

# **Government Bond Data Report**

# European market data update

Q2: 2018



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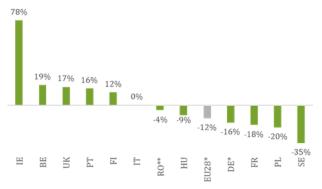
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"EU government bond trading volume<sup>1</sup> decreased 12% vear-onyear in 2Q18"

### **Annual change in Government Bond average** trading volumes

(2Q18 vs 2Q17) 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.

### **Quarterly change in Government Bond** average trading volumes

(2Q18 vs 1Q18) 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.

This report provides a comprehensive data source with updated statistics of the Government bond<sup>2</sup> primary and secondary markets in Europe (EU28).

### Among the main findings of this report are:

- Average daily trading volumes of European government bonds decreased by 12% YoY during 2Q18, driven by a significant decrease in German (-16%YoY) and French (-18% YoY) trading, only partially offset by increases in UK (17% YoY) and IE (78% YoY). This is a similar trend at both EU and national level to what was observed in 1Q18, and 2Q18 saw the lowest trading volume for a second quarter since 2013 according to MarketAxess.
- **European Government bond and bills gross issuance** totalled €586.4 bn in 2Q18, a decrease of 12% from the volume issued in 1Q18 (€666.4 bn) and 5.8% below the volume issued in 2Q17 (€622.6 bn).
- The average bid-cover ratio (demand/amount allocated)<sup>3</sup> was 2.16 in 2Q18, an increase from 2.10 in both 1Q18 and 2Q17. The UK bid-cover ratio saw a significant fall from 3.44 in 2017 (the highest on record) to 2.60 in 2Q18, thus falling back in line with the longer term average.
- The second quarter of the year saw 3 long-term credit rating upgrades for EU countries (after 8 upgrades in the first quarter) and no downgrades. This reflects significant credit quality improvements of European sovereign issuers, particularly of southern European and CEE countries, bringing the year to date total to 14 upgrades and 0 downgrades (3 further upgrades so far in 3Q18).

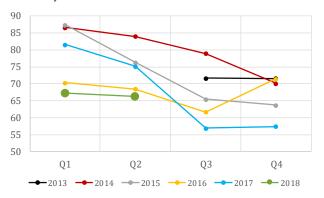
	2014	2015	2016	2017	1Q 2018	2Q 2018
Gross Issuance (€ bn)	2719.9	2595.6	2547.1	2471.6	666.4	586.4
Bonds (€bn)	1260.1	1210.0	1178.0	1222.1	341.5	288.8
Bills (€bn)	1459.8	1385.6	1369.1	1249.6	325.0	297.6
Outstandings (€ tn)	9.32	9.73	9.60	9.64	9.78	9.86
Bid-cover ratio	2.29	2.22	2.16	2.13	2.10	2.16
Average daily turnover						
(% YoY change)	-	-8.4%	-7.2%	-0.3%	-17.6%	-11.8%

Highlights and Market **Environment** 

<sup>&</sup>lt;sup>1</sup> Total EU government bond trading volume data is sourced from Trax <sup>2</sup> Fixed income securities issued by central governments. The report includes Bonds and Treasury Bills and excludes agencies and Central Bank origination.

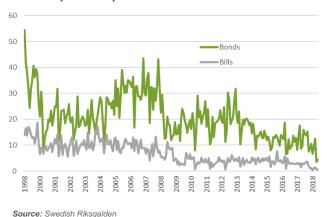
<sup>3</sup> Weighted average (by issuance volume) of bid-cover ratios in the United Kingdom, Spain, France, Italy, Germany, Belgium, Sweden, Netherlands Denmark and Austria.

# Seasonality of EU government bond trading (quarterly trading volumes, average daily, EURbn)



Source: Trax, a MarketAxess subsidiary

# Swedish Government bond and bill trading volume (EURbn)



Outstanding EU green government bonds



Source: Thomson Reuters Eikon

### **Highlights**

# 2Q 2018 EU Government Bond trading volume, large declines in Sweden

EU government bond trading volume fell 12% year-on-year (YoY), with German, France, Poland and Sweden showing the largest reductions. The decline for Sweden is surprising given that Government bond trading volumes tend to increase in the run up to major national elections, which for Sweden occurred in September 2018. In fact, the trend of declining trading volumes continued in July and August 2018 to the lowest levels on record, see chart middle left. The trading of bonds in July and August is around half the next lowest value since records began in 1998. The chart also shows the notable decline in trading volumes since the financial crisis and sustained decline since 2013.

