

SwapsInfo First Quarter of 2020 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 and Bloomberg swap data repositories (SDRs). This report covers only trades required to be disclosed under US regulations.

KEY HIGHLIGHTS FOR THE FIRST QUARTER OF 2020

Trading volumes for IRD and credit derivatives both increased during the first quarter of 2020, driven by market volatility caused by the coronavirus pandemic. For IRD, the increase was particularly noticeable in overnight index swaps (OIS). For credit derivatives, there was more trading activity across all major indices.

Interest Rate Derivatives

IRD traded notional and trade count both grew in the first quarter of 2020. IRD traded notional and trade count rose by 25.0% and 27.4%, respectively, compared with the first quarter of 2019. Single currency fixed-for-floating interest rate swaps (IRS) traded notional decreased by 3.4%, while forward rate agreements (FRAs) and OIS traded notional grew by 8.7% and 111.4%, respectively, in the first quarter of 2020 compared with the prior year.

In the first quarter of 2020:

- IRD traded notional increased to \$87.4 trillion from \$70.0 trillion in the first quarter of 2019. Trade count grew to 481.6 thousand from 378.0 thousand over the same period. Single currency fixed-for-floating IRS traded notional decreased to \$19.5 trillion from \$20.2 trillion. FRA traded notional grew to \$29.4 trillion from \$27.1 trillion and OIS traded notional jumped to \$30.3 trillion in the first quarter of 2020 from \$14.3 trillion in the first quarter of 2019.
- Single currency fixed-for-floating IRS accounted for 62.1% of total IRD trades but represented only 22.3% of IRD traded notional in the first quarter of 2020. FRAs and OIS represented 33.6% and 34.7% of traded notional and 15.3% and 8.5% of total trade count, respectively.
- Cleared IRD transactions represented 91.2% of total traded notional and 84.1% of trade count. 94.8% of fixed-for-floating IRS, 99.0% of FRA, 97.2% of OIS and 32.5% of other IRD traded notional was cleared in the first quarter of 2020.
- SEF-traded IRD represented 52.8% of total traded notional and 61.0% of trade count. 58.2% of fixed-for-floating IRS, 80.9% of FRA, 25.9% of OIS and 38.3% of other IRD traded notional was executed on SEFs in the first quarter of 2020.

- IRD contracts denominated in US dollars contributed 61.2% of traded notional and 52.6% of trade count. Euro-denominated transactions accounted for 11.0% of traded notional and 14.2% of trade count. Sterling-denominated transactions totaled 14.4% and 9.2% of total IRD traded notional and trade count, respectively.
- Fixed-for-floating IRS contracts denominated in US dollars decreased by 5.6%, while US dollar FRA and OIS contracts increased by 9.6% and 97.7%, respectively, compared with the first quarter of 2019. Euro-denominated FRAs and OIS increased by 2.2% and 38.8%, respectively, while euro-denominated IRS decreased by 16.5%.

Credit Derivatives

Credit derivatives traded notional and trade count jumped by 67.9% and 61.5%, respectively, in the first quarter of 2020 compared to the first quarter of 2019¹. There was more trading activity across all major indices, including CDX HY, CDX IG and iTraxx Europe.

In the first quarter of 2020:

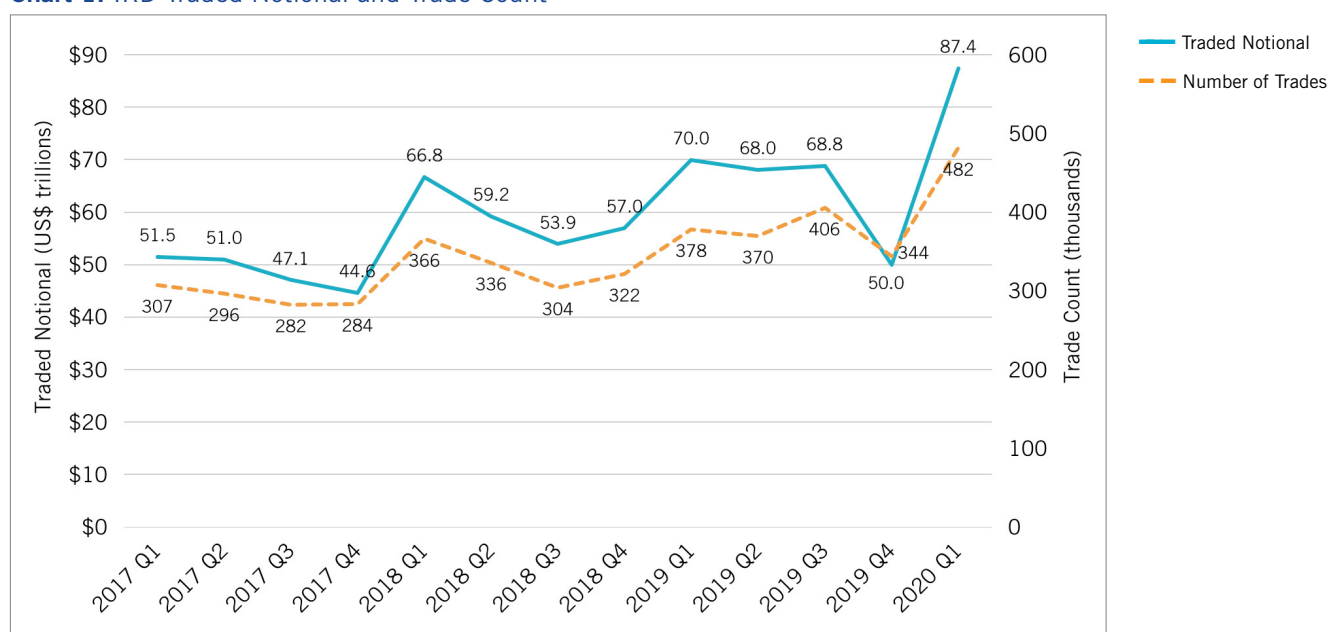
- Credit derivatives traded notional increased to \$3.9 trillion from \$2.4 trillion in the first quarter of 2019. Trade count grew to 102.0 thousand from 63.2 thousand over the same period. CDX HY traded notional increased by 76.3% to \$635.9 billion from \$360.7 billion in the first quarter of 2019. CDX IG traded notional increased by 82.7% to \$1.6 trillion from \$891.9 billion in the first quarter of 2019. iTraxx Europe traded notional rose by 90.0% to \$713.9 billion in the first quarter of 2020 from \$375.7 billion in the same period of 2019.
- CDX HY and CDX IG represented 16.1% and 41.4% of traded notional and 28.2% and 27.5% of total trade count, respectively. iTraxx Europe accounted for 18.1% of total credit derivatives traded notional and 12.7% of total trade count.
- Cleared credit derivatives transactions represented 83.3% of total traded notional and 82.2% of trade count. 96.4% of CDX HY, 96.8% of CDX IG, 93.9% of iTraxx Europe and 43.9% of other credit derivatives traded notional was cleared.
- SEF-traded credit derivatives represented 79.9% of total traded notional and 79.1% of trade count. 95.1% of CDX HY, 95.5% of CDX IG, 91.7% of iTraxx Europe and 34.6% of other credit derivatives traded notional was executed on SEFs.
- Credit derivatives contracts denominated in US dollars represented 71.5% of total traded notional and 72.5% of trade count. Euro-denominated transactions accounted for 28.3% and 27.1% of traded notional and trade count, respectively.

¹ 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

INTEREST RATE DERIVATIVES

IRD traded notional rose by 25.0% to \$87.4 trillion in the first quarter of 2020 from \$70.0 trillion in the first quarter of 2019. Trade count grew by 27.4% over the same period to 481.6 thousand from 378.0 thousand (see Chart 1).

Chart 1: IRD Traded Notional and Trade Count

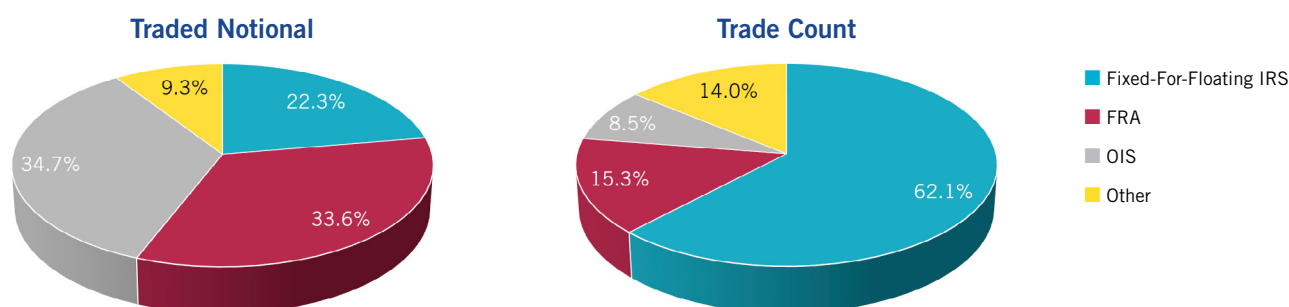


Source: DTCC and Bloomberg SDRs

IRD Product Taxonomy

Single currency fixed-for-floating IRS accounted for 62.1% of total IRD trade count, but represented only 22.3% of IRD traded notional in the first quarter of 2020. FRAs and OIS represented 33.6% and 34.7% of total traded notional and 15.3% and 8.5% of trade count, respectively (see Chart 2).

