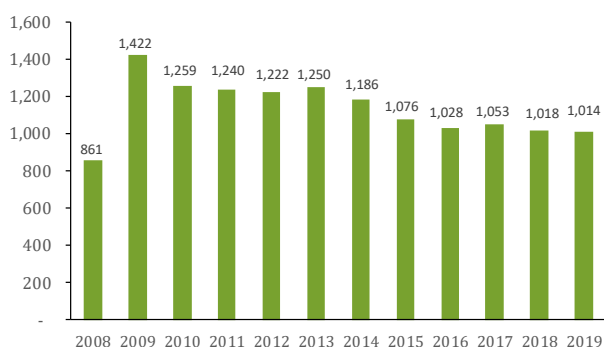
Source: ECB and National Debt Management Offices

1.2 EU Treasury Bills gross issuance (EUR bn). Year-to-date (1H)



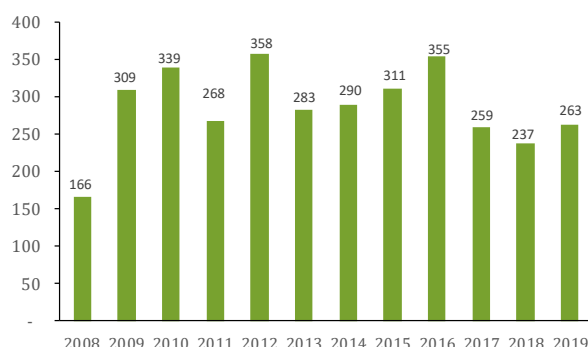
Source: ECB and National Debt Management Offices

1.3 Eurozone bonds and bills gross issuance (EUR bn): year-to-date (1H)



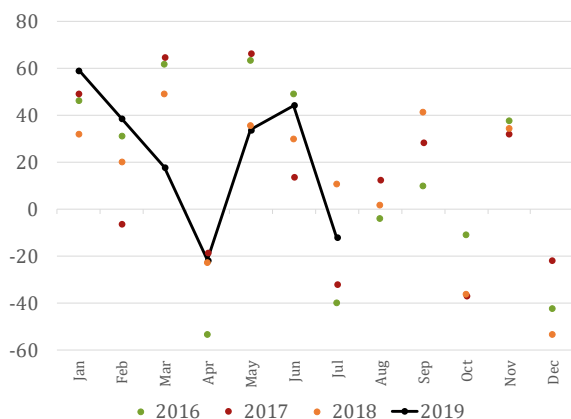
Source: ECB and National Debt Management Offices

1.4 Non-Eurozone bonds and bills gross issuance (EUR bn). Year-to-date (1H)



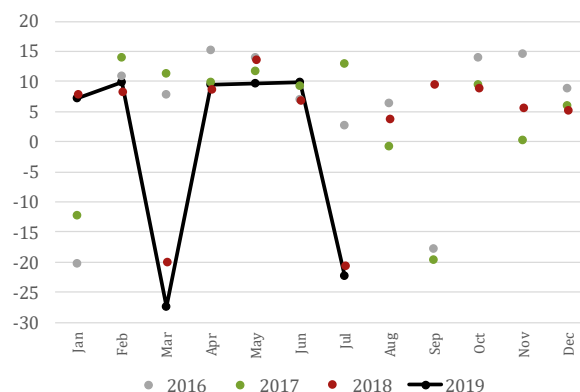
Source: ECB and National Debt Management Offices

1.5 Euro area net sovereign debt issuance (EUR bn)



Source: ECB

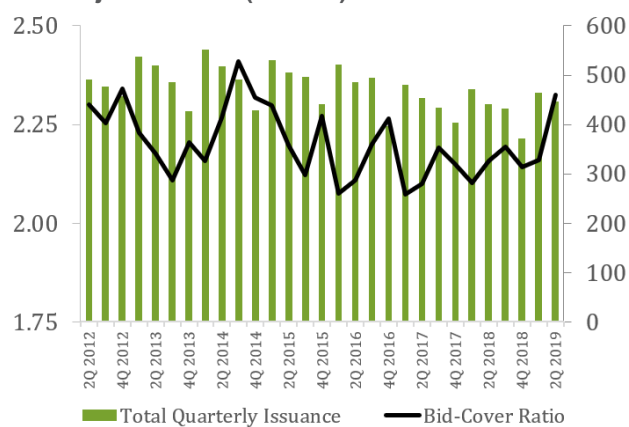
1.6 UK Gilts net issuance (GBP bn)



Source: UK Debt Management Office

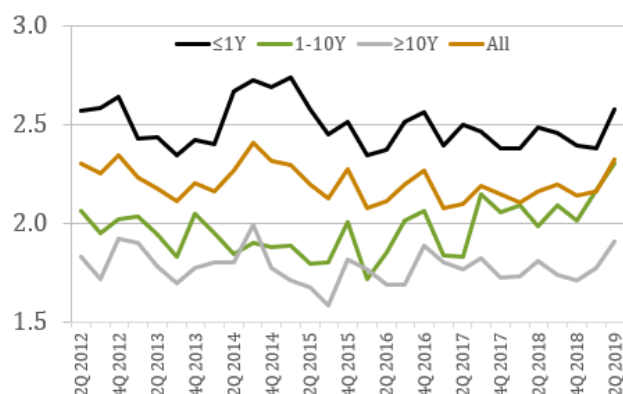
2. Recent auctions and primary dealers

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



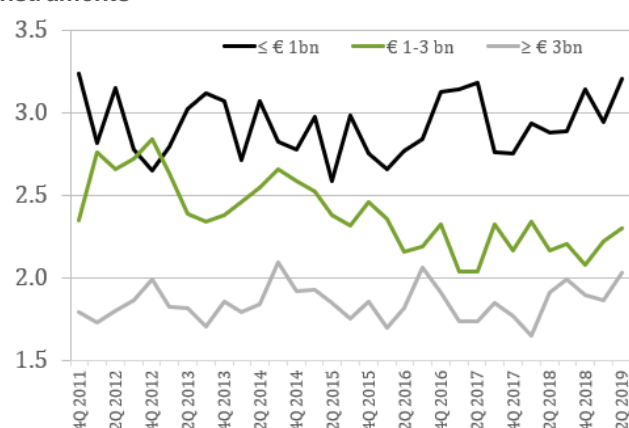
Source: Thomson Reuters Eikon. Weighted average of UK, DE, FR, ES, IT, BE, SE, NL, DK, and AT bonds and bills

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



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

2.3 Average bid-cover ratios by size of issued instruments



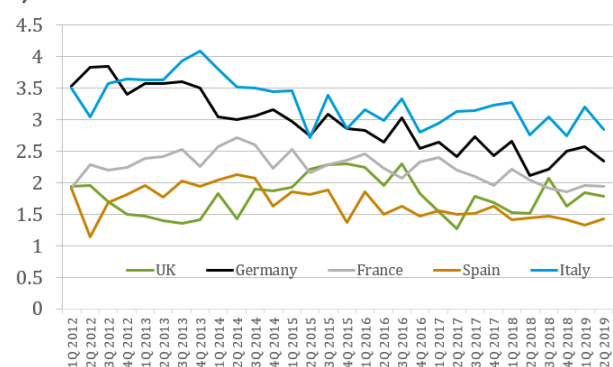
Source: Thomson Reuters Eikon. Weighted average of UK, DE, FR, ES, IT, BE, SE, NL, DK, and AT bonds and bills

