

# TRANSITION TO RFRs REVIEW: First Half of 2022 and the Second Quarter of 2022

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The Transition to Risk-free Rates (RFRs) Review analyzes the trading volumes of over-the-counter (OTC) and exchange-traded interest rate derivatives (IRD) that reference selected alternative RFRs, including the Secured Overnight Financing Rate (SOFR), the Sterling Overnight Index Average (SONIA), the Swiss Average Rate Overnight (SARON), the Tokyo Overnight Average Rate (TONA), the Euro Short-Term Rate (€STR) and the Australian Overnight Index Average (AONIA).

Global data is collected from all major central counterparties (CCPs) that clear OTC and exchange-traded derivatives (ETD) in six currencies, including the Australian Securities Exchange, CME Group, Eurex, Intercontinental Exchange (ICE), Japan Securities Clearing Corporation, LCH and the Tokyo Financial Exchange. Only cleared transactions are captured in this data.

US data is collected from the Depository Trust & Clearing Corporation (DTCC) swap data repository (SDR). It therefore only covers trades that are required to be disclosed under US Commodity Futures Trading Commission regulations and includes cleared and non-cleared OTC IRD transactions.

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## KEY HIGHLIGHTS FOR THE FIRST HALF OF 2022 AND THE SECOND QUARTER OF 2022

### Global Trading Activity<sup>1</sup>

The ISDA-Clarus RFR Adoption Indicator tracks how much global trading activity (as measured by DVO1) is conducted in cleared OTC and exchange-traded IRD that reference RFRs in six major currencies<sup>2</sup>.

#### In the first half of 2022:

The ISDA-Clarus RFR Adoption Indicator increased to a monthly average of 40.7% compared to 22.8% in the second half of 2021<sup>3</sup>.

RFR-linked IRD traded notional accounted for 32.4% of total IRD traded notional in the first half of 2022 versus 16.4% in the second half of 2021.

#### In the second quarter of 2022:

The ISDA-Clarus RFR Adoption Indicator rose to a monthly average of 45.5% compared to 36.6% in the first quarter of 2022.

RFR-linked IRD traded notional represented 38.3% of total IRD traded notional in the second quarter of 2022 versus 27.6% in the prior quarter.

### Trading Activity in the US<sup>4</sup>

#### In the first half of 2022:

US-reported traded notional of OTC IRD referencing alternative RFRs grew to \$56.9 trillion in the first half of 2022 compared to \$24.9 trillion in the second half of 2021. RFR transactions accounted for 36.0% of total OTC IRD traded notional, up from 22.5% in the second half of 2021.

<sup>1</sup> The global data is collected from all major central counterparties (CCPs) that clear over-the-counter (OTC) and exchange-traded derivatives (ETD) in six currencies, including the Australian Securities Exchange, CME Group, Eurex, Intercontinental Exchange (ICE), Japan Securities Clearing Corporation, LCH and the Tokyo Financial Exchange. Only cleared transactions are captured in this data

<sup>2</sup> ISDA-Clarus RFR Adoption Indicator White Paper [www.isda.org/a/SlmTE/ISDA-Clarus-RFR-Adoption-Indicator-Whitepaper.pdf](https://www.isda.org/a/SlmTE/ISDA-Clarus-RFR-Adoption-Indicator-Whitepaper.pdf)

<sup>3</sup> The RFR Adoption Indicator was 46.4% in June 2022. ISDA-Clarus RFR Adoption Indicator, June 2022 [www.isda.org/a/DxagE/ISDA-Clarus-RFR-Adoption-Indicator-June-2022.pdf](https://www.isda.org/a/DxagE/ISDA-Clarus-RFR-Adoption-Indicator-June-2022.pdf)

<sup>4</sup> The US data is collected from the Depository Trust & Clearing Corporation (DTCC) swap data repository (SDR). It only covers transactions that are required to be disclosed under Commodity Futures Trading Commission regulations and includes cleared and non-cleared OTC IRD transactions

- OTC IRD traded notional referencing SOFR increased to \$25.8 trillion in the first half of 2022 versus \$7.7 trillion in the second half of 2021. SOFR transactions accounted for 33.2% of US dollar-denominated OTC IRD traded notional compared to 13.1% in the second half of 2021.
- IRD traded notional referencing SONIA fell by 11.7% to \$11.8 trillion in the first half of 2022 compared to \$13.4 trillion in the second half of 2021. SONIA-linked transactions represented 96.9% of sterling-denominated OTC IRD traded notional compared to 82.6% in the second half of 2021.
- €STR-linked OTC IRD traded notional totaled \$17.2 trillion in the first half of 2022 compared to \$2.8 trillion in the second half of 2021. €STR-linked transactions comprised 33.3% of euro-denominated IRD traded notional compared to 12.1% in the second half of 2021.
- Traded notional of OTC IRD referencing LIBOR denominated in US dollars, sterling, Swiss franc, yen and euro, as well as EURIBOR and TIBOR, rose by 11.0% to \$64.6 trillion in the first half of 2022 compared to \$58.2 trillion in the second half of 2021. These interbank offered rates (IBORs) represented 40.9% of total OTC IRD traded notional compared to 52.6% in the second half of 2021.

**In the second quarter of 2022:**

US-reported traded notional of OTC IRD referencing alternative RFRs increased by 10.0% to \$29.8 trillion in the second quarter of 2022 versus \$27.1 trillion in the previous quarter. RFR transactions accounted for 41.8% of total OTC IRD traded notional, up from 31.2% in the first quarter of 2022.

- OTC IRD traded notional referencing SOFR increased to \$13.0 trillion in the second quarter of 2022 from \$12.8 trillion in the first quarter of 2022. SOFR transactions accounted for 40.1% of US dollar-denominated OTC IRD traded notional compared to 28.2% in the previous quarter.
- SONIA-linked IRD traded notional declined by 6.4% to \$5.7 trillion in the second quarter of 2022 versus \$6.1 trillion in the first quarter of 2022. SONIA transactions represented 97.0% of sterling-denominated OTC IRD traded notional compared to 96.8% in the first quarter of 2022.

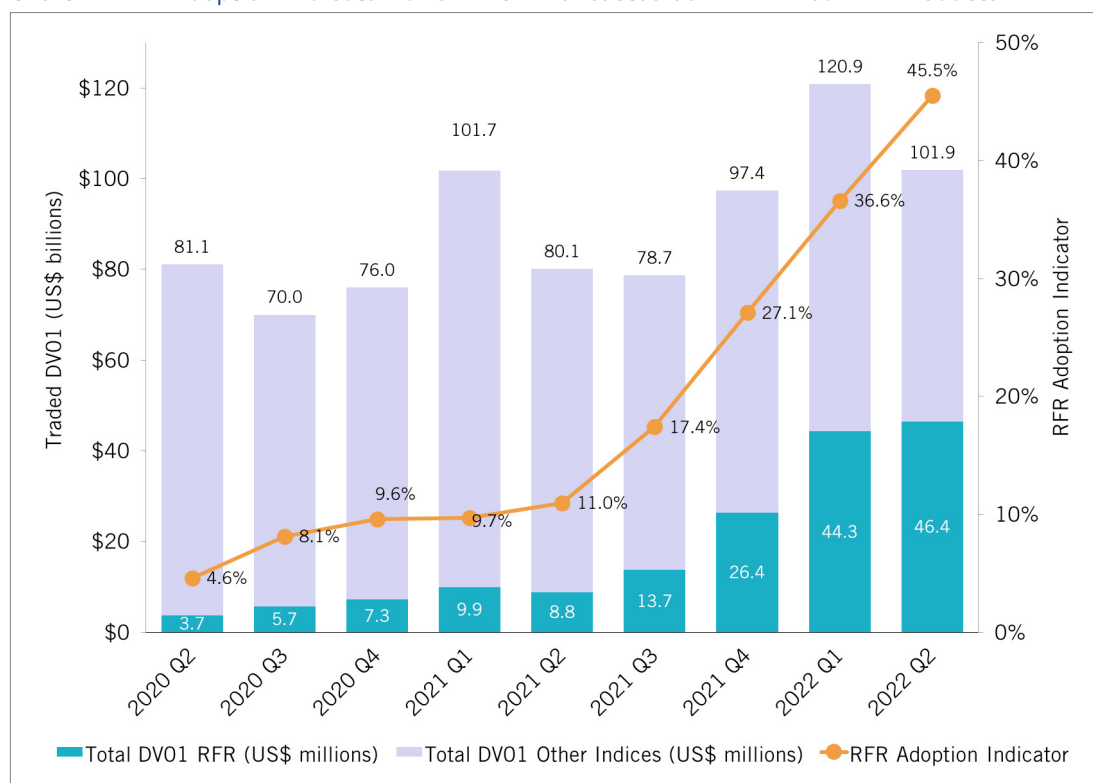
- OTC IRD traded notional linked to €STR grew by 36.9% to \$10.0 trillion in the second quarter of 2022 compared to \$7.3 trillion in the prior quarter. €STR-linked transactions comprised 39.7% of euro-denominated IRD traded notional compared to 27.3% in the first quarter of 2022.
  - Traded notional of IRD referencing LIBOR denominated in US dollars, sterling, Swiss franc, yen and euro, as well as EURIBOR and TIBOR, fell by 26.2% to \$27.4 trillion in the second quarter of 2022 compared to \$37.2 trillion in the first quarter of 2022. These IBORs represented 38.5% of total OTC IRD traded notional compared to 42.8% in the first quarter of 2022.
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## GLOBAL RFR-LINKED OTC AND EXCHANGE-TRADED IRD

The ISDA-Clarus RFR Adoption Indicator rose to a monthly average of 40.7% in the first half of 2022 compared to 22.8% in the second half of 2021. RFR-linked IRD DV01 increased to \$90.7 billion compared to \$40.1 billion in the second half of 2021. Total IRD DV01 grew to \$222.8 billion from \$176.1 billion over the same period.