Chart 2: IRD Traded Notional and Trade Count by Product



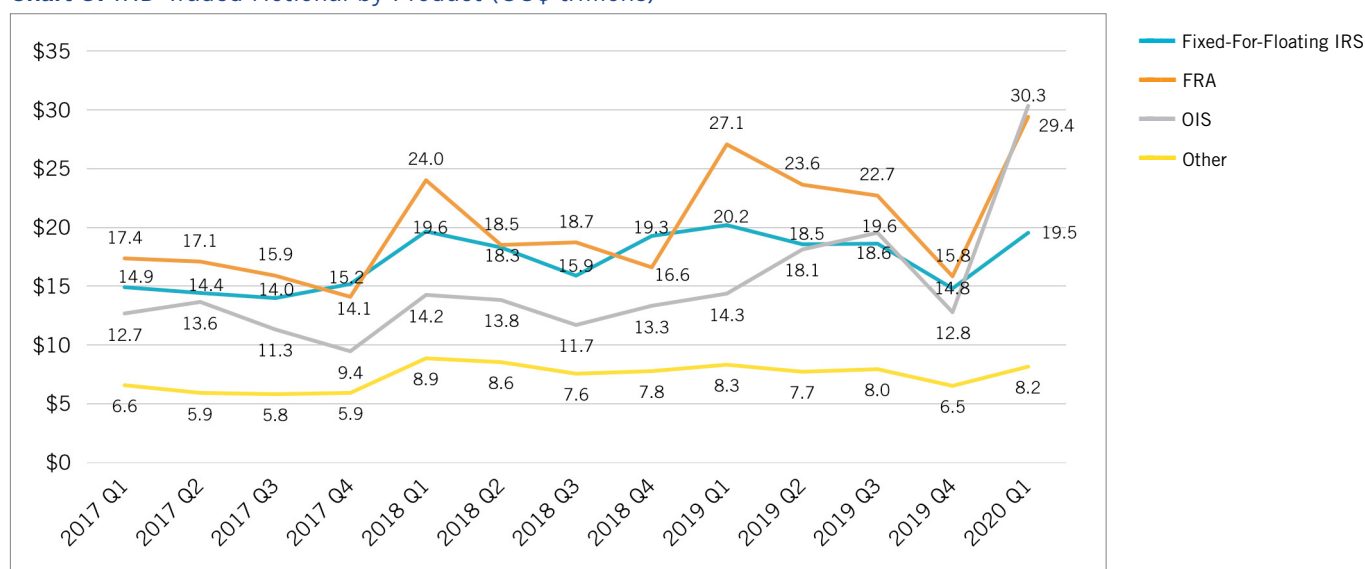
Source: DTCC and Bloomberg SDRs

Fixed-for-floating IRS traded notional decreased by 3.4% from \$20.2 trillion in the first quarter of 2019 to \$19.5 trillion in the first quarter of 2020. IRS trade count increased by 26.9% from 235.8 thousand to 299.2 thousand over the same period (see Chart 3 and Chart 4).

FRA traded notional increased by 8.7% from \$27.1 trillion in the first quarter of 2019 to \$29.4 trillion in the first quarter of 2020. Trade count increased by 11.4% from 66.3 thousand to 73.9 thousand over the same period.

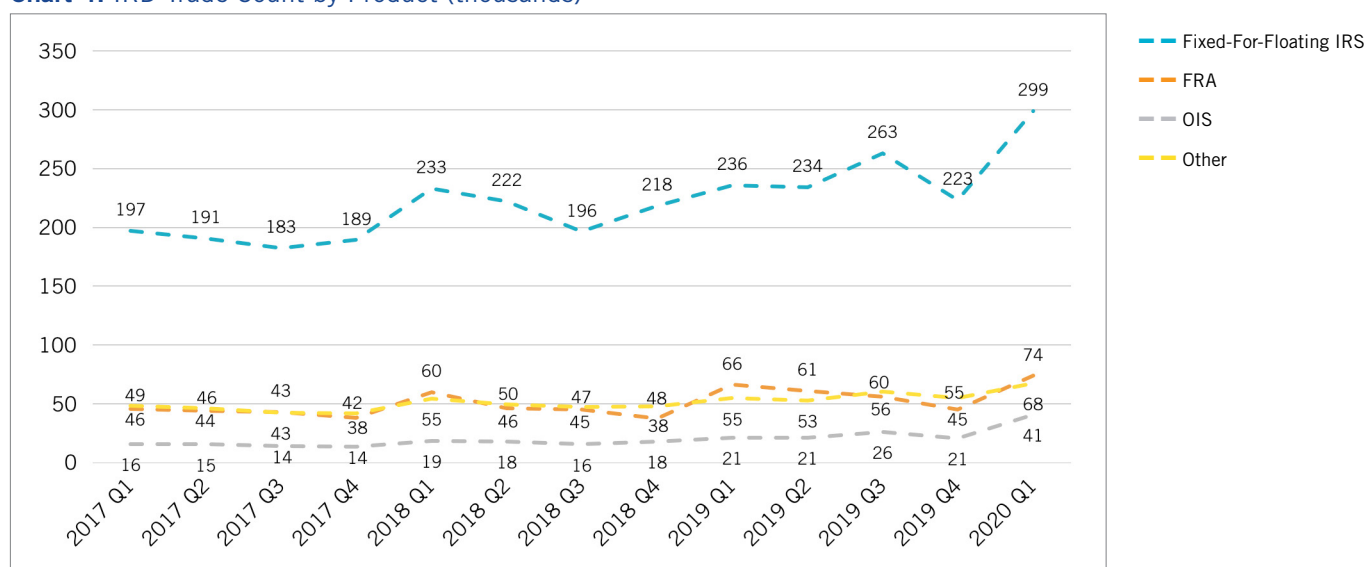
OIS traded notional jumped by 111.4% from \$14.3 trillion in the first quarter of 2019 to \$30.3 trillion in the first quarter of 2020. OIS trade count increased by 92.9% in the first quarter of 2020 compared with the first quarter of 2019.

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



Source: DTCC and Bloomberg SDRs

Chart 4: IRD Trade Count by Product (thousands)



Source: DTCC and Bloomberg SDRs

IRD Average Daily Traded Notional, Trade Count and Trade Size

Fixed-for-floating IRS average daily traded notional decreased by 6.3% in the first quarter of 2020 versus the first quarter of 2019, totaling \$300.6 billion. Fixed-for-floating IRS average daily trade count increased by 23.0%, while average trade size decreased by 24.6% (see Table 1).

FRA average daily traded notional totaled \$459.7 billion in the first quarter of 2020, 7.0% higher than the first quarter of 2019. FRA average daily trade count increased by 9.7%, while average trade size decreased by 0.7%.

OIS average daily traded notional was \$466.5 billion in the first quarter of 2020, a 108.2% increase compared with the first quarter of 2019. OIS average daily trade count and trade size increased by 89.9% and 4.1%, respectively.

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

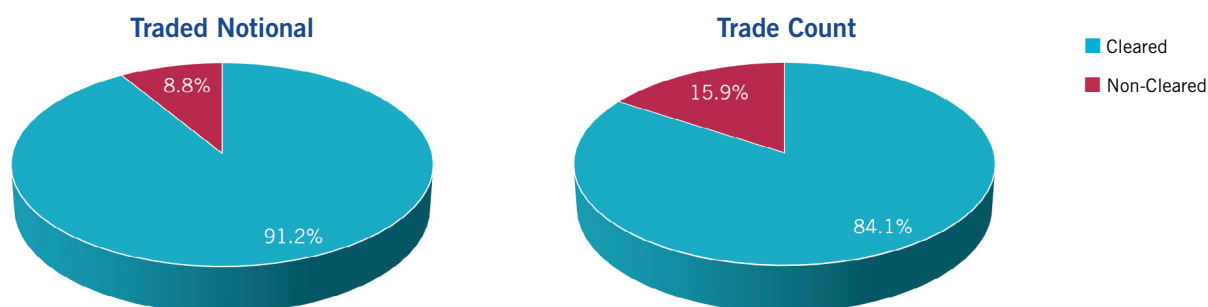
	Average Daily Traded Notional (US\$ billions)			Average Daily Trade Count			Average Trade Size (US\$ millions)		
	IRS	FRA	OIS	IRS	FRA	OIS	IRS	FRA	OIS
Q1 2020	300.6	459.7	466.5	4,604	1,154	630	64.9	729.0	685.1
Q1 2019	321.0	429.6	224.1	3,742	1,052	332	86.1	734.0	657.9
Q1 2020 vs. Q1 2019	-6.3%	7.0%	108.2%	23.0%	9.7%	89.9%	-24.6%	-0.7%	4.1%

Source: DTCC and Bloomberg SDRs

IRD Central Clearing

Cleared IRD transactions represented 91.2% of total IRD traded notional and 84.1% of trade count during the first quarter of 2020 (see Chart 5). IRD cleared notional and trade count totaled \$79.8 trillion and 405.2 thousand, respectively.