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



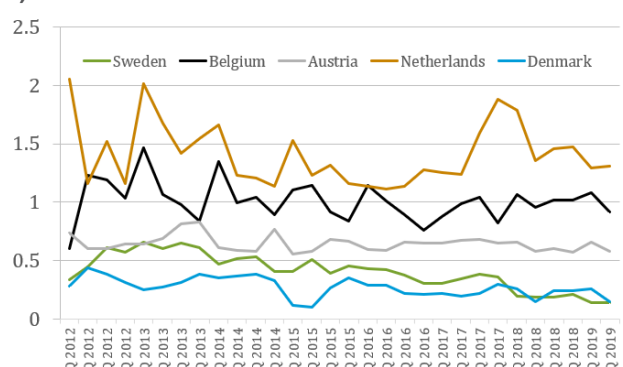
Source: Thomson Reuters Eikon. Weighted average of UK, DE, FR, ES, IT, BE, SE, NL, DK, and AT bonds and bills. Polynomial trendline in grey.

2.5 Average auction size in selected jurisdictions (EUR bn)



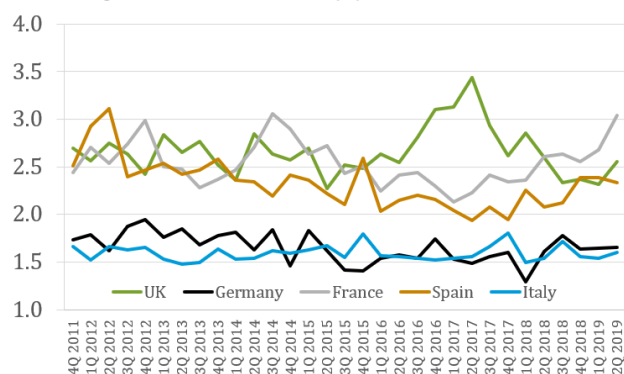
Source: Thomson Reuters Eikon

2.6 Average auction size in selected jurisdictions (EUR bn)



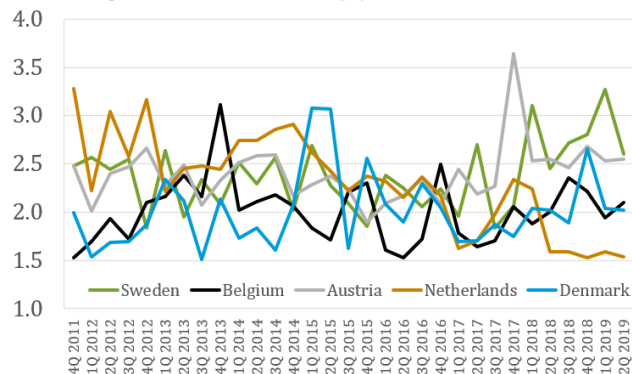
Source: Thomson Reuters Eikon

2.7 Average bid-cover ratios by jurisdictions



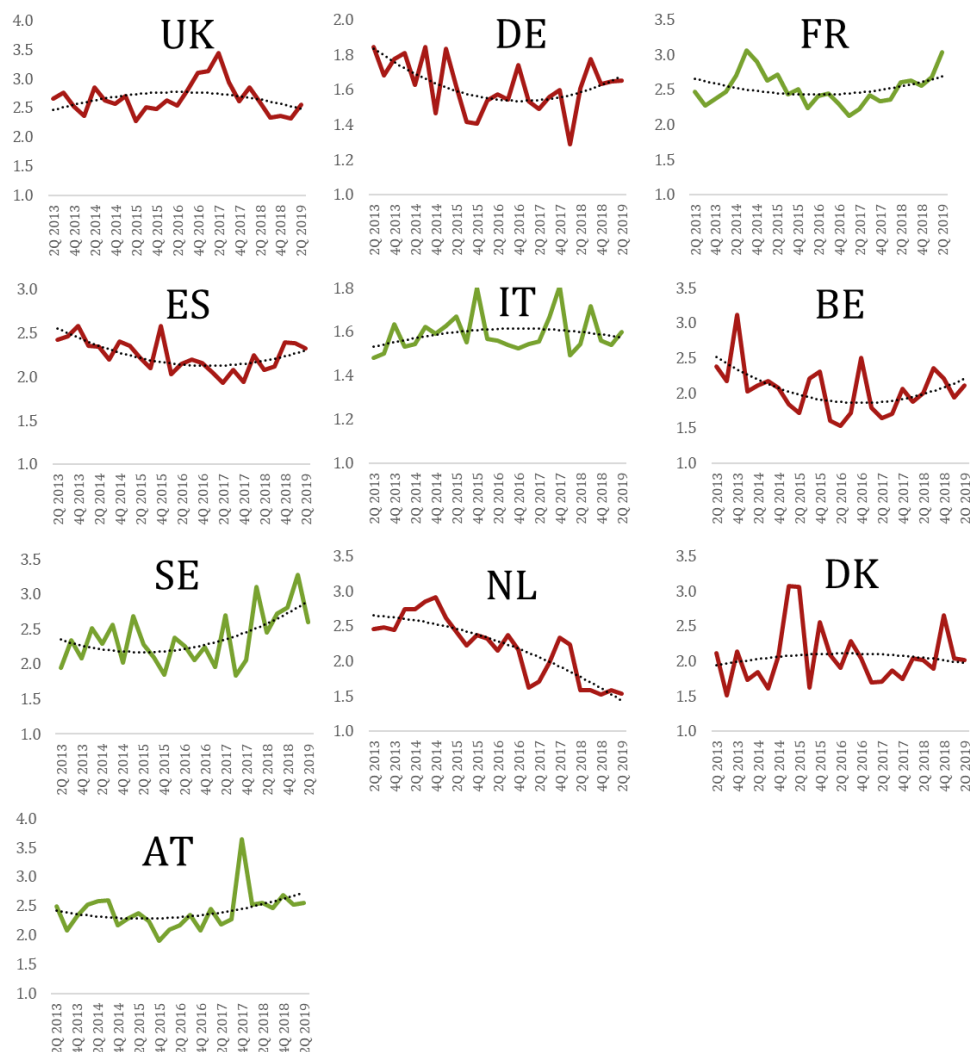
Source: Thomson Reuters Eikon

2.8 Average bid-cover ratios by jurisdictions



Source: Thomson Reuters Eikon

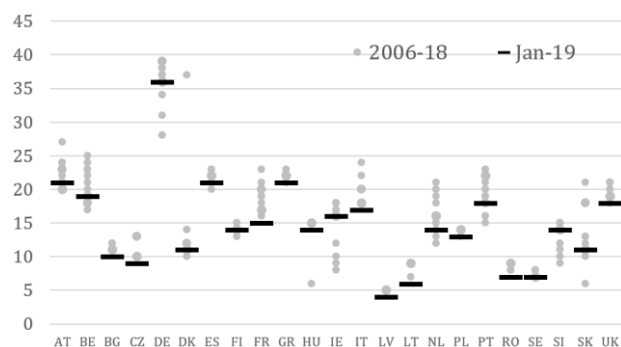
2.9 Average bid-cover ratios in selected jurisdictions: 2012-19⁵



Source: Thomson Reuters Eikon

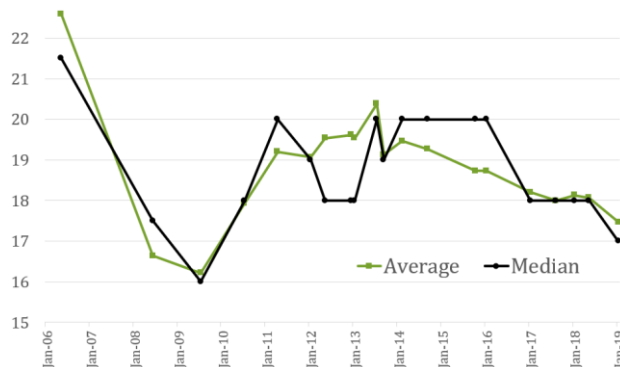
⁵ Chart colour indicates slope of trendline. Green indicates end value of trendline above starting value and red indicates end value of trendline below starting value.

