

SwapsInfo Full Year 2021 and the Fourth Quarter of 2021 Review

The ISDA SwapsInfo Quarterly Review provides analysis of interest rate derivatives (IRD) and credit derivatives trading. The report provides a breakdown of cleared and non-cleared activity, swap execution facility (SEF) and off-SEF traded notional, product taxonomy and currency information.

IRD and credit derivatives traded notional and trade count data is taken from the ISDA SwapsInfo website (swapsinfo.org), using information from the Depository Trust & Clearing Corporation (DTCC) and Bloomberg swap data repositories (SDRs). This report covers only trades required to be disclosed under US regulations.

KEY HIGHLIGHTS FOR THE FULL YEAR 2021 AND THE FOURTH QUARTER OF 2021

Interest Rate Derivatives

In 2021, IRD traded notional and trade count grew by 0.5% and 19.5%, respectively, compared to 2020. Fixed-for-floating interest rate swaps (IRS) traded notional increased by 50.5%, while forward rate agreements (FRAs) and overnight index swaps (OIS) traded notional decreased by 35.2% and 5.2%, respectively. Fixed-for-floating IRS and OIS trade count increased by 20.1% and 134.3%, respectively, in 2021 versus 2020, while FRA trade count was down by 24.4%.

In the full year 2021:

- IRD traded notional increased to \$231.0 trillion in 2021 from \$229.7 trillion in 2020. Trade count rose to 1.9 million from 1.6 million over the same period. Single currency fixed-for-floating IRS traded notional increased to \$94.6 trillion from \$62.8 trillion. FRA traded notional dropped to \$53.4 trillion from \$82.5 trillion and OIS traded notional declined to \$55.2 trillion in the 2021 from \$58.3 trillion in 2020.
- Single currency fixed-for-floating IRS accounted for 62.4% of total IRD trade count but represented only 40.9% of IRD traded notional. FRAs and OIS represented 23.1% and 23.9% of traded notional and 10.3% and 13.9% of total trade count, respectively.
- Cleared IRD transactions represented 75.6% of total traded notional and 72.3% of trade count. 83.5% of fixed-for-floating IRS, 94.6% of FRA, 69.6% of OIS and 23.8% of other IRD traded notional was cleared¹.
- SEF-traded IRD represented 65.5% of total traded notional and 66.7% of trade count. 74.0% of fixed-for-floating IRS, 91.4% of FRA, 40.7% of OIS and 36.2% of other IRD traded notional was executed on SEFs.

¹ A planned system upgrade by the DTCC SDR on November 21, 2020 changed reporting logic for the cleared status of trades. Following the upgrade, the percentage of IRD trades indicated to be cleared appears lower in 2021 compared to historical averages as firms switched to the new reporting logic

- IRD contracts denominated in US dollars contributed 54.8% of traded notional and 44.4% of trade count. Euro-denominated transactions accounted for 20.4% of traded notional and 19.8% of trade count. Sterling-denominated transactions totaled 13.2% and 9.8% of total IRD traded notional and trade count, respectively.
- Fixed-for-floating IRS and OIS contracts denominated in US dollars increased by 88.5% and 1.7%, respectively, while US dollar-denominated FRAs decreased by 57.9% in 2021 compared to 2020. Euro-denominated IRS and FRAs increased by 54.1% and 126.9%, respectively, while euro-denominated OIS drop by 22.3%. Sterling-denominated IRS and FRAs traded notional decreased by 0.3% and 38.0%, respectively, while sterling-denominated OIS traded notional increased by 17.0%.

In the fourth quarter of 2021:

- IRD traded notional increased by 50.3% to \$60.4 trillion in the fourth quarter of 2021 from \$40.2 trillion in the fourth quarter of 2020. Trade count grew by 43.8% to 480.3 thousand from 334.0 thousand over the same period. Single currency fixed-for-floating IRS traded notional increased by 67.6% to \$23.1 trillion from \$13.8 trillion. FRA traded notional decreased by 45.3% to \$6.1 trillion from \$11.1 trillion. OIS traded notional grew by 146.8% to \$23.7 trillion in the fourth quarter of 2021 from \$9.6 trillion in the fourth quarter of 2020.
- Single currency fixed-for-floating IRS accounted for 58.5% of total IRD traded notional but represented only 38.2% of IRD traded notional. FRAs and OIS represented 10.0% and 39.3% of traded notional and 4.8% and 23.3% of total trade count, respectively.
- Cleared IRD transactions represented 74.1% of total traded notional and 73.3% of trade count. 85.6% of fixed-for-floating IRS, 90.1% of FRA, 73.5% of OIS and 28.1% of other IRD traded notional was cleared.
- SEF-traded IRD represented 57.3% of total traded notional and 66.1% of trade count. 74.4% of fixed-for-floating IRS, 83.7% of FRA, 40.4% of OIS and 37.4% of other IRD traded notional was executed on SEFs.

- IRD contracts denominated in US dollars contributed 53.8% of traded notional and 43.8% of trade count. Euro-denominated transactions accounted for 20.0% of traded notional and 20.2% of trade count. Sterling-denominated transactions represented 15.3% and 10.6% of total IRD traded notional and trade count, respectively.
- Fixed-for-floating IRS and OIS contracts denominated in US dollars increased by 102.6% and 283.4%, respectively, while US dollar-denominated FRAs decreased by 79.1% in the fourth quarter of 2021 compared to the fourth quarter of 2020. Euro-denominated IRS, FRAs and OIS increased by 111.5%, 240.2% and 24.4%, respectively. Sterling-denominated IRS and FRAs traded notional decreased by 47.7% and 64.8%, respectively, while sterling-denominated OIS increased by 159.9%.

Credit Derivatives

Credit derivatives traded notional and trade count decreased by 1.7% and 11.8%, respectively, in 2021 compared to 2020². There was less trading activity across CDX HY and CDX IG, while trading in iTraxx Europe increased.

In the full year 2021:

- Credit derivatives traded notional decreased to \$9.5 trillion in 2021 from \$9.7 trillion in 2020. Trade count fell to 243.0 thousand from 275.4 thousand over the same period. CDX HY traded notional declined by 13.5% to \$1.5 trillion from \$1.7 trillion in 2020. CDX IG traded notional decreased by 17.5% to \$3.2 trillion from \$3.9 trillion. iTraxx Europe traded notional increased by 33.7% to \$2.3 trillion in 2021 from \$1.7 trillion in the 2020.
- CDX HY and CDX IG represented 15.3% and 33.8% of traded notional and 27.0% and 23.4% of total trade count, respectively. iTraxx Europe accounted for 23.6% of total credit derivatives traded notional and 16.5% of total trade count.
- Cleared credit derivatives transactions represented 80.6% of total traded notional and 84.4% of trade count. 96.7% of CDX HY, 97.1% of CDX IG, 92.7% of iTraxx Europe and 40.6% of other credit derivatives traded notional was cleared.

² Credit derivatives mostly comprise CDS indices, but also include CDS index tranches, credit swaptions, exotic products, total return swaps and insignificant amount of single-name CDS

- SEF-traded credit derivatives represented 79.9% of total traded notional and 83.9% of trade count. 96.1% of CDX HY, 96.3% of CDX IG, 92.0% of iTraxx Europe and 40.0% of other credit derivatives traded notional was executed on SEFs.
- Credit derivatives contracts denominated in US dollars represented 61.5% of total traded notional and 63.2% of trade count. Euro-denominated transactions accounted for 38.3% and 36.3% of traded notional and trade count, respectively.

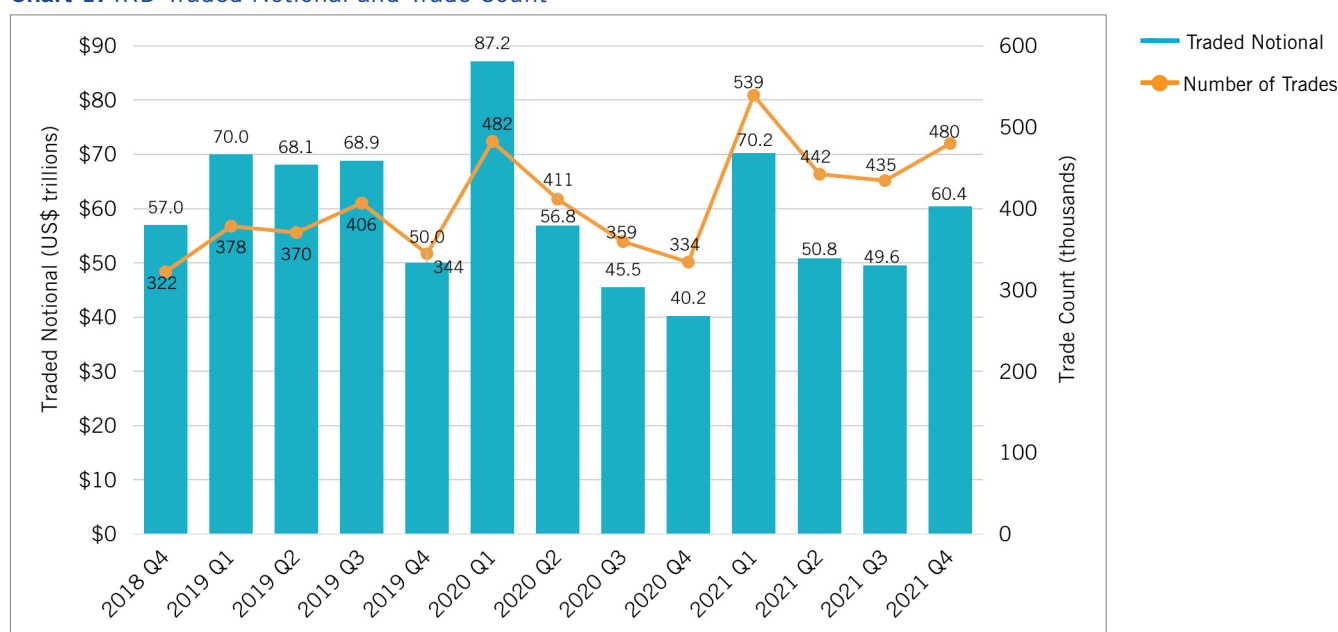
In the fourth quarter of 2021:

- Credit derivatives traded notional increased by 56.3% to \$2.7 trillion in the fourth quarter of 2021 from \$1.7 trillion in the fourth quarter of 2020. Trade count rose by 30.6% to 68.9 thousand from 52.7 thousand over the same period. CDX HY traded notional grew by 30.4% to \$397.2 billion from \$304.6 billion, while CDX IG traded notional increased by 23.5% to \$829.7 billion from \$671.6 billion. iTraxx Europe traded notional increased by 138.5% to \$708.4 billion in the fourth quarter of 2021 from \$297.1 billion in the fourth quarter of 2020.
 - CDX HY and CDX IG represented 14.6% and 30.6% of traded notional and 26.3% and 20.7% of total trade count, respectively. iTraxx Europe accounted for 26.1% of total credit derivatives traded notional and 17.9% of total trade count.
 - Cleared credit derivatives transactions represented 79.7% of total traded notional and 85.2% of trade count. 96.8% of CDX HY, 97.1% of CDX IG, 90.5% of iTraxx Europe and 42.4% of other credit derivatives traded notional was cleared.
 - SEF-traded credit derivatives represented 78.7% of total traded notional and 84.5% of trade count. 95.4% of CDX HY, 96.1% of CDX IG, 89.6% of iTraxx Europe and 41.6% of other credit derivatives traded notional was executed on SEFs.
 - Credit derivatives contracts denominated in US dollars represented 57.6% of total traded notional and 59.5% of trade count. Euro-denominated transactions accounted for 42.2% and 40.1% of traded notional and trade count, respectively.
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INTEREST RATE DERIVATIVES

IRD traded notional increased by 50.3% to \$60.4 trillion in the fourth quarter of 2021 from \$40.2 trillion in the fourth quarter of 2020. Trade count grew by 43.8% to 480.3 thousand from 334.0 thousand over the same period (see Chart 1).