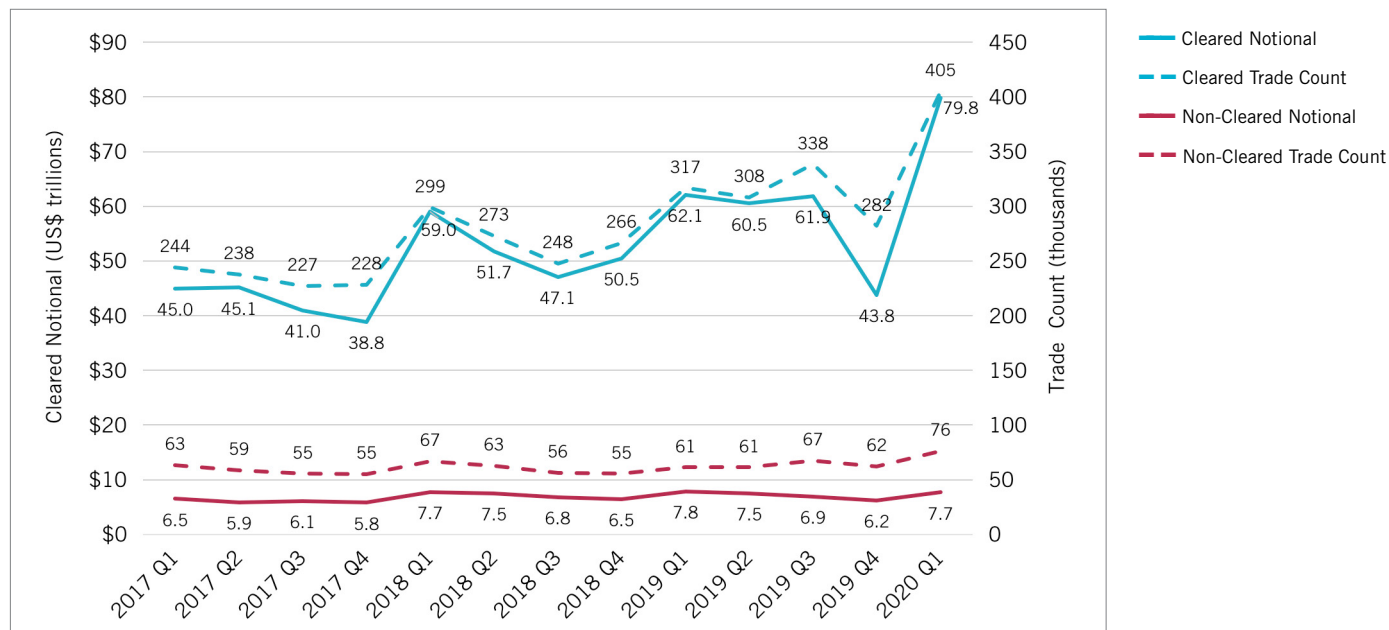
Chart 5: IRD Cleared Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

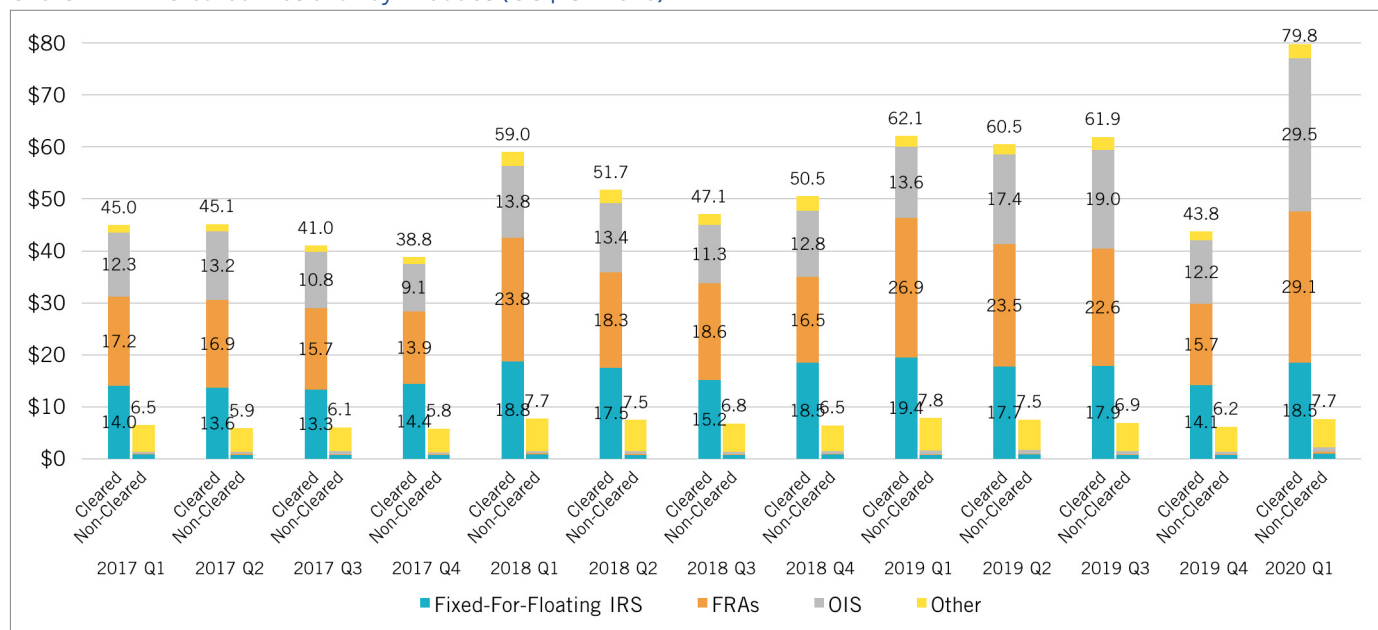
IRD cleared notional increased by 28.4% from \$62.1 trillion in the first quarter of 2019 to \$79.8 trillion in the first quarter of 2020 (see Chart 6). Cleared trade count grew by 28.0% from 316.7 thousand to 405.2 thousand over the same period.

IRD non-cleared notional fell by 1.9% in the first quarter of 2020 versus the first quarter of 2019, from \$7.8 trillion to \$7.7 trillion. Trade count increased by 24.6% from 61.3 thousand to 76.4 thousand.

Chart 6: IRD Cleared Notional and Trade Count


Source: DTCC and Bloomberg SDRs

As shown in Chart 7, \$18.5 trillion (94.8%) of fixed-for-floating IRS traded notional was cleared and \$1.0 trillion was non-cleared in the first quarter of 2020. The notional amount of cleared FRAs and OIS totaled \$29.1 trillion (99.0%) and \$29.5 trillion (97.2%), respectively. \$2.7 trillion (32.5%) of other IRD products notional was cleared and \$5.5 trillion was non-cleared.

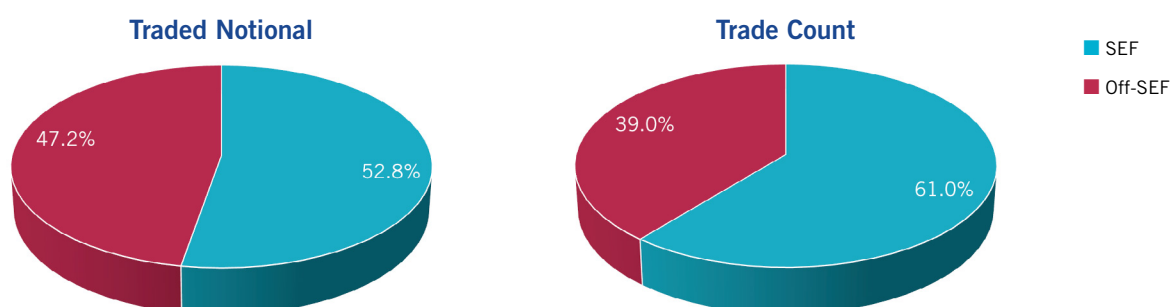
Chart 7: IRD Cleared Notional by Product (US\$ trillions)


Source: DTCC and Bloomberg SDRs

IRD Trading Venue

SEF-traded IRD represented 52.8% of total IRD traded notional and 61.0% of trade count in the first quarter of 2020 (see Chart 8). Total IRD traded notional executed on SEFs was \$46.1 trillion, while \$41.3 trillion was executed off-SEF. In terms of trade count, 293.6 thousand transactions were executed on SEFs and 188.1 thousand occurred off-SEF.

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

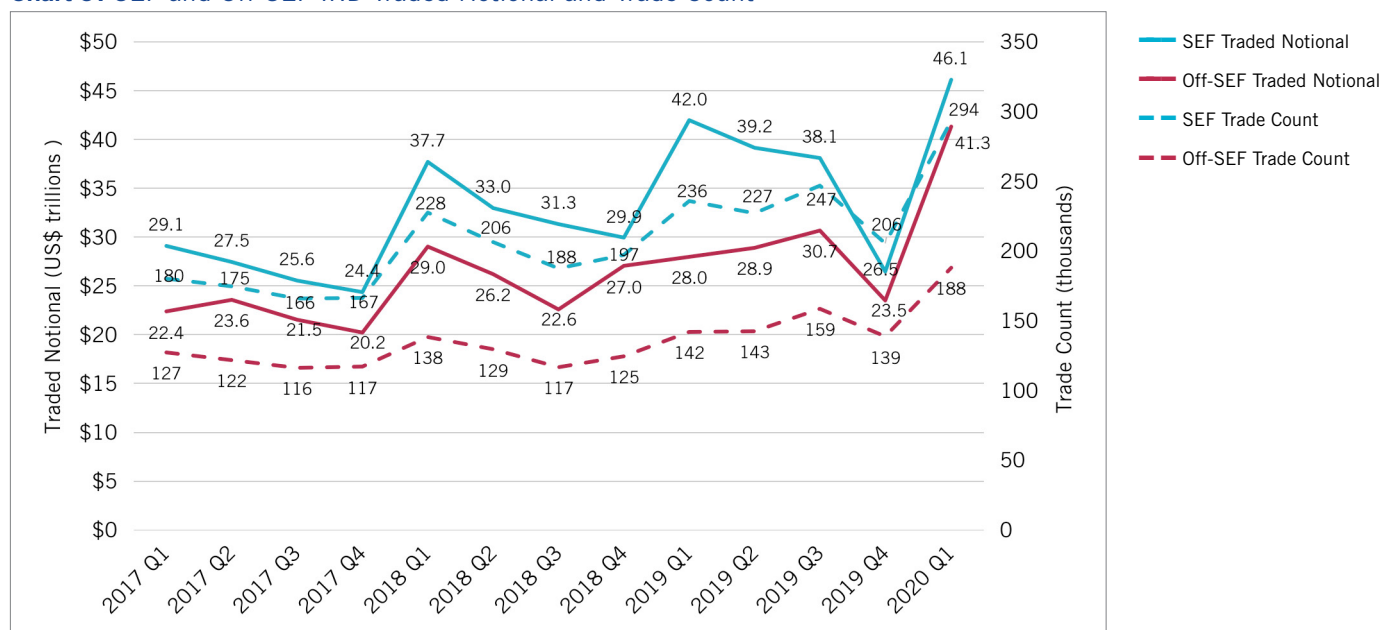


Source: DTCC and Bloomberg SDRs

IRD traded notional executed on SEFs grew by 10.0% from \$42.0 trillion in the first quarter of 2019 to \$46.1 trillion in the first quarter of 2020. The number of trades executed on SEFs increased by 24.4% from 236.0 thousand to 293.6 thousand over the same period (see Chart 9).