2.10 Number of primary dealers relative to historic number



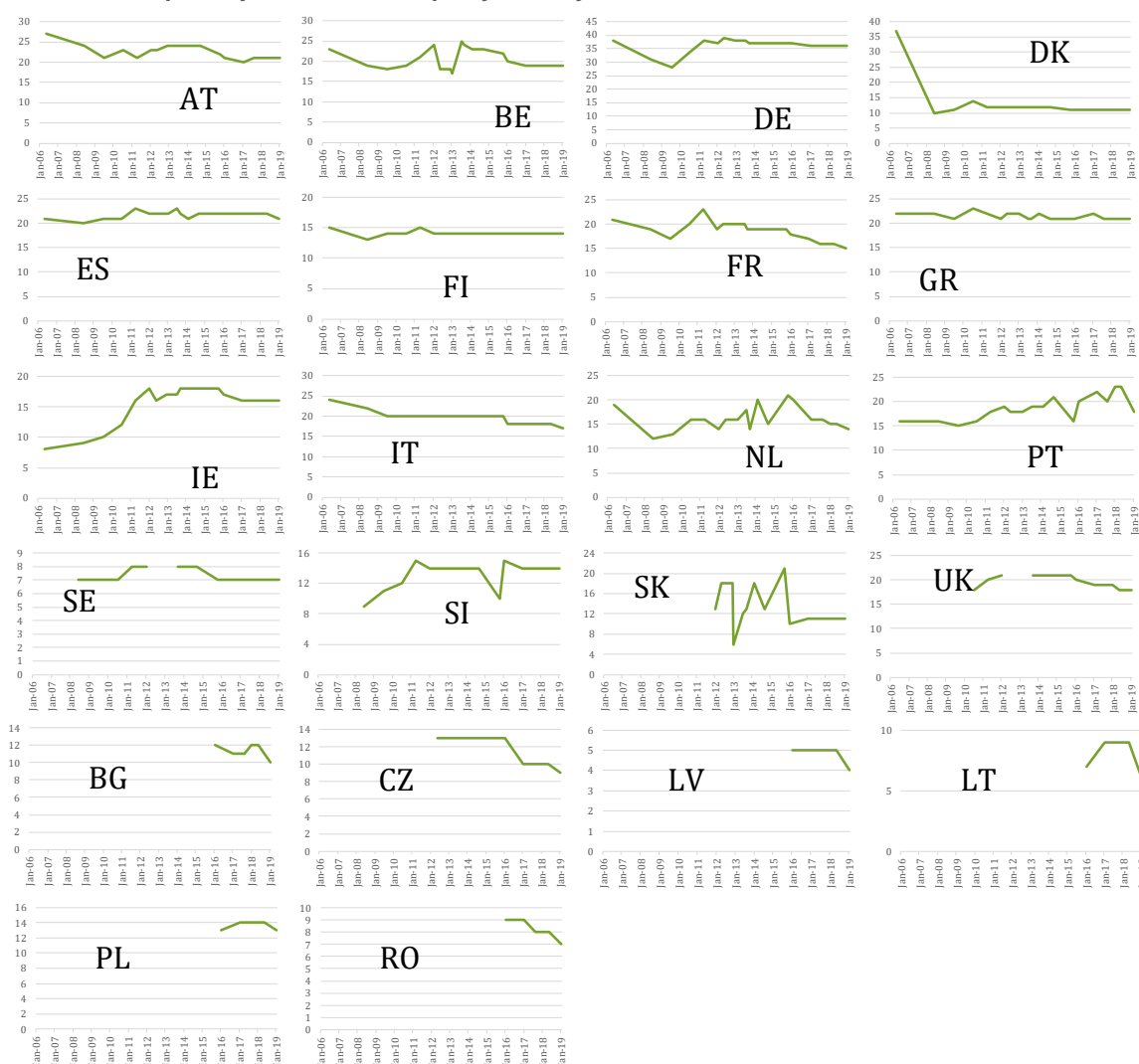
Source: AFME Primary Dealers Handbooks and national DMOs

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



Source: AFME HRF Table and 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: 2006-19⁶

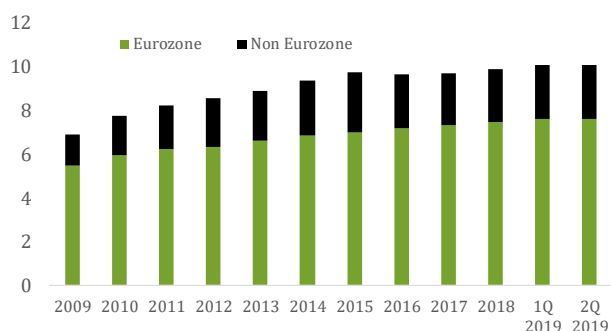


Source: AFME HRF Table and national DMOs

⁶ The gap in the lines for UK and Sweden indicates data not recorded in the relevant period.

