

SwapsInfo Second Quarter 2017 Review

The ISDA SwapsInfo Quarterly Review provides analysis of interest rate derivatives (IRD) and index credit default swaps (CDS) trading activity. The report provides a breakdown of publicly available data to analyze the impact of regulatory change on swap execution facility (SEF) and bilateral trading volumes, as well as cleared and non-cleared activity.

Interest rate derivatives and index CDS 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).

KEY HIGHLIGHTS FOR SECOND QUARTER OF 2017

Interest Rate Derivatives

During the second quarter of 2017, IRD traded notional amount rose by 14.2% to \$50.8 trillion from \$44.5 trillion in the second quarter of 2016. Trade count grew by 7.5% over the same period, to 295,891 from 275,351.

In the first half of 2017, IRD traded notional amount and trade count increased by 21.5% and 8.6%, respectively, compared with the first half of 2016.

In the 12 months ended June 30, 2017, IRD traded notional amount and trade count rose by 20.9% and 9.8%, respectively, compared to the 12 months ended June 30, 2016.

In the second quarter of 2017:

- Average daily notional for IRD totaled \$781.6 billion, while average trade size was \$162.9 million. Average daily trade count was 4,552.
 - Cleared IRD transactions represented 88.5% of traded notional and 80.3% of trade count.
 - SEF-traded IRD represented 53.9% of notional and 58.9% of trade count.
 - Single currency fixed-for-floating interest rate swaps (IRS) accounted for 64.3% of total IRD trade count, but represented only 28.3% of IRD traded notional. Forward rate agreements (FRAs) and overnight indexed swaps (OIS) represented 33.5% and 26.8% of traded notional and 14.9% and 5.2% of total trade count, respectively.
 - IRD contracts in US dollars remained the most actively traded instruments, and contributed 66.7% of traded notional and 53.2% of trade count. Euro-denominated transactions accounted for a far smaller percentage of notional (16.1%) and trade count (15.1%).
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Index Credit Default Swaps

Index CDS traded notional amount fell by 2.4% from \$1.7 trillion in the second quarter of 2016 to \$1.6 trillion in the second quarter of 2017. Trade count also contracted, with the number of trades falling by 14.5% from 55,869 to 47,777 over the same period.

In the first half of 2017, index CDS traded notional and trade count declined by 16.6% and 22.8%, respectively, compared with the first half of 2016.

In the 12 months ended June 30, 2017, index CDS traded notional and trade count fell by 15.6% and 18.6%, respectively, compared to the 12 months ended June 30, 2016.

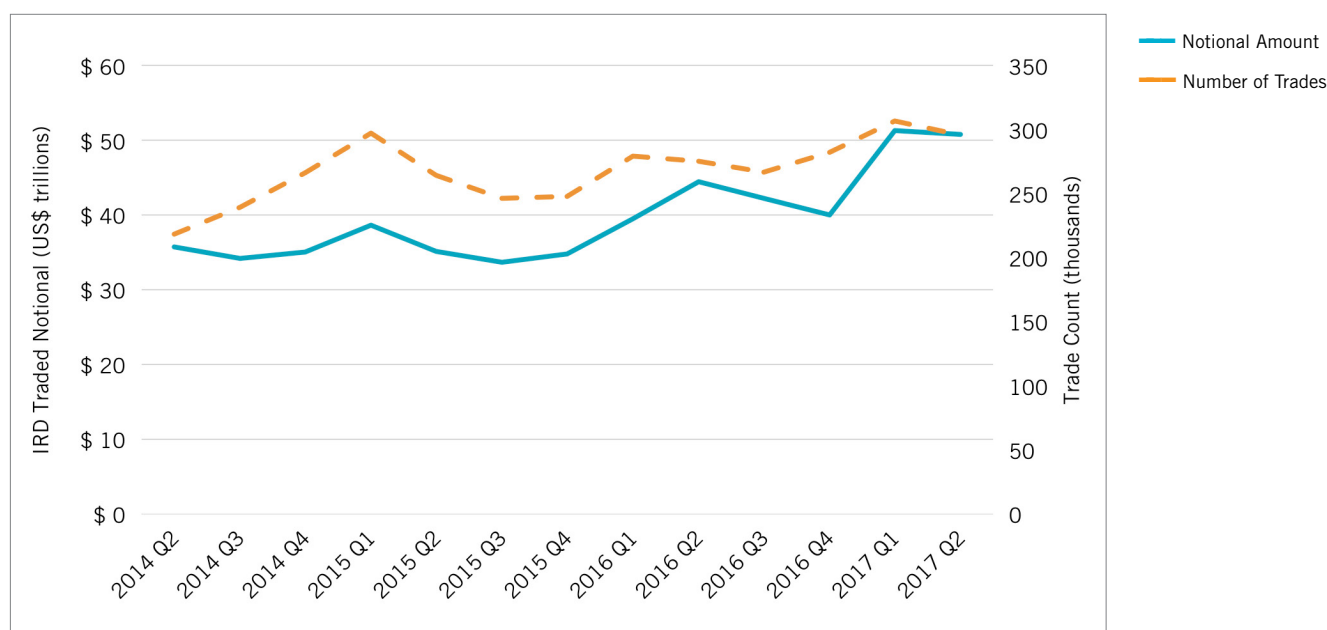
In the second quarter of 2017:

- Average daily notional for index CDS totaled \$25.3 billion, average trade size was \$34.2 million and average daily trade count was 735.
 - Cleared index CDS transactions represented 79% of traded notional amount and 81% of trade count.
 - SEF-traded index CDS represented 73.7% of notional amount and 75.7% of trade count.
 - iTraxx Europe accounted for 33.3% of total index CDS traded notional and 31.1% of total trade count. CDX HY and CDX IG represented 13.7% and 29.6% of traded notional and 26.2% and 19.8% of total trades, respectively.
 - Index CDS contracts denominated in US dollars continued to decline in the second quarter of 2017, but remained the most actively traded instruments. US dollar-denominated index CDS represented 58.9% of index CDS traded notional and 64.7% of trade count. Euro-denominated transactions accounted for 40.9% and 34.9% of traded notional and trade count, respectively.
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INTEREST RATE DERIVATIVES

During the second quarter of 2017, IRD traded notional amount rose by 14.2%, from \$44.5 trillion to \$50.8 trillion, versus the second quarter of 2016. Trade count grew by 7.5% over the same period, from 275,351 to 295,891.

IRD Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

In the first half of 2017, IRD traded notional increased by 21.5% to \$102.1 trillion from \$84 trillion in the first half of 2016. Trade count increased by 8.6% over the same period from 554,842 to 602,560.

In the 12 months ended June 30, 2017, IRD traded notional rose to \$184.4 trillion, a 20.9% increase from the \$152.4 trillion for the 12 months ended June 30, 2016. IRD trade count grew by 9.8% over the same period, from 1,048,961 to 1,151,695 transactions.

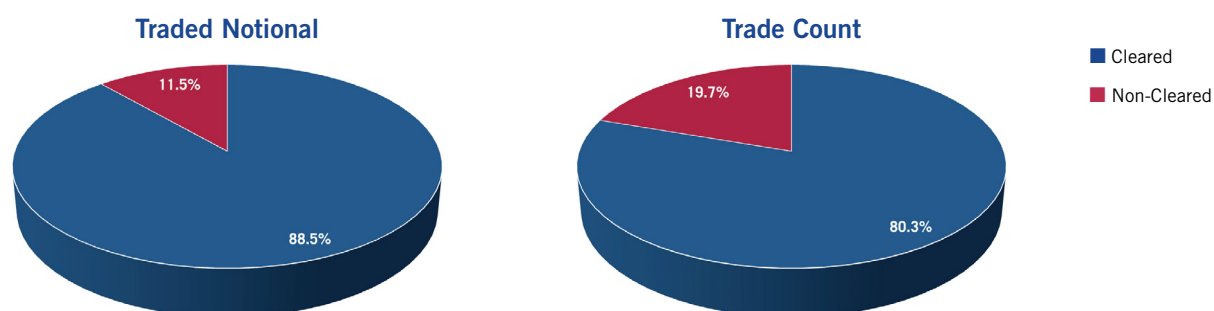
IRD Statistics: Average Daily Notional, Trade Count and Trade Size Quarterly Statistics

In the second quarter of 2017, average daily notional for IRD totaled \$781.6 billion, while average trade size was \$162.9 million. Average daily trade count was 4,552.