Chart 1: IRD Traded Notional and Trade Count



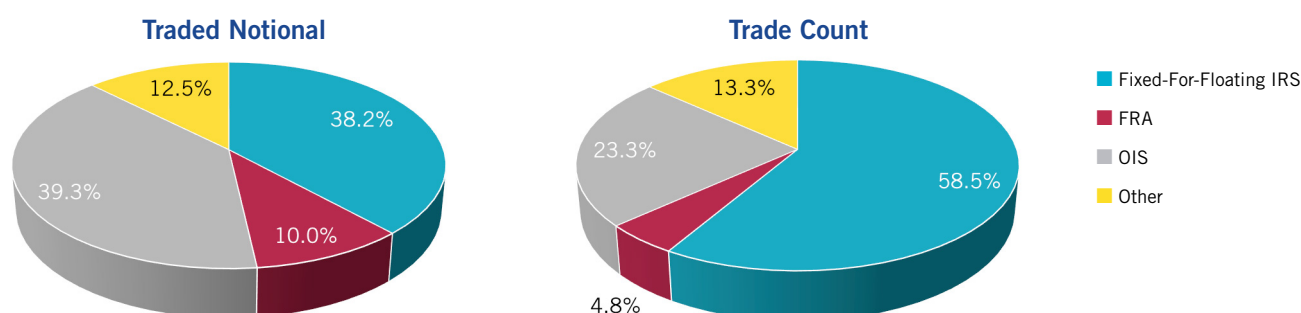
Source: DTCC SDR

In the full year 2021, IRD traded notional grew by 0.5% to \$231.0 trillion from \$229.7 trillion in 2020. Trade count increased by 19.5% to 1.9 million from 1.6 million over the same period.

IRD Product Taxonomy

Single currency fixed-for-floating IRS accounted for 58.5% of total IRD trade count and 38.2% of IRD total traded notional in the fourth quarter of 2021. FRAs and OIS represented 10.0% and 39.3% of total traded notional and 4.8% and 23.3% of trade count, respectively (see Chart 2).

Chart 2: IRD Traded Notional and Trade Count by Product



Source: DTCC SDR

Fixed-for-floating IRS traded notional increased by 67.6% to \$23.1 trillion in the fourth quarter of 2021 from \$13.8 trillion in the fourth quarter of 2020. IRS trade count grew by 29.9% to 281.2 thousand from 216.4 thousand over the same period (see Chart 3 and Chart 4).

In the full year 2021, IRS traded notional rose by 50.5% to \$94.6 trillion from \$62.8 trillion in the full year 2020. Trade count grew by 20.1% to 1.2 million from 984.4 thousand over the same interval.

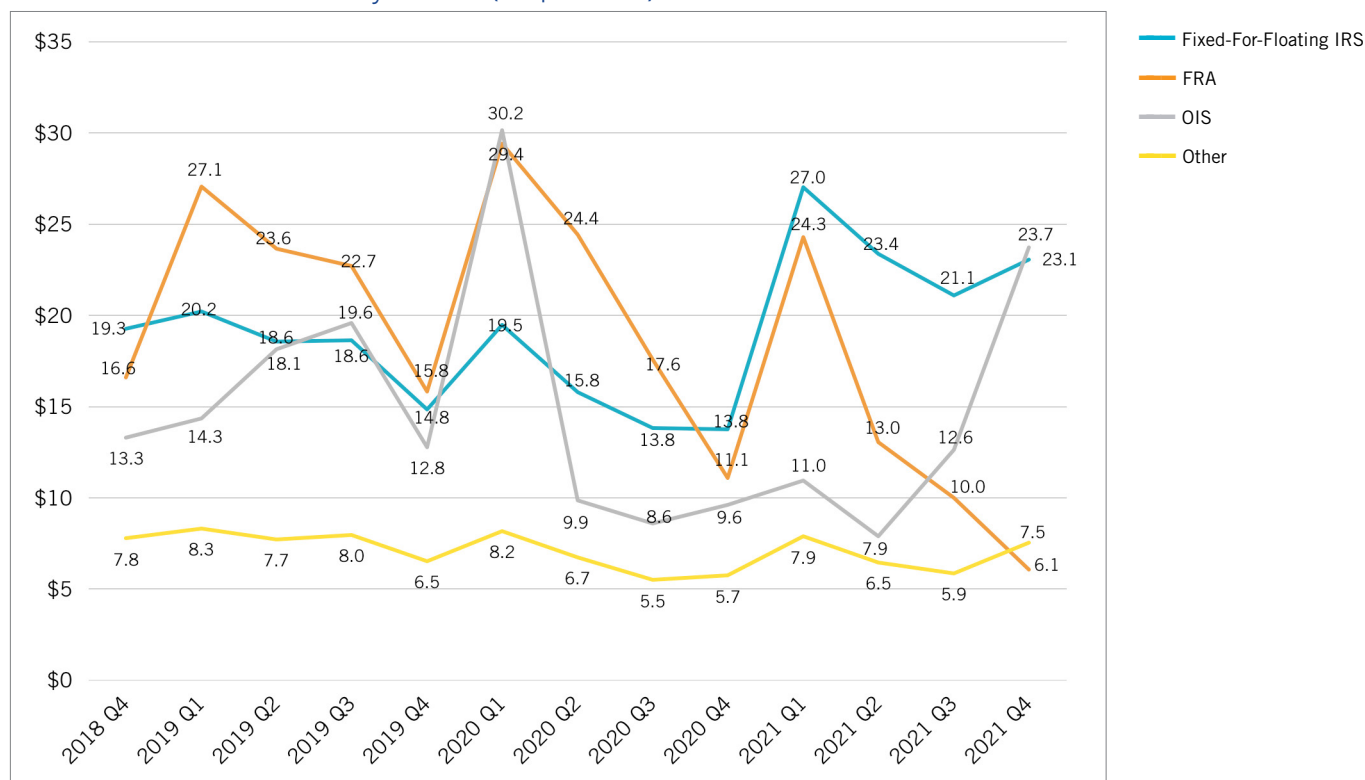
FRA traded notional decreased by 45.3% to \$6.1 trillion in the fourth quarter of 2021 from \$11.1 trillion in the fourth quarter of 2020. Trade count dropped by 32.6% to 23.1 thousand from 34.2 thousand over the same period.

In the full year 2021, FRA traded notional decreased by 35.2% to \$53.4 trillion from \$82.5 trillion in the full year 2020. Trade count also declined by 24.4% to 194.9 thousand from 257.9 thousand.

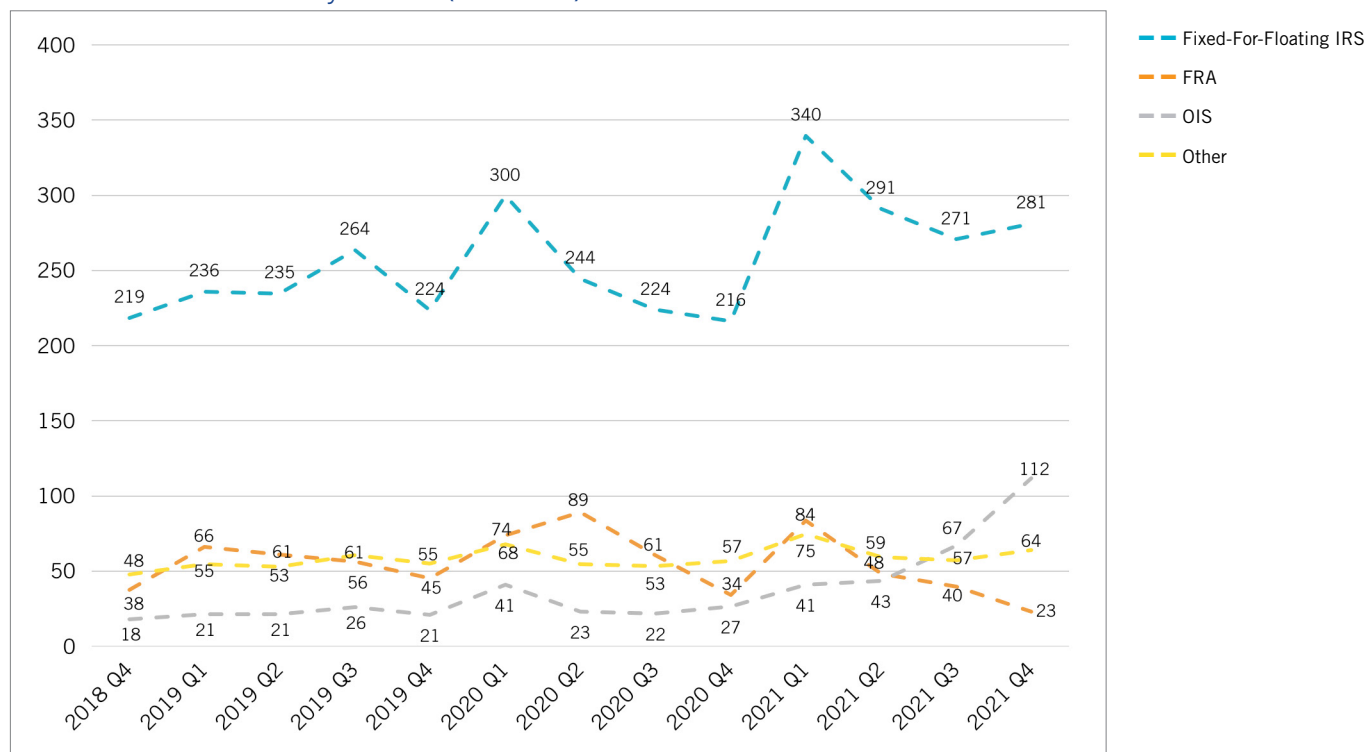
OIS traded notional increased by 146.8% to \$23.7 trillion in the fourth quarter of 2021 from \$9.6 trillion in the fourth quarter of 2020. OIS trade count rose by 321.3% to 112.0 thousand from 26.6 thousand over the same period.

In the full year 2021, OIS traded notional declined by 5.2% to \$55.2 trillion from \$58.3 trillion in 2020. Trade count grew by 134.3% to 263.6 thousand from 112.5 thousand over the same interval.