In the second quarter of 2022, the ISDA-Clarus RFR Adoption Indicator increased to a monthly average of 45.5% versus 36.6% in the first quarter of 2022. RFR-linked IRD DV01 grew to \$46.4 billion compared to \$44.3 billion in the prior quarter. Total IRD DV01 declined to \$101.9 billion from \$120.9 billion over the same period<sup>5</sup> (see Chart 1).

**Chart 1:** RFR Adoption Indicator: % of DV01 Transacted as RFR-linked IRD Products



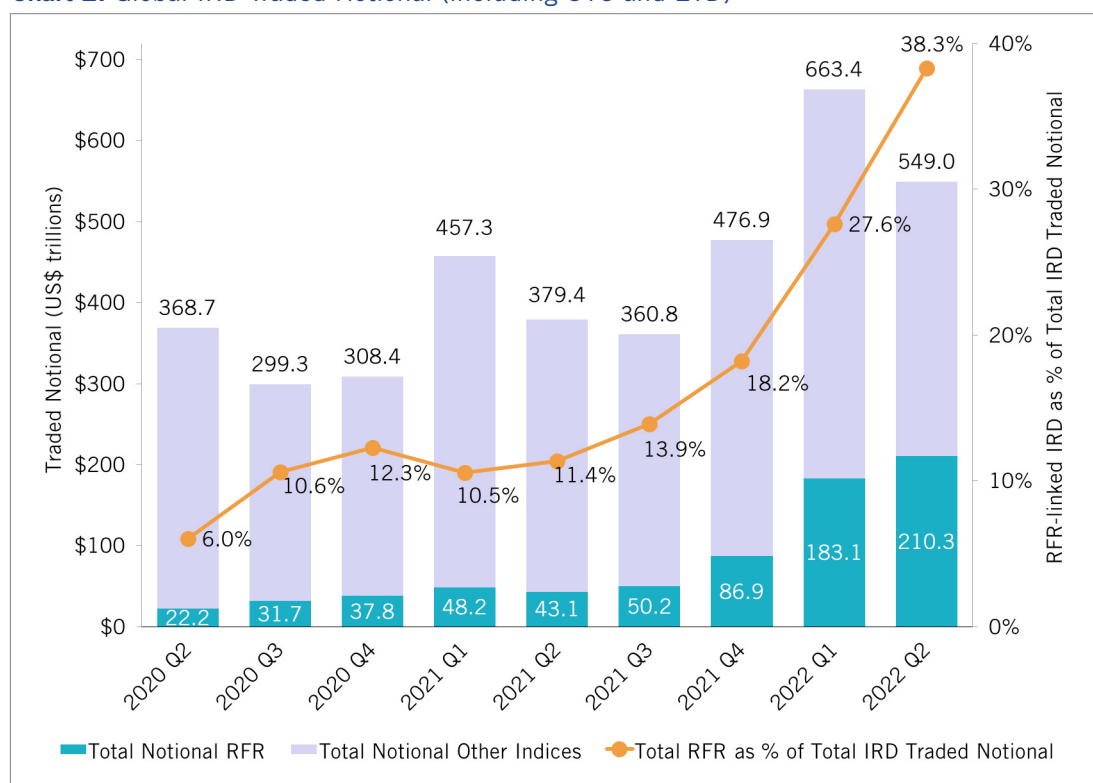
Source: ISDA-Clarus RFR Adoption Indicator

RFR-linked IRD traded notional increased to 32.4% of total IRD traded notional in the first half of 2022 versus 16.4% in the second half of 2021. RFR-linked IRD traded notional, which includes OTC and ETD, totaled \$393.4 trillion in the first half of 2022 compared to \$137.1 trillion in the second half of 2021. Total IRD traded notional rose to \$1,212.4 trillion from \$837.8 trillion over the same period.

<sup>5</sup> To access interactive charts and download monthly data, go to <https://rfr.clarusft.com>

In the second quarter of 2022, IRD traded notional referencing RFRs accounted for 38.3% of total IRD traded notional compared to 27.6% in the first quarter of 2022. RFR-linked IRD traded notional increased to \$210.3 trillion from \$183.1 trillion in the prior quarter. Total IRD traded notional fell to \$549.0 trillion from \$663.4 trillion over the same period (see Chart 2).

**Chart 2:** Global IRD Traded Notional (including OTC and ETD)



Source: ISDA-Clarus RFR Adoption Indicator

## RFR-LINKED OTC IRD IN THE US

US-reported OTC IRD traded notional referencing alternative RFRs increased by 128.1% to \$56.9 trillion in the first half of 2022 compared to \$24.9 trillion in the second half of 2021. RFR transactions comprised 36.0% of total OTC IRD traded notional, up from 22.5% in the second half of 2021.

The number of trades referencing RFRs rose to 435.7 thousand in the first half of 2022 from 164.9 thousand in the second half of 2021. RFR-linked trades accounted for 37.4% of total OTC IRD trade count compared to 17.9% in the second half of 2021.

### In the first half of 2022:

- SOFR-linked OTC IRD traded notional increased from \$7.7 trillion in the second half of 2021 to \$25.8 trillion, including \$3.7 trillion of basis swaps. Trade count grew from 75.1 thousand to 289.9 thousand, including 27.5 thousand basis swaps.
- IRD traded notional referencing SONIA fell by 11.7% from \$13.4 trillion to \$11.8 trillion, including \$284.7 billion of basis swaps. Trade count increased by 6.5% to 67.9 thousand, including 2.5 thousand basis swaps.
- SARON-linked IRD traded notional rose to \$445.7 billion, including \$33.4 billion of basis swaps. Trade count increased to 8.6 thousand, including 348 basis swaps.
- OTC IRD traded notional linked to TONA climbed to \$1.7 trillion, including \$374.6 billion of basis swaps. Trade count rose to 24.4 thousand, including 4.5 thousand basis swaps.
- €STR-linked OTC IRD traded notional increased from \$2.8 trillion in the second half of 2021 to \$17.2 trillion, including \$849.2 billion of basis swaps. Trade count grew to 44.9 thousand, including 6.6 thousand basis swaps.

### In the second quarter of 2022:

- OTC IRD traded notional referencing SOFR grew by 1.7% versus the first quarter of 2022 and totaled \$13.0 trillion, including \$1.6 trillion of basis swaps. Trade count increased from 136.8 thousand to 153.1 thousand, including 12.9 thousand basis swaps.
- SONIA-linked IRD traded notional fell by 6.4% to \$5.7 trillion, including \$121.0 billion of basis swaps. Trade count decreased by 5.4% to 33.0 thousand, including 1.2 thousand basis swaps.
- SARON-linked OTC IRD traded notional rose to \$259.5 billion, including \$13.6 billion of basis swaps. Trade count increased to 4.6 thousand, including 157 basis swaps.