	Average Daily Notional (US\$ billions)	Average Daily Trade Count	Average Trade Size (US\$ millions)
Q2 2017	781.6	4,552	162.9
Q2 2016	684.2	4,236	152.5
Q2 2017 vs. Q2 2016	14.2%	7.5%	6.8%
1H 2017	785.2	4,635	161.2
1H 2016	646.3	4,268	143.6
1H 2017 vs. 1H 2016	21.5%	8.6%	12.3%
LTM 2017	707	4,414.0	152.6
LTM 2016	582	4,006	137.2
LTM 2017 vs. LTM 2016	21.3%	10.2%	11.2%

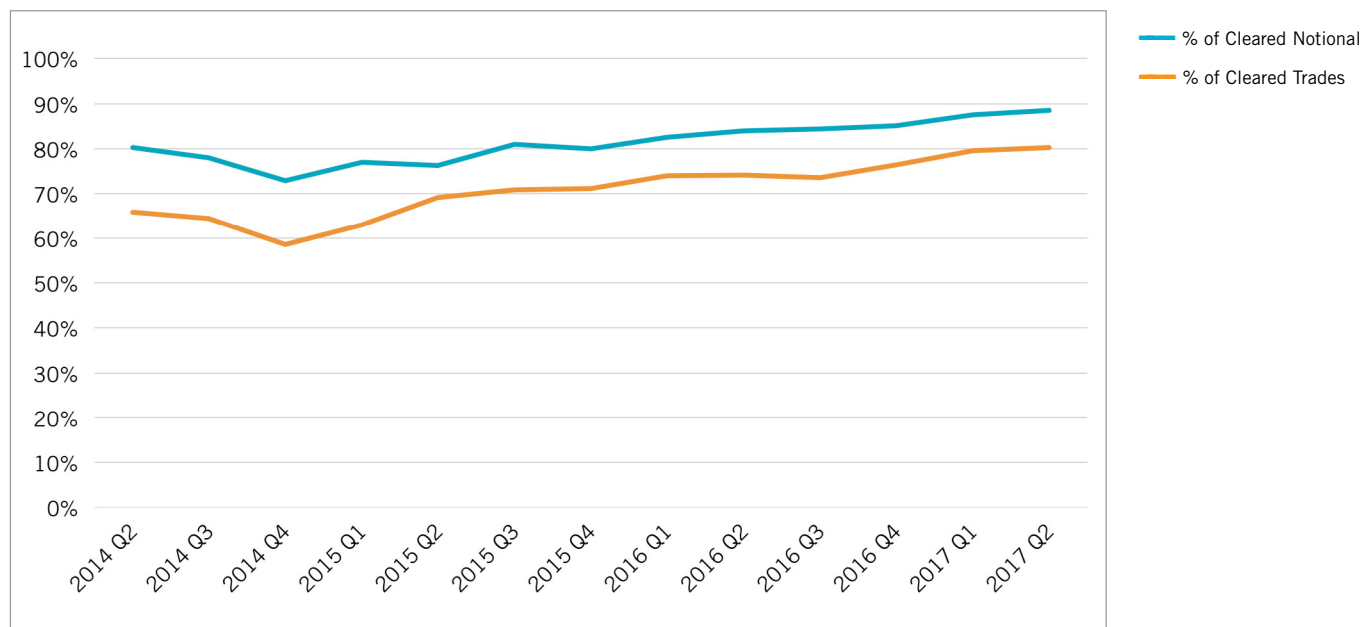
IRD Statistics: Central Clearing

During the second quarter of 2017, cleared IRD transactions represented 88.5% of traded notional and 80.3% of trade count. Traded notional amount of IRD cleared transactions was \$45 trillion and total trade count was 237,549.



Both the percentage of cleared traded notional and the percentage of cleared trades have been gradually increasing over the past three years.

Percentage of IRD Cleared Notional and Trade Count

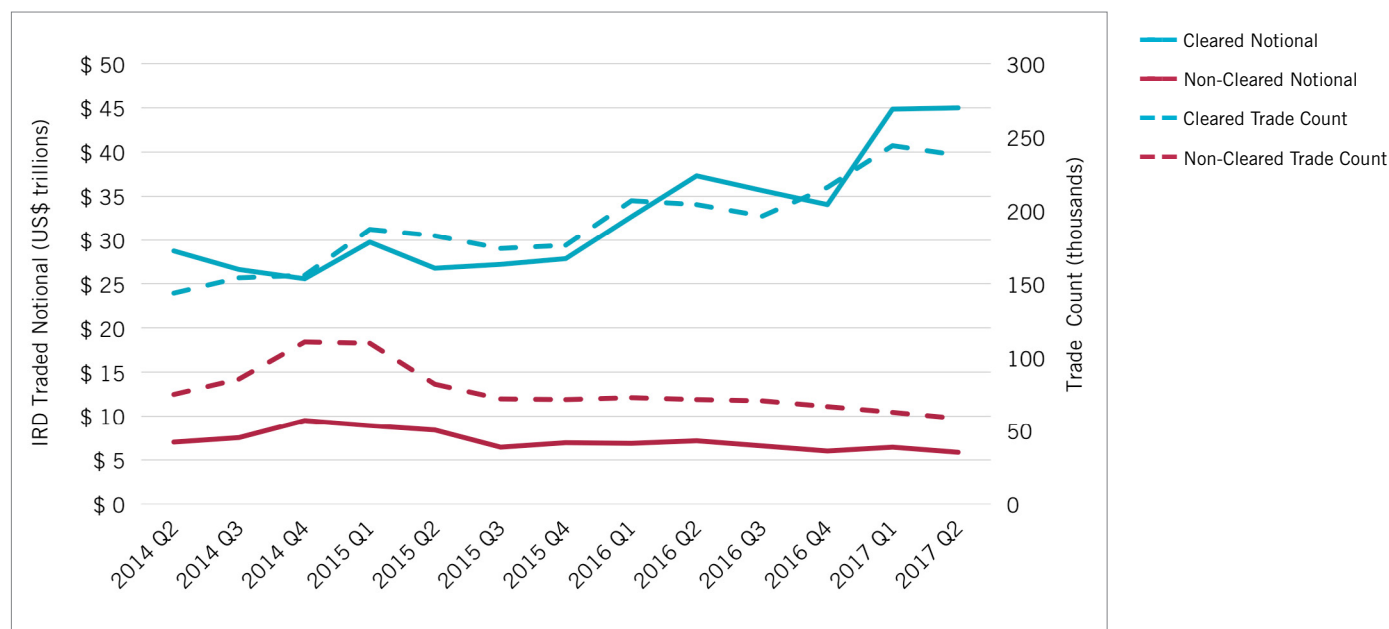


Source: DTCC and Bloomberg SDRs

IRD cleared notional reached \$45 trillion in the second quarter of 2017, a 20.5% increase from \$37.3 trillion in the second quarter of 2016. Cleared trade count grew by 16.4% over the same period, from 204,073 to 237,549. IRD cleared notional increased by 28.4% in the first half of 2017, to \$89.9 trillion from \$70 trillion in the first half of 2016. Trade count increased by 17.3% over the same period. Cleared notional also ticked up in the 12 months ended June 30, 2017 compared to the 12 months ended June 30, 2016, growing by 27.6% from \$125.1 trillion to 159.5 trillion. Trade count grew by 17.3% from 761,648 to 893,753 over the same period.

Non-cleared notional amount fell by 18.4% in the second quarter of 2017 versus the second quarter of 2016, from \$7.2 trillion to \$5.8 trillion. Trade count decreased by 18.1% over the same period, from 71,278 to 58,342. In the first half of 2017, non-cleared notional and trade count declined by 12.9% and 10.2% compared with the first half of 2016, to \$12.2 trillion and 120,932, respectively. Non-cleared notional amount for the 12 months ended June 30, 2017 declined to \$24.8 trillion, a 9.5% decrease compared with \$27.4 trillion for the 12 months ended June 30, 2016. Trade count declined by 10.2% from 287,313 to 257,942 over the same period.