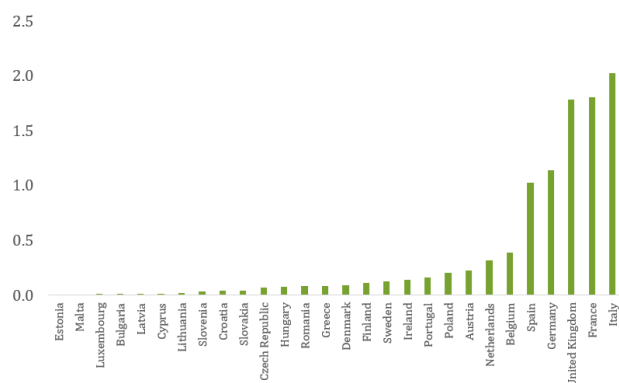
3. Outstanding

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



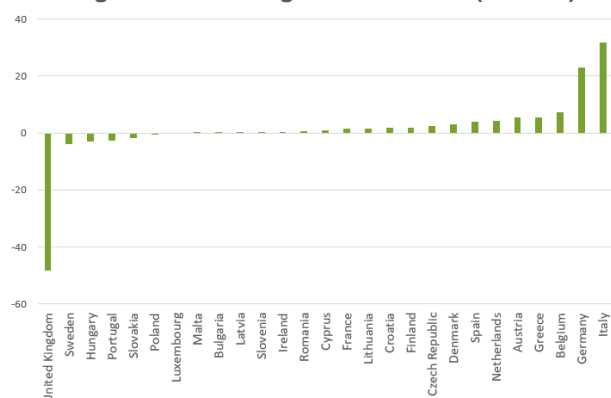
Source: ECB and Thomson Reuters Eikon

3.2 European government bonds outstanding by country (EUR tn)



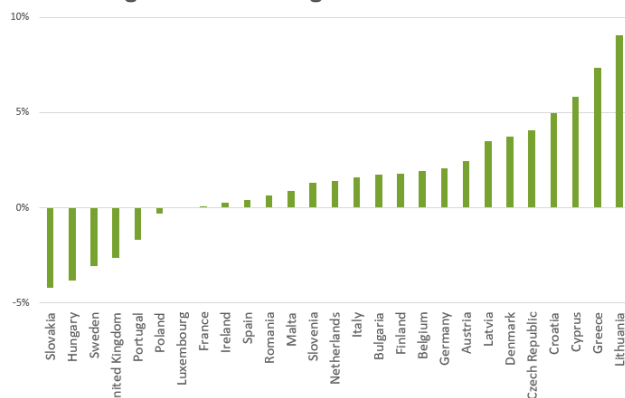
Source: Thomson Reuters Eikon

3.3 Change in outstandings 1Q19 to 2Q19 (EUR bn)



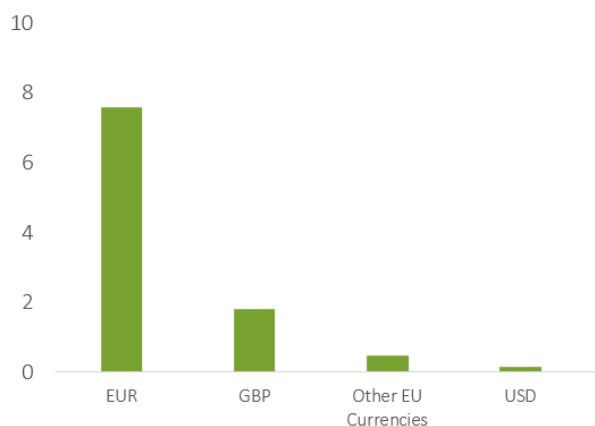
Source: Thomson Reuters Eikon

3.4 % Change in outstandings from 1Q19 to 2Q19



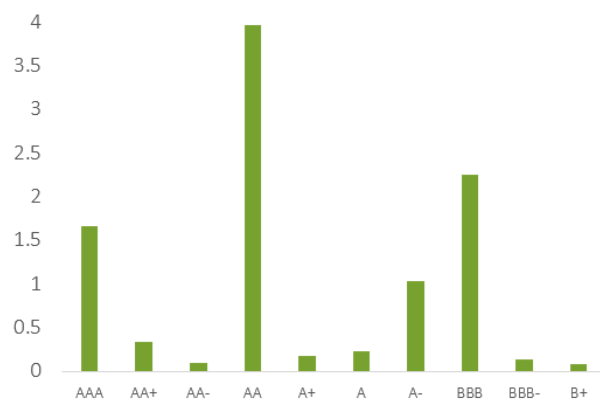
Source: Thomson Reuters Eikon and Standard and Poor's

3.5 European government bonds outstanding by currency (EUR tn)



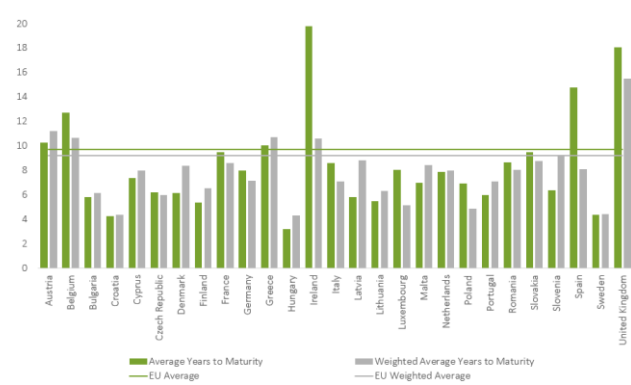
Source: Thomson Reuters Eikon

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



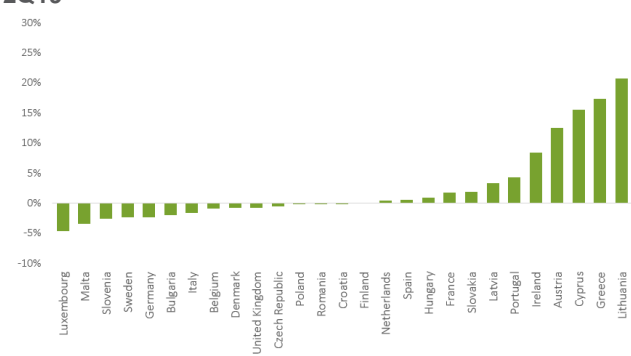
Source: Thomson Reuters Eikon and Standard and Poor's

3.7 Average years to maturity for outstanding government bonds in EU countries⁷



Source: Thomson Reuters Eikon

3.8 Quarterly change in weighted average years to maturity for outstanding government bonds 1Q19 to 2Q19⁸

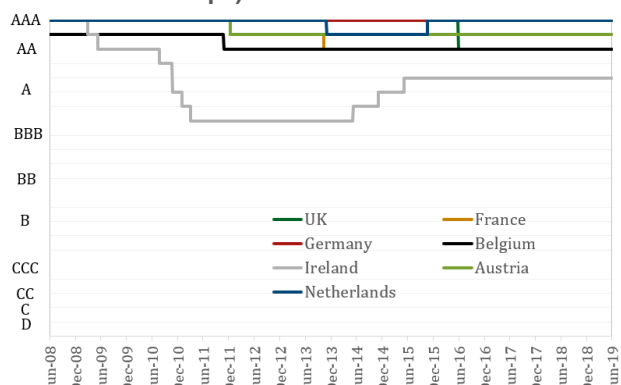


Source: Thomson Reuters Eikon

⁷ Weighted average by outstanding amount
⁸ Weighted average by outstanding amount

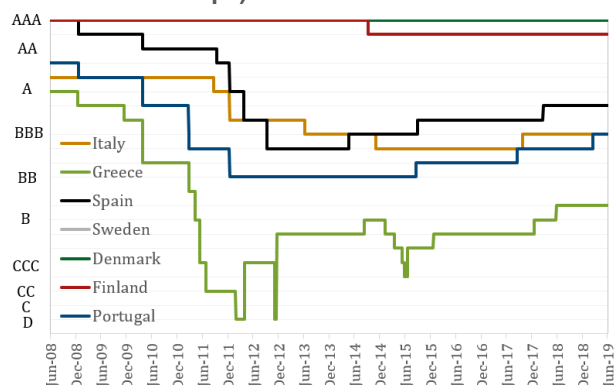
4. Credit quality

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



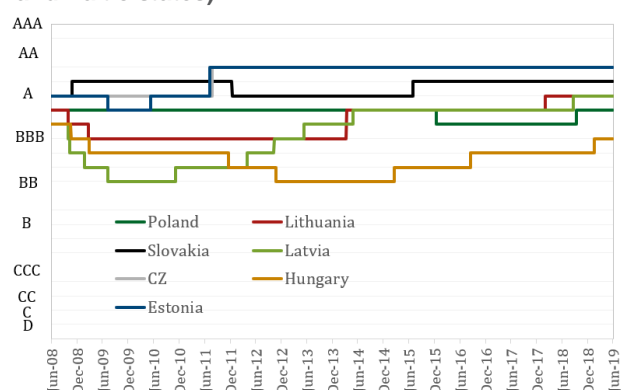
Source: Thomson Reuters Eikon with data of Standard and Poor's