The large quarterly increase in trading volumes of 45% for Hungary was likely due to a combination of the Hungarian parliamentary election in April 2018 and a notably low trading volume in Q1 2018. Despite the significant increase from Q1 to Q2 2018, the Q2 trading volume is still lower than the value in Q2 2017.

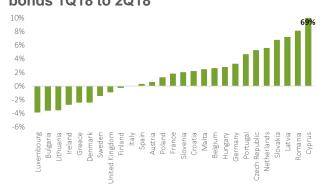
The 12% annual fall in government bond trading is of smaller magnitude than the annual decline in investment-grade corporate bonds (-17% YoY according to Trax), but larger than European equities (-1% YoY according to CBOE markets) and contrasts with the YoY increase in high yield corporate bonds (+1% YoY according to Trax) and global FX trading (+16% YoY, according to CLS).

Government bond trading in 2Q18 was the lowest volume recorded in the second quarter of a year (see chart on top left panel) which was also the case for the first quarter of this year.

# Green government bond issuance continues to climb

After Belgium joined France and Poland by issuing a green government bond in Q1 2018, Lithuania also entered the market by issuing a €20 million 10-year green bond in May 2018. France also undertook a syndicated tap in June to increase the outstanding amount of their green bond to almost €15 bn.

### Quarterly change in weighted average years to maturity for outstanding government bonds 1Q18 to 2Q18



Thomson Reuters Eikon

### Longer maturities for CEE countries

Weighted average maturities of outstanding government bonds increased for 8 of the 10 Central and Eastern European (CEE) countries were data is available<sup>4</sup>. Romania, Czech Republic and Latvia are in the 8 countries with the greatest increase for the second quarter in a row. The significant increase for Cyprus is due to the issuance of a large amount of bonds with 15 to 20-year maturities in April5.

### Major upcoming regulatory, legislative and policy initiatives

There several regulatory initiatives that are 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 currently being developed are:

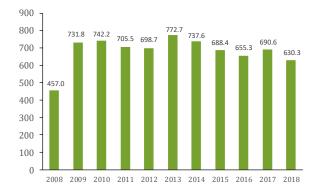
- MiFID II/R
- Fundamental Review of the Trading Book (FRTB)
- Basel III
- **CSDR**
- **Prospectus Regulation**

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

<sup>&</sup>lt;sup>4</sup> CEE countries as defined by OECD: Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Ślovakia, Slovenia, Estonia, Latvia and Lithuania (Albania not included as not in the EU).

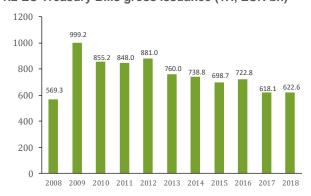
### 1. Issuance

#### 1.1 EU Government Bond gross issuance (1H, EUR bn)



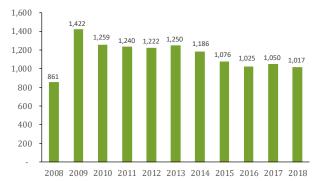
### Source: ECB and National Debt Management Offices

#### 1.2 EU Treasury Bills gross issuance (1H, EUR bn)



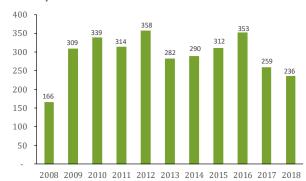
Source: ECB and National Debt Management Offices

# 1.3 Eurozone bonds and bills gross issuance (1H, EUR bn)



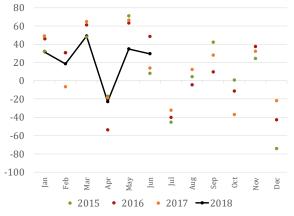
Source: ECB and National Debt Management Offices