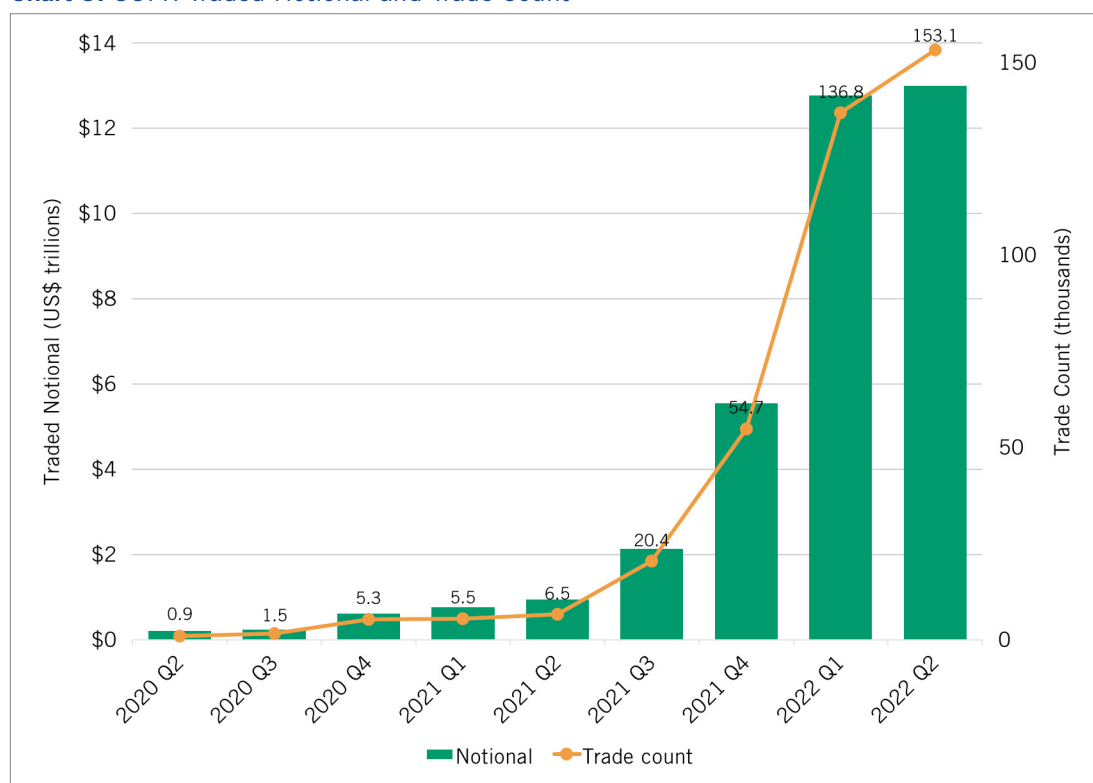


- IRD traded notional linked to TONA climbed to \$901.2 billion, including \$204.8 billion of basis swaps. Trade count rose to 13.6 thousand, including 2.5 thousand basis swaps.
- €STR-linked OTC IRD traded notional increased to \$10.0 trillion, including \$375.9 billion of basis swaps. Trade count grew to 24.1 thousand, including 3.1 thousand basis swaps.

## SOFR

Traded notional of SOFR-linked OTC IRD grew by 1.7% to \$13.0 trillion in the second quarter of 2022 versus \$12.8 trillion in the first quarter of 2022. The number of SOFR-linked IRD transactions increased by 11.9% to 153.1 thousand from 136.8 thousand over the same period (see Chart 3).

**Chart 3: SOFR Traded Notional and Trade Count**

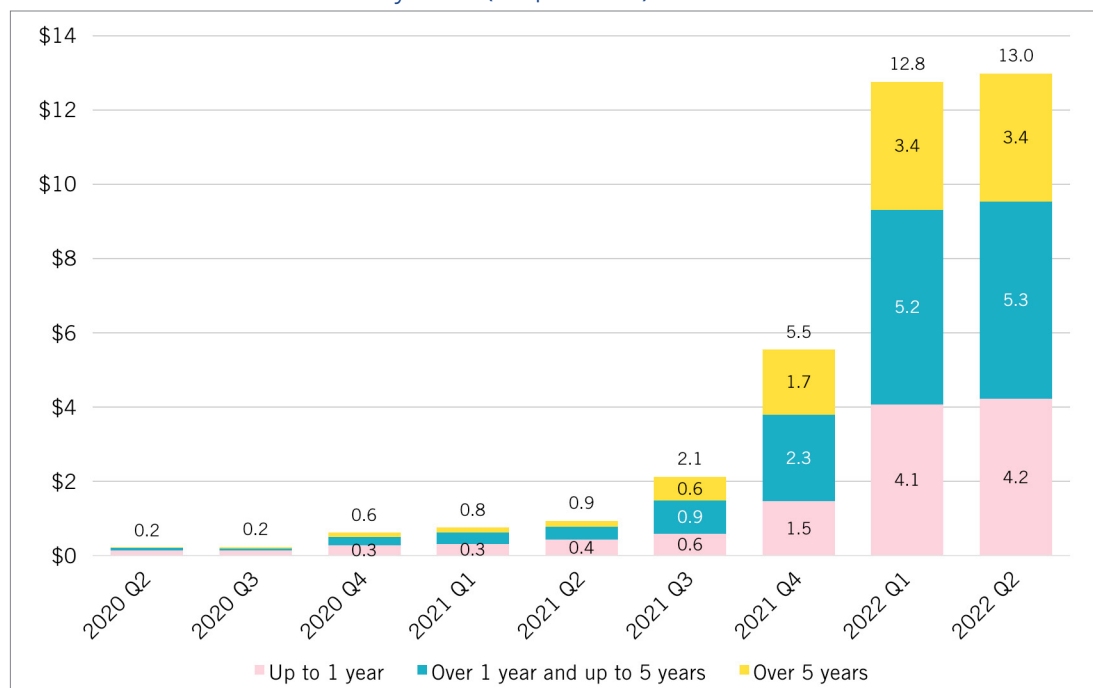


Source: DTCC SDR

Of the \$13.0 trillion of SOFR-linked IRD traded notional in the second quarter of 2022, \$4.2 trillion (32.6%) had a tenor up to one year, \$5.3 trillion (40.9%) was between one and five years and \$3.4 trillion (26.5%) had a tenor over five years<sup>6</sup> (see Chart 4).

<sup>6</sup> Tenor is calculated as the difference between the effective date and the maturity date

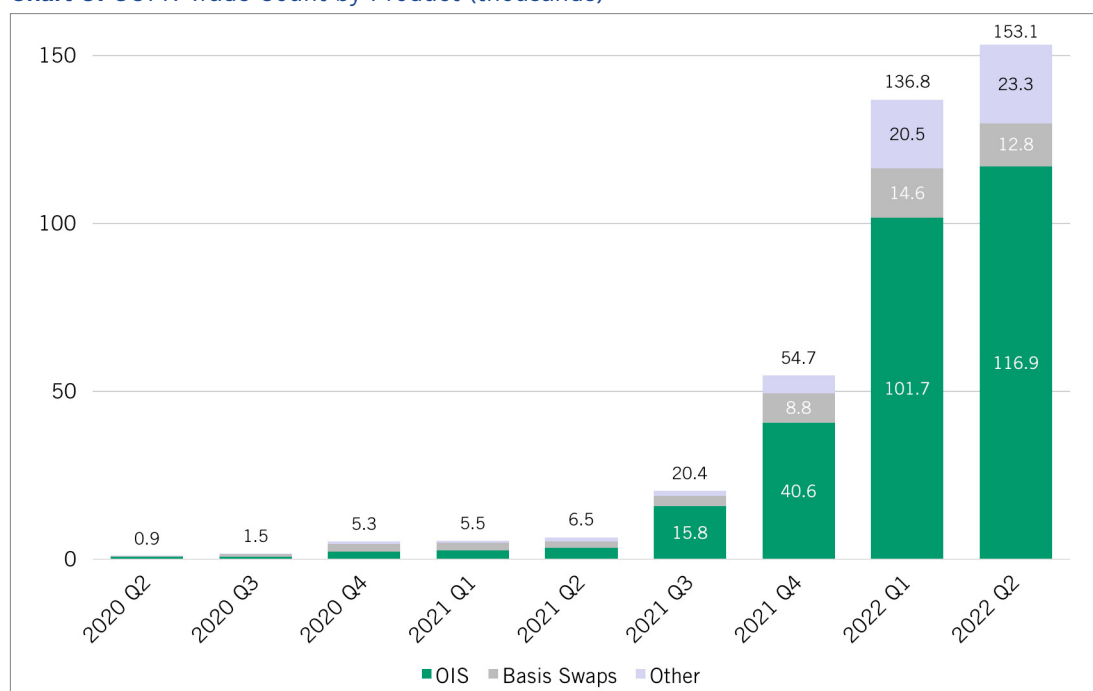
**Chart 4: SOFR Traded Notional by Tenor (US\$ trillions)**



Source: DTCC SDR

Overnight index swaps (OIS) accounted for the majority of SOFR-linked contracts in the second quarter of 2022. Of the 153.1 thousand transactions, 116.9 thousand were OIS, 12.8 thousand were basis swaps and 23.3 thousand were other transactions, including fixed-for-floating interest rate swaps and cap floor products (see Chart 5).