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



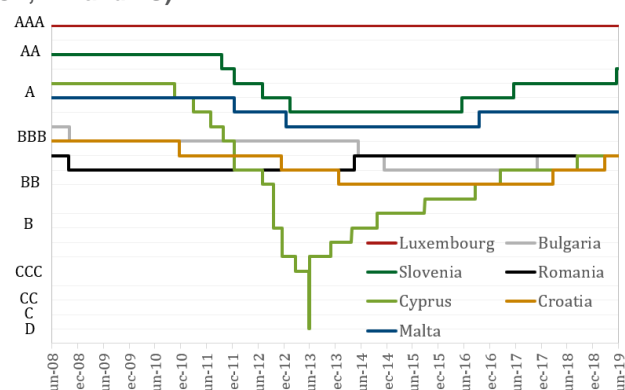
Source: Thomson Reuters Eikon with data of Standard and Poor's

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



Source: Thomson Reuters Eikon with data of Standard and Poor's

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



Source: Thomson Reuters Eikon with data of Standard and Poor's

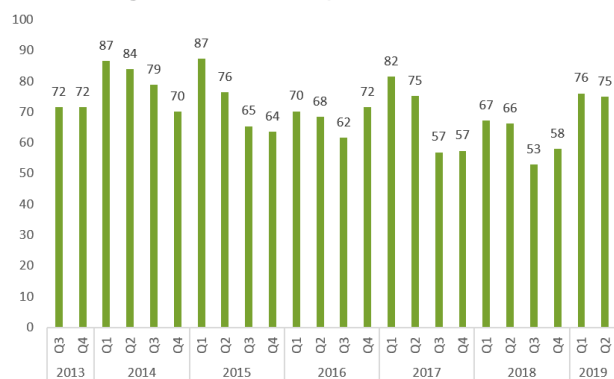
4.5 European rating actions on long-term foreign currency ratings (YtD)

Issuer	Rating action	Date	Rated by	Rationale
Hungary	Upgrade to BBB (stable) from BBB-	Feb-19	S&P	Sound growth prospects, supported by high private savings and real wage gains, as well as ongoing expansion of export capacity
Hungary	Upgrade to BBB (stable) from BBB-	Feb-19	Fitch	Rapid external deleveraging, reduction in external debt, consistent current account surpluses, stable FDI inflows and capital transfers from the EU
Greece	Upgrade to B1 (stable) from B3	Mar-19	Moody's	Implementation of reforms, strengthening economy and fiscal structural improvement, re-establishment of market based sovereign funding
Portugal	Upgrade to BBB (stable) from BBB-	Mar-19	S&P	Declining debt and balanced growth, expected budget surpluses for the next three years
Croatia	Upgrade to BBB- (positive) from BB+	Mar-19	S&P	Strengthening fiscal metrics and declining government debt
Croatia	Upgrade to BBB- (positive) from BB+	Jun-19	Fitch	Positive fiscal developments underpinned by expenditure restraint, increased revenue, lower interest costs and favourable macro-economic conditions
Slovenia	Upgrade to AA- (stable) from A+	Jun-19	S&P	Expected solid economic and fiscal results, whilst running substantial net external surpluses with the rest of the world
Malta	Upgrade to A2 (positive) from A3	Jul-19	Moody's	Continued improvement of fiscal strength, driven by fiscal prudence and Malta's strong medium-term growth prospects
Slovenia	Upgrade to A (stable) from A-	Jul-19	Fitch	Improvement in public debt sustainability stemming from a combination of primary surpluses, strong growth dynamics and asset sales

Source: Fitch, Moody's, S&P

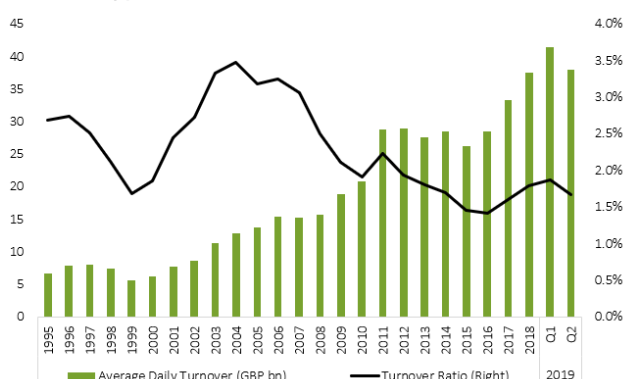
5. Secondary market trading volumes and turnover ratios⁹