Chart 3: IRD Traded Notional by Product (US\$ trillions)



Source: DTCC SDR

Chart 4: IRD Trade Count by Product (thousands)


Source: DTCC SDR

IRD Average Daily Traded Notional, Trade Count and Trade Size

Fixed-for-floating IRS average daily traded notional increased by 67.6% in the fourth quarter of 2021 versus the fourth quarter of 2020, totaling \$349.4 billion. Fixed-for-floating IRS average daily trade count and average trade size rose by 29.9% and 25.0%, respectively (see Table 1).

FRA average daily traded notional totaled \$93.3 billion in the fourth quarter of 2021, 46.1% lower compared to the fourth quarter of 2020. FRA average daily trade count and average trade size decreased by 33.7% and 27.0%, respectively.

OIS average daily traded notional was \$359.8 billion in the fourth quarter of 2021, a 143.0% increase compared to the fourth quarter of 2020. OIS average daily trade count grew by 314.9%, while average trade size decreased by 44.5%.

Table 1: IRD Average Daily Traded Notional, Daily Trade Count and Trade Size

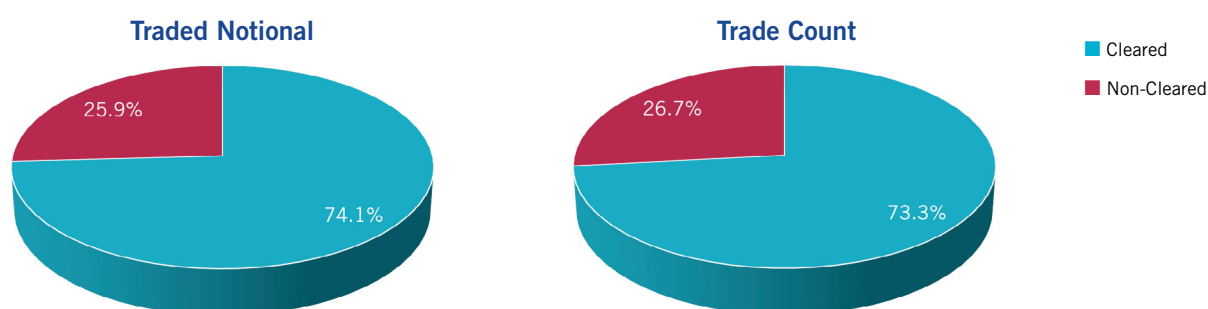
	Average Daily Traded Notional (US\$ billions)			Average Daily Trade Count			Average Trade Size (US\$ millions)		
	IRS	FRAs	OIS	IRS	FRAs	OIS	IRS	FRAs	OIS
2021 Q4	349.4	93.3	359.8	4,260	355	1,696	78.3	545.6	210.0
2020 Q4	208.5	173.1	148.1	3,279	535	409	62.7	747.4	378.1
2021 Q4 vs. 2020 Q4	67.6%	-46.1%	143.0%	29.9%	-33.7%	314.9%	25.0%	-27.0%	-44.5%
Full Year 2021	362.8	209.5	211.7	4,537	763	1,008	77.7	542.5	212.6
Full Year 2020	240.1	320.2	223.5	3,760	1,000	431	63.5	690.7	472.2
Full Year 2021 vs. Full Year 2020	51.1%	-34.6%	-5.3%	20.7%	-23.7%	133.7%	22.3%	-21.5%	-55.0%

Source: DTCC SDR

IRD Central Clearing

Cleared IRD transactions represented 74.1% of total IRD traded notional and 73.3% of total trade count during the fourth quarter of 2021 (see Chart 5). IRD cleared notional and trade count equaled \$44.8 trillion and 352.2 thousand, respectively.

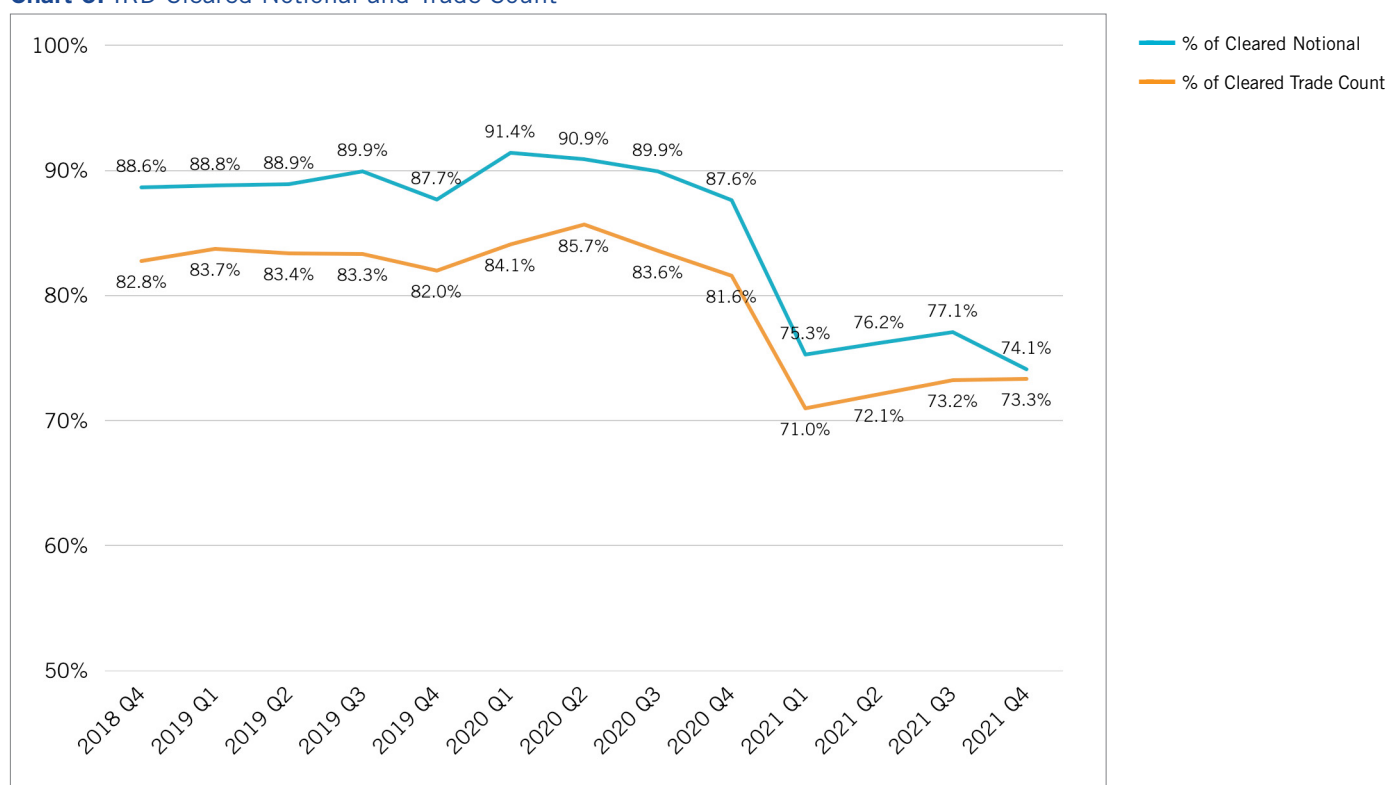
Chart 5: IRD Cleared Traded Notional and Trade Count



Source: DTCC SDR

The DTCC SDR completed a planned system upgrade on November 21, 2020, which changed the reporting logic for the status of cleared trades. Following the upgrade, the percentage of IRD cleared trades in 2021 appears to be lower than historical averages, as firms switched to the new reporting logic (see Chart 6).

Chart 6: IRD Cleared Notional and Trade Count

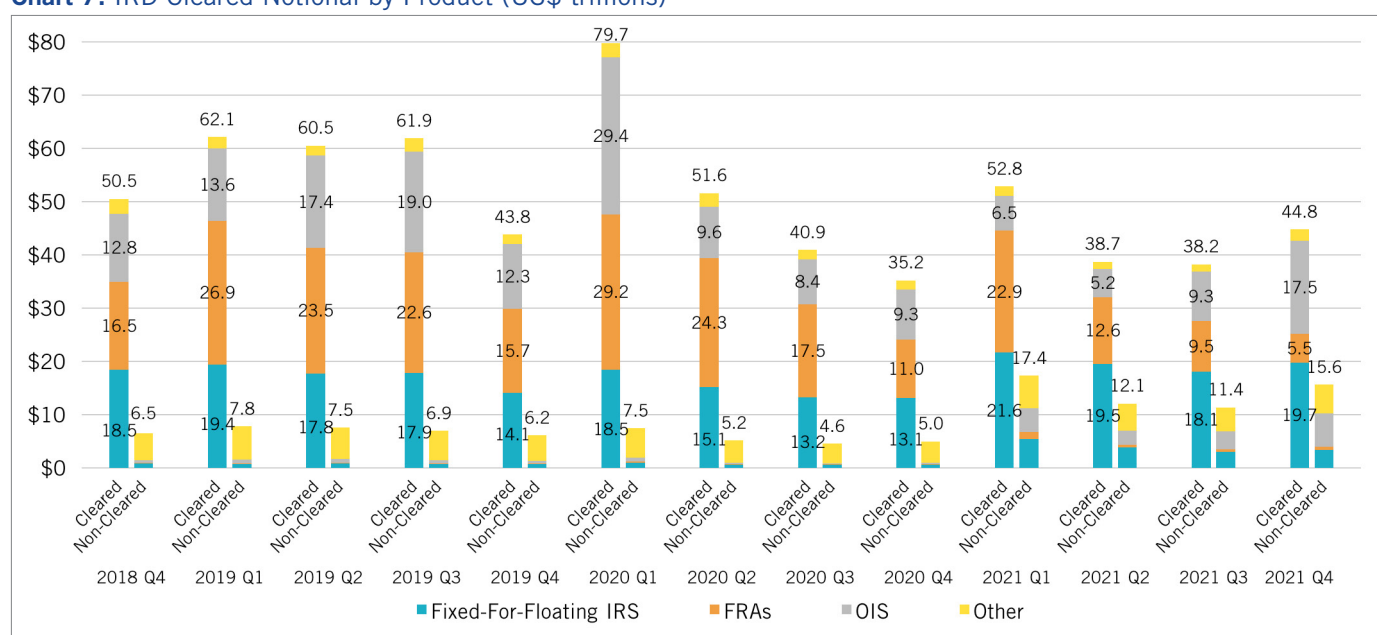


Source: DTCC SDR

In the fourth quarter of 2021, \$19.7 trillion (85.6%) of fixed-for-floating IRS traded notional was cleared and \$3.3 trillion was non-cleared. Cleared FRA and OIS traded notional equaled \$5.5 trillion (90.1%) and \$17.5 trillion (73.5%), respectively. \$2.1 trillion (28.1%) of other IRD products traded notional was cleared and \$5.4 trillion was non-cleared (see Chart 7).

In the full year 2021, \$79.0 trillion (83.5%) of fixed-for-floating IRS traded notional was cleared and \$15.6 trillion was non-cleared. \$50.5 trillion (94.6%) of FRA and \$38.5 trillion (69.6%) of OIS traded notional was cleared. \$6.6 trillion (23.8%) of other IRD products traded notional was cleared and \$21.1 trillion was non-cleared.