# 1.4 Non-Eurozone bonds and bills gross issuance (1H, EUR bn)



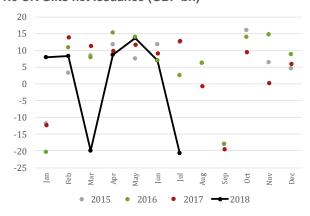
Source: ECB and National Debt Management Offices

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



Source: ECB

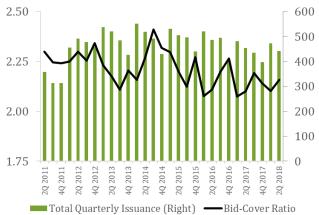
### 1.6 UK Gilts net issuance (GBP bn)



Source: UK Debt Management Office

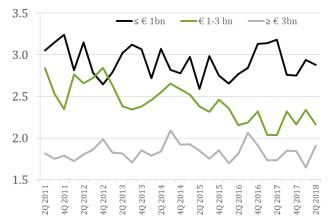
### 2. Recent auctions and primary dealers

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



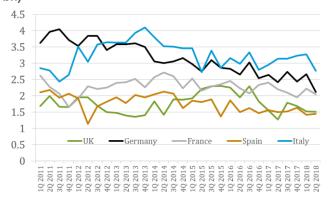
Source: Thomson Reuters Eikon. Weighted average of UK, DE, FR, ES, IT, BE, SE, NL, DK, and AT bonds and bills

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



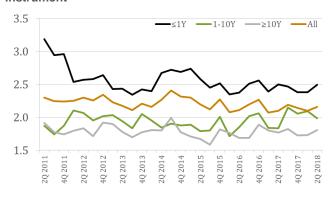
**Source:** Thomson Reuters Eikon. Weighted average of UK, DE, FR, ES, IT, BE, SE, NL, DK, and AT bonds and bills

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



Source: Thomson Reuters Eikon

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



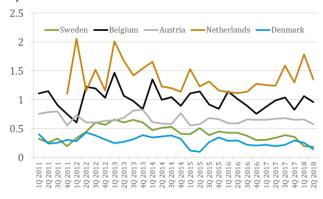
**Source:** Thomson Reuters Eikon. Weighted average of UK, DE, FR, ES, IT, BE, SE, NL, DK, and AT bonds and bills

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

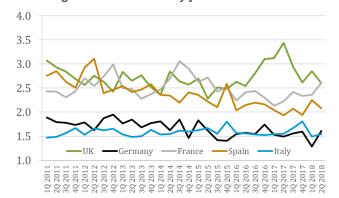


**Source:** Thomson Reuters Eikon. Weighted average of UK, DE, FR, ES, IT, BE, SE, NL, DK, and AT bonds and bills. Polynomial trendline in grey.

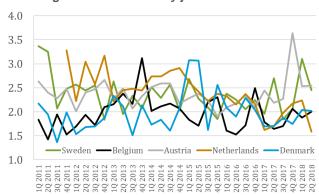
# 2.6 Average auction size in selected jurisdictions (EUR bn)



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

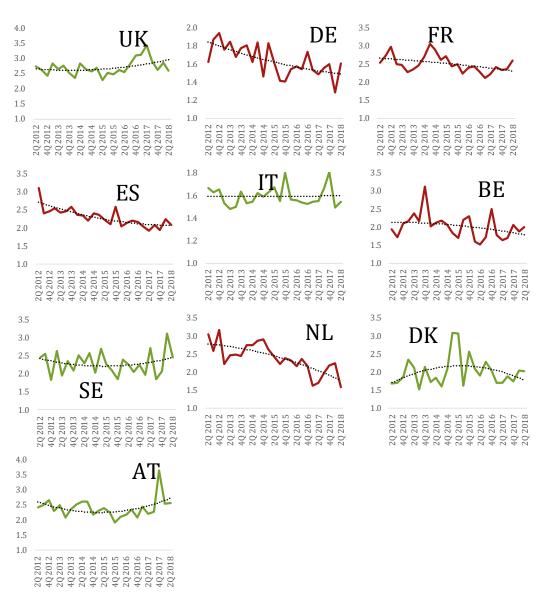


#### 2.8 Average bid-cover ratios by jurisdictions



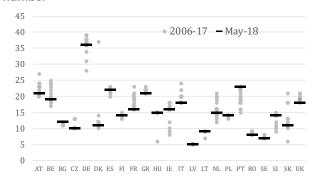
Source: Thomson Reuters Eikon Source: Thomson Reuters Eikon