IRD traded notional executed off-SEF increased by 47.5% from \$28.0 trillion in the first quarter of 2019 to \$41.3 trillion in the first quarter of 2020. The number of transactions increased by 32.5% from 142.0 thousand to 188.1 thousand over the same period.

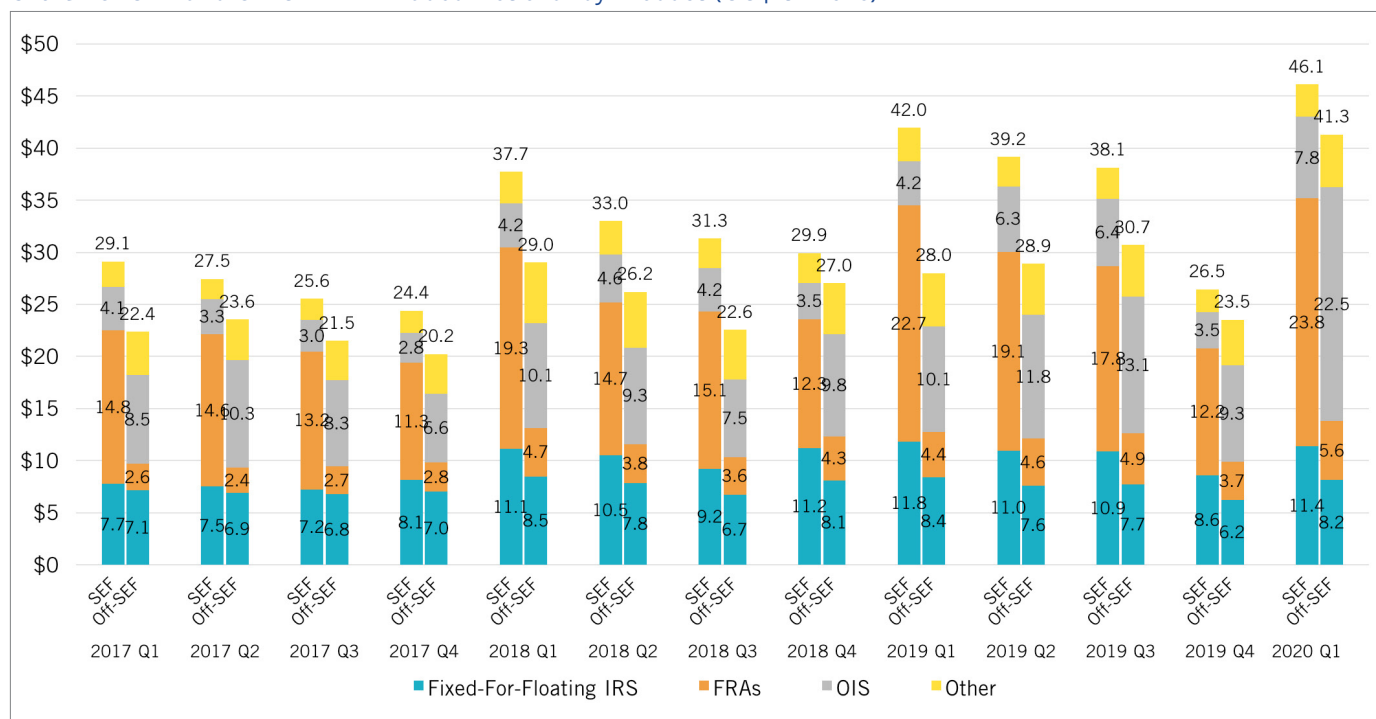
Chart 9: SEF and Off-SEF IRD Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

In the first quarter of 2020, \$11.4 trillion (58.2%) of fixed-for-floating IRS was traded on SEFs and \$8.2 trillion was executed off-SEF. \$23.8 trillion (80.9%) of FRAs was executed on SEFs and \$5.6 trillion was traded off-SEF. \$7.8 trillion (25.9%) of OIS was executed on SEFs and \$22.5 trillion occurred off-SEF (see Chart 10).

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

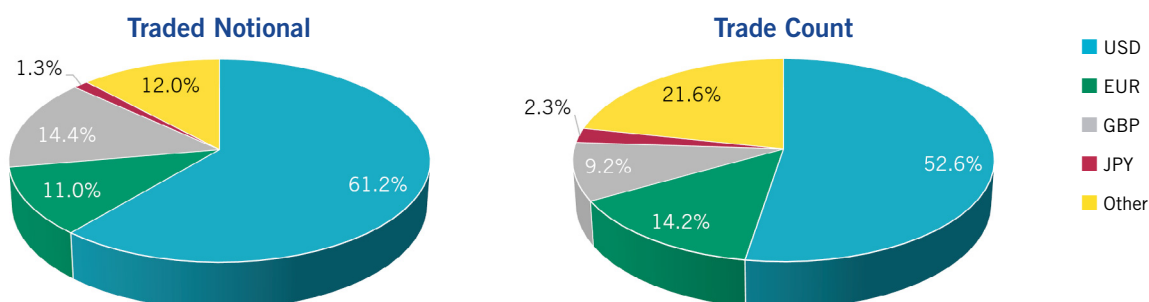


Source: DTCC and Bloomberg SDRs

IRD by Currency

IRD contracts denominated in US dollars were the most actively traded over the quarter. US dollar-denominated IRD contributed 61.2% of total IRD traded notional and 52.6% of trade count in the first quarter of 2020. Euro-denominated transactions accounted for 11.0% of IRD traded notional and 14.2% of trade count. Sterling-denominated transactions totaled 14.4% and 9.2% of total IRD traded notional and trade count, respectively (see Chart 11).

Chart 11: IRD Traded Notional and Trade Count by Currency



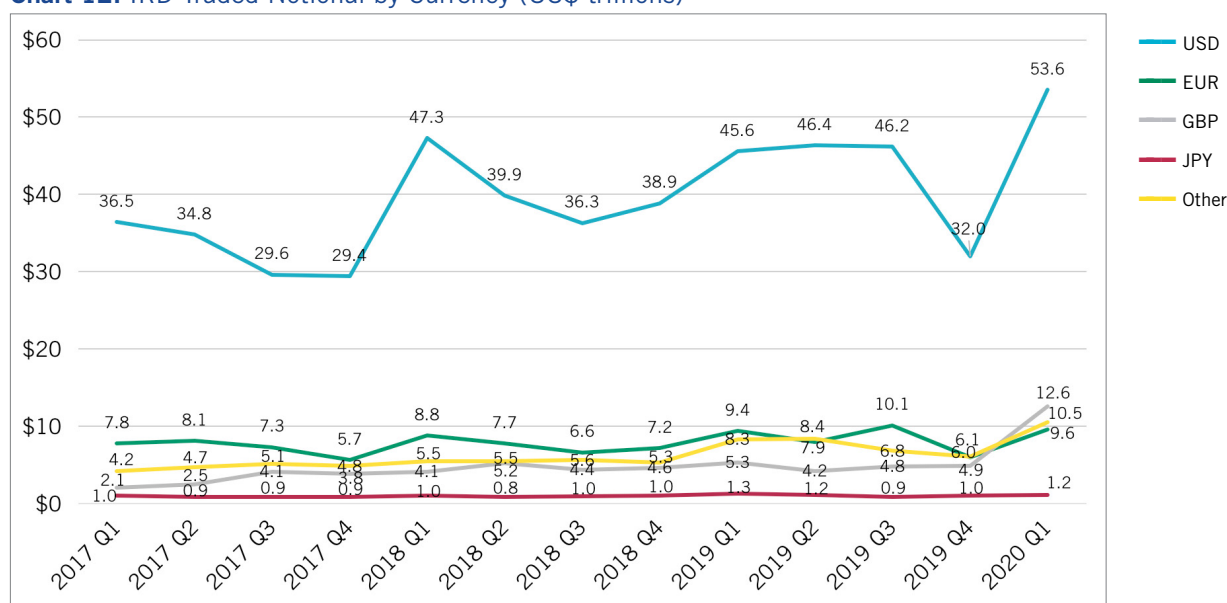
Source: DTCC and Bloomberg SDRs

US dollar-, euro- and sterling-denominated IRD traded notional increased by 17.5%, 2.3% and 135.9%, respectively, while yen-denominated IRD traded notional decreased by 12.5% in the first quarter of 2020 compared with the first quarter of 2019.

US dollar-denominated traded notional totaled \$53.6 trillion in the first quarter of 2020 compared with \$45.6 trillion in the first quarter of 2019. Euro-denominated traded notional rose to \$9.6 trillion in the first quarter of 2020 versus \$9.4 trillion in the first quarter of 2019. Traded notional for sterling- and yen-denominated trades totaled \$12.6 trillion and \$1.2 trillion, respectively, in the first quarter of 2020 (see Chart 12).