Chart 7: IRD Cleared Notional by Product (US\$ trillions)

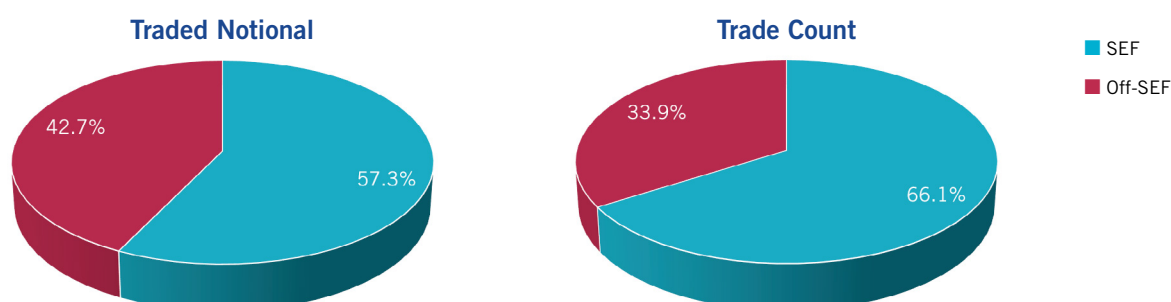


Source: DTCC SDR

IRD Trading Venue

SEF-traded IRD represented 57.3% of total IRD traded notional and 66.1% of total trade count in the fourth quarter of 2021 (see Chart 8). Total IRD traded notional executed on SEFs was \$34.6 trillion, while \$25.8 trillion was executed off-SEF. In terms of trade count, 317.4 thousand transactions were executed on SEFs and 162.9 thousand occurred off-SEF.

Chart 8: SEF and Off-SEF IRD Traded Notional and Trade Count



Source: DTCC SDR

IRD traded notional executed on SEFs grew by 45.9% to \$34.6 trillion in the fourth quarter of 2021 from \$23.8 trillion in the same quarter of 2020. The number of trades executed on SEFs increased by 54.1% to 317.4 thousand from 206.0 thousand over the same interval (see Chart 9).

IRD traded notional executed off-SEF increased by 56.7% to \$25.8 trillion in the fourth quarter of 2021 from \$16.5 trillion in the fourth quarter of 2020. The number of transactions grew by 27.4% to 162.9 thousand from 127.9 thousand over the same period.

In the full year 2021, IRD traded notional executed on SEFs rose by 10.6% to \$151.3 trillion from \$136.8 trillion in the full year 2020. Trade count also increased by 26.4% to 1.3 million from 1.0 million.

IRD traded notional executed off-SEF decreased by 14.3% to \$79.6 trillion in the full year 2021 from \$92.9 trillion in the prior 12-month period. The number of transactions increased by 7.7% over the same period, to 631.0 thousand from 585.7 thousand.

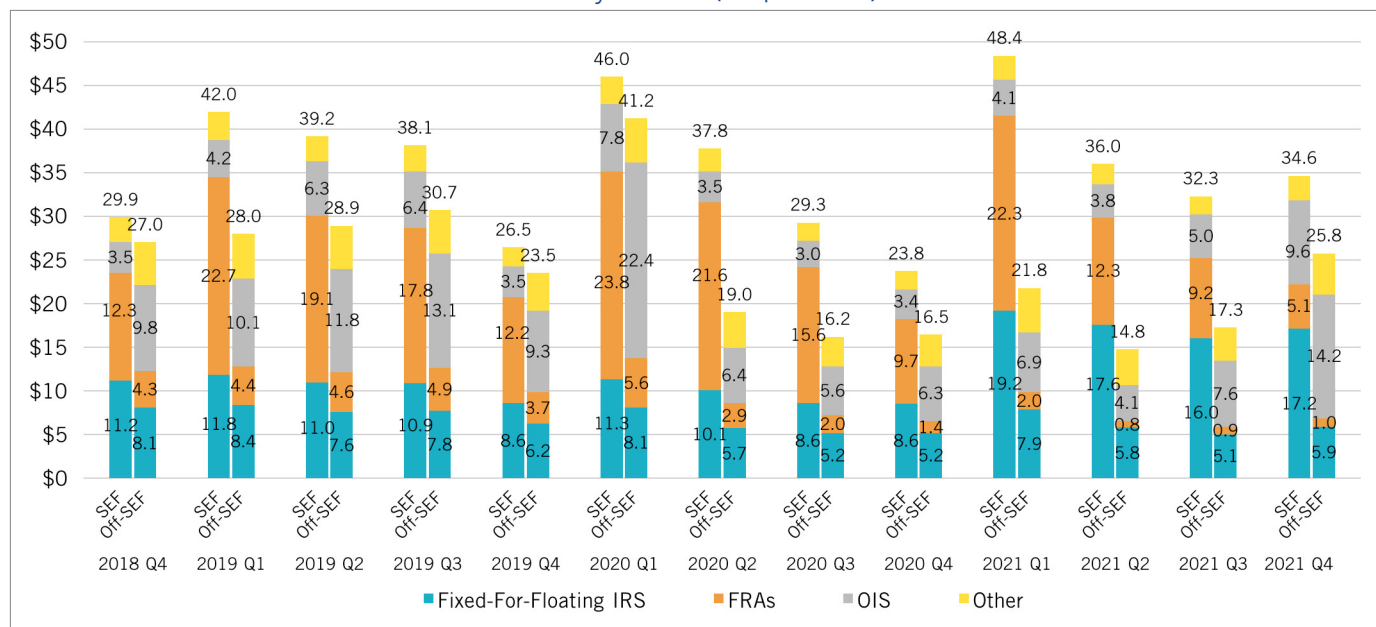
Chart 9: SEF and Off-SEF IRD Traded Notional and Trade Count



Source: DTCC SDR

In the fourth quarter of 2021, \$17.2 trillion (74.4%) of fixed-for-floating IRS traded notional took place on SEFs and \$5.9 trillion was executed off-SEF, \$5.1 trillion (83.7%) of FRA traded notional occurred on SEFs and \$985.2 billion was off-SEF, and \$9.6 trillion (40.4%) of OIS traded notional took place on SEFs and \$14.2 trillion was off-SEF (see Chart 10).

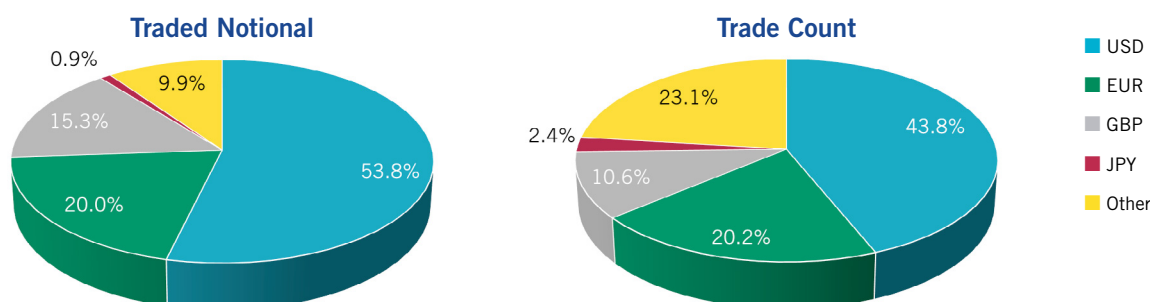
In the full year 2021, \$70.0 trillion (74.0%) of fixed-for-floating IRS traded notional occurred on SEFs and \$24.6 trillion was executed off-SEF, \$48.9 trillion (91.4%) of FRA traded notional was executed on SEFs and \$4.6 trillion was off-SEF, and \$22.5 trillion (40.7%) of OIS traded notional took place on SEFs and \$32.8 trillion was off-SEF.

Chart 10: SEF and Off-SEF IRD Traded Notional by Product (US\$ trillions)


Source: DTCC SDR

IRD by Currency

IRD contracts denominated in US dollars were the most actively traded over the quarter. US dollar-denominated IRD comprised 53.8% of total IRD traded notional and 43.8% of total trade count in the fourth quarter of 2021. Euro-denominated transactions accounted for 20.0% of total IRD traded notional and 20.2% of trade count. Sterling-denominated transactions made up 15.3% and 10.6% of total IRD traded notional and trade count, respectively (see Chart 11).

Chart 11: IRD Traded Notional and Trade Count by Currency


Source: DTCC SDR

US dollar-, euro- and sterling-denominated IRD traded notional increased by 40.7%, 95.1% and 70.5%, respectively, in the fourth quarter of 2021 versus the same period in 2020. Yen-denominated IRD traded notional decreased by 3.3% compared to the fourth quarter of 2020.

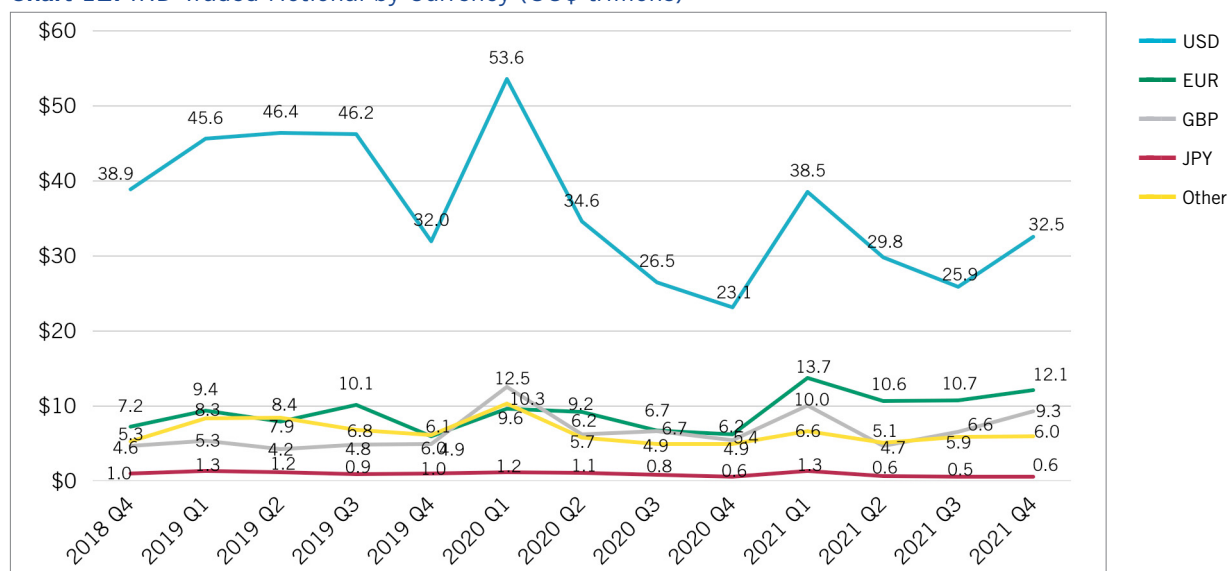
US dollar-denominated IRD traded notional totaled \$32.5 trillion in the fourth quarter of 2021 versus \$23.1 trillion in the fourth quarter of 2020, while euro-denominated traded notional increased to \$12.1 trillion from \$6.2 trillion over the same interval. Traded notional for sterling- and yen-denominated IRD totaled \$9.3 trillion and \$570.4 billion, respectively (see Chart 12).