#### 2.9 Average bid-cover ratios in selected jurisdictions: 2011-186

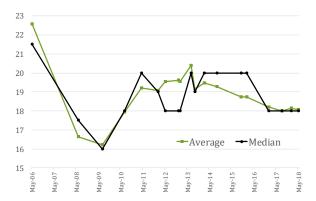


<sup>&</sup>lt;sup>6</sup> Chart colour indicates slope of trendline. Green indicates end value of trendline above starting value and red indicates end value of trendline below starting value

# 2.10 Number of primary dealers relative to historic number



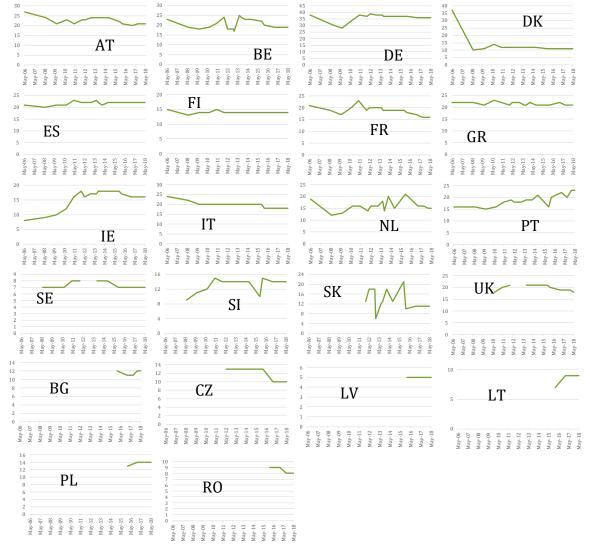
# 2.11 Average and median number of primary dealers in selected EU countries



Source: AFME Primary Dealers Handbooks and national DMOs

Source: AFME Primary Dealers Handbooks 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: 2006-18<sup>7</sup>

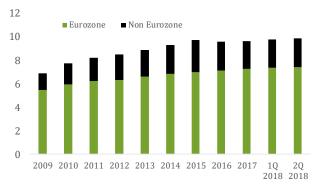


Source: AFME Primary Dealers Handbooks and national DMOs

<sup>&</sup>lt;sup>7</sup> The gap in the lines for UK and Sweden indicates data not recorded in the relevant period.

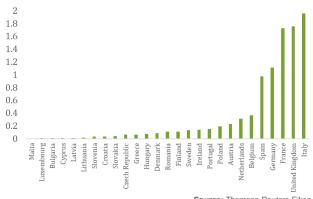
### 3. Outstanding

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



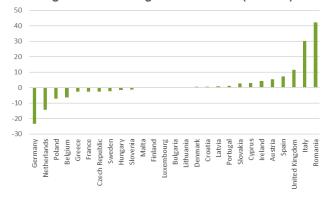
Source: ECB and Thomson Reuters Eikon

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



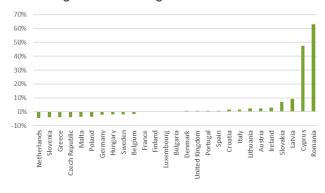
Source: Thomson Reuters Eikon

### 3.3 Change in outstandings 1Q18 to 2Q18 (EUR bn)



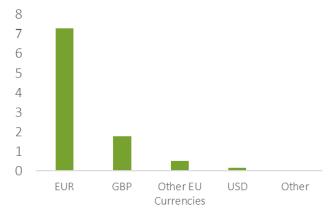
Source: Thomson Reuters Eikon

#### 3.4 % Change in outstandings from 1Q18 to 2Q18



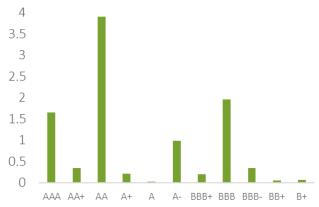
Source: Thomson Reuters Eikon and Standard and Poor's