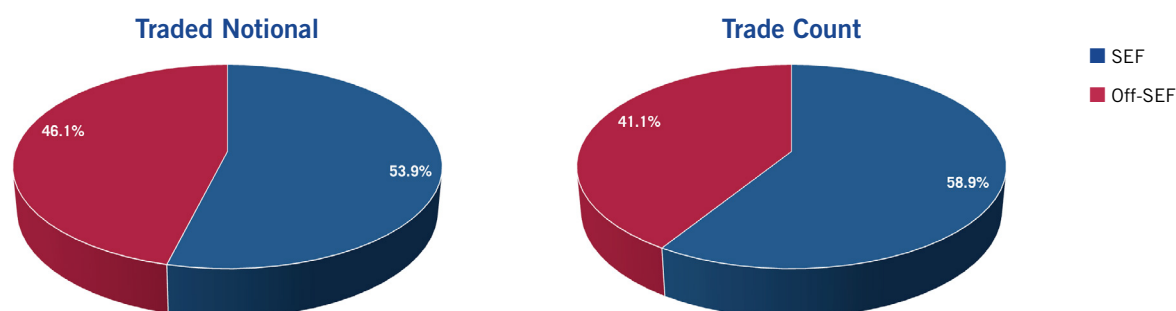
Central Clearing: IRD Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

IRD Statistics: Trading Venue

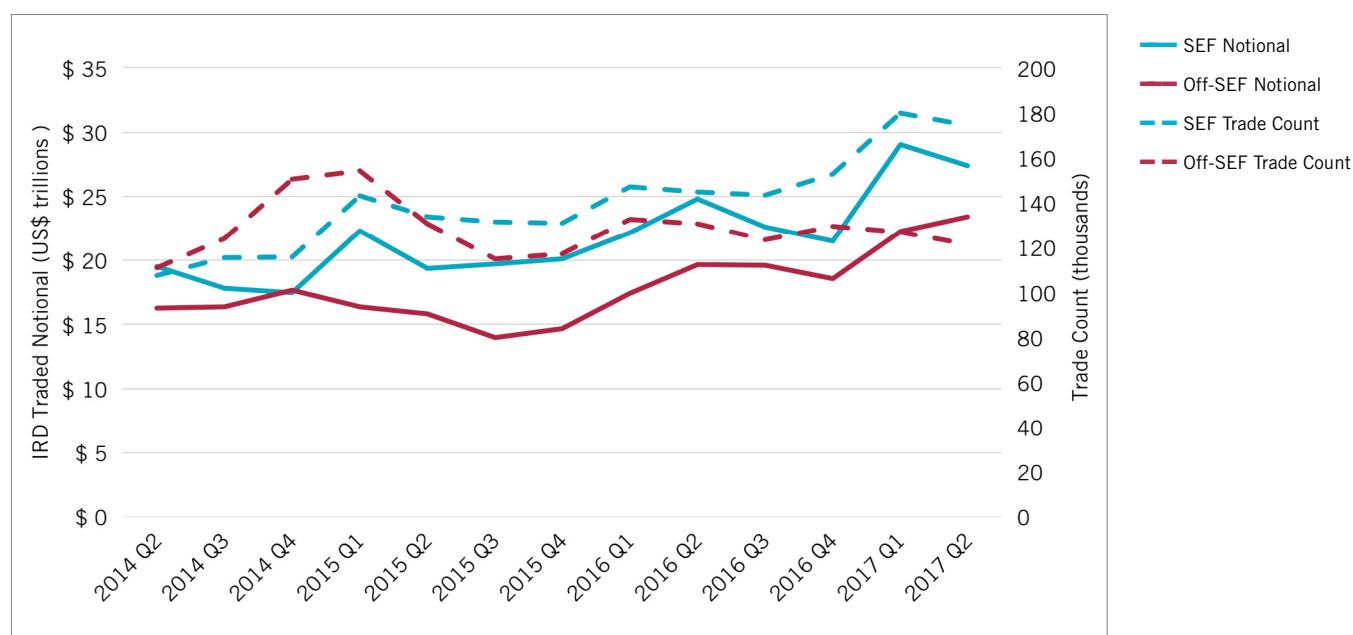
During the second quarter of 2017, off-SEF traded notional grew at faster pace compared with SEF-traded notional. The growth in off-SEF traded notional was due to an increase in average trade size, while the number of off-SEF transactions declined. SEF-traded swaps represented 53.9% of notional volume and 58.9% of trade count. Total IRD notional amount executed on SEFs was \$27.4 trillion, while \$23.4 trillion was executed off-SEF. 174,417 transactions were executed on SEFs and 121,474 trades were off-SEF.



In the second quarter of 2017, notional executed on SEFs grew by 10.4% compared with the same period a year ago, from \$24.8 trillion to \$27.4 trillion. The number of trades executed on SEFs increased by 20.4% from 144,919 to 174,417 over the same period. In the first half of 2017, notional and number of trades executed on SEFs totaled \$56.5 trillion and 354,339, respectively, a 20.2% and 21.4% increase from the first half of 2016. For the 12 months ended June 30, 2017, notional executed on SEFs jumped up by 15.9% to \$100.5 trillion from \$86.7 trillion in the 12 months ended June 30, 2016. Trade count increased by 17.4% from 554,179 to 650,563 over the same period.

Notional amount transacted off-SEF increased by 19.1% from \$19.7 trillion in the second quarter of 2016 to \$23.4 trillion in the second quarter of 2017. However, the number of transactions decreased by 6.9% over the same period, from 130,432 to 121,474. In the first half of 2017, notional transacted off-SEF increased by 23.1% to \$45.6 trillion from \$37.1 trillion in the first half of 2016. For the 12 months ended June 30, 2017, notional amount and transaction count executed off-SEF grew by 27.6% and 1.3%, respectively, compared with the prior year. Notional amount increased from \$65.7 trillion to \$83.8 trillion and number of transactions increased from 494,782 to 501,132.

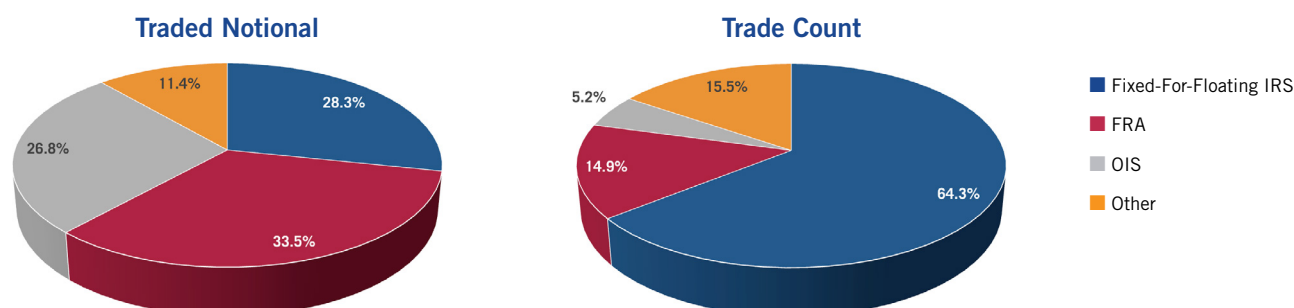
SEF and Off-SEF IRD Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

IRD Statistics: Product Taxonomy

Single currency fixed-for-floating IRS accounted for 64.3% of IRD trades, but represented only 28.3% of IRD traded notional. FRAs and OIS represented 33.5% and 26.8% of traded notional and 14.9% and 5.2% of trade count, respectively, in the second quarter of 2017.