Trade count for US dollar-denominated IRD increased by 24.8% to 210.2 thousand in the fourth quarter of 2021, while euro-denominated transactions grew by 93.9% to 97.1 thousand. Trade count for sterling-denominated IRD rose by 69.7% to 50.7 thousand and yen-denominated IRD transactions increased by 58.7% to 11.5 thousand (see Chart 13).

In the full year 2021, US dollar-denominated IRD traded notional decreased by 8.0% to \$126.7 trillion from \$137.7 trillion in 2020. Euro-denominated IRD traded notional increased by 48.8% to \$47.2 trillion from \$31.7 trillion, sterling-denominated traded notional fell by 1.1% to \$30.5 trillion and yen-denominated traded notional dropped by 15.1% to \$3.1 trillion over the same period.

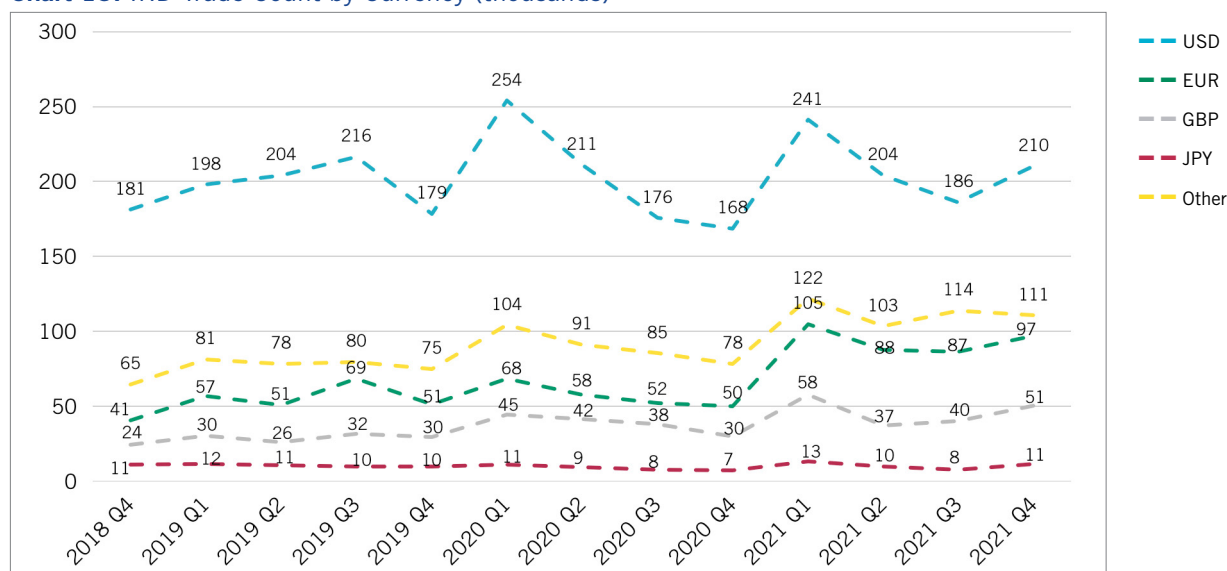
Trade count for US dollar-denominated trades grew by 4.0% in the full year 2021 compared to the full year 2020. Trade count increased by 64.5% for euro-denominated trades, 20.5% for sterling-denominated transactions and 19.4% for yen-denominated trades over the same period.

Chart 12: IRD Traded Notional by Currency (US\$ trillions)



Source: DTCC SDR

Chart 13: IRD Trade Count by Currency (thousands)



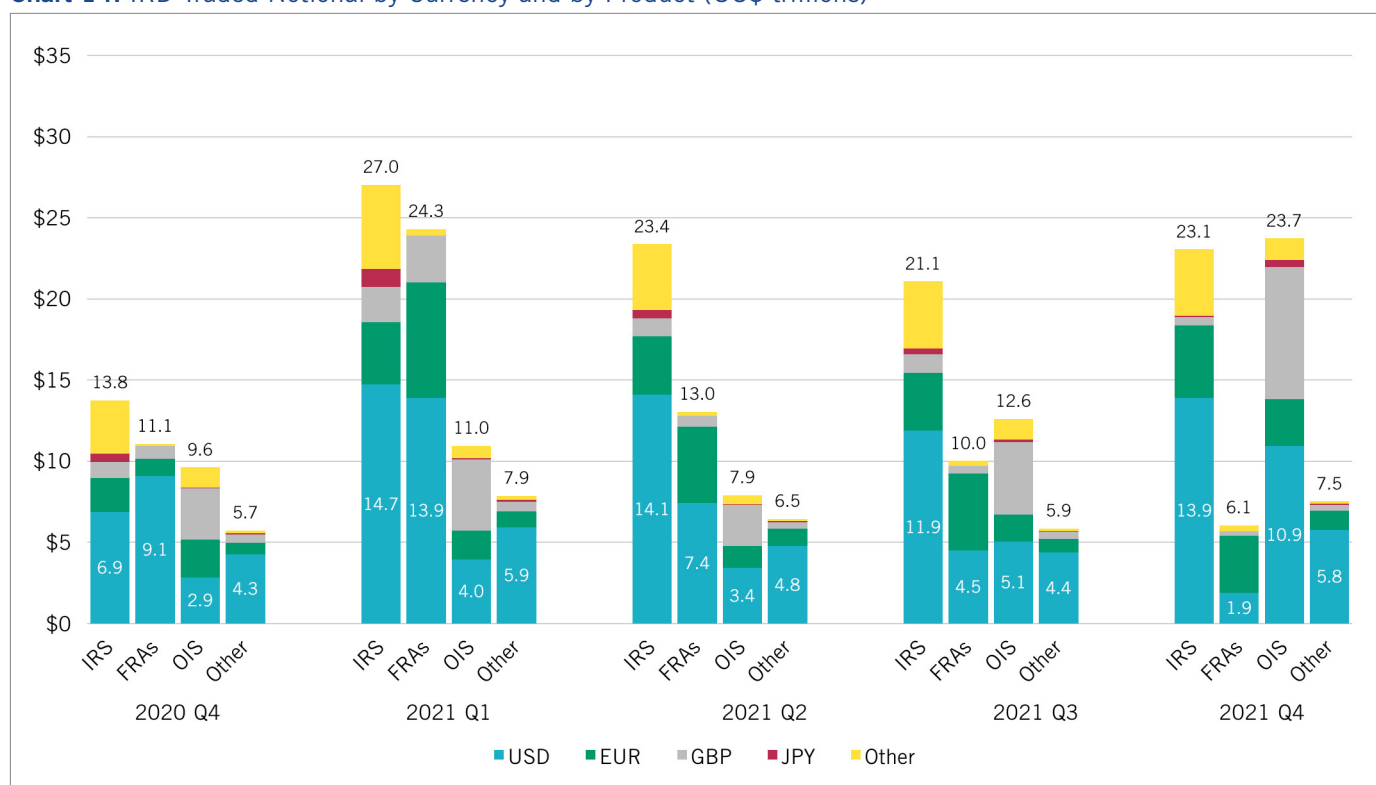
Source: DTCC SDR

US dollar-denominated fixed-for-floating IRS traded notional increased by 102.6% to \$13.9 trillion in the fourth quarter of 2021 versus \$6.9 trillion in the fourth quarter of 2020. Euro-denominated fixed-for-floating IRS traded notional grew by 111.5% over the same period, to \$4.5 trillion from \$2.1 trillion. Sterling-denominated IRS traded notional totaled \$522.8 billion in the fourth quarter of 2021 compared to \$1.0 trillion in the fourth quarter of 2020, while yen-denominated IRS was \$75.3 billion versus \$494.2 billion (see Chart 14).

US dollar-denominated FRA traded notional decreased by 79.1% to \$1.9 trillion in the fourth quarter of 2021 from \$9.1 trillion in the fourth quarter of 2020, while euro-denominated FRAs grew by 240.2% to \$3.5 trillion over the same period. Sterling-denominated FRA traded notional decreased by 64.8% to \$279.6 billion in the fourth quarter of 2021 from \$794.9 billion in the fourth quarter of 2020.

US dollar-denominated OIS traded notional rose by 283.4% to \$10.9 trillion in the fourth quarter of 2021 from \$2.9 trillion in the fourth quarter of 2020. Euro-denominated OIS traded notional increased by 24.4% to \$2.9 trillion, while sterling-denominated OIS grew by 159.9% to \$8.1 trillion over the same interval.

Chart 14: IRD Traded Notional by Currency and by Product (US\$ trillions)

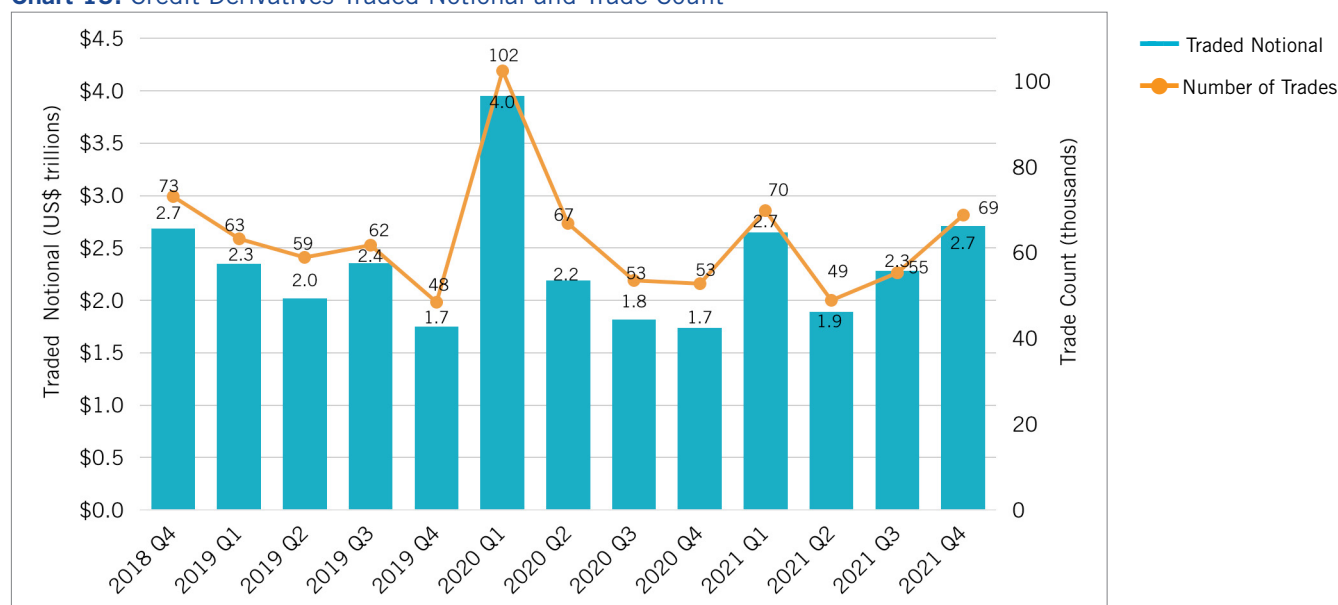


Source: DTCC SDR

CREDIT DERIVATIVES

Credit derivatives traded notional increased by 56.3% to \$2.7 trillion in the fourth quarter of 2021 from \$1.7 trillion in the fourth quarter of 2020³. The number of trades rose by 30.6% to 68.9 thousand from 52.7 thousand over the same period (see Chart 15).