5.1 EU28: Average daily trading volumes (Government and sovereign bonds, EURbn)¹⁰



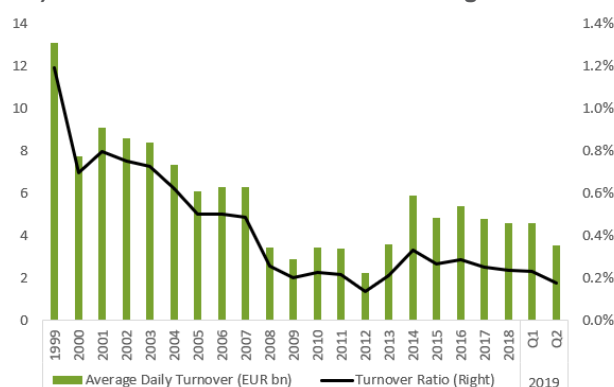
Source: Trax, a MarketAxess subsidiary

5.2 United Kingdom: Average daily trading volume (bonds only) and turnover ratio¹¹



Source: UK Debt Management Office

5.3 Italy: Average daily trading volume (bonds and bills) and turnover ratio. Electronic trading¹²



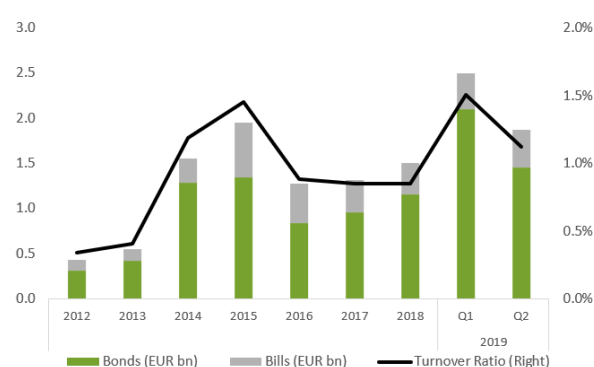
Source: Italian Dipartimento del Tesoro

5.4 Germany: Average daily trading volume (aggregated bonds and bills) and turnover ratio¹³



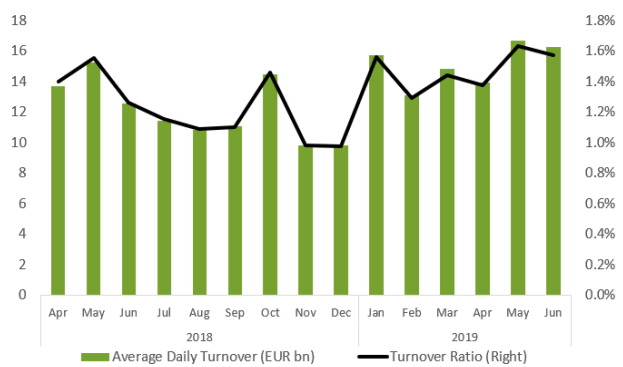
Source: Deutsche Finanzagentur und ECB

5.5. Portugal: Average daily trading volume and turnover ratio¹⁴



Source: Agência de Gestão da Tesouraria e da Dívida Pública – IGCP and ECB

5.6 Spain: Average daily trading volume and turnover ratio¹⁵



Source: BME Market Data and Tesoro Público de España

⁹ Turnover ratios are calculated as the average daily trading volume relative to total outstandings. Cash trading only (excludes repo and derivatives transactions). Given the differences in the aggregation basis across jurisdictions, the data is not fully comparable between countries.

¹⁰ 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. Government & Sovereign bond volumes for EU28 member states as per the AFME methodology.

¹¹ Turnover data reported to the DMO by the Gilt-edged Market Makers (primary dealers).

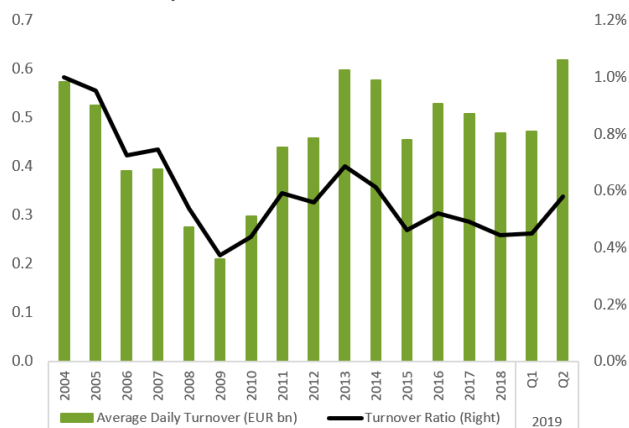
¹² Turnover on electronic interdealer regulated market.

¹³ 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. Bubills, Schaeetze, Bobls, Bunds and inflation-linked securities. Capital and coupon strips as well as US-dollar bonds are excluded. Data not currently available for 3Q18.

¹⁴ Turnover of electronic and OTC trading reported on MTS-Portugal, BrokerTec and eSpeed.

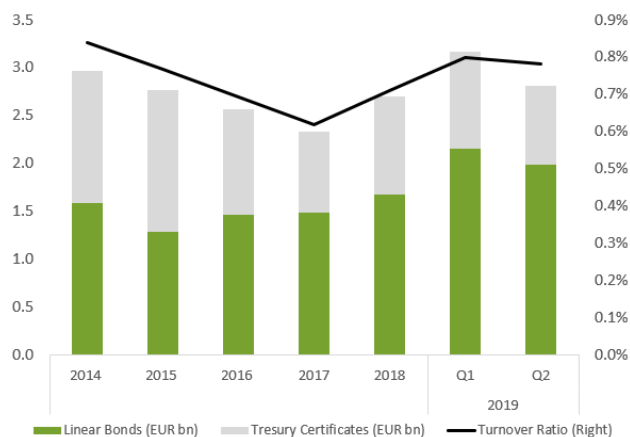
¹⁵ Due to data reconciliation activities of the Bank of Spain, data from April 2018 is from BME Market Data, a subsidiary of Bolsas y Mercados Españoles. Turnover is derived from settlement data from Iberclear.

5.7 Finland: Average daily trading volume (aggregated bonds and bills) and turnover ratio¹⁶



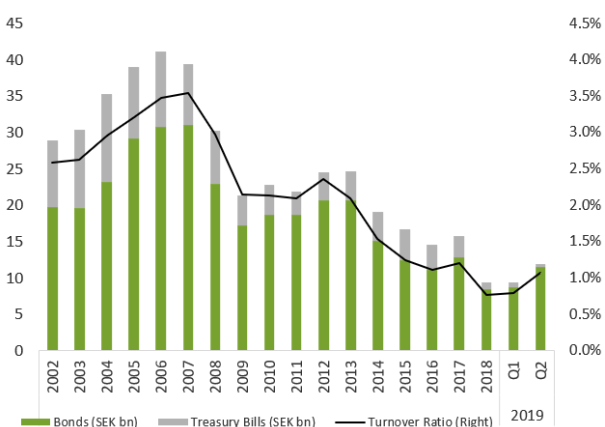
Source: Finland Valtiokonttori and ECB

5.8 Belgium: Average daily trading volume and turnover ratio¹⁷



Source: Belgian Debt Agency and ECB

5.9 Sweden: Average daily trading volume and turnover ratio¹⁸



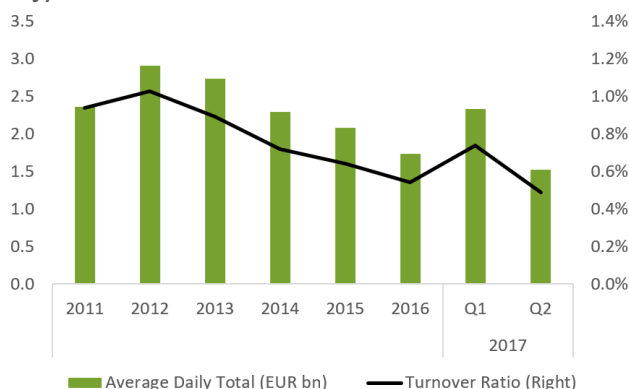
Source: Swedish National Debt Office (Riksgälden) and ECB

5.10 Ireland: Average daily trading volume (aggregated bonds and bills) and turnover ratio¹⁹



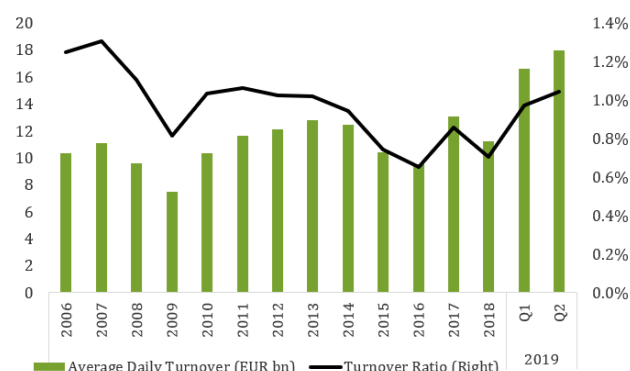
Source: Irish Stock Exchange and ECB

5.11 Netherlands: Average daily trading volume (bonds only) and turnover ratio²⁰



Source: Ministerie van Financiën

5.12 France: Average daily trading volume (bonds only) and turnover ratio²¹



Source: Agence France Trésor and ECB

¹⁶ Turnover of customer trades, MTS Finland and Euro MTS.

¹⁷ Turnover is total outright transactions.