**Chart 5: SOFR Trade Count by Product (thousands)**

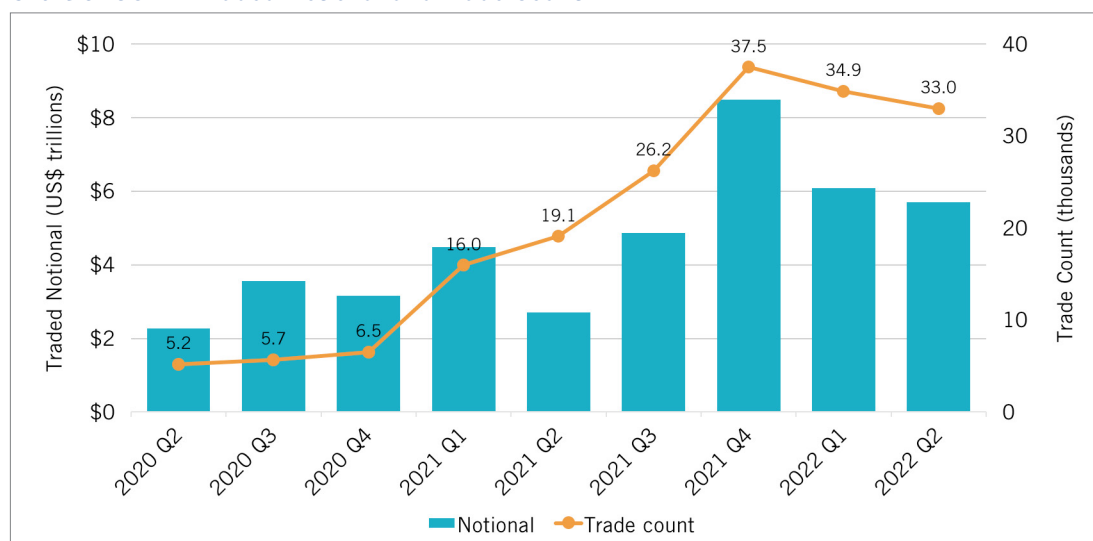


Source: DTCC SDR

## SONIA

Traded notional of OTC IRD referencing SONIA fell by 6.4% to \$5.7 trillion in the second quarter of 2022 from \$6.1 trillion in the first quarter of 2022. Trade count dropped by 5.4% to 33.0 thousand from 34.9 thousand over the same period (see Chart 6).

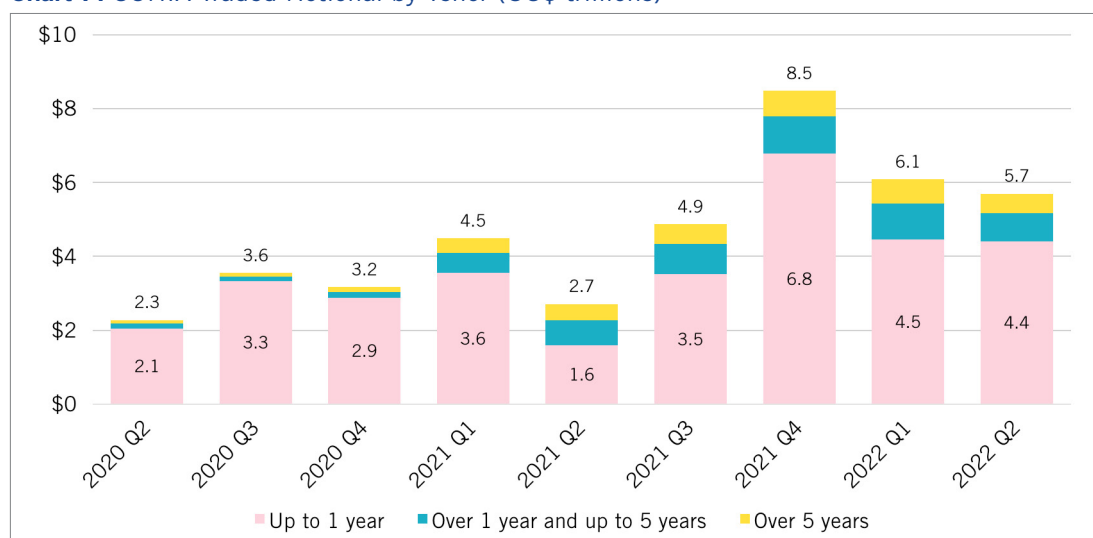
**Chart 6: SONIA Traded Notional and Trade Count**



Source: DTCC SDR

Most transactions referencing SONIA had a tenor up to one year. Of the \$5.7 trillion of SONIA-linked IRD traded notional in the second quarter of 2022, \$4.4 trillion (77.3%) had a tenor up to one year, \$766.6 billion (13.5%) was between one and five years and \$526.9 billion (9.2%) had a tenor over five years (see Chart 7).

**Chart 7: SONIA Traded Notional by Tenor (US\$ trillions)**

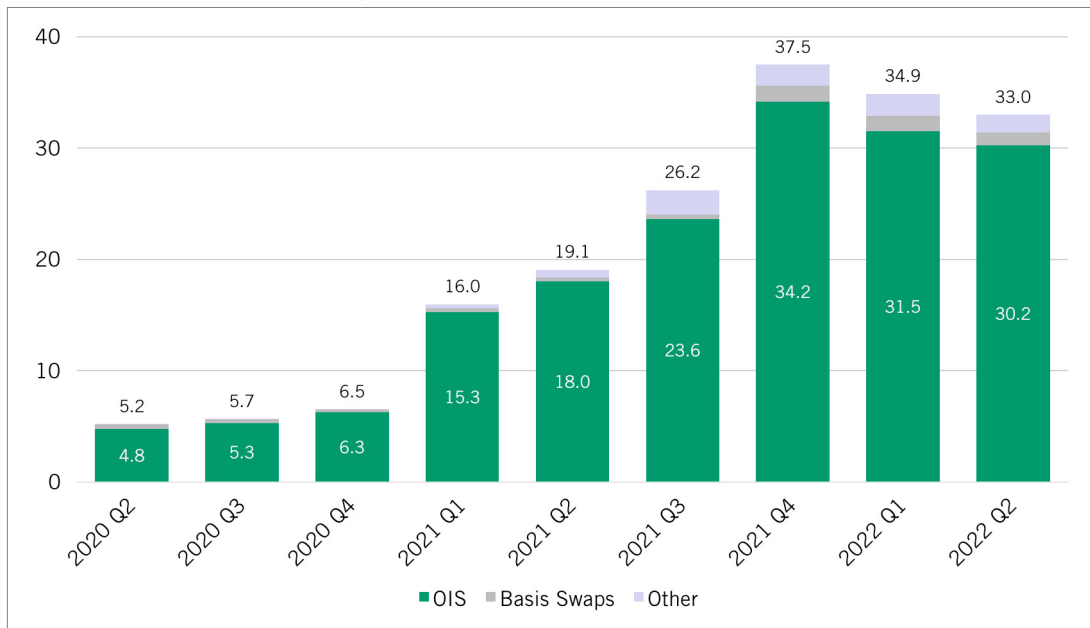


Source: DTCC SDR

<sup>10</sup> The difference between the rate of decrease of SONIA-linked traded notional and trade count was due to a smaller transaction size

OIS accounted for the majority of SONIA-linked OTC IRD trade count. Of the 33.0 thousand SONIA-linked IRD contracts traded in the second quarter of 2022, 30.2 thousand were OIS transactions, 1.2 thousand were basis swaps and 1.6 thousand were other products (see Chart 8).

**Chart 8:** SONIA Trade Count by Product (thousands)

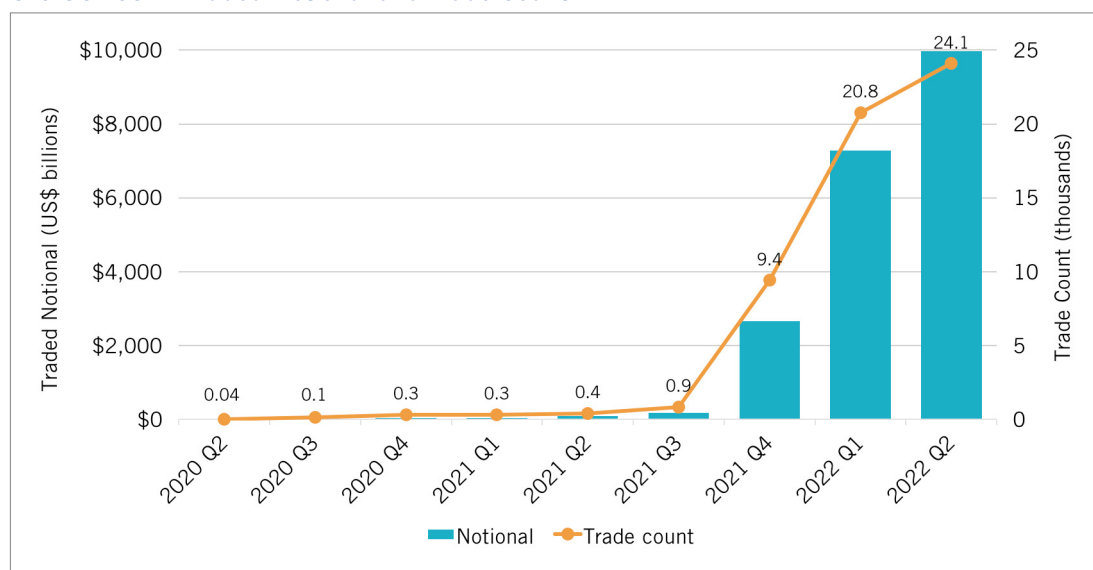


Source: DTCC SDR

## €STR

€STR-linked OTC IRD traded notional increased by 36.9% to \$10.0 trillion in the second quarter of 2022 from \$7.3 trillion in the first quarter of 2022. Trade count grew by 16.2% to 24.1 thousand from 20.8 thousand over the same period<sup>7</sup> (see Chart 9).