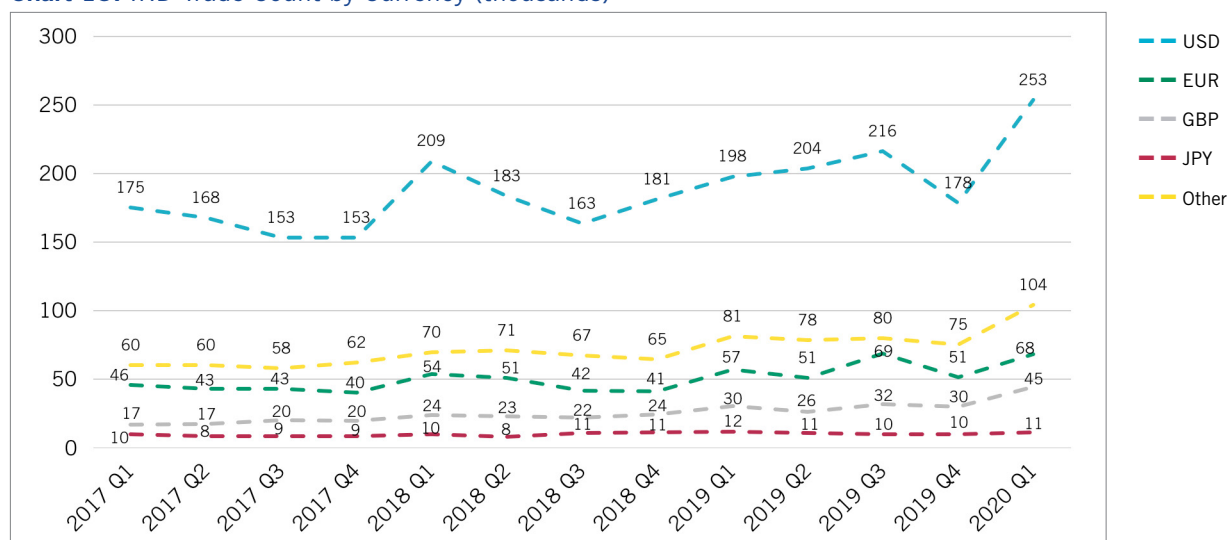
Trade count increased by 28.2% to 253.4 thousand for US dollar-denominated IRD and by 20.4% to 68.3 thousand for euro-denominated transactions. Trade count for sterling-denominated IRD grew by 46.1% to 44.5 thousand, while yen-denominated IRD decreased by 4.5% to 11.3 thousand (see Chart 13).

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



Source: DTCC and Bloomberg SDRs

Chart 13: IRD Trade Count by Currency (thousands)



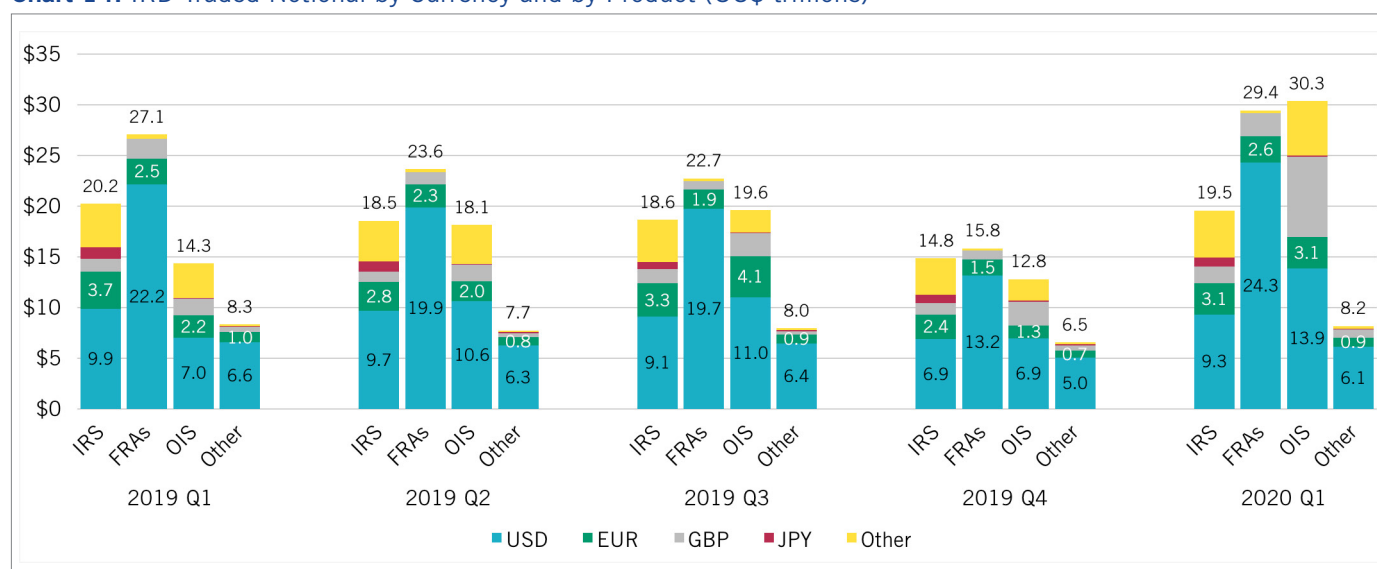
Source: DTCC and Bloomberg SDR

US dollar-denominated fixed-for-floating IRS declined by 5.6% to \$9.3 trillion in the first quarter of 2020 versus \$9.9 trillion in the first quarter of 2019. Euro-denominated fixed-for-floating IRS decreased by 16.5% over the same period, falling from \$3.7 trillion to \$3.1 trillion. Sterling- and yen-denominated IRS totaled \$1.6 trillion and \$0.9 trillion in the first quarter of 2020 compared with \$1.2 trillion and \$1.2 trillion, respectively, in the first quarter of 2019 (see Chart 14).

US dollar-denominated FRAs increased by 9.6% to \$24.3 trillion in the first quarter of 2020 from \$22.2 trillion in the first quarter of 2019, while euro-denominated FRAs grew by 2.2% to \$2.6 trillion over the same period. Sterling-denominated FRAs increased by 17.6% to \$2.3 trillion in the first quarter of 2020 from \$1.9 trillion in the first quarter of 2019.

US dollar-denominated OIS increased by 97.7% to \$13.9 trillion in the first quarter of 2020 from \$7.0 trillion in the first quarter of 2019. Euro-denominated OIS increased by 38.8% to \$3.1 trillion from \$2.2 trillion over the same period. Sterling-denominated OIS increased by 372.9% to \$7.9 trillion in the first quarter of 2020 from \$1.7 trillion in the first quarter of 2019.

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



Source: DTCC and Bloomberg SDRs

CREDIT DERIVATIVES

Credit derivatives traded notional jumped by 67.9% to \$3.9 trillion in the first quarter of 2020 from \$2.4 trillion in the first quarter of 2019. The number of trades increased by 61.5% to 102.0 thousand from 63.2 thousand over the same period (see Chart 15).

Chart 15: Credit Derivatives Traded Notional and Trade Count

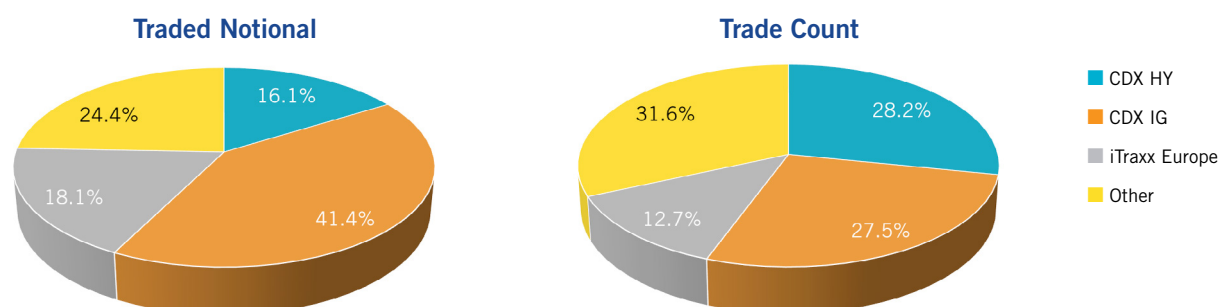


Source: DTCC and Bloomberg SDRs

Credit Derivatives Product Taxonomy

In the first quarter of 2020, CDX HY and CDX IG represented 16.1% and 41.4% of traded notional and 28.2% and 27.5% of total trade count, respectively. iTraxx Europe accounted for 18.1% of traded notional and 12.7% of trade count (see Chart 16).

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

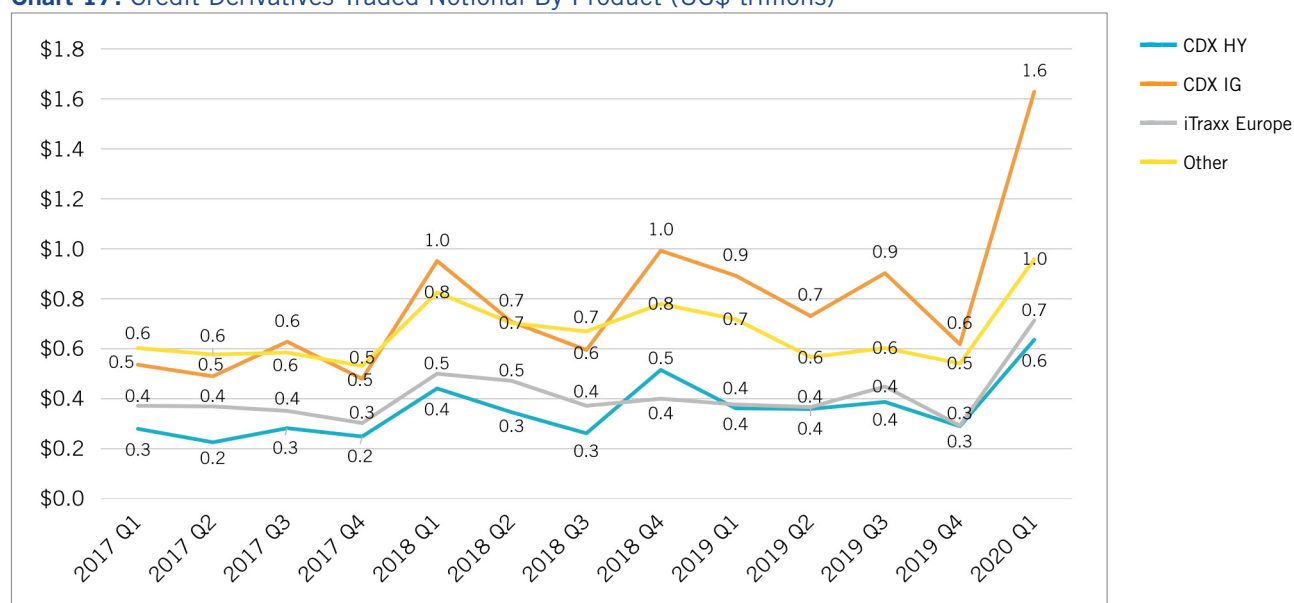


Source: DTCC and Bloomberg SDRs

CDX HY and CDX IG traded notional increased by 76.3% and 82.7%, respectively, in the first quarter of 2020 compared with the first quarter of 2019. CDX HY increased to \$635.9 billion from \$360.7 billion, and CDX IG grew to \$1.6 trillion from \$891.9 billion. Trade count increased quarter-over-quarter by 68.0% for CDX HY and 75.6% for CDX IG (see Chart 17 and Chart 18).