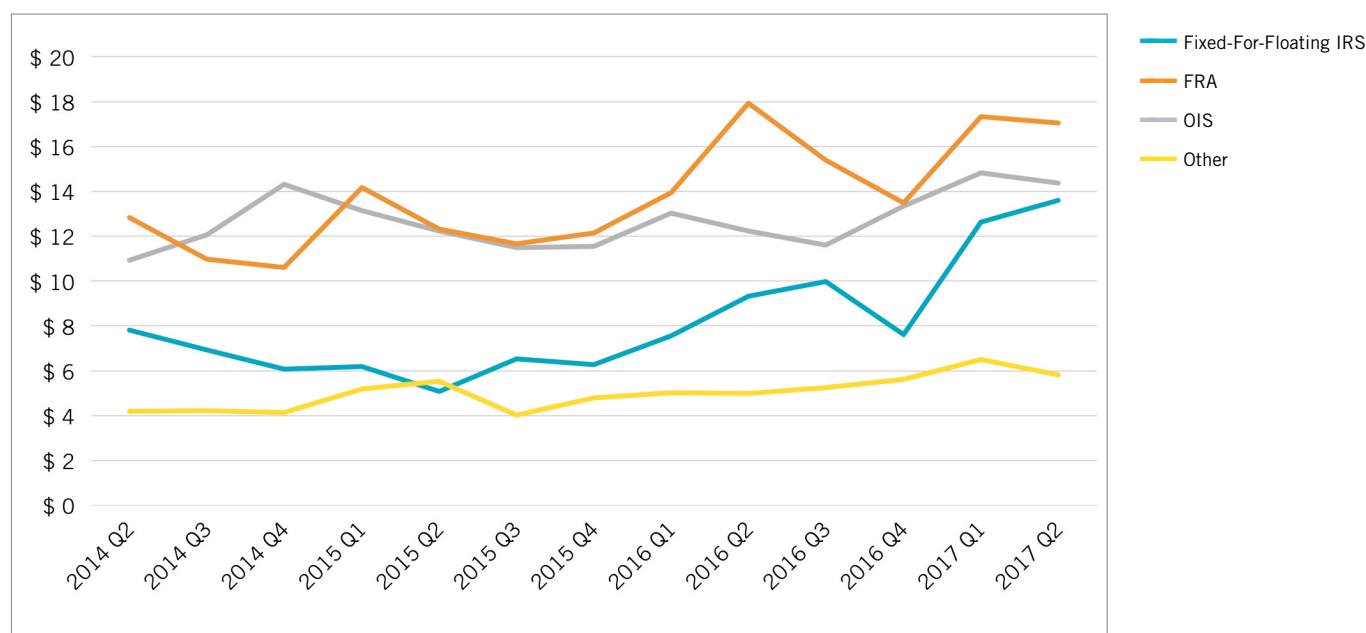


OIS traded notional significantly jumped by 45.7% from \$9.3 trillion in the second quarter of 2016 to \$13.6 trillion in the second quarter of 2017, and increased by 47.5% from \$29.7 trillion to \$43.8 trillion year-over-year. OIS trade count increased by 22.9% quarter-over-quarter and by 34.7% year-over-year. In the first half of 2017, OIS traded notional and trade count grew by 55.1% and 30.4%, respectively, compared with the first half of 2016.

Fixed-for-floating IRS traded notional increased by 17.6% from \$12.2 trillion in the second quarter of 2016 to \$14.4 trillion in the second quarter of 2017. IRS trade count increased by 8.2% quarter-over-quarter. In the first half of 2017, fixed-for-floating IRS traded notional and trade count grew by 15.7% and 6.5%, respectively, compared with the first half of 2016, and totaled \$29.2 trillion and 387,399. Traded notional for 12 months ended June 30, 2017 increased by 12.1% to \$54.1 trillion from \$48.3 trillion the year before, and trade count grew by 8.4% year-over-year.

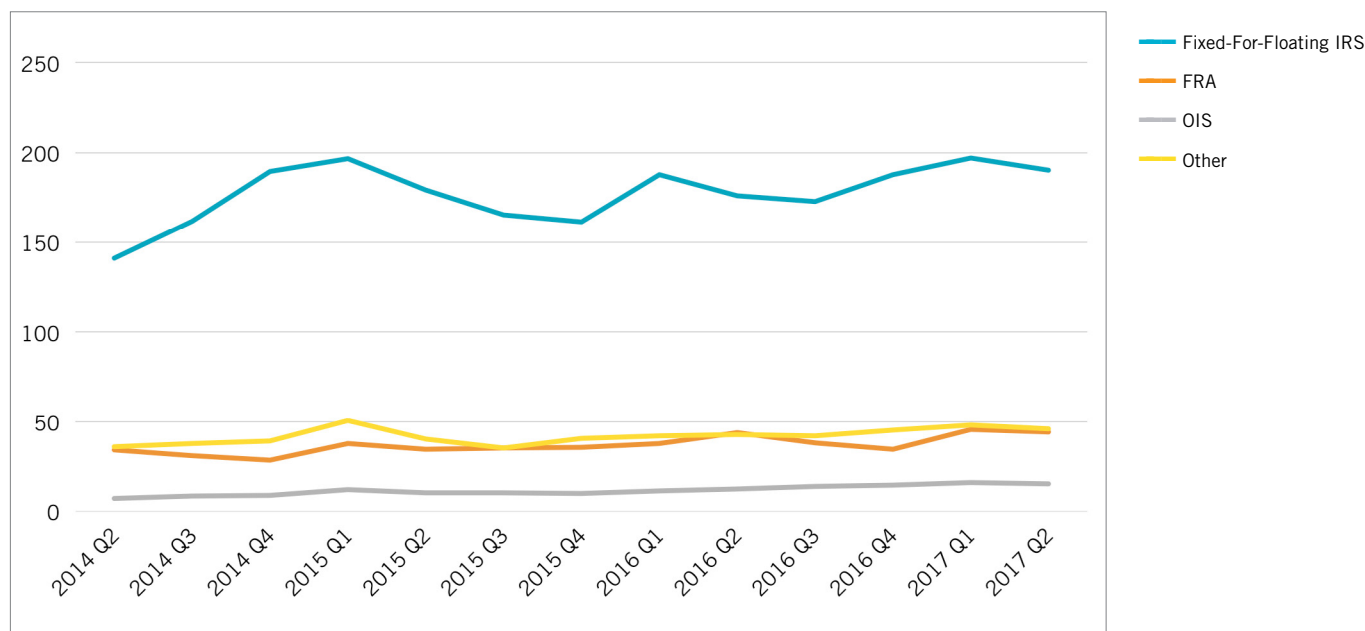
FRA traded notional declined by 5% from \$17.9 trillion in the second quarter of 2016 to \$17 trillion in the second quarter of 2017. Trade count was relatively flat quarter-over-quarter. In the first half of 2017, FRA traded notional increased by 7.9% to \$34.4 trillion compared with \$31.9 trillion in the first half of 2016. Traded notional for the 12 months ended June 30, 2017 increased by 13.7% to \$63.3 trillion from \$55.6 trillion the year before. FRA trade count was relatively flat quarter-over-quarter and increased by 6.2% year-over-year.

IRD Traded Notional By Product (US\$ trillions)



Source: DTCC and Bloomberg SDRs

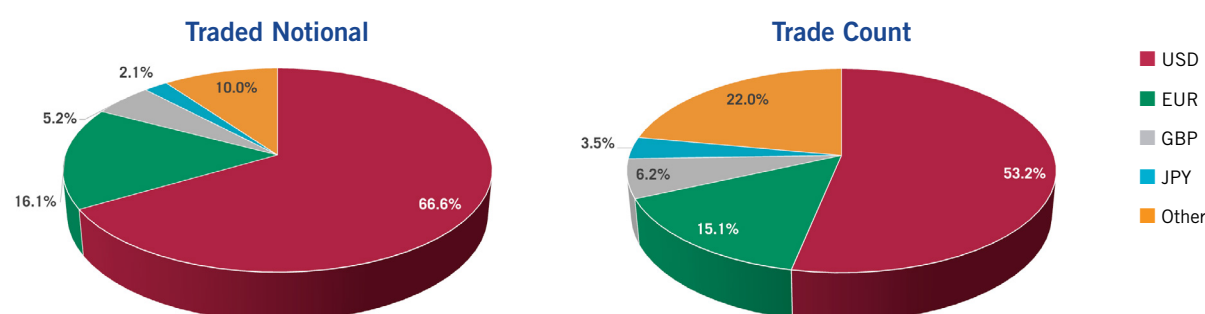
IRD Trade Count By Product (thousands)



Source: DTCC and Bloomberg SDRs

IRD Statistics: Currency

IRD contracts in US dollars remained the most actively traded instruments, and traded notional grew to \$33.8 trillion in the second quarter of 2017. US dollar-denominated IRD contributed 66.7% of traded notional and 53.2% of trade count. Euro-denominated transactions accounted for a far smaller percentage of traded notional (16.1%) and trade count (15.1%).