Chart 15: Credit Derivatives Traded Notional and Trade Count



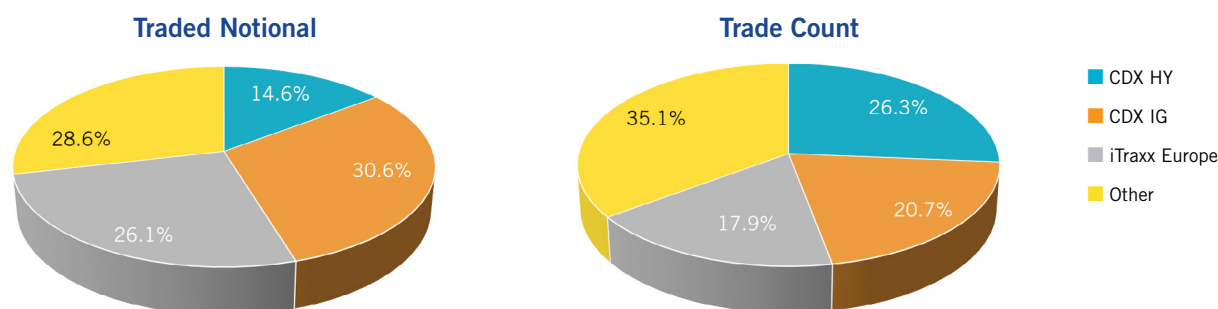
Source: DTCC SDR

In the full year 2021, credit derivatives traded notional decreased by 1.7% to \$9.5 trillion from \$9.7 trillion in the full year 2020. Credit derivatives trade count fell by 11.8% to 243.0 thousand from 275.4 thousand over the same period.

Credit Derivatives Product Taxonomy

In the fourth quarter of 2021, CDX HY and CDX IG represented 14.6% and 30.6% of total credit derivatives traded notional and 26.3% and 20.7% of total trade count, respectively. iTraxx Europe accounted for 26.1% of total traded notional and 17.9% of trade count (see Chart 16).

Chart 16: Credit Derivatives Traded Notional and Trade Count by Product



Source: DTCC SDR

³ Credit derivatives mostly comprise CDS indices, but also include CDS index tranches, credit swaptions, exotic products, total return swaps and insignificant amount of single-name CDS

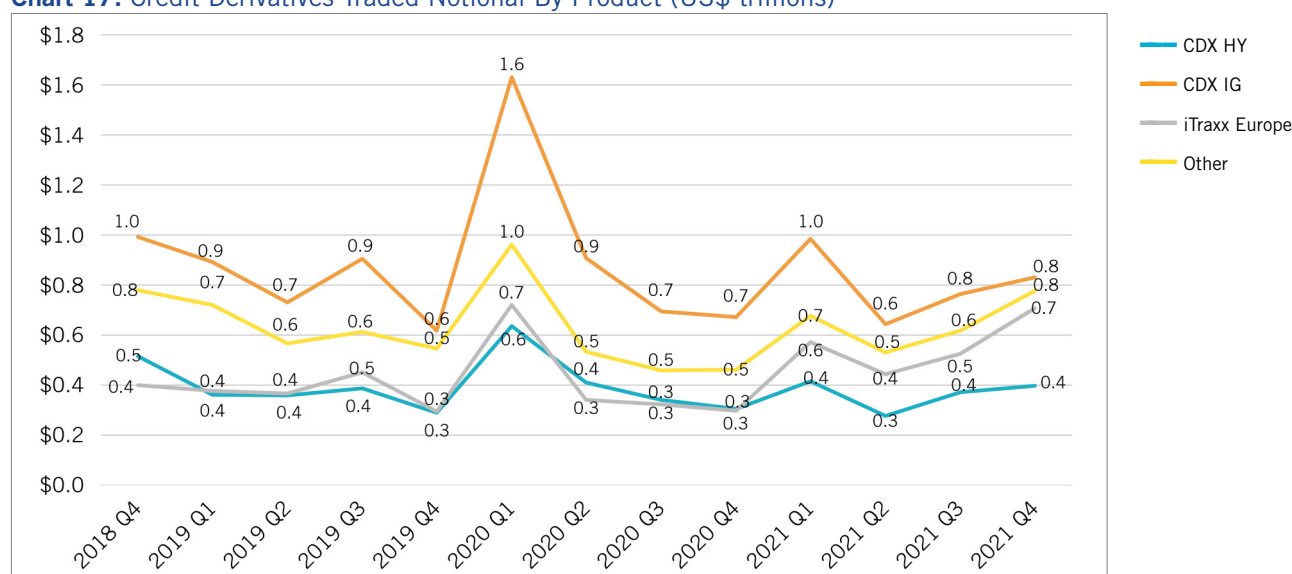
CDX HY and CDX IG traded notional increased by 30.4% and 23.5%, respectively, in the fourth quarter of 2021 versus the fourth quarter of 2020. CDX HY rose to \$397.2 billion from \$304.6 billion, and CDX IG grew to \$829.7 billion from \$671.6 billion. Trade count increased by 19.3% for CDX HY and by 2.8% for CDX IG over the same period (see Chart 17 and Chart 18).

iTraxx Europe traded notional increased by 138.5% to \$708.4 billion in the fourth quarter of 2021 versus \$297.1 billion in the fourth quarter of 2020. Trade count grew by 97.3% to 12.3 thousand.

In the full year 2021, CDX HY traded notional fell by 13.5% to \$1.5 trillion from \$1.7 trillion in the full year 2020. CDX IG traded notional decreased by 17.5% to \$3.2 trillion from \$3.9 trillion over the same period. Trade count for CDX HY and CDX IG fell by 17.4% and 23.9%, respectively.

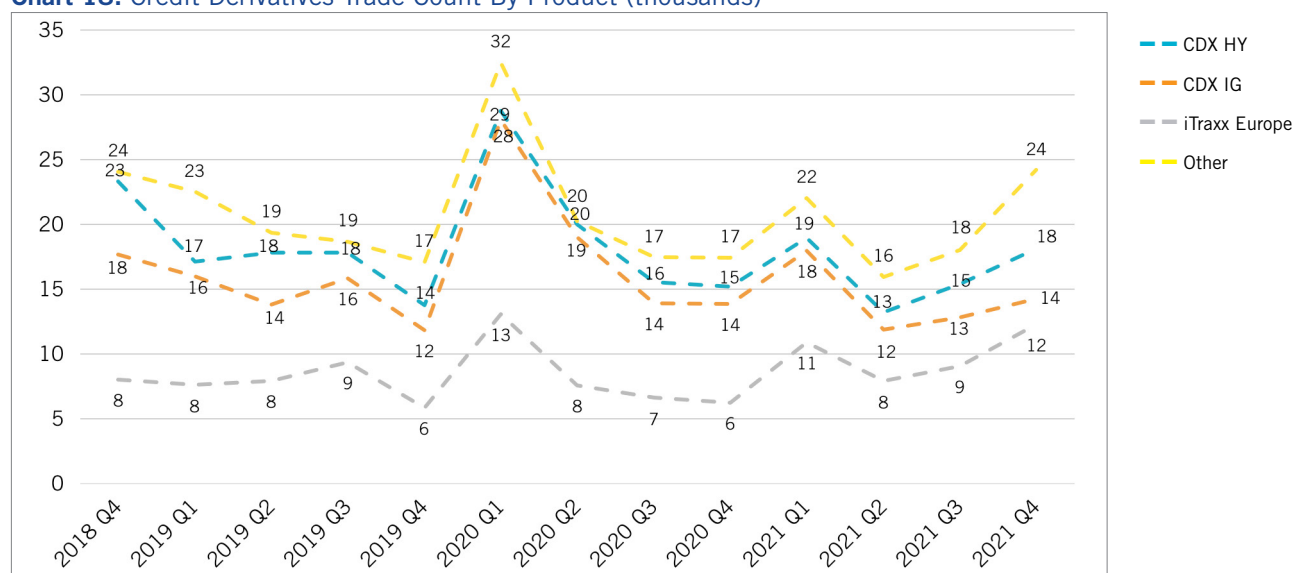
iTraxx Europe traded notional grew by 33.7% to \$2.3 trillion in the full year 2021 compared to 2020. Trade count rose by 20.0% over the same interval.

Chart 17: Credit Derivatives Traded Notional By Product (US\$ trillions)



Source: DTCC SDR

Chart 18: Credit Derivatives Trade Count By Product (thousands)



Source: DTCC SDR

Credit Derivatives Average Daily Traded Notional, Trade Count and Trade Size

Average daily traded notional of CDX HY increased by 30.4% to \$6.2 billion, while CDX IG average daily traded notional climbed by 21.6% to \$13.0 billion between the fourth quarter of 2020 and the fourth quarter of 2021. CDX HY average daily trade count rose by 19.3% to 283, while CDX IG grew by 1.2% to 223 over the same interval. Average trade size of CDX HY and CDX IG increased to \$21.2 million and \$57.8 million, respectively (see Table 2).

iTraxx Europe average daily traded notional grew by 138.5% to \$11.1 billion and average daily trade count rose by 97.3% to 192. iTraxx Europe average trade size increased by 17.7% to \$55.3 million in the fourth quarter of 2021 compared to \$46.9 million in the fourth quarter of 2020.

Table 2: Credit Derivatives Average Daily Traded Notional, Daily Trade Count and Trade Size

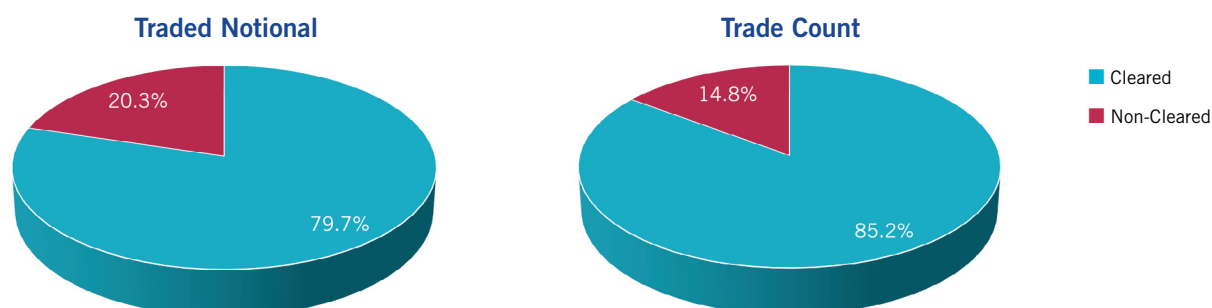
	Average Daily Traded Notional (US\$ billions)			Average Daily Trade Count			Average Trade Size (US\$ millions)		
	CDX HY	CDX IG	iTraxx Europe	CDX HY	CDX IG	iTraxx Europe	CDX HY	CDX IG	iTraxx Europe
2021 Q4	6.2	13.0	11.1	283	223	192	21.2	57.8	55.3
2020 Q4	4.8	10.7	4.6	237	220	97	19.3	47.9	46.9
2021 Q4 vs. 2020 Q4	30.4%	21.6%	138.5%	19.3%	1.2%	97.3%	9.7%	20.6%	17.7%
Full Year 2021	5.8	12.8	8.9	260	226	159	20.9	55.4	54.2
Full Year 2020	6.7	15.6	6.6	314	298	132	20.0	49.8	47.5
Full Year 2021 vs. Full Year 2020	-13.4%	-17.9%	34.1%	-17.2%	-24.2%	20.3%	4.1%	11.2%	13.9%

Source: DTCC SDR

Credit Derivatives Central Clearing

Cleared credit derivatives transactions represented 79.7% of total traded notional and 85.2% of total trade count in the fourth quarter of 2021 (see Chart 19). Cleared traded notional and trade count was \$2.2 trillion and 58.7 thousand, respectively.