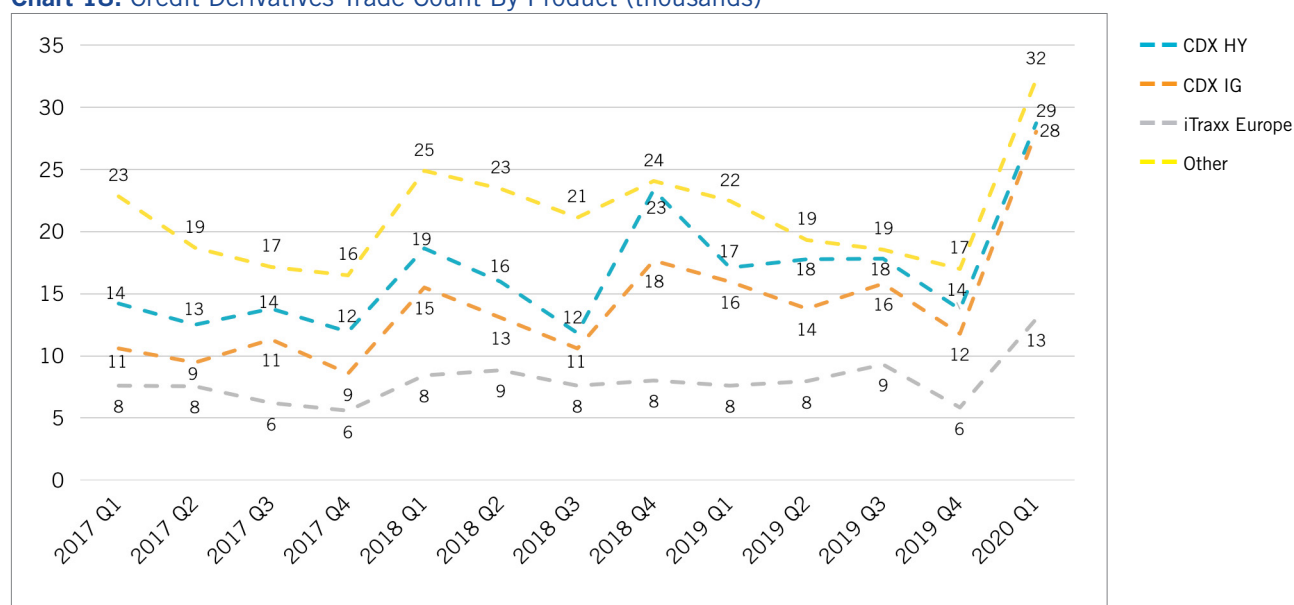
iTraxx Europe traded notional increased by 90.0% to \$713.9 billion in the first quarter of 2020 from \$375.7 billion in the first quarter of 2019. Trade count rose by 70.2% to 13.0 thousand over the same period.

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



Source: DTCC and Bloomberg SDRs

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



Source: DTCC and Bloomberg SDRs

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

Average daily traded notional of CDX HY and CDX IG increased by 73.5% and 79.7% between the first quarter of 2019 and the first quarter of 2020, and totaled \$10.3 billion and \$26.3 billion, respectively. Average daily trade count of CDX HY rose by 65.3% and totaled 464, while CDX IG grew by 72.8% and totaled 452. Average trade size of CDX HY and CDX IG was \$21.2 million and \$57.1 million, respectively (see Table 2).

iTraxx Europe average daily traded notional increased by 87.1% to \$11.2 billion and average daily trade count rose by 67.5% to 202. iTraxx Europe average trade size grew by 14.2% to \$54.6 million in the first quarter of 2020 compared with \$47.8 million in the first quarter of 2019.

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

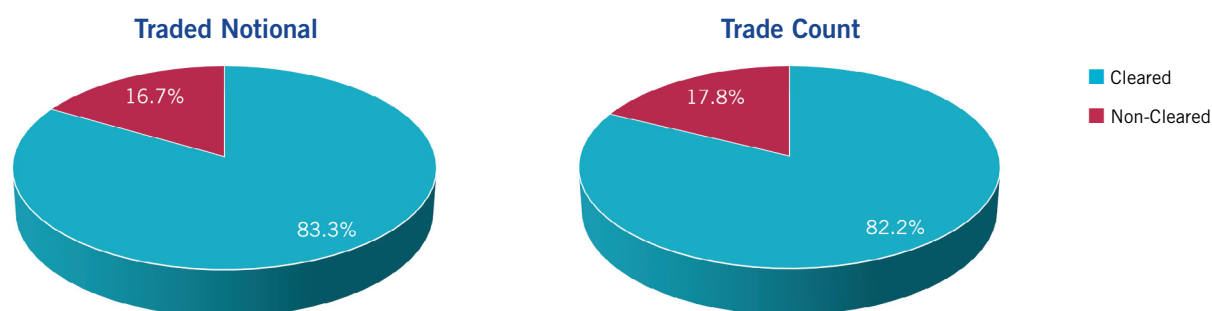
	Average Daily Traded Notional (US\$ billions)			Average Daily Trade Count			Average Trade Size (US\$ millions)		
	CDX HY	CDX IG	iTraxx Europe	CDX HY	CDX IG	iTraxx Europe	CDX HY	CDX IG	iTraxx Europe
Q1 2020	10.3	26.3	11.2	464	452	202	21.2	57.1	54.6
Q1 2019	5.9	14.6	6.0	281	262	121	19.7	54.7	47.8
Q1 2020 vs. Q1 2019	73.5%	79.7%	87.1%	65.3%	72.8%	67.5%	7.7%	4.4%	14.2%

Source: DTCC and Bloomberg SDRs

Credit Derivatives Central Clearing

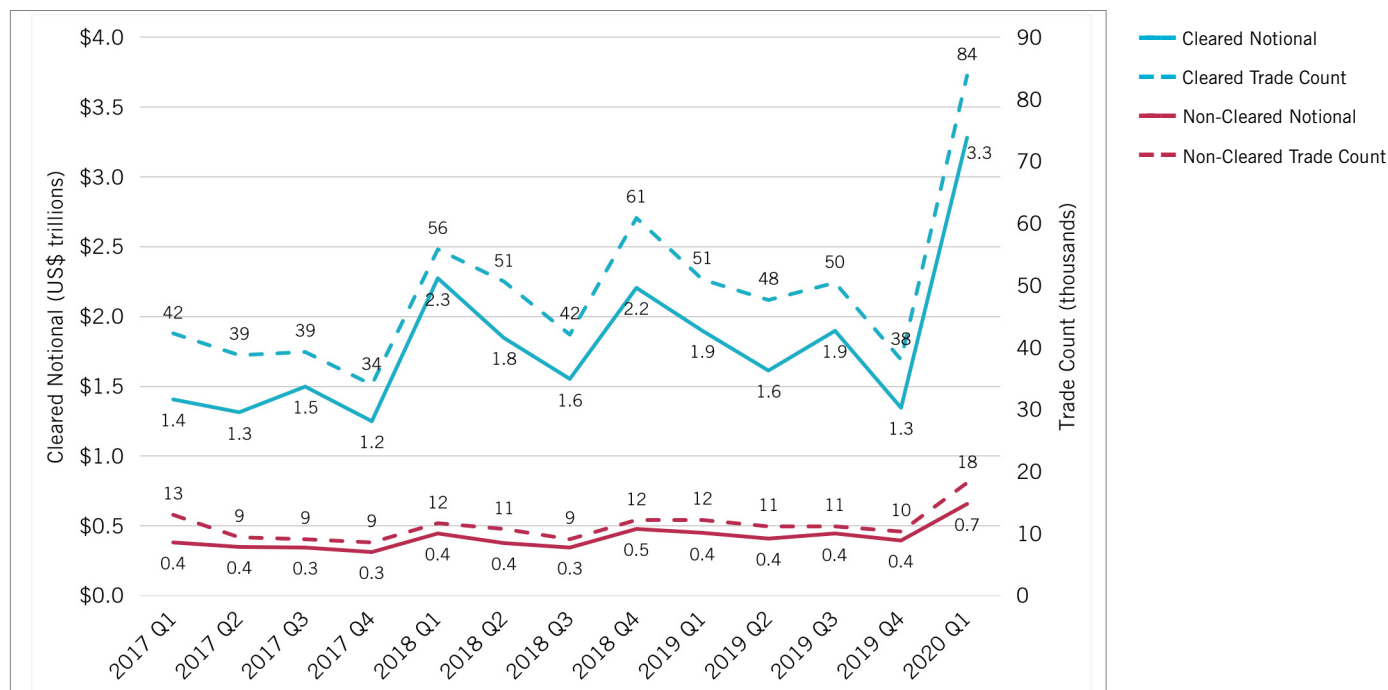
Cleared credit derivatives transactions represented 83.3% of traded notional and 82.2% of trade count in the first quarter of 2020 (see Chart 19). Traded notional and trade count of cleared credit derivatives transactions was \$3.3 trillion and 83.8 thousand, respectively.