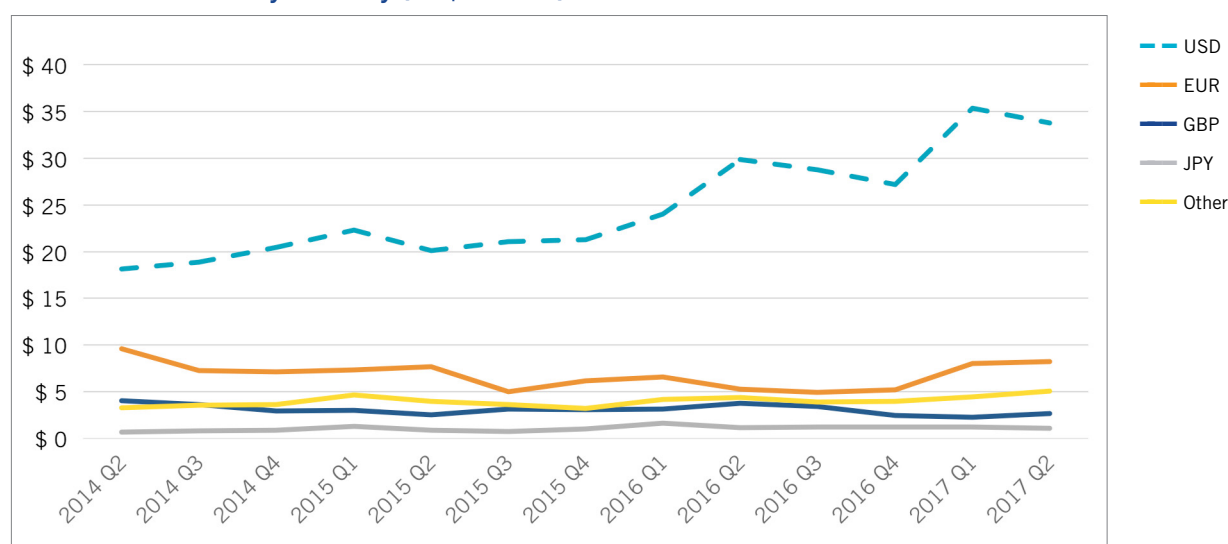


Euro-denominated IRD traded notional increased by 56.4% in the second quarter of 2017 compared with the second quarter of 2016, while US dollar-denominated traded notional increased by 13.1% over the same period. Euro-denominated traded notional totaled \$8.2 trillion in the second quarter of 2017 compared with \$5.2 trillion in the second quarter of 2016. US dollar-denominated traded notional was \$33.8 trillion in the second quarter of 2017 compared with \$29.9 trillion in second quarter of 2016. Traded notional for sterling- and yen-denominated trades declined by 30.1% and 8.3% quarter-over-quarter, respectively. Trade count increased by 20.9% for euro trades, 3.6% and 4.4% for US dollar and sterling trades, respectively, and declined by 16% for yen-denominated trades quarter-over-quarter.

In the first half of 2017, US dollar- and euro-denominated IRD traded notional totaled \$69.2 and \$16.2 trillion, respectively, up 28.2% and 37.4% from the first half of 2016. Traded notional for sterling- and yen-denominated trades declined by 29.2% and 18.3%, respectively, over the same period. Trade count increased by 7.7% for US dollar, 20.9% for euro and 3.7% for sterling, and declined by 27.9% for yen.

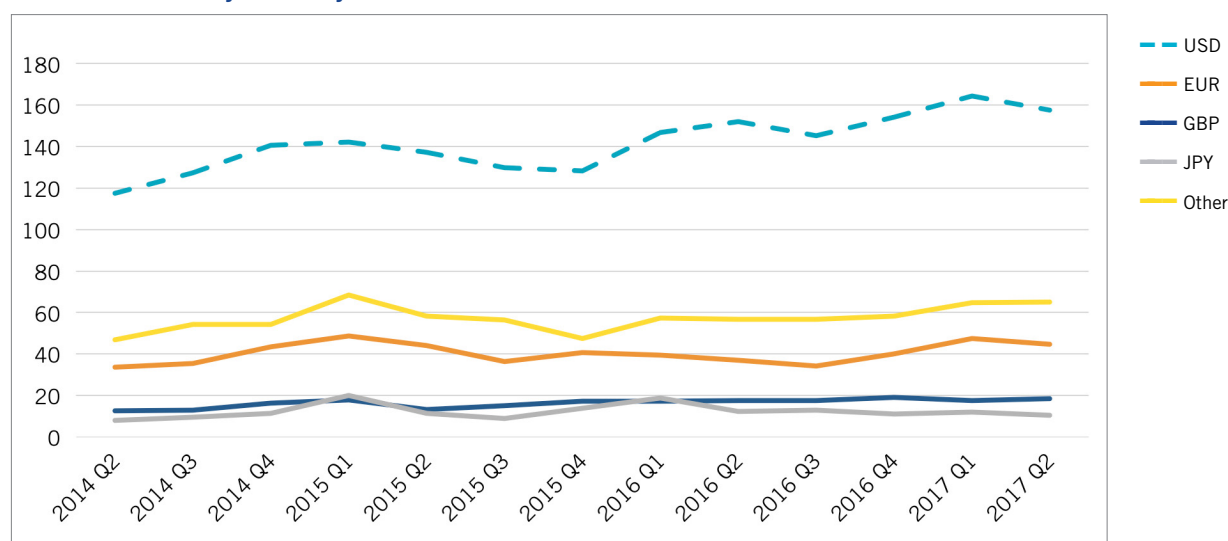
During the 12 months ended June 30, 2017, US dollar-denominated IRD traded notional increased by 29.9% to \$125.2 trillion from \$96.4 trillion in the 12 months ended June 30, 2016. Euro-denominated traded notional increased by 14.8% from \$22.9 trillion to \$26.3 trillion over the same period, while sterling-denominated notional declined by 18.1% from \$13.2 trillion to \$10.8 trillion. Trade count increased by 12% for US dollar-denominated transactions, from 556,884 to 621,594 year-over-year. Trade count for euro- and sterling-denominated transactions increased by 8.5% and 8.3%, respectively, and trade count for yen trades declined by 14% year-over-year.

IRD Traded Notional by Currency (US\$ trillions)



Source: DTCC and Bloomberg SDRs

IRD Trade Count by Currency (thousands)

