

FINsights: CTP Whitepaper Series

#7: Across the pond ...

Insights into US Treasury trading in the UK and EU 16 May

2024

Executive Summary

In previous papers, based on our analysis of 390,000,000 transaction records across all asset classes, we highlighted specific data quality issues. We also worked with a number of trade associations and bodies to promote <u>evidence-based policy discussion</u> and propose concrete improvements in transaction data frameworks (such as the AFM's <u>Principles</u> relating to fixed income).

However, one important aspect of any consolidation exercise is the insights into the market itself.

In order to contribute, we believe it's timely to provide some insights into the level and detail of **US Treasury activity traded on EU and UK venues** for the 15-month period from <u>1st January 2023 - 31st March 2024</u>.

In this regard, we were assisted by **Katie Kolchin, CFA** at **SIFMA**ⁱⁱ, allowing us to compare issuance recorded by **TreasuryDirect** ("TD") during that period with activity for those same bonds on EU and UK venues:

1. Issuance

- Total some \$29.4trn of US Treasury bonds over 530 securities were issued for that period
- **Observation 99.8%** of those bonds were traded at venues in the EU and UK

2. Volume in UK/EU

- **Total Volume** some \$18.7trn (eq) in total Traded Volume was reported in the EU and UK
- **Observation** we see the highest levels of trading occur in the more liquid, 'on the run' bonds:

Туре*	Traded Volume (\$)	Issuance (\$)	Times traded (x)
Bills	1,649,627,818,159	25,394,243,434,200	0.06
Notes	15,336,325,006,466	3,935,109,392,500	3.90
Bonds	1,759,915,452,360	575,189,655,200	3.06
Total	18,745,868,276,985	29,904,542,481,900	0.63

*per TD definitions

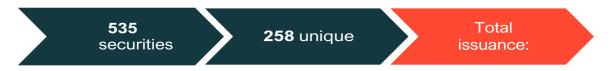
We observed higher levels of activity (relative to issuance) in the 2, 5, 10 and 30- year bonds as well as distinct patterns for 'on the run' bond issuance.

- 3. Reference data
- Reported Issuance as we noted in our previous <u>whitepaper</u>, there are issues around the accuracy of "Total issued nominal amount" (TINA) reported as part of the FIRDS database
- Observation- we observe some significant differences in the relative issuance records of TD and TINA in FIRDS over the time series we examined

Detailed breakdown

Overview

We collected in issuance data for the period <u>1st January 2023 - 31st March 2024</u> of all US Treasury bonds from TreasuryDirect.



Those securities were then mapped to ISINs using FIRDS1 to MIFID II2 post-trade, delayed transaction data for the same period:



Issuance and trading volumes

In terms of the split between EU and UK venues (by venue of publication, we find the following split:

(\$ eq)	Venue of Publication		%	
	EU	UK	EU	UK
Traded Volume	6,329,825,454,755	12,416,042,822,230	33.8%	66.2%
# of records	1,508,949	1,151,928	56.7%	43.3%
Records with no flags (as a % of Traded Volume)	1,761,623,004,962	1,113,536,946,167	28%	9%

3 January 2018

¹ FIRDS (Financial Instruments Reference Data System) is the reference data collection infrastructure established by European Securities and Markets Authority's (ESMA), in co-operation with the EU competent national authorities (NCAs), in order to collect data in an efficient and harmonised manner

² MiFID II (Markets in Financial Instruments Directive II) is ESMA's legislative framework for financial markets, entered into force

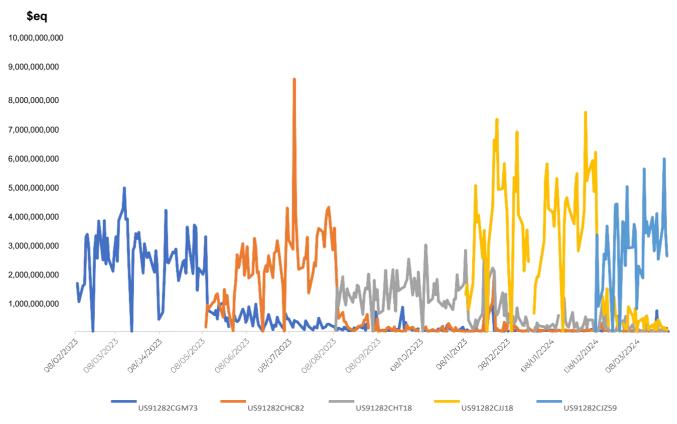
'Liquidity'

In terms of the activity on EU and UK venues, we see that the highest levels of trading (times issuance traded) relate **to benchmark**, **'on the run'** US Treasuries:

Туре*	Distinct ISINs	Traded volume (\$)	Issuance (\$)	Times traded (x)
Bills	167	1,649,627,818,159	25,394,243,434,200	0.06
a. CMB	4	55,395,659,279	3,475,070,556,100	0.02
b. 4-Week Bill	4	18,524,213,914	4,860,332,535,100	0.00
c. 8-Week Bill	9	128,614,484,609	4,394,594,503,700	0.03
d. 13-Week Bill	13	298,157,885,877	4,705,708,956,300	0.06
d. 17-Week Bill	65	424,964,632,859	3,121,862,012,400	0.14
e. 26-Week Bill	56	639,046,166,098	4,146,710,951,500	0.15
f. 52-Week Bill	16	84,924,775,523	689,963,919,100	0.12
Notes	76	15,336,325,006,466	3,935,109,392,500	3.90
g. 2-Year Note	15	2,687,897,155,031	743,552,711,500	3.61
h. 3-Year Note	15	1,991,745,691,069	721,707,126,200	2.76
i. 5-Year Note	15	4,825,526,166,311	759,223,681,200	6.36
j. 7-Year Note	15	1,382,906,521,640	576,947,610,700	2.40
k. 10-Year Note	6	3,978,361,090,852	576,343,518,600	6.90
m. FRN	5	49,804,626,534	344,344,525,200	0.14
n. TIPS Note	5	420,083,755,028	212,990,219,100	1.97
Bonds	14	1,759,915,452,360	575,189,655,200	3.06
o. 20-Year Bond	6	365,533,012,049	211,935,144,000	1.72
p. 30-Year Bond	6	1,349,677,092,463	333,989,130,600	4.04
r. TIPS Bond	2	44,705,347,848	29,265,380,600	1.53
Total	257	18,745,868,276,985	29,904,542,481,900	0.63

*per TD definitions which includes : "Note: UST = US Treasury securities; primary dealer reporting, includes double counting of some trades".

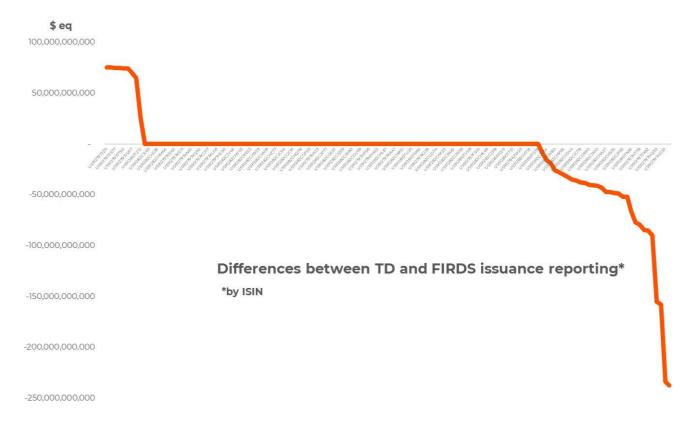
If we look in more detail at a trading volume pattern for 'on the run' bonds (in this case, we take the 10-year Treasury Note issuance during the period under review), we can see distinct tapering patterns of activity around each new 'on the run' issue:



*we excluded 3 transaction records for \$30bn, \$20bn and \$10bn from one APA that seemed, in context, to be 'data anomalies'.

FIRDS records

We noted in a previous **whitepaper**, discrepancies between FIRDS and 'official' records of bond issuance. In this case, we compared - on a single day snapshot - the TINA in FIRDS with the relevant TD data - taking account of any maturities during the relevant period (some 134 ISINs):



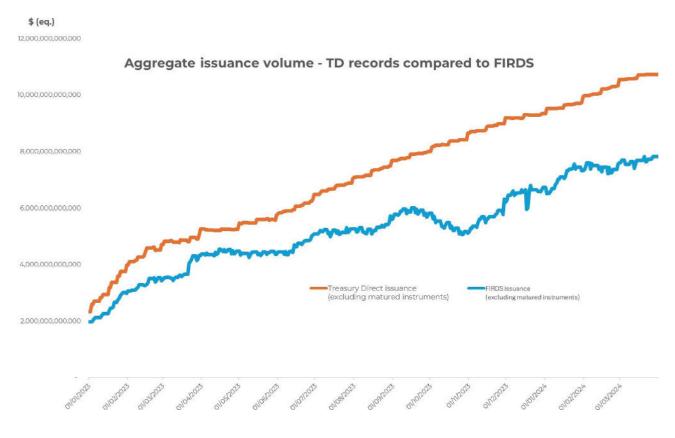
We observed that there were 115 ISINs (86%) with differences between the relative issuance records.

In some 75 cases, there were differences (less than 1% of the TD level) that may be explained by differences in FX rates or sources.

The remaining 40 ISINs had significant differences:

- a. 10 bonds that has FIRDS issuance amounts of '0'
- b. Other bonds seemed to have a 'delay' factor:
 - 9 bonds that had higher issuance volume in FIRDS than the TD levels maturities did not seem to have been reflected in FIRDS
 - 21 bonds were the opposite way around where there had been a 'tap' that seemed not to have been updated FIRDS

Rather than a single day snapshot, we look at the same data on an <u>aggregated (consensus) basis</u> over the relevant time period - once again, taking account of maturities - we can see that there is a consistent difference between the two data sets:



In our previous whitepaper, we explored some of the potential explanations to disparities in the FIRDS database and, as we outlined, believe improvements can be made to both the process and data quality elements of FIRDS.

FINBOURNE and the Consolidated Tape | Finbourne

FINBOURNE would like to thank Katie Kolchin CFA, Justyna Romulus and Rob Toomey at SIFMA

- Data provided by SIFMA Research
- ^v Data provided by SIFMA Research

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