Chart 19: Credit Derivatives Cleared Traded Notional and Trade Count



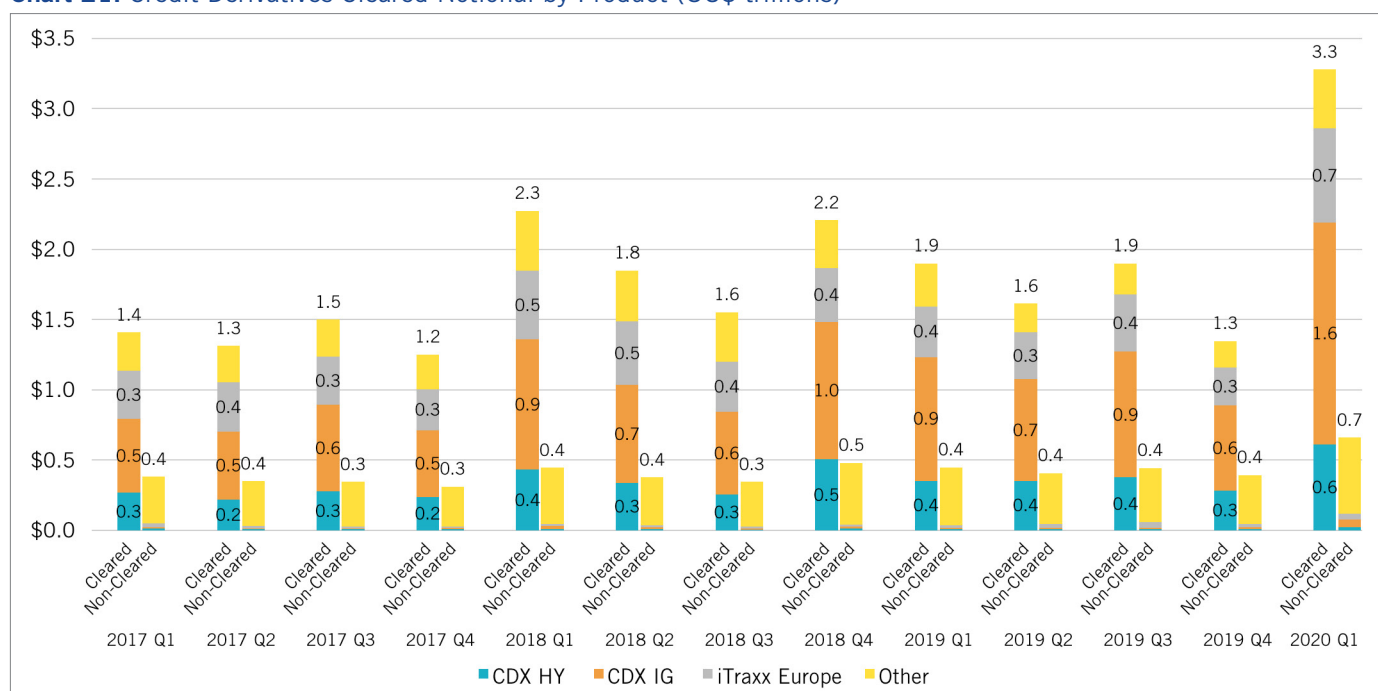
Source: DTCC and Bloomberg SDRs

Credit derivatives cleared notional increased by 72.8% to \$3.3 trillion in the first quarter of 2020 from \$1.9 trillion in the first quarter of 2019. Cleared trade count increased by 64.5% to 83.8 thousand from 51.0 thousand over the same period (see Chart 20). Non-cleared notional increased by 46.9% to \$658.7 billion in the first quarter of 2020 from \$448.4 billion in the first quarter of 2019. Non-cleared trade count increased by 48.8% over the same period.

Chart 20: Credit Derivatives Cleared Notional and Trade Count


Source: DTCC and Bloomberg SDRs

In the first quarter of 2020, \$612.8 billion (96.4%) of CDX HY and \$1.6 trillion (96.8%) of CDX IG was cleared, while \$23.2 billion and \$52.8 billion, respectively, was non-cleared. Cleared notional of iTraxx Europe totaled \$670.2 billion (93.9%), while non-cleared notional was \$43.7 billion. Only \$421.2 billion (43.9%) of other credit derivatives traded notional was cleared and \$539.1 billion was non-cleared (see Chart 21).

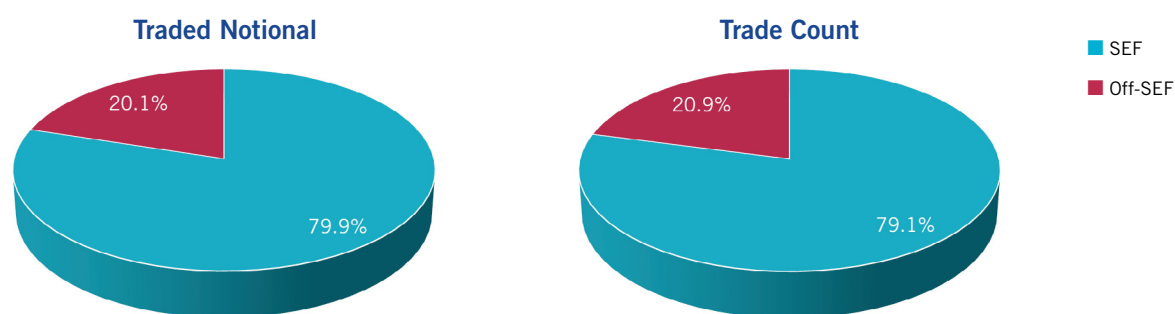
Chart 21: Credit Derivatives Cleared Notional by Product (US\$ trillions)


Source: DTCC and Bloomberg SDRs

Credit Derivatives Trading Venue

SEF-traded credit derivatives represented 79.9% of total traded notional and 79.1% of trade count in the first quarter of 2020 (see Chart 22). Total credit derivatives traded notional executed on SEFs was \$3.1 trillion, while \$0.8 trillion was executed off-SEF. 80.7 thousand transactions were executed on SEFs and 21.3 thousand transactions were transacted off-SEF.

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

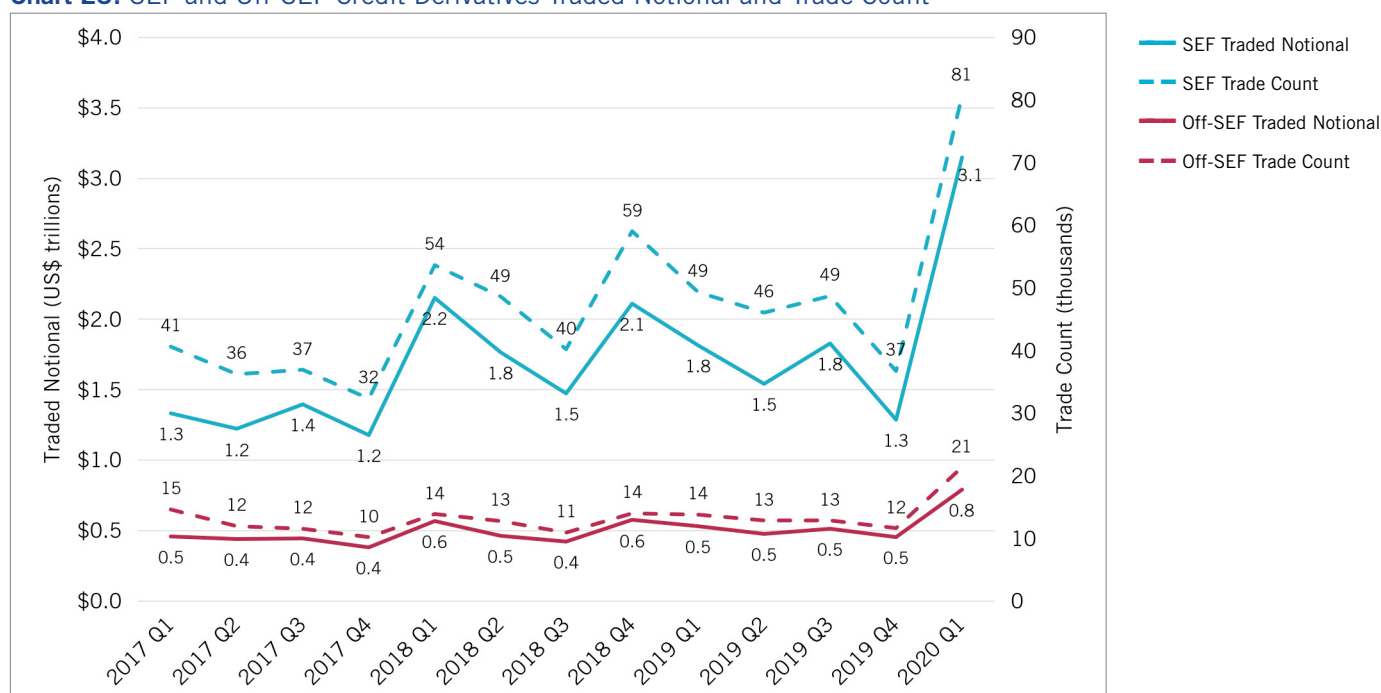


Source: DTCC and Bloomberg SDRs

Credit derivatives traded notional executed on SEFs increased by 73.2% to \$3.1 trillion in the first quarter of 2020 from \$1.8 trillion in the first quarter of 2019. The number of trades executed on SEFs increased by 63.5% over the same period (see Chart 23).

Credit derivatives traded notional executed off-SEF increased by 49.5% to \$792.5 billion in the first quarter of 2020 from \$530.0 billion in the first quarter of 2019. The number of off-SEF transactions increased by 54.3% over the same period.