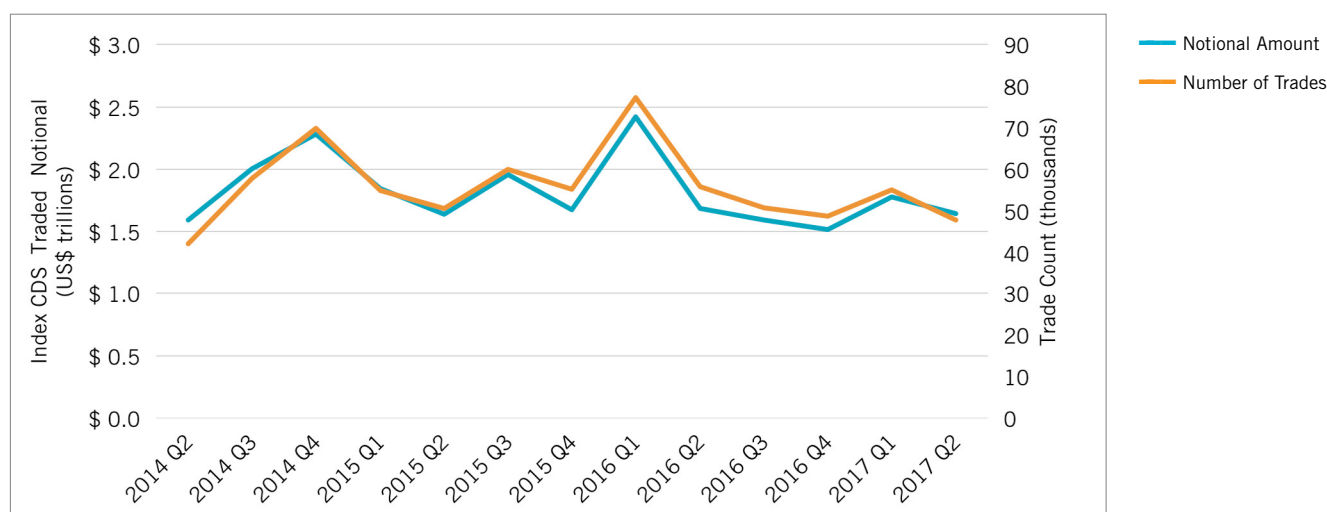


Source: DTCC and Bloomberg SDRs

INDEX CREDIT DEFAULT SWAPS

During the second quarter of 2017, index CDS traded notional amount and trade count continued to decline. The traded notional amount decreased by 2.4% from \$1.7 trillion in the second quarter of 2016 to \$1.6 trillion in the second quarter of 2017. The number of trades declined by 14.5% from 55,869 to 47,777 over the same period.

Index CDS Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

In the first half of 2017, index CDS traded notional declined by 16.6% to \$3.4 trillion from \$4.1 trillion in the first half of 2016. Trade count decreased by 22.8% over the same period to 102,758.

In the 12 months ended June 30, 2017, index CDS traded notional fell to \$6.5 trillion, a 15.6% decline from \$7.7 trillion in the 12 months ended June 30, 2016. Index CDS trade count declined by 18.6% over the same period, from 248,367 to 202,189 transactions.

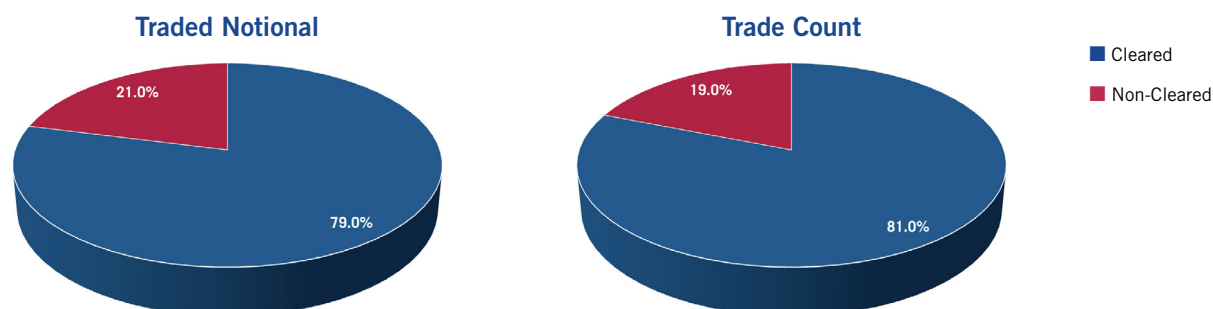
Index CDS Statistics: Average Daily Notional, Trade Count and Trade Size Quarterly Statistics

In the second quarter of 2017, average daily notional for index CDS totaled \$25.3 billion, average trade size was \$34.2 million and average daily trade count was 735.

	Average Daily Notional (US\$ billions)	Average Daily Trade Count	Average Trade Size (US\$ millions)
Q2 2017	25.3	735	34.2
Q2 2016	25.9	863	29.4
Q2 2017 vs. Q2 2016	-2.4%	-14.8%	16.3%
1H 2017	26.4	791	32.6
1H 2016	31.6	1,028	29.9
1H 2017 vs. 1H 2016	-16.6%	-23.1%	8.9%
LTM 2017	25	778.0	31.7
LTM 2016	30	956	30.3
LTM 2017 vs. LTM 2016	-15.3%	-18.6%	4.8%

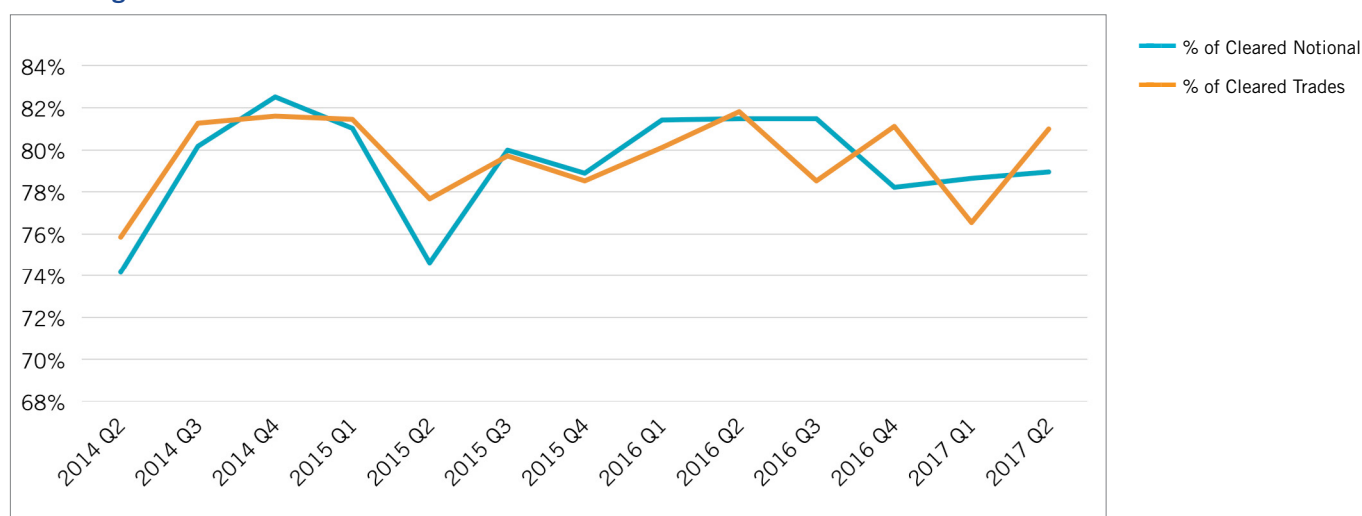
Index CDS Statistics: Central Clearing

During the second quarter of 2017, cleared CDS index transactions represented 79% of traded notional amount and 81% of trade count. Traded notional amount of cleared CDS index transactions was \$1.3 trillion and total trade count was 38,699.



Over the past three years, the percentage of cleared index CDS notional and percentage of cleared trades has fluctuated between 74% and 83%.