Chart 19: Credit Derivatives Cleared Traded Notional and Trade Count



Source: DTCC SDR

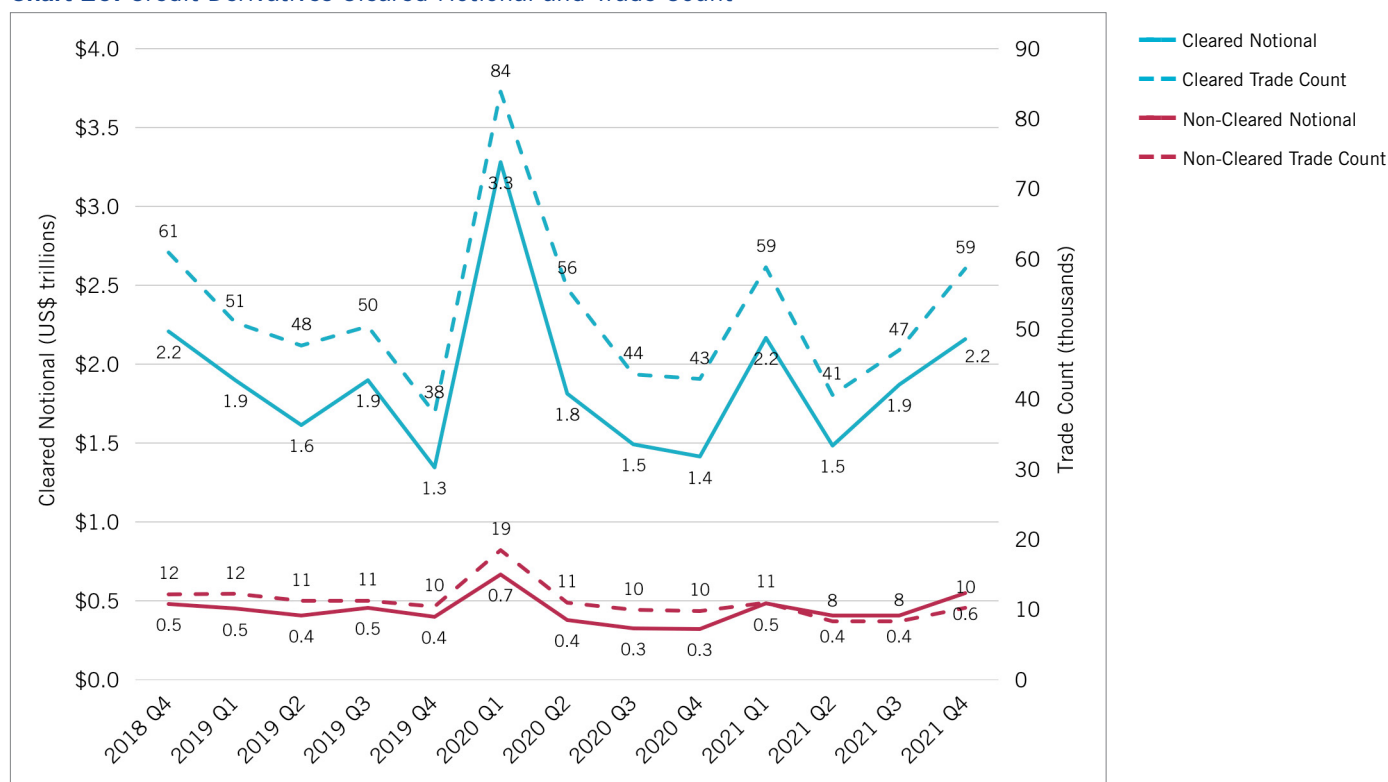
Credit derivatives cleared notional increased by 52.8% to \$2.2 trillion in the fourth quarter of 2021 from \$1.4 trillion in the fourth quarter of 2020. Cleared trade count grew by 36.7% to 58.7 thousand from 42.9 thousand over the same period (see Chart 20).

Non-cleared traded notional rose by 71.7% to \$551.1 billion in the fourth quarter of 2021 from \$321.0 billion in the fourth quarter of 2020. Non-cleared trade count increased by 4.2%.

In the full year 2021, credit derivatives cleared traded notional decreased by 4.0% to \$7.7 trillion from \$8.0 trillion in the full year 2020. Cleared trade count fell by 9.3% to 205.1 thousand from 226.1 thousand over the same period.

Non-cleared traded notional rose to \$1.9 trillion in the full year 2021, a 9.2% increase compared to \$1.7 trillion in the full year 2020. Non-cleared trade count declined by 23.2% to 37.9 thousand from 49.3 thousand.

Chart 20: Credit Derivatives Cleared Notional and Trade Count



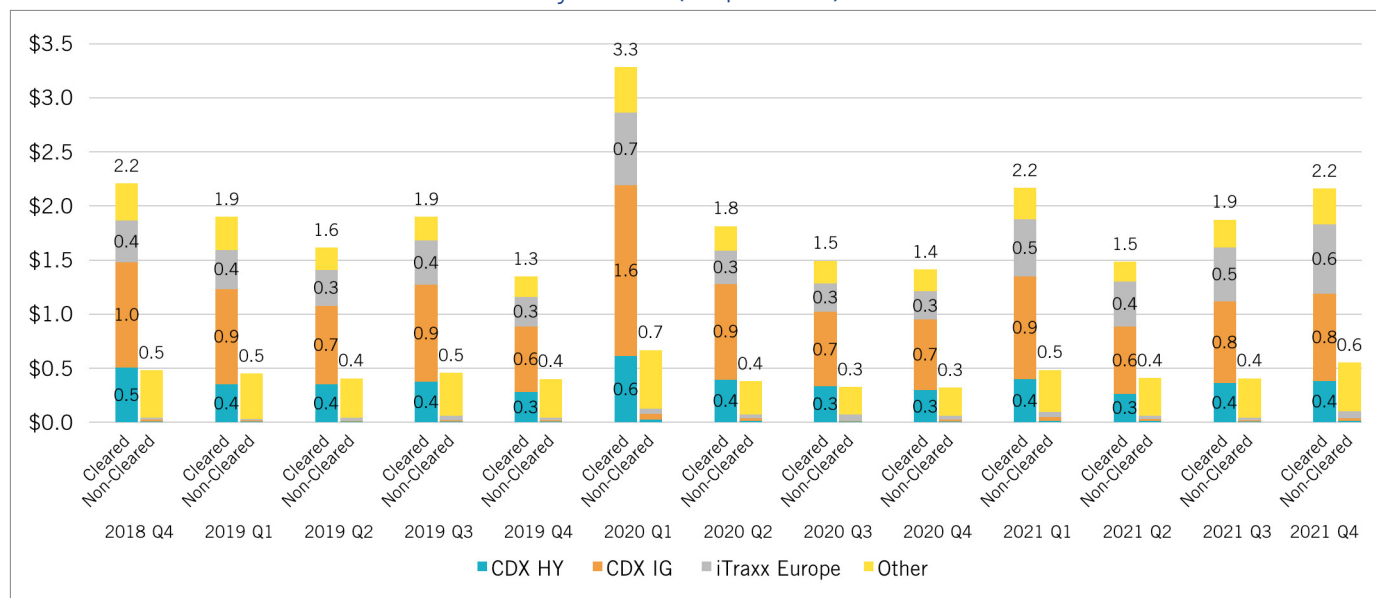
Source: DTCC and Bloomberg SDRs

In the fourth quarter of 2021, \$384.5 billion (96.8%) of CDX HY and \$805.7 billion (97.1%) of CDX IG traded notional was cleared, while \$12.7 billion and \$24.0 billion was non-cleared, respectively (see Chart 21).

Cleared traded notional of iTraxx Europe totaled \$640.8 billion (90.5%) in the fourth quarter of 2021, while non-cleared traded notional was \$67.6 billion. \$329.2 billion (42.4%) of other credit derivatives traded notional was cleared and \$446.7 billion was non-cleared.

In the full year 2021, \$1.4 trillion (96.7%) of CDX HY and \$3.1 trillion (97.1%) of CDX IG traded notional was cleared and \$47.6 billion and \$95.0 billion was non-cleared, respectively.

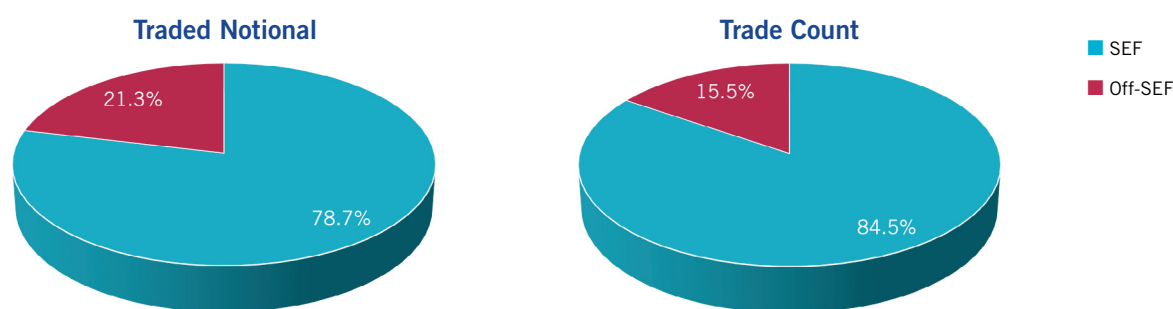
Cleared traded notional of iTraxx Europe totaled \$2.1 trillion (92.7%) in the full year 2021. \$1.1 trillion (40.6%) of other credit derivatives traded notional was cleared and \$1.5 trillion was non-cleared.

Chart 21: Credit Derivatives Cleared Notional by Product (US\$ trillions)


Source: DTCC SDR

Credit Derivatives Trading Venue

SEF-traded credit derivatives represented 78.7% of total traded notional and 84.5% of trade count in the fourth quarter of 2021 (see Chart 22). Total credit derivatives traded notional executed on SEFs was \$2.1 trillion, while \$577.4 billion took place off-SEF. 58.2 thousand transactions were executed on SEFs and 10.7 thousand transactions occurred off-SEF.