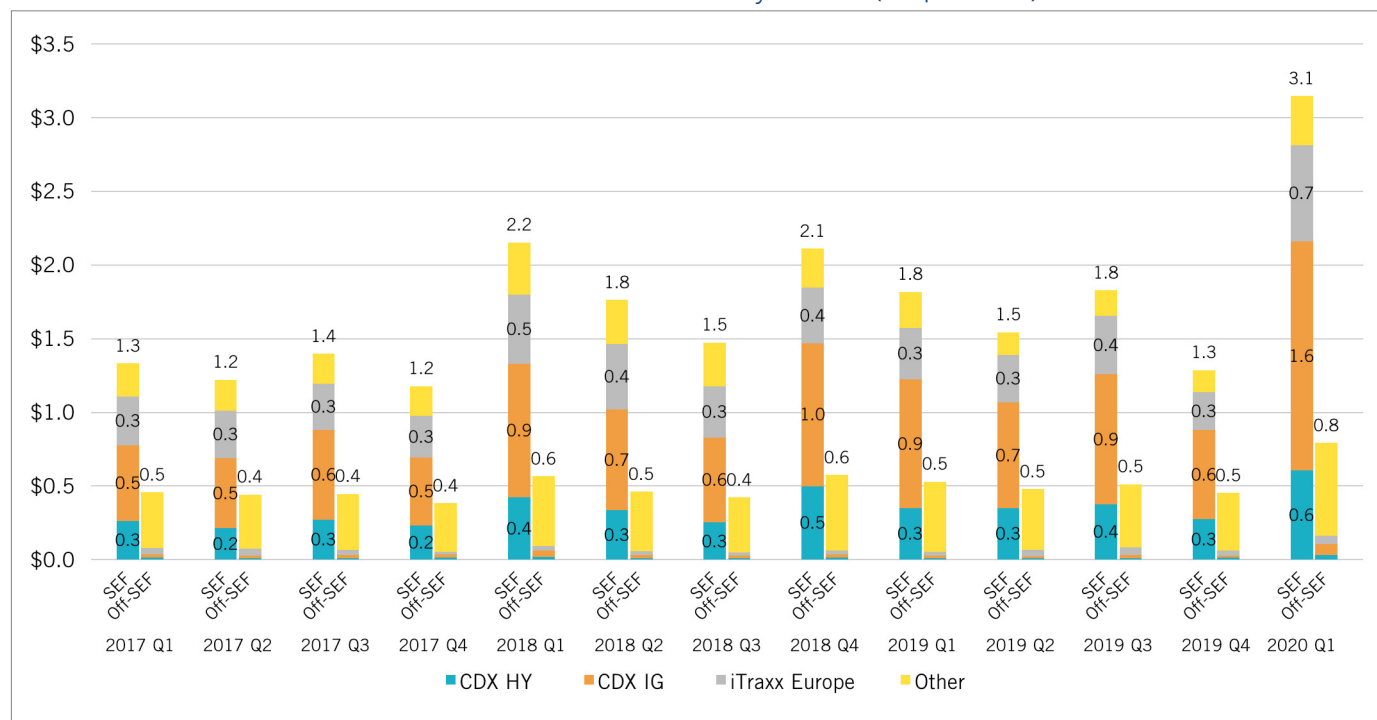
Chart 23: SEF and Off-SEF Credit Derivatives Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

In the first quarter of 2020, \$604.9 billion (95.1%) of CDX HY and \$1.6 trillion (95.5%) of CDX IG notional was traded on SEFs, and \$31.1 billion and \$73.9 billion, respectively, was executed off-SEF. \$654.8 billion (91.7%) of iTraxx Europe traded notional was executed on SEFs and \$59.1 billion occurred off-SEF. Only \$331.8 billion (34.6%) of traded notional for other credit derivatives was executed on SEFs and \$628.5 billion was traded off-SEF (see Chart 24).

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

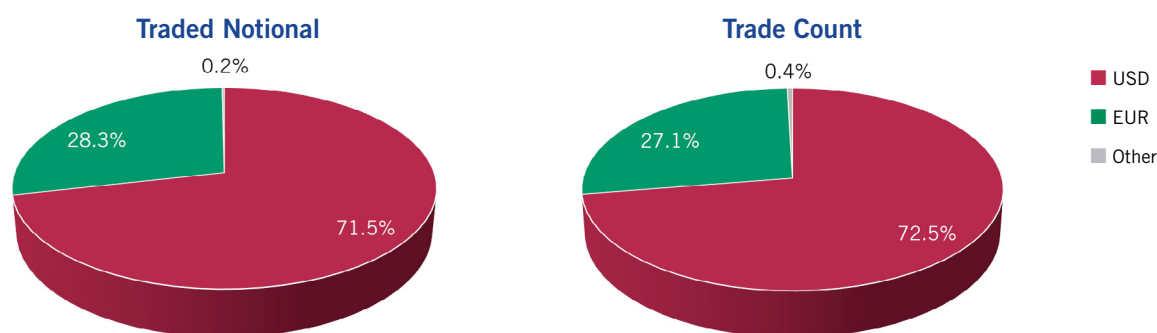


Source: DTCC and Bloomberg SDRs

Credit Derivatives by Currency

Credit derivatives contracts denominated in US dollars represented 71.5% and 72.5% of traded notional and trade count, respectively, in the first quarter of 2020. Euro-denominated transactions accounted for 28.3% and 27.1% of traded notional and trade count, respectively (see Chart 25).

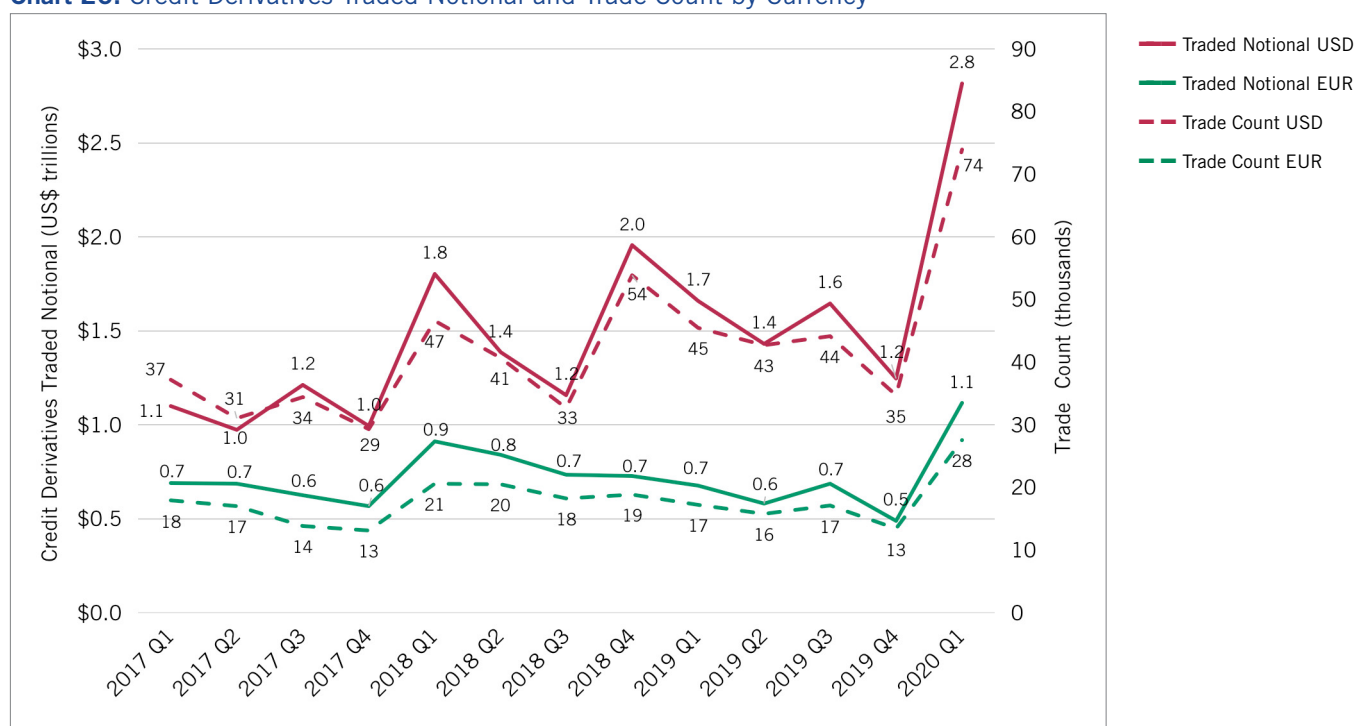
Chart 25: Credit Derivatives Traded Notional and Trade Count by Currency



Source: DTCC and Bloomberg SDRs

US dollar- and euro-denominated traded notional increased by 69.8% and 64.8%, respectively, in the first quarter of 2020 compared with the first quarter of 2019. US dollar-denominated traded notional grew to \$2.8 trillion in the first quarter of 2020 from \$1.7 trillion in the first quarter of 2019. Euro-denominated traded notional rose to \$1.1 trillion from \$676.9 billion over the same period. Trade count jumped by 62.6% for US dollar-denominated trades and 60.1% for euro-denominated trades over the same period (see Chart 26).

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



Source: DTCC and Bloomberg SDRs



ISDA has published other recent research papers:

- ***Interest Rate Benchmarks Review: First Quarter of 2020, April 2020***

<https://www.isda.org/a/k6qTE/Interest-Rate-Benchmarks-Review-First-Quarter-of-2020.pdf>

- ***ISDA Margin Survey Year-End 2019, April 2020***

<https://www.isda.org/a/1F7TE/ISDA-Margin-Survey-Year-end-2019.pdf>

- ***Adoption of Risk-Free Rates: Major Developments in 2020, February 2020***

<https://www.isda.org/a/WhXTE/Adoption-of-Risk-Free-Rates-Major-Developments-in-2020.pdf>

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Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has more than 900 member institutions from 73 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

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