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



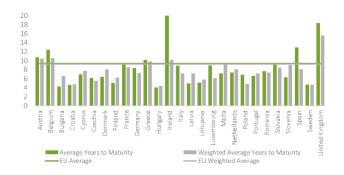
Source: Thomson Reuters Eikon

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

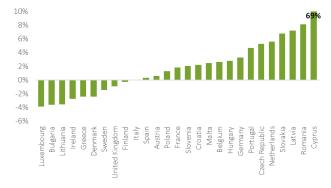


Source: Thomson Reuters Eikon and Standard and Poor's

### 3.7 Average years to maturity for outstanding government bonds in EU countries8



3.8 Quarterly change in weighted average years to maturity for outstanding government bonds 1Q18 to 2Q18<sup>9</sup>

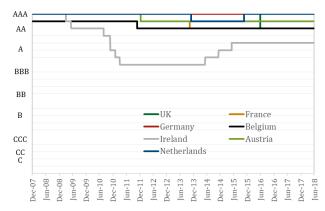


Source: Thomson Reuters Eikon

<sup>&</sup>lt;sup>8</sup> Weighted average by outstanding amount <sup>9</sup> Weighted average by outstanding amount

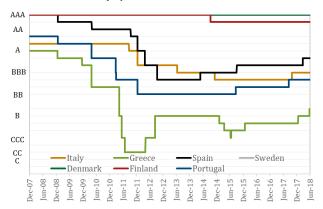
### 4. Credit quality

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



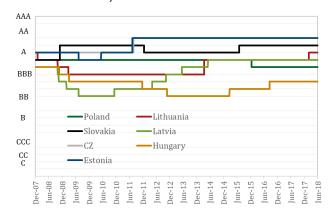
Source: Thomson Reuters Eikon with data of Standard and Poor's

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



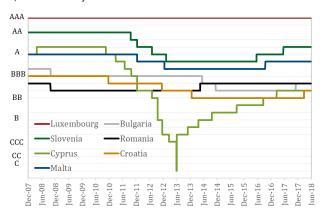
Source: Thomson Reuters Eikon with data of Standard and Poor's

# 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 (2018YtD)

Issuer	Rating action	Date	Rated by	Rationale
Spain	Upgrade to A- (stable) from BBB+	Jan-18	Fitch	Reduction in macro imbalances, strong econ. recovery, and limited econ. impact caused by Catalonia's declaration of independence
Croatia	Upgrade to BB+ (stable) from BB	Jan-18	Fitch	Strengthening tourism revenues, a current account surplus, and stronger consumption and investment
Greece	Upgrade to B (positive) from B-	Jan-18	S&P	Steadily improving general government finances and its gradually recovering economic prospects
Greece	Upgrade to B (positive) from B-	Feb-18	Fitch	Improved outlook of debt sustainability underpinned by sustained GDP growth, reduced political risks
Greece	Upgrade to B3 (positive) from Caa2	Feb-18	Moody's	Material fiscal and institutional improvements under its current adjustment programme
Croatia	Upgrade to BB+ (stable) from BB	Mar-18	S&P	External position improving on external deleveraging, current account surpluses, increase in FX reserves. Improved fiscal picture
Spain	Upgrade to A- (positive) from BBB+	Mar-18	S&P	Continuously strong economic performance, accompanied by a solid current account surplus and ongoing budgetary consolidation
Lithuania	Upgrade to A (stable) from A-	Mar-18	S&P	Strong economic development over the past years, robust growth prospects in the near term
Cyprus	Upgrade to BB+ (positive) from BB	Apr-18	Fitch	Strong improvement in the performance of and outlook for its public finances supported by strong nominal GDP growth
Spain	Upgrade to Baa1 (stable) from Baa2	Apr-18	Moody's	Enhanced economic resiliency due to an increasingly balanced growth profile and improved banking sector fundamentals
Greece	Upgrade to B+ (positive) from B	Jun-18	S&P	Debt relief agreement decided by Eurogroup reduced sovereign debt servicing risks
Cyprus	Upgrade to Ba2 (stable) from Ba3	Jul-18	Moody's	Recovery of Cyprus's banking system and positive fundamental trend with respect to the government's balance sheet
Czech Republic	Upgrade to AA- (stable) from A+	Aug-18	Fitch	General fiscal prudence and government budget surpluses and strong external position
Greece	Upgrade to BB- (stable) from B	Aug-18	Fitch	Improving public finances and substantial improvement in Greece's relationships with its European creditors