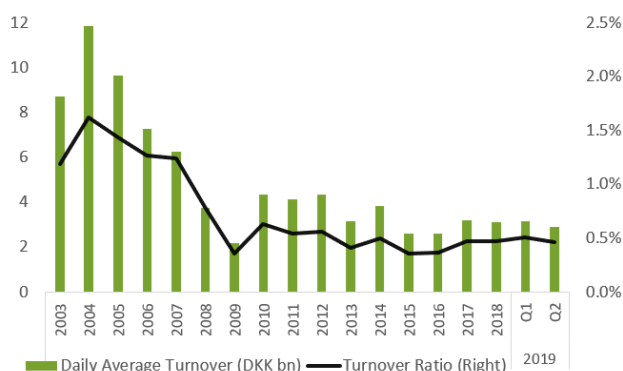
¹⁸ Turnover is total outright transactions.

¹⁹ Turnover on Irish Stock Exchange.

²⁰ Turnover is customer and interdealer trading. Total outright transactions, including electronic and OTC trading. Data only available up to 2Q17

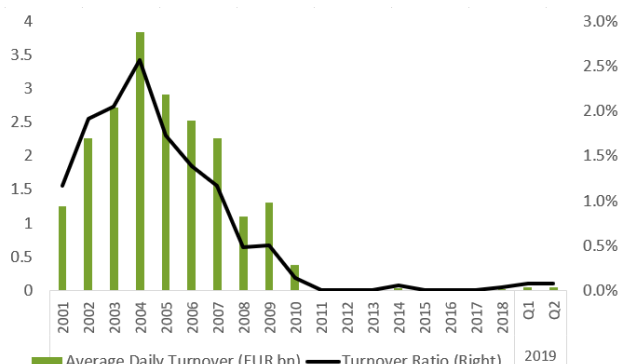
²¹ Turnover of voice and electronic trading (not including PSPP transactions or trading without an SVT).

5.13 Denmark: Average daily trading volume (bonds and bills) and turnover ratio²²



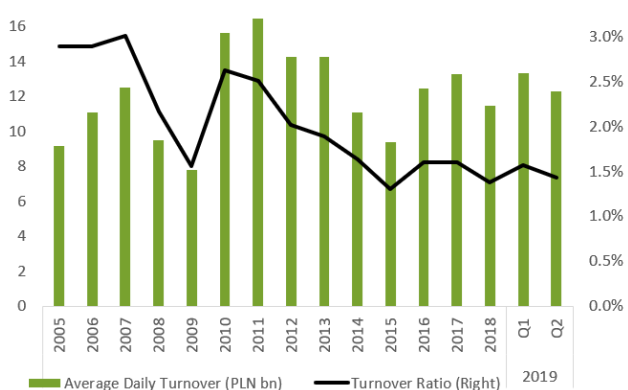
Source: Danmarks Nationalbank

5.14 Greece: Average daily trading volume (bonds only) and turnover ratio²³



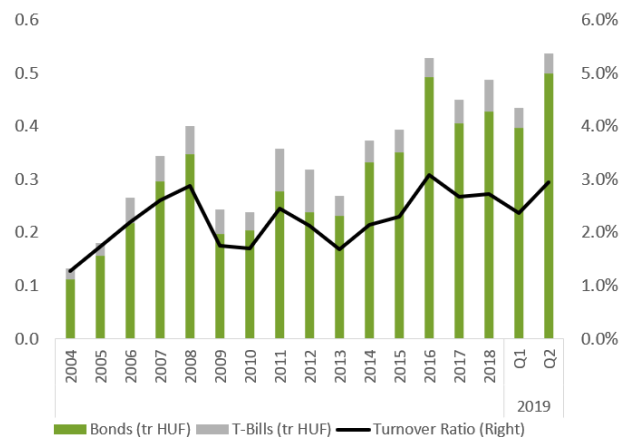
Source: Bank of Greece and ECB

5.15 Poland: Average daily trading volume (bonds only) and turnover ratio²⁴



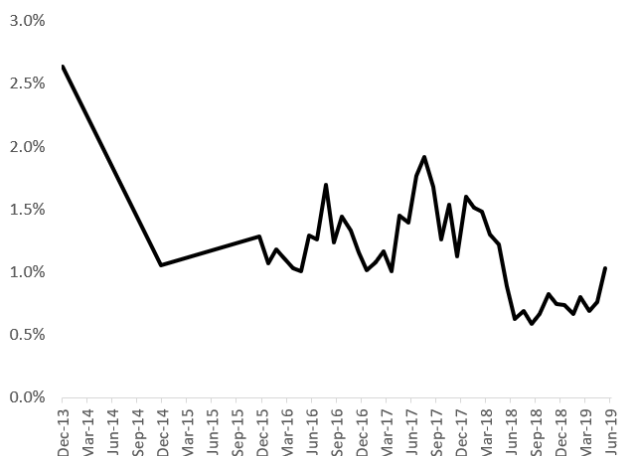
Source: National Depository for Securities (KDPW), WSE

5.16 Hungary: Average daily trading volume and turnover ratio²⁵



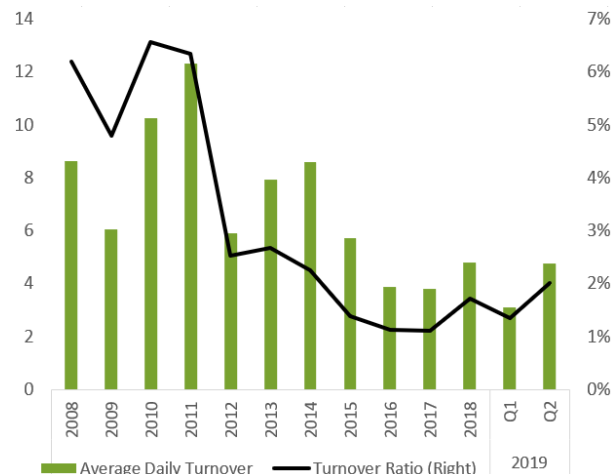
Source: ÁKK

5.17 Romania: Average daily turnover ratio²⁶



Source: Ministerul Finantelor

5.18 Bulgaria: Average daily turnover ratio²⁷



Source: Ministry of Finance of the Republic of Bulgaria

²² Turnover of MTS, TradeWeb, Bondvision and trades reported to Nasdaq OMX (including voice trading). Data only available up to 2018 Q4.

²³ Turnover on Electronic Secondary Securities Market (HDAI).

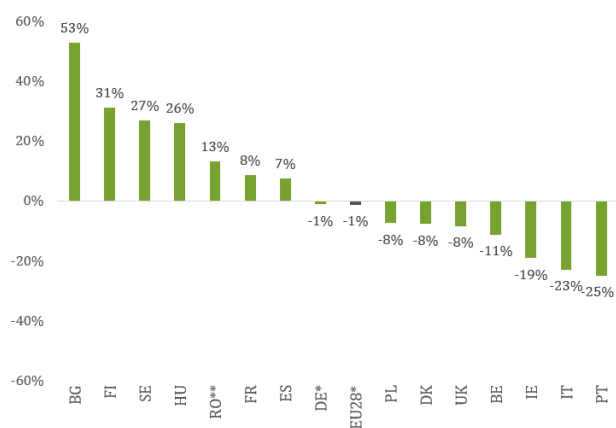
²⁴ Turnover is total outright transactions. Data from KDPW are presented according to the date of the settlement, while data from WSE are presented according to the date of conclusion of a transaction.