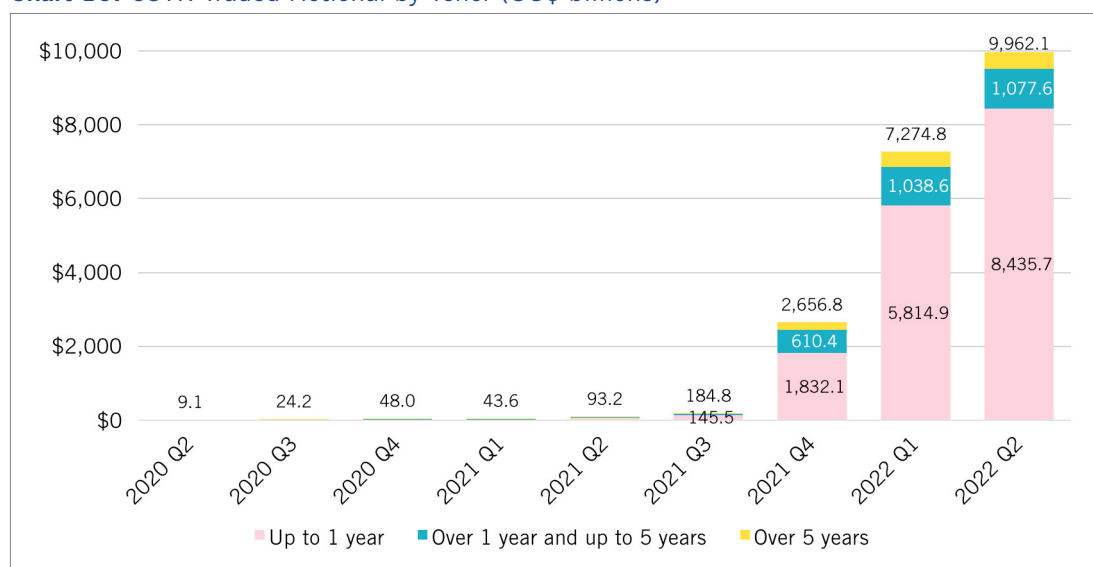
**Chart 9: €STR Traded Notional and Trade Count**



Source: DTCC SDR

Most transactions referencing €STR had a tenor up to one year. Of the \$10.0 trillion of €STR-linked IRD traded notional in the second quarter of 2022, \$8.4 trillion (84.7%) had a tenor up to one year, \$1.1 trillion (10.8%) was between one and five years and \$448.8 billion (4.5%) had a tenor over five years (see Chart 10).

**Chart 10: €STR Traded Notional by Tenor (US\$ billions)**

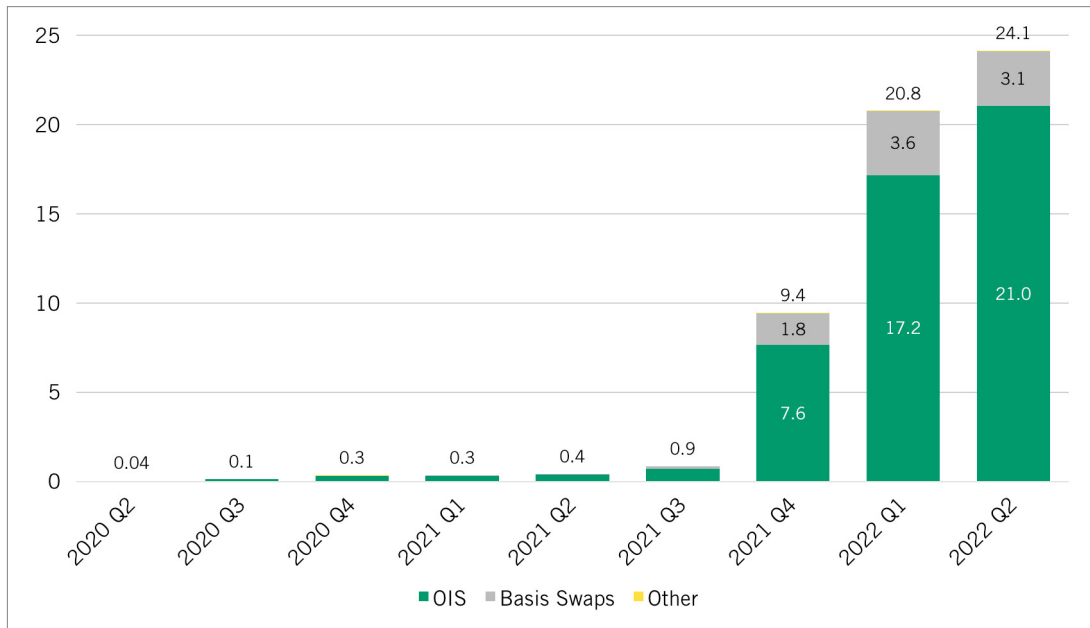


Source: DTCC SDR

<sup>7</sup> €STR swaps started trading in the fourth quarter of 2019

OIS accounted for the majority of €STR-linked OTC IRD trade count. Of the 24.1 thousand €STR trades in the second quarter of 2022, 21.0 thousand were OIS, 3.1 thousand were basis swaps and 21 were other products (see Chart 11).

**Chart 11: €STR Trade Count by Product (thousands)**



Source: DTCC SDR

Table 1: US IRD Traded Notional and Trade Count

	Q2 2022		H1 2022	
	Traded Notional (US\$ billions)	Trade Count	Traded Notional (US\$ billions)	Trade Count
USD LIBOR	12,648.1	57,951	32,998.0	142,615
SOFR	11,372.2	140,277	22,049.3	262,450
Basis Swaps: SOFR	1,613.3	12,848	3,699.4	27,477
GBP LIBOR	6.9	18	15.3	75
SONIA	5,577.2	31,830	11,502.7	65,329
Basis Swaps: SONIA	121.0	1,153	284.7	2,520
CHF LIBOR	0.1	2	0.1	2
SARON	245.9	4,422	412.3	8,237
Basis Swaps: SARON	13.6	157	33.4	348
JPY LIBOR	2.2	45	4.7	97
TIBOR/Euroyen TIBOR	2.6	38	6.1	88
TONA	696.4	11,068	1,309.2	19,926
Basis Swaps: TONA	204.8	2,524	374.6	4,506
EUR LIBOR	0.1	1	0.1	1
EURIBOR	14,777.2	138,984	31,613.8	261,912
€STR	9,586.2	21,070	16,387.7	38,253
Basis Swaps: €STR	375.9	3,053	849.2	6,631
Other*	14,085.0	154,901	36,660.7	324,059
<b>Total**</b>	<b>71,328.7</b>	<b>580,342</b>	<b>158,201.3</b>	<b>1,164,526</b>

\*Other includes IRD with other reference rates, IBOR/non-RFR basis swaps and IBOR/IBOR basis swaps that reference different IBORs IBOR/IBOR basis swaps that reference the same IBOR are included in a corresponding IBOR category  
RFR/RFR basis swaps that reference different RFRs are included in both RFR basis swaps categories and, therefore, are double-counted  
\*\*This data includes only the transactions required to be disclosed under U.S. regulations and does not include any exchange-traded derivatives (futures)