Source: Fitch, Moody's, S&P

### 5. Secondary market trading volumes and turnover ratios<sup>10</sup>

# 5.1 EU28: Average daily trading volumes (Government and sovereign bonds, EURbn)<sup>11</sup>



### Source: Trax, a MarketAxess subsidiary

# 5.2 United Kingdom: Average daily trading volume (bonds only) and turnover ratio<sup>12</sup>



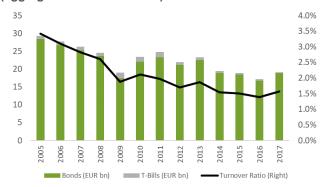
Source: UK Debt Management Office

# 5.3 Italy: Average daily trading volume (bonds and bills) and turnover ratio. Electronic trading<sup>13</sup>



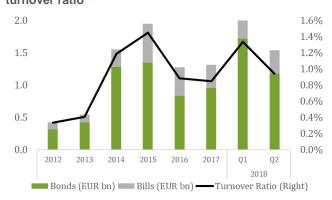
Source: Italian Dipartimento del Tesoro

# 5.4 Germany: Average daily trading volume (aggregated bonds and bills) and turnover ratio<sup>14</sup>



Source: Deutsche Finanzagentur and ECB

# 5.5. Portugal: Average daily trading volume and turnover ratio<sup>15</sup>



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

# 5.6 Spain: Average daily trading volume and turnover ratio<sup>16</sup>



Source: Banco de España and Tesoro Público de España

<sup>&</sup>lt;sup>10</sup> 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.

<sup>&</sup>lt;sup>11</sup> 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.
<sup>12</sup> Turnover data reported to the DMO by the Gilt-edged Market Makers (primary dealers).

<sup>&</sup>lt;sup>13</sup> Turnover on electronic interdealer regulated market.

<sup>&</sup>lt;sup>14</sup> Turnover of both electronic interceal regulated market.

<sup>14</sup> 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. Bubilis, Schaetze, Bobls, Bunds and inflation-linked securities. Capital and coupon strips as well as US-dollar bonds are excluded. Data not currently available for 1Q18 or 2Q18.

<sup>&</sup>lt;sup>15</sup> Turnover of electronic and OTC trading reported on MTS-Portugal, BrokerTec and eSpeed.

<sup>16</sup> Turnover is total outright spot transactions. Includes Treasury Bills and non-stripped Government Bonds between account holders in the book-entry debt market. Due to changes in reporting, after the introduction of T2S in September 2017 reported turnover is not comparable with previous months. Data from September 2017 is from Iberclear and electronic platforms.

# 5.7 Finland: Average daily trading volume (aggregated bonds and bills) and turnover ratio 17



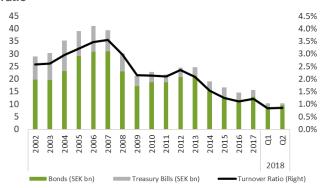
Source: Finland Valtiokonttor and ECBi

# 5.8 Belgium: Average daily trading volume and turnover ratio<sup>18</sup>



Source: Belgian Debt Agency and ECB

# 5.9 Sweden: Average daily trading volume and turnover ratio<sup>19</sup>



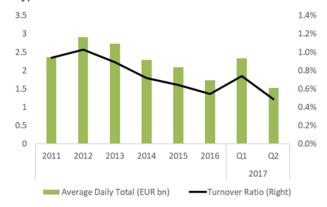
Source: Swedish National Debt Office (Riksgälden) and ECB

# 5.10 Ireland: Average daily trading volume (aggregated bonds and bills) and turnover ratio<sup>20</sup>



Source: Irish Stock Exchange and ECB

# 5.11 Netherlands: Average daily trading volume (bonds only) and turnover ratio<sup>21</sup>



Source: Ministerie van Financiën

## 5.12 France: Average daily trading volume (bonds only) and turnover ratio<sup>22</sup>



Source: Agence France Trésor and ECB

<sup>&</sup>lt;sup>17</sup> Turnover of customer trades, MTS Finland and Euro MTS.

<sup>&</sup>lt;sup>18</sup> Turnover is total outright transactions.