²⁵ Turnover on MTS Hungary and Keler OTC.

²⁶ 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.

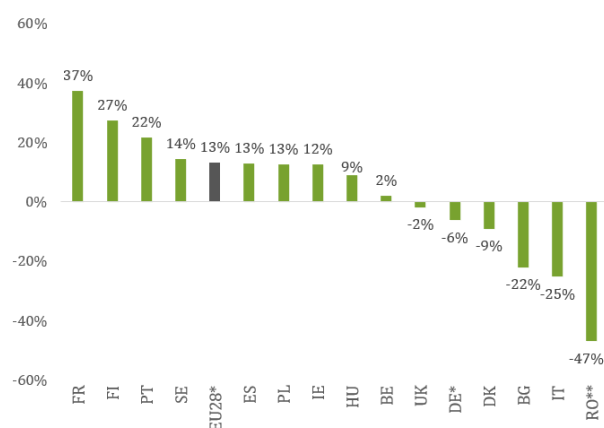
²⁷ Turnover ratio of the government securities issued on domestic market. Official values reported as average monthly turnover ratios, which have been converted assuming 20 business days per month.

5.19 Quarterly change in average daily turnover volumes of EU government bonds: 1Q19 to 2Q19



Source: AFME with information from European DMOs and other agency sources. See section 5 for details on aggregation basis and sources. *Europe 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.

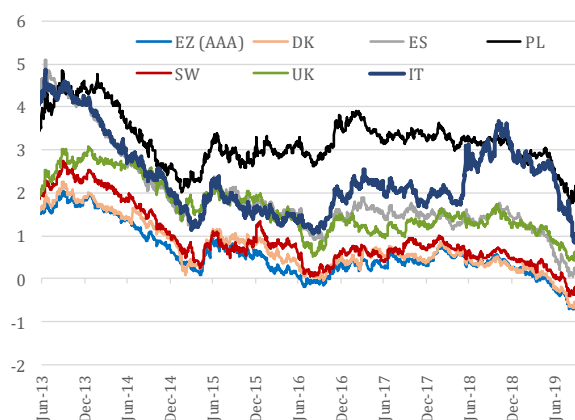
5.20 Annual change in average daily turnover volumes of EU government bonds: 2Q18 to 2Q19



Source: AFME with information from European DMOs and other agency sources. See section 5 for details on aggregation basis and sources. *Europe 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.

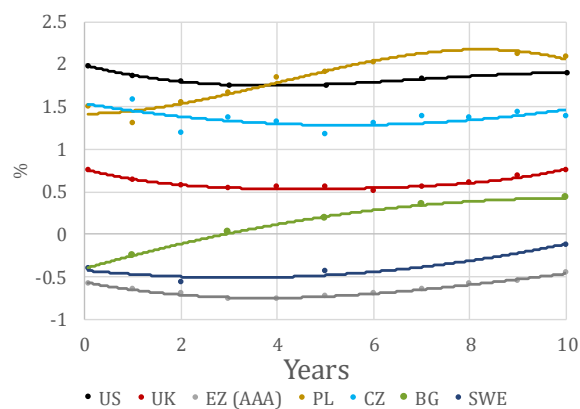
6. Valuations

6.1 Selected European 10Y spot yields



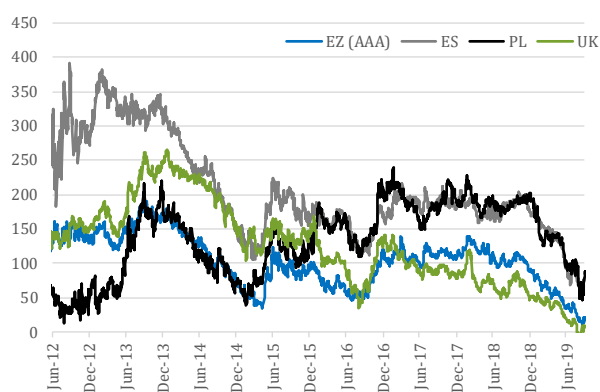
Source: ECB and Thomson Reuters Eikon

6.2 Sovereign spot yield curve of selected jurisdictions: 16 September 2019



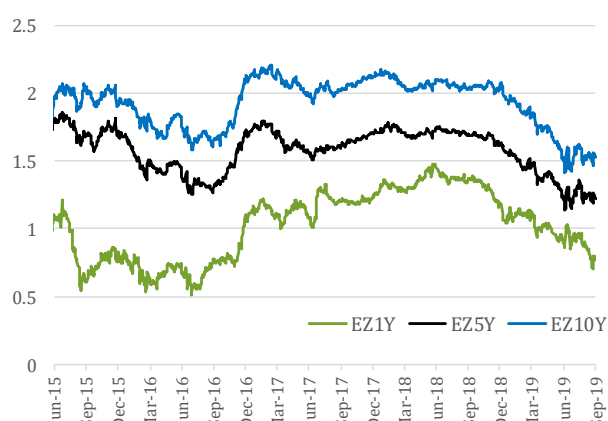
Source: Thomson Reuters Eikon

6.3 Slope: 1Y10Y spread (bps)



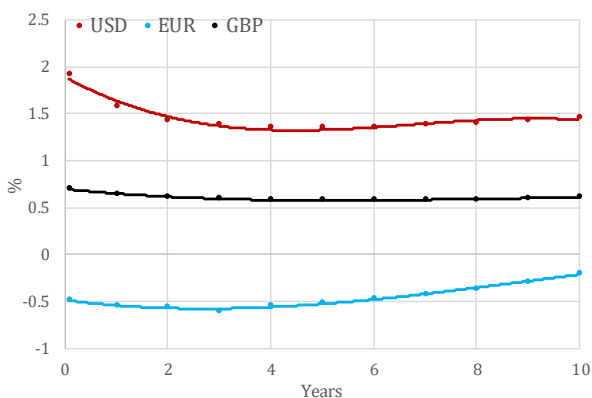
Source: ECB and Thomson Reuters Eikon

6.4 Market-implied inflation expectations (EuroZone)



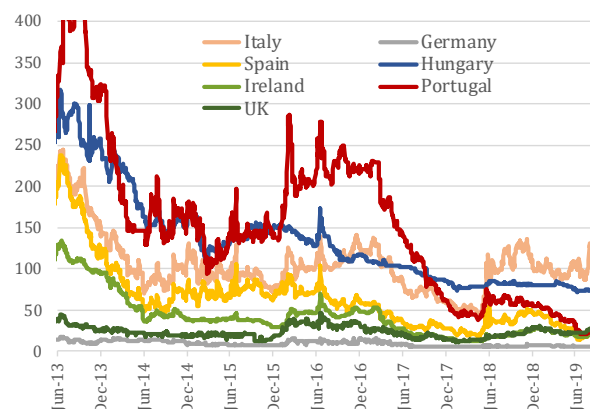
Source: Thomson Reuters Eikon

6.5 Overnight index swap (OIS) yield curve: 16 September 2019



Source: Thomson Reuters Eikon

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



Source: Thomson Reuters Eikon

Annex

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Methodologies

A summary of the methodologies adopted for this report is available at <https://www.afme.eu/en/reports/Statistics/Methodologies>

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