Source: DTCC SDR

Table 2: US IRD Traded Notional and Trade Count Q2 2022 vs. Q1 2022

	Q2 2022		Q1 2022		Q2 2022 vs. Q1 2022	
	Traded Notional (US\$ billions)	Trade Count	Traded Notional (US\$ billions)	Trade Count	Traded Notional	Trade Count
USD LIBOR	12,648.1	57,951	20,349.9	84,664	-37.8%	-31.6%
SOFR	12,985.5	153,125	12,763.2	136,802	1.7%	11.9%
GBP LIBOR	6.9	18	8.4	57	-18.3%	-68.4%
SONIA	5,698.2	32,983	6,089.3	34,866	-6.4%	-5.4%
CHF LIBOR	0.1	2	0.0	0		
SARON	259.5	4,579	186.2	4,006	39.4%	14.3%
JPY LIBOR	2.2	45	2.4	52	-8.1%	-13.5%
TIBOR/Euroyen TIBOR	2.6	38	3.5	50	-23.5%	-24.0%
TONA	901.2	13,592	782.6	10,840	15.2%	25.4%
EUR LIBOR	0.1	1	0.0	0		
EURIBOR	14,777.2	138,984	16,836.6	122,928	-12.2%	13.1%
€STR	9,962.1	24,123	7,274.8	20,761	36.9%	16.2%
Other*	14,085.0	154,901	22,575.7	169,158	-37.6%	-8.4%
<b>Total**</b>	<b>71,328.7</b>	<b>580,342</b>	<b>86,872.5</b>	<b>584,184</b>	<b>-17.9%</b>	<b>-0.7%</b>

\*Other includes IRD with other reference rates, IBOR/non-RFR basis swaps and IBOR/IBOR basis swaps that reference different IBORs IBOR/IBOR basis swaps that reference the same IBOR are included in a corresponding IBOR category  
RFR/RFR basis swaps that reference different RFRs are included in both RFR basis swaps categories and, therefore, are double-counted  
\*\*This data includes only the transactions required to be disclosed under U.S. regulations and does not include any exchange-traded derivatives (futures)

Source: DTCC SDR



Table 3: US IRD Traded Notional and Trade Count H1 2022 vs. H2 2021

	H1 2022		H2 2021		H1 2022 vs. H2 2021	
	Traded Notional (US\$ billions)	Trade Count	Traded Notional (US\$ billions)	Trade Count	Traded Notional	Trade Count
USD LIBOR	32,998.0	142,615	37,430.2	276,876	-11.8%	-48.5%
SOFR	25,748.7	289,927	7,670.6	75,087	235.7%	286.1%
GBP LIBOR	15.3	75	2,470.7	21,510	-99.4%	-99.7%
SONIA	11,787.4	67,849	13,354.7	63,709	-11.7%	6.5%
CHF LIBOR	0.1	2	155.1	3,458	-99.9%	-99.9%
SARON	445.7	8,585	227.7	4,396	95.8%	95.3%
JPY LIBOR	4.7	97	435.5	9,353	-98.9%	-99.0%
TIBOR/Euroyen TIBOR	6.1	88	6.2	96	-2.4%	-8.3%
TONA	1,683.8	24,432	849.2	11,432	98.3%	113.7%
EUR LIBOR	0.1	1	0.9	7	-93.8%	-85.7%
EURIBOR	31,613.8	261,912	17,714.2	161,251	78.5%	62.4%
€STR	17,236.8	44,884	2,841.6	10,282	506.6%	336.5%
Other*	36,660.7	324,059	27,509.4	281,946	33.3%	14.9%
Total**	158,201.3	1,164,526	110,666.0	919,403	43.0%	26.7%

\*Other includes IRD with other reference rates, IBOR/non-RFR basis swaps and IBOR/IBOR basis swaps that reference different IBORs IBOR/IBOR basis swaps that reference the same IBOR are included in a corresponding IBOR category  
RFR/RFR basis swaps that reference different RFRs are included in both RFR basis swaps categories and, therefore, are double-counted  
\*\*This data includes only the transactions required to be disclosed under U.S. regulations and does not include any exchange-traded derivatives (futures)

Source: DTCC SDR

Table 4: US IRD Traded Notional and Trade Count H1 2022 vs. H1 2021

	H1 2022		H1 2021		H1 2022 vs. H1 2021	
	Traded Notional (US\$ billions)	Trade Count	Traded Notional (US\$ billions)	Trade Count	Traded Notional	Trade Count
USD LIBOR	32,998.0	142,615	56,138.2	376,747	-41.2%	-62.1%
SOFR	25,748.7	289,927	1,703.4	11,989	1411.6%	2318.3%
GBP LIBOR	15.3	75	7,289.6	53,185	-99.8%	-99.9%
SONIA	11,787.4	67,849	7,197.5	35,050	63.8%	93.6%
CHF LIBOR	0.1	2	381.7	6,559	-100.0%	-100.0%
SARON	445.7	8,585	18.7	238	2289.0%	3507.1%
JPY LIBOR	4.7	97	1,758.3	22,458	-99.7%	-99.6%
TIBOR/Euroyen TIBOR	6.1	88	11.5	88	-47.1%	0.0%
TONA	1,683.8	24,432	144.9	475	1061.7%	5043.6%
EUR LIBOR	0.1	1	1.07	14	-94.9%	-92.9%
EURIBOR	31,613.8	261,912	20,672.7	174,961	52.9%	49.7%
€STR	17,236.8	44,884	136.8	732	12503.0%	6031.7%
Other*	36,660.7	324,059	25,696.3	300,060	42.7%	8.0%
Total**	158,201.3	1,164,526	121,150.7	982,556	30.6%	18.5%

\*Other includes IRD with other reference rates, IBOR/non-RFR basis swaps and IBOR/IBOR basis swaps that reference different IBORs IBOR/IBOR basis swaps that reference the same IBOR are included in a corresponding IBOR category  
RFR/RFR basis swaps that reference different RFRs are included in both RFR basis swaps categories and, therefore, are double-counted  
\*\*This data includes only the transactions required to be disclosed under U.S. regulations and does not include any exchange-traded derivatives (futures)

Source: DTCC SDR

**Table 5: US RFR-linked IRD Traded Notional and Trade Count by Tenor**

	Q2 2022		H1 2022	
	Traded Notional (US\$ billions)	Trade Count	Traded Notional (US\$ billions)	Trade Count
<b>SOFR</b>	12,985.5	153,125	25,748.7	289,927
Up to 1 year	4,229.6	12,748	8,304.1	23,471
Over 1 year and up to 5 years	5,310.0	59,290	10,550.3	113,359
Over 5 years	3,445.9	81,087	6,894.3	153,097
<b>SONIA</b>	5,698.2	32,983	11,787.4	67,849
Up to 1 year	4,404.7	3,955	8,857.4	8,448
Over 1 year and up to 5 years	766.6	11,415	1,741.3	23,071
Over 5 years	526.9	17,613	1,188.7	36,330
<b>SARON</b>	259.5	4,579	445.7	8,585
Up to 1 year	105.7	349	148.3	561
Over 1 year and up to 5 years	123.4	2,629	238.2	4,990
Over 5 years	30.5	1,601	59.3	3,034
<b>TONA</b>	901.2	13,592	1,683.8	24,432
Up to 1 year	261.2	876	529.8	1,743
Over 1 year and up to 5 years	383.2	4,731	674.2	8,213
Over 5 years	256.8	7,985	479.8	14,476
<b>€STR</b>	9,962.1	24,123	17,236.8	44,884
Up to 1 year	8,435.7	6,221	14,250.5	10,967
Over 1 year and up to 5 years	1,077.6	8,796	2,116.2	16,857
Over 5 years	448.8	9,106	870.1	17,060
RFR/RFR basis swaps that reference different RFRs are included in both RFR basis swaps categories and, therefore, are double-counted This data includes only the transactions required to be disclosed under U.S. regulations and does not include any exchange-traded derivatives (futures)				