Chart 22: SEF and Off-SEF Credit Derivatives Traded Notional and Trade Count


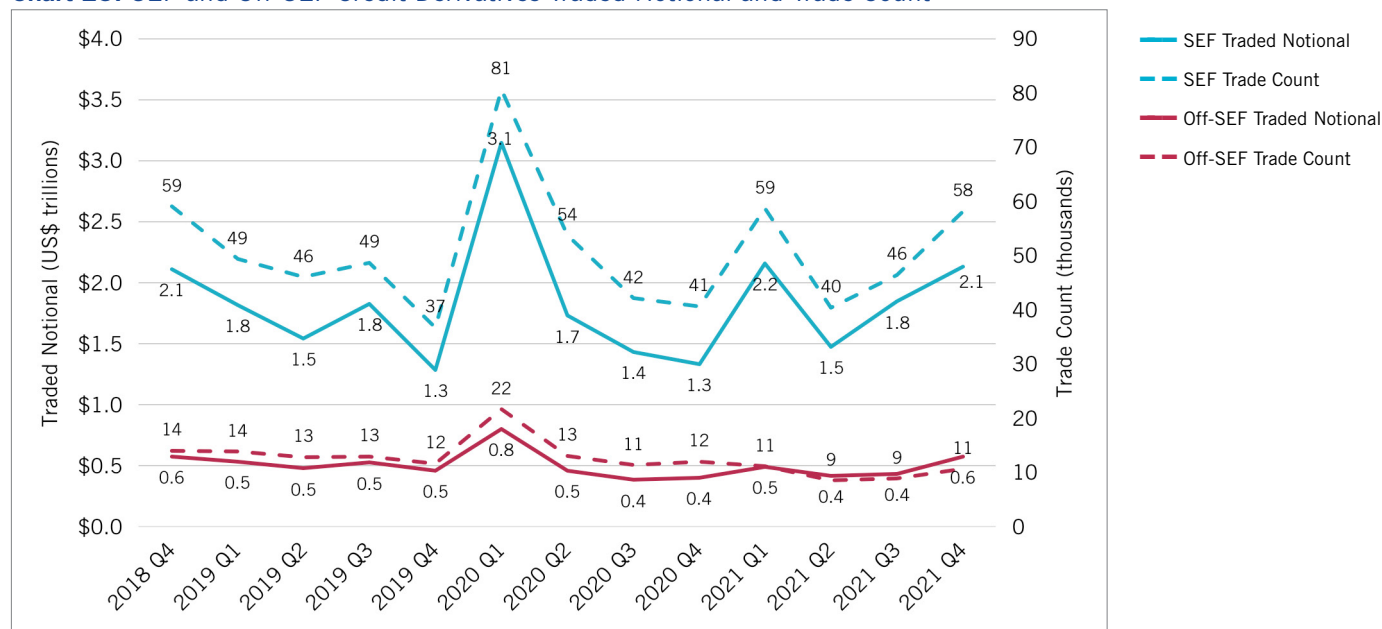
Source: DTCC SDR

Credit derivatives traded notional executed on SEFs increased by 60.2% to \$2.1 trillion in the fourth quarter of 2021 from \$1.3 trillion in the fourth quarter of 2020. The number of trades that took place on SEFs increased by 43.2% over this period (see Chart 23).

Credit derivatives traded notional executed off-SEF increased by 43.6% to \$577.4 billion in the fourth quarter of 2021 from \$402.1 billion in the fourth quarter of 2020. The number of off-SEF transactions decreased by 11.5% over the same period.

In the full year 2021, traded notional that occurred on SEFs fell by 0.4% to \$7.6 trillion from \$7.6 trillion in the full year 2020. Trade count fell by 6.2% to 203.8 thousand from 217.2 thousand.

Credit derivatives traded notional executed off-SEF decreased by 6.4% to \$1.9 trillion in the full year 2021 from \$2.1 trillion in the full year 2020. The number of off-SEF transactions fell by 32.6% over this time.

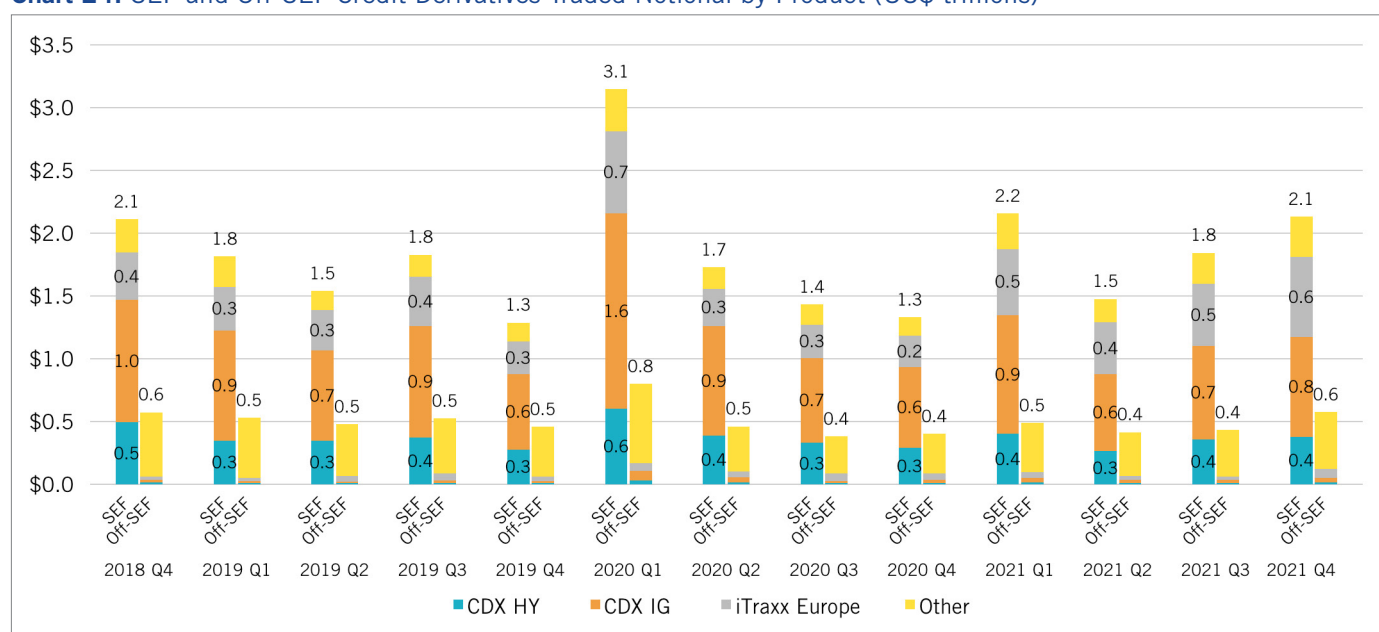
Chart 23: SEF and Off-SEF Credit Derivatives Traded Notional and Trade Count


Source: DTCC SDR

In the fourth quarter of 2021, \$378.7 billion (95.4%) of CDX HY and \$797.3 billion (96.1%) of CDX IG traded notional was traded on SEFs and \$18.5 billion and \$32.4 billion took place off-SEF, respectively.

\$634.8 billion (89.6%) of iTraxx Europe traded notional was executed on SEFs and \$73.7 billion occurred off-SEF. \$323.1 billion (41.6%) of traded notional for other credit derivatives was executed on SEFs and \$452.8 billion was traded off-SEF (see Chart 24).

In the full year 2021, \$1.4 trillion (96.1%) of CDX HY, \$3.1 trillion (96.3%) of CDX IG and \$2.1 trillion (92.0%) of iTraxx Europe traded notional took place on SEFs. \$1.0 trillion (40.0%) of other credit derivatives traded notional occurred on SEFs and \$1.6 trillion was traded off-SEF

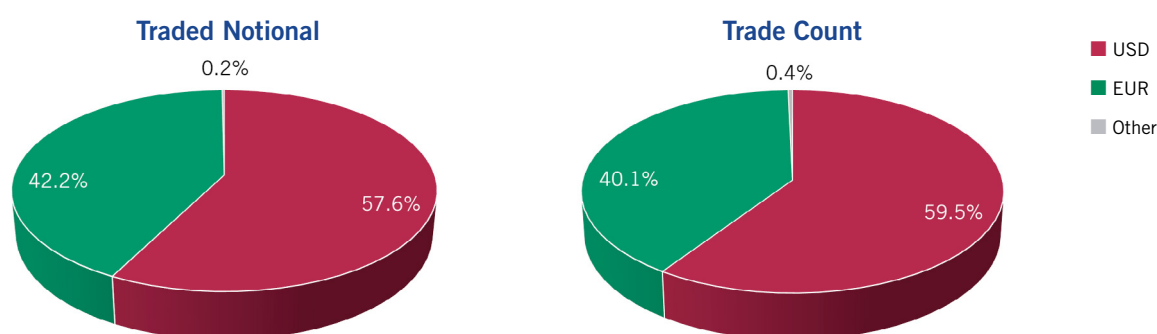
Chart 24: SEF and Off-SEF Credit Derivatives Traded Notional by Product (US\$ trillions)


Source: DTCC SDR

Credit Derivatives by Currency

Credit derivatives contracts denominated in US dollars represented 57.6% and 59.5% of total traded notional and trade count, respectively, in the fourth quarter of 2021. Euro-denominated transactions accounted for 42.2% of total credit derivatives traded notional and 40.1% total trade count (see Chart 25).

Chart 25: Credit Derivatives Traded Notional and Trade Count by Currency



Source: DTCC SDR

US dollar-denominated traded notional increased by 28.0% to \$1.6 trillion in the fourth quarter of 2021 from \$1.2 trillion in the fourth quarter of 2020. Euro-denominated traded notional grew by 124.1% to \$1.1 trillion in the fourth quarter of 2021 compared to the same period in 2020. Trade count rose by 8.7% for US dollar-denominated trades and by 86.8% for euro-denominated transactions (see Chart 26).

In the full year 2021, US dollar-denominated traded notional decreased by 15.7% to \$5.9 trillion from \$7.0 trillion in the full year 2020. Euro-denominated traded notional increased by 33.9% to \$3.7 trillion from \$2.7 trillion over the same interval. Trade count fell by 22.9% for US dollar-denominated transactions but grew by 17.9% for euro-denominated transactions. For other currencies, traded notional grew by 9.9% and trade count declined by 13.3%.

Chart 26: Credit Derivatives Traded Notional and Trade Count by Currency



Source: DTCC SDR



ISDA has published other recent research papers:

- ***Transition to RFRs Review: Full Year 2021 and the Fourth Quarter of 2021***

www.isda.org/2022/01/27/transition-to-rfrs-review-full-year-2021-and-the-fourth-quarter-of-2021/

- ***ISDA-Clarus RFR Adoption Indicator: December 2021***

www.isda.org/a/OP6gE/ISDA-Clarus-RFR-Adoption-Indicator-December-2021.pdf

- ***Interest Rate Derivatives Trading Activity in the EU, UK and US: October 2021***

www.isda.org/a/sn6gE/Interest-Rate-Derivatives-Trading-Activity-Reported-in-EU-UK-and-US-Markets-Oct-2021.pdf

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