Percentage of Index CDS Cleared Notional and Trade Count

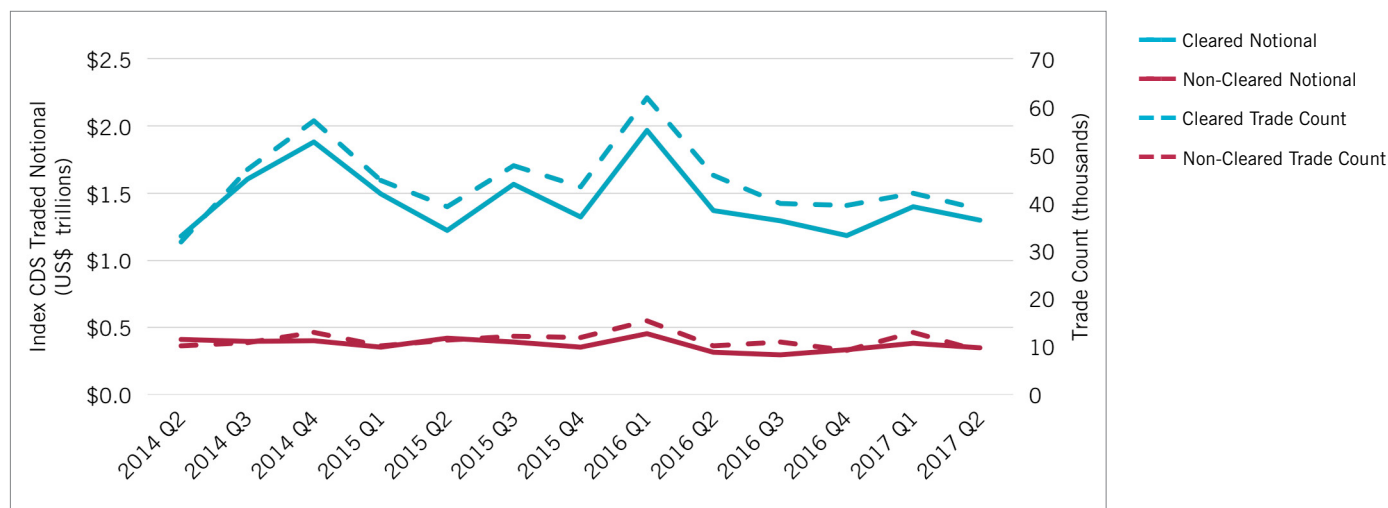


Source: DTCC and Bloomberg SDRs

Cleared index CDS notional declined to \$1.3 trillion in the second quarter of 2017, a 5.4% decrease from \$1.4 trillion in the second quarter of 2016. Cleared trade count decreased by 15.3% over the same period, from 45,704 to 38,699. Cleared notional fell by 19.3% in the first half of 2017, to \$2.7 trillion from \$3.3 trillion in the first half of 2016. Trade count decreased by 24.9% over the same period. Cleared notional also decreased in the 12 months ended June 30, 2017 compared to the 12 months ended June 30, 2016, shrinking by 16.9% from \$6.2 trillion to \$5.2 trillion. Trade count declined by 19.5% from 198,804 to 160,123 over the same period.

Non-cleared index CDS notional increased by 10.8% in the second quarter of 2017 versus the second quarter of 2016, from \$312.5 billion to \$346.3 billion. However, trade count decreased by 10.7% over the same period, from 10,165 to 9,078. Non-cleared notional and trade count in the first half of 2017 were \$726.2 billion and 21,970 compared with \$762.2 and 25,518, respectively, in the first half of 2016. Non-cleared notional amount for the 12 months ended June 30, 2017 declined to \$1.4 trillion, a 10.4% decrease compared with \$1.5 trillion the prior year. Trade count declined by 15.1% from 49,563 to 42,066 over the same period.

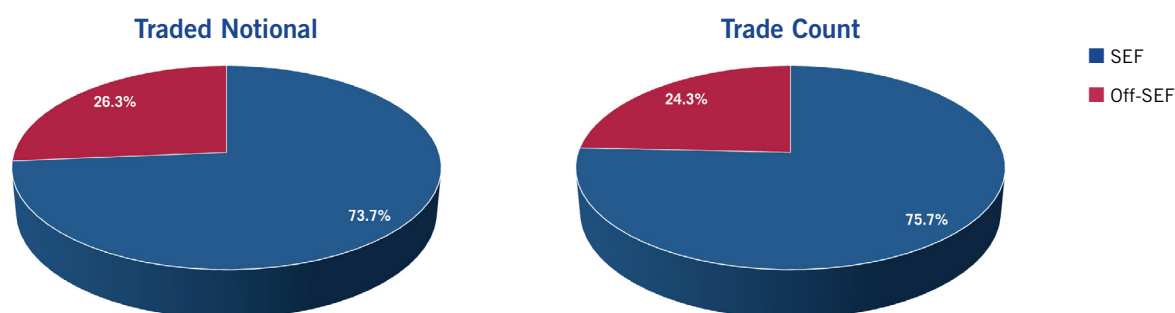
Index CDS Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

Index CDS Statistics: Trading Venue

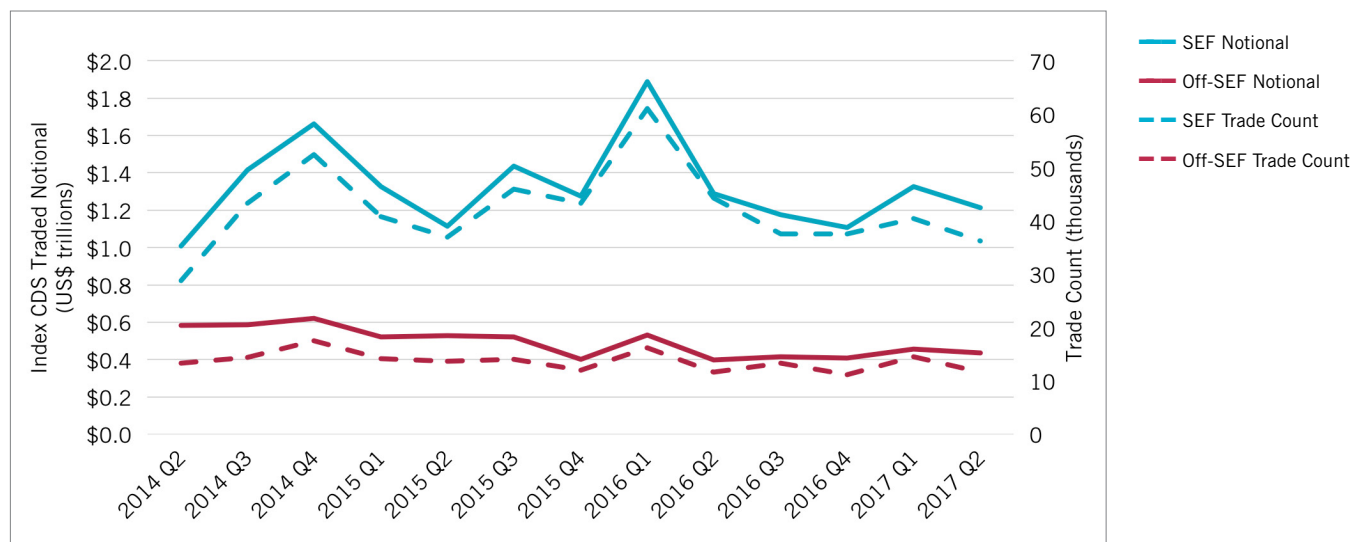
During the second quarter of 2017, off-SEF CDS index traded notional increased, while SEF-traded notional declined compared with the second quarter of 2016. The increase in off-SEF traded notional was due to an increase in average trade size, while the number of off-SEF transactions declined. SEF-traded index CDS represented 73.7% of traded notional and 75.7% of trade count. Total notional amount executed on SEFs was \$1.2 trillion, while \$0.4 trillion was executed off-SEF. 36,187 transactions were executed on SEFs and 11,590 transactions were off-SEF.



In the second quarter of 2017, index CDS notional executed on SEFs declined by 6% compared with the second quarter of 2016, from \$1.3 trillion to \$1.2 trillion. The number of trades executed on SEFs declined by 18.2% from 44,232 to 36,187 over the same period. In the first half of 2017, SEF-traded index CDS notional totaled \$2.5 trillion, a 20.1% decline from \$3.2 trillion in the first half of 2016. For the 12 months ended June 30, 2017, notional executed on SEFs shrank by 18.1% to \$4.8 trillion from \$5.9 trillion in the 12 months ended June 30, 2016. Trade count decreased by 22% from 194,491 to 151,724 over the same period.

Notional amount transacted off-SEF increased by 9.4% from \$396.2 billion in the second quarter of 2016 to \$433.5 billion in the second quarter of 2017. However, the number of transactions decreased by 0.4% over the same period, from 11,637 to 11,590. In the first half of 2017, off-SEF notional declined by 4.3% to \$888 billion, and trade count decreased by 6.3% to 26,094 compared to the first half of 2016. For the 12 months ended June 30, 2017, notional amount and transaction count executed off-SEF declined by 7.6% and 6.3%, respectively, compared with the prior year. Notional amount decreased from \$1.9 trillion to \$1.7 trillion, and the number of transactions declined from 53,876 to 50,465.