Source: DTCC SDR

**Table 6: US RFR-linked IRD Traded Notional and Trade Count by Product**

	Q2 2022		H1 2022	
	Traded Notional (US\$ billions)	Trade Count	Traded Notional (US\$ billions)	Trade Count
<b>SOFR</b>	12,985.5	153,125	25,748.7	289,927
<b>OIS</b>	8,968.4	116,940	17,471.8	218,593
<b>Basis Swaps</b>	1,613.3	12,848	3,699.4	27,477
<b>Fixed-for-Floating IRS</b>	158.3	4,723	265.7	8,500
<b>Cross Currency IRS</b>	35.9	1,658	82.1	3,363
<b>Inflation Swaps</b>	1.3	10	1.7	15
<b>Exotics</b>	314.0	2,234	523.3	3,927
<b>Options</b>	1,566.9	12,036	3,149.7	23,238
<b>Cap Floor</b>	327.3	2,676	554.9	4,814
<b>SONIA</b>	5,698.2	32,983	11,787.4	67,849
<b>OIS</b>	5,295.8	30,238	10,919.5	61,746
<b>Basis Swaps</b>	121.0	1,153	284.7	2,520
<b>Fixed-for-Floating IRS</b>	0.9	19	1.2	24
<b>Cross Currency IRS</b>	0.6	6	1.2	20
<b>Inflation Swaps</b>	0.0	1	0.1	3
<b>Exotics</b>	6.9	53	8.0	62
<b>Options</b>	188.1	1,357	441.6	3,205
<b>Cap Floor</b>	84.8	156	131.1	269
<b>SARON</b>	259.5	4,579	445.7	8,585
<b>OIS</b>	245.9	4,422	412.3	8,237
<b>Basis Swaps</b>	13.6	157	33.4	348
<b>Fixed-for-Floating IRS</b>	0.0	0	0.0	0
<b>Cross Currency IRS</b>	0.0	0	0.0	0
<b>Inflation Swaps</b>	0.0	0	0.0	0
<b>Exotics</b>	0.0	0	0.0	0
<b>Options</b>	0.0	0	0.0	0
<b>Cap Floor</b>	0.0	0	0.0	0
<b>TONA</b>	901.2	13,592	1,683.8	24,432
<b>OIS</b>	615.9	9,626	1,138.4	17,147
<b>Basis Swaps</b>	204.8	2,524	374.6	4,506
<b>Fixed-for-Floating IRS</b>	0.3	21	0.5	27
<b>Cross Currency IRS</b>	0.0	0	0.0	0
<b>Inflation Swaps</b>	0.0	0	0.0	0
<b>Exotics</b>	1.6	72	2.0	110
<b>Options</b>	78.5	1,348	168.0	2,638
<b>Cap Floor</b>	0.0	1	0.2	4
<b>€STR</b>	9,962.1	24,123	17,236.8	44,884
<b>OIS</b>	9,583.4	21,049	16,384.2	38,225
<b>Basis Swaps</b>	375.9	3,053	849.2	6,631
<b>Fixed-for-Floating IRS</b>	0.1	4	0.4	8
<b>Cross Currency IRS</b>	0.8	6	0.8	6
<b>Inflation Swaps</b>	0.0	0	0.0	0
<b>Exotics</b>	0.0	0	0.0	0
<b>Options</b>	2.0	11	2.2	14
<b>Cap Floor</b>	0.0	0	0.0	0

RFR/RFR basis swaps that reference different RFRs are included in both RFR basis swaps categories and, therefore, are double-counted  
This data includes only the transactions required to be disclosed under U.S. regulations and does not include any exchange-traded derivatives (futures)

Source: DTCC SDR

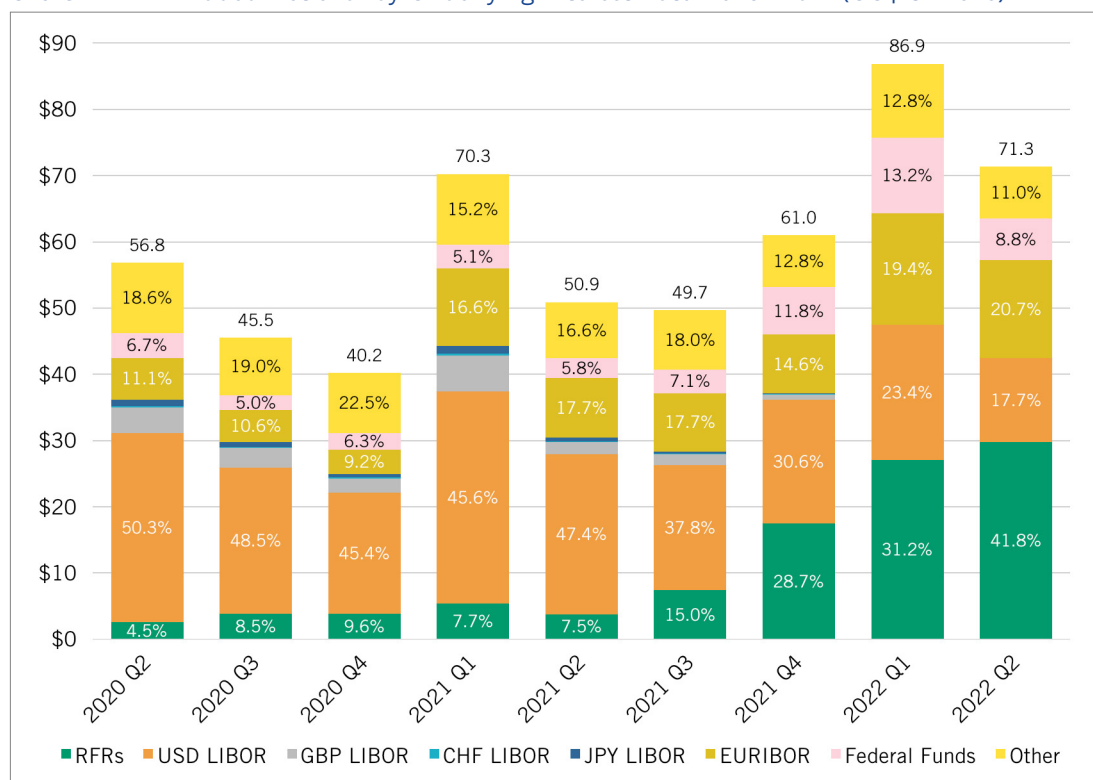
## IBOR-LINKED OTC IRD IN THE US

US-reported OTC IRD traded notional referencing LIBOR denominated in US dollars, sterling, Swiss franc, yen and euro, as well as EURIBOR and TIBOR, increased by 11.0% to \$64.6 trillion in the first half of 2022 from \$58.2 trillion in the second half of 2021. The number of trades referencing IBORs declined by 14.3% to 404.8 thousand from 472.6 thousand over the same period. IBOR-linked transactions represented 40.9% of total OTC IRD traded notional in the first half of 2022 compared to 52.6% in the second half of 2021.

Traded notional of IBOR-linked transactions fell by 26.2% to \$27.4 trillion in the second quarter of 2022 from \$37.2 trillion in the first quarter of 2022. The number of trades declined by 5.2% to 197.0 thousand from 207.8 thousand over the same period. IBOR-linked transactions represented 38.5% of total IRD traded notional in the second quarter of 2022 versus 42.8% in the first quarter of 2022<sup>8</sup>.

OTC IRD traded notional based on US dollar LIBOR equaled \$12.6 trillion, accounting for 17.7% of total OTC IRD traded notional in the second quarter of 2022<sup>9</sup> (see Chart 12). IRD traded notional linked to EURIBOR and sterling LIBOR was \$14.8 trillion and \$6.9 billion, respectively. IRD traded notional referencing the effective federal funds rate totaled \$6.3 trillion and accounted for 8.8% of IRD traded notional.

**Chart 12:** IRD Traded Notional by Underlying Interest Rate Benchmark (US\$ trillions)



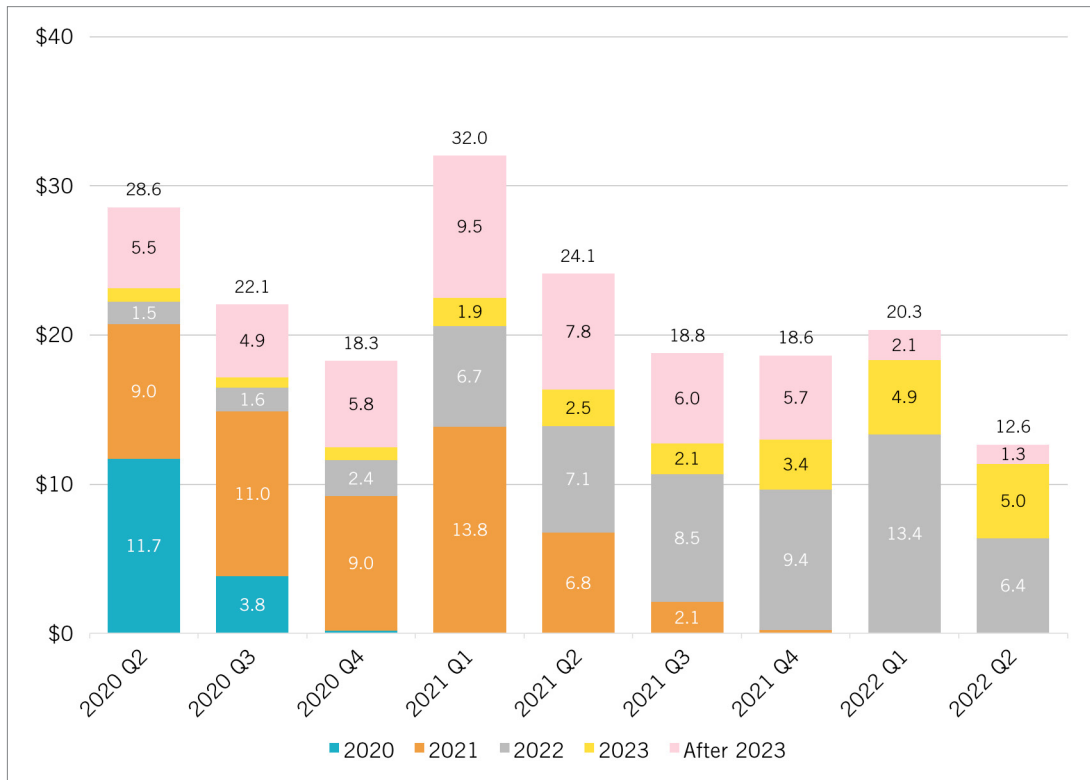
Source: DTCC SDR

<sup>8</sup> This data covers only transactions that are required to be disclosed under US regulations

<sup>9</sup> RFR/RFR basis swaps that reference different RFRs are double counted. These swaps totaled about \$0.7 trillion in the second quarter of 2022

Of the \$12.6 trillion of US dollar LIBOR-linked IRD traded notional in the second quarter of 2022, \$6.4 trillion had a 2022 maturity, \$5.0 trillion had a 2023 maturity and \$1.3 trillion had a maturity after 2023 (see Chart 13).