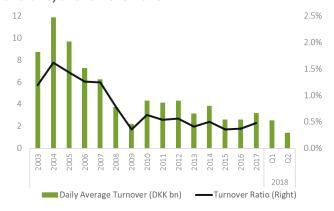
<sup>&</sup>lt;sup>19</sup> Turnover is total outright transactions.

<sup>&</sup>lt;sup>20</sup> Turnover on Irish Stock Exchange.

<sup>&</sup>lt;sup>21</sup> Turnover is customer and interdealer trading. Total outright transactions, including electronic and OTC trading. Data available only as of 2Q17

<sup>&</sup>lt;sup>22</sup> 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 ratio<sup>23</sup>



Source: Danmarks Nationalbank

# 5.14 Greece: Average daily trading volume (bonds only) and turnover ratio<sup>24</sup>



Source: Bank of Greece and ECB

## 5.15 Poland: Average daily trading volume (bonds only) and turnover ratio<sup>25</sup>



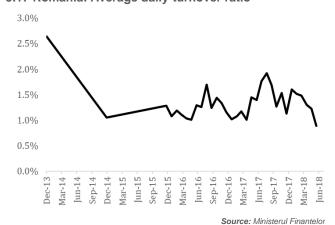
5.16 Hungary: Average daily trading volume and turnover ratio<sup>26</sup>



Source: National Depository for Securities (KDPW), WSE

Source: ÁKK

### 5.17 Romania: Average daily turnover ratio<sup>27</sup>



<sup>23</sup> Turnover of MTS, TradeWeb, Bondvision and trades reported to Nasdaq OMX (including voice trading). **Please note that due to changes in reporting after MiFID II**, the turnover for Q1 and Q2 2018 is not comparable with turnover in previous years.

<sup>&</sup>lt;sup>24</sup> Turnover on Electronic Secondary Securities Market (HDAT).

<sup>&</sup>lt;sup>25</sup> 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.

<sup>&</sup>lt;sup>26</sup> Turnover on MTS Hungary and Keler OTC.

<sup>&</sup>lt;sup>27</sup> 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.

# 5.18 Quarterly change in average daily turnover volumes of EU government bonds: 1Q18 to 2Q18



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.

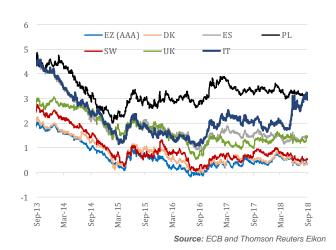
# 5.19 Annual change in average daily turnover volumes of EU government bonds: 2Q17 to 2Q18



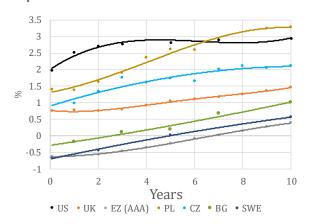
Source: AFME with information from European DMOs and other agency sources. See section 5 for details on aggregation basis and sources. \*Europe total and Germany is sourced from Trax Facts as the quarterly variation of average daily volumes of government and sovereign bonds. \*\*Romanian turnover volume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

### 6. Valuations

#### 6.1 Selected European 10Y spot yields

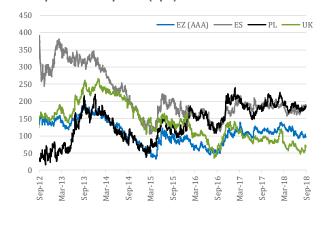


# 6.2 Sovereign spot yield curve of selected jurisdictions:10 September 2018



Source: Thomson Reuters Eikon

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

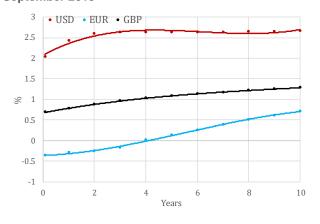


Source: ECB and Thomson Reuters Eikon

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

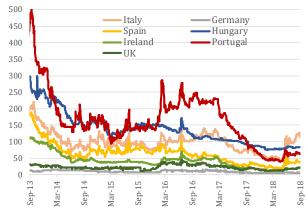


# 6.5 Overnight index swap (OIS) yield curve: 10 September 2018



Source: Thomson Reuters Eikon

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



### **Annex**

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### Methodologies

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



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