**Chart 13: US dollar LIBOR IRD Traded Notional by Maturity (US\$ trillions)**



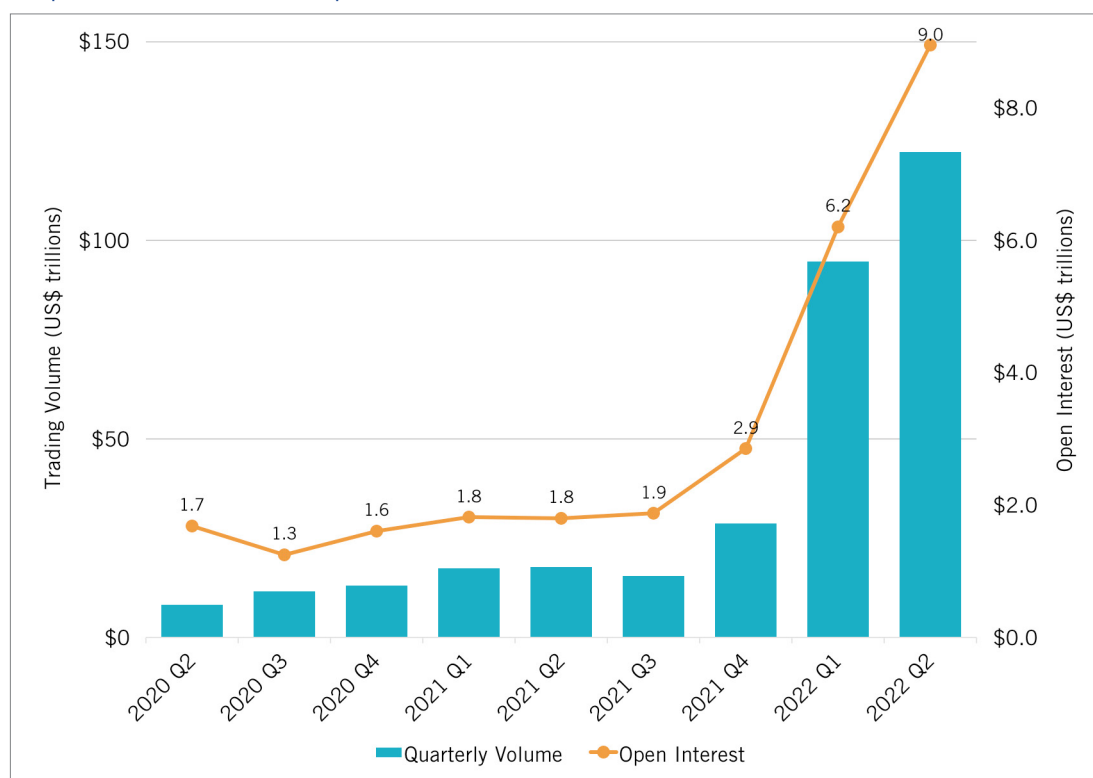
Source: DTCC SDR

## SOFR AND SONIA FUTURES

Trading volume in SOFR futures totaled \$216.9 trillion in the first half of 2022 compared to \$44.3 trillion in the second half of 2021. Open interest increased to \$9.0 trillion at the end of June 2022 versus \$2.9 trillion at the end of December 2021<sup>10</sup>.

Trading volume in SOFR futures rose by 29.0% to \$122.2 trillion in the second quarter of 2022 versus \$94.7 trillion in the first quarter of 2022 (see Chart 14).

**Chart 14:** SOFR Futures Quarterly Trading Volume and Open Interest  
(Implied Notional in OTC Equivalent)



Source: CME and ICE

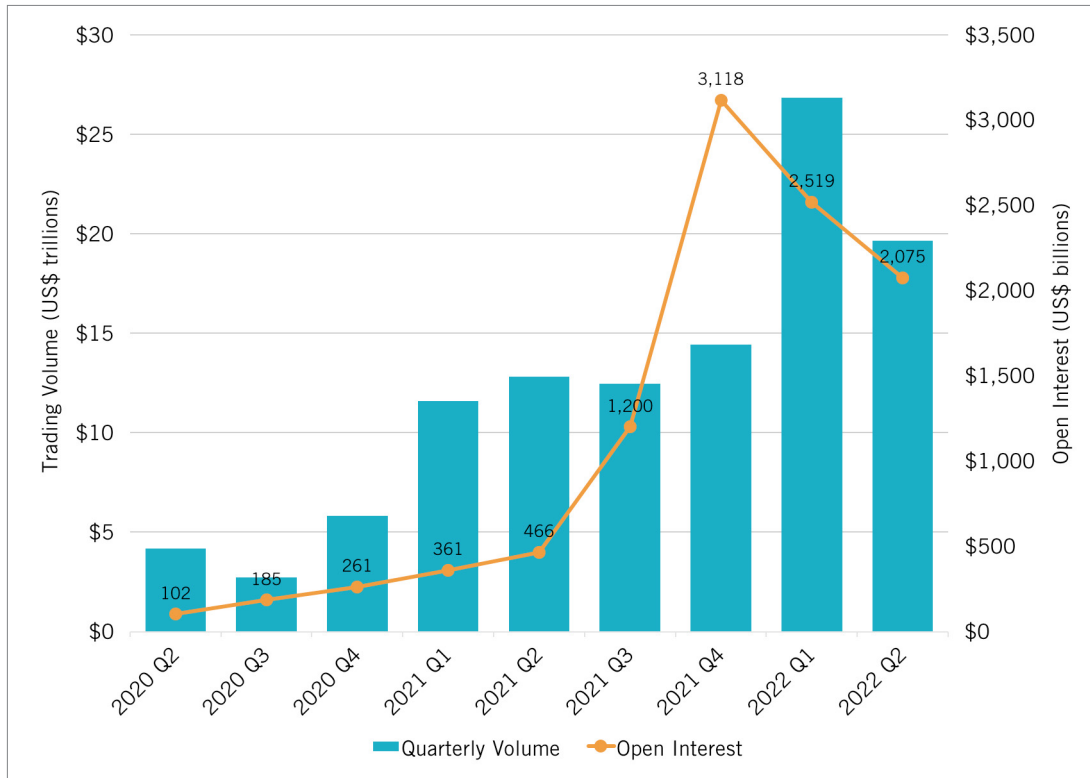
Trading volume in SONIA futures grew to \$46.5 trillion in the first half of 2022 compared to \$26.9 trillion in the second half of 2021. Open interest decreased to \$2.1 trillion at the end of June 2022 versus 3.1 trillion at the end of December 2021<sup>11</sup>.

Trading volume in SONIA futures fell by 26.7% to \$19.7 trillion in the second quarter of 2022 from \$26.8 trillion in the first quarter of 2022 (see Chart 15).

<sup>10</sup> The analysis of trading activity in SOFR exchange-traded futures is based on data from CME and ICE

<sup>11</sup> The analysis of trading activity in SONIA exchange-traded futures is based on data from CME, ICE and LCH

**Chart 15: SONIA Quarterly Trading Volume and Open Interest**  
(Implied Notional in OTC Equivalent)



Source: CME, ICE and LCH



ISDA has published other recent research papers:

- ***ISDA-Clarus RFR Adoption Indicator: June 2022***

<https://www.isda.org/a/DxagE/ISDA-Clarus-RFR-Adoption-Indicator-June-2022.pdf>

- ***SwapsInfo First Half of 2022 and the Second Quarter of 2022 Review: Summary***

<https://www.isda.org/2022/07/19/swapsinfo-first-half-of-2022-and-the-second-quarter-of-2022-review-summary/>

- ***Demystifying Derivatives Trading in the EU***

<https://www.isda.org/a/zAWgE/Demystifying-Derivatives-Trading-in-the-EU.pdf>

The [ISDA-Brattle microsite](#) provides background information about the IBOR Fallbacks, including adoption rates for the IBOR Fallbacks Protocol, graphs comparing certain fallback rates for LIBOR to LIBOR in the corresponding currency and information about the consultations that resulted in the final fallbacks.

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Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient.

Today, ISDA has over 990 member institutions from 78 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition

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