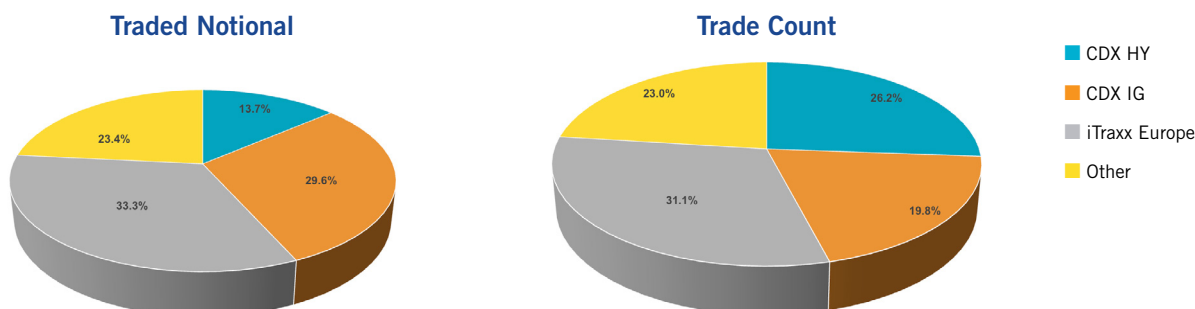
SEF and Off-SEF Index CDS Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

Index CDS: Product Taxonomy

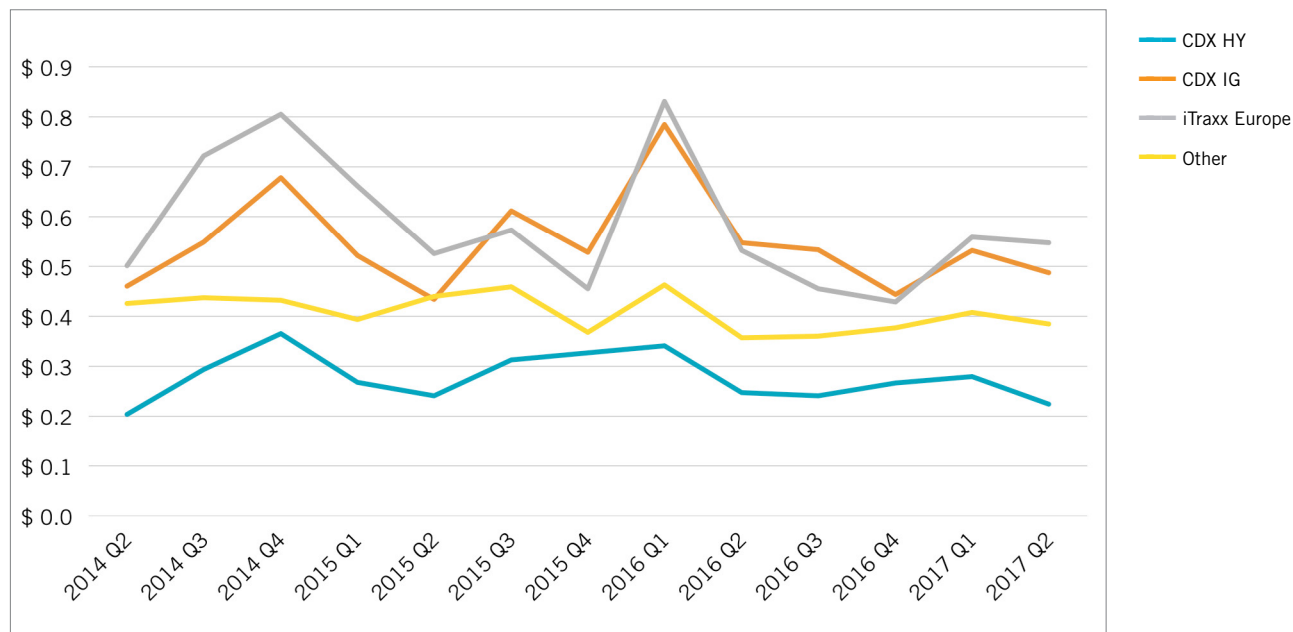
In the second quarter of 2017, iTraxx Europe accounted for 33.3% of index CDS traded notional and 31.1% of total trades. CDX HY and CDX IG represented 13.7% and 29.6% of traded notional and 26.2% and 19.8% of total trades, respectively.



iTraxx Europe traded notional increased by 2.9% in the second quarter of 2017 compared with the second quarter of 2016, to \$532.7 billion from \$548.3 billion. In the first half of 2017, iTraxx traded notional declined by 18.8% to \$1.1 trillion from \$1.4 trillion in the first half of 2016. In the 12 months ended June 30, 2017, iTraxx Europe traded notional declined by 16.7% to \$2 trillion compared with \$2.4 trillion in the 12 months ended June 30, 2016. iTraxx Europe trade count declined by 13.4% quarter-over-quarter and 28.4% year-over-year.

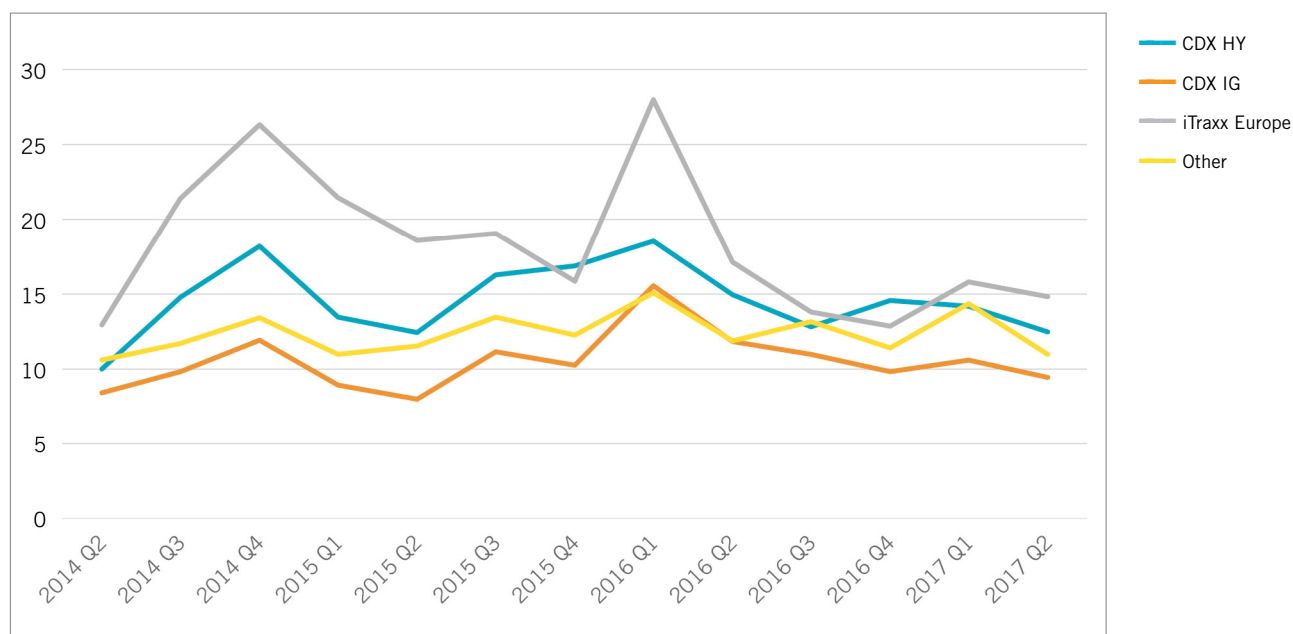
CDX HY and CDX IG traded notional declined by 9.3% and 11%, respectively, quarter-over-quarter. CDX HY decreased from \$248.1 billion in the second quarter of 2016 to \$225 billion in the second quarter of 2017. CDX IG declined from \$548.2 billion to \$487.6 billion over the same period. Trade count decreased quarter-over-quarter by 16.4% for CDX HY and by 20.4% for CDX IG. In the first half of 2017, CDX HY traded notional decreased by 14.2% to \$505.1 billion from \$588.9 billion in the first half of 2016. CDX IG traded notional declined by 23.5% to \$1 trillion over the same period. In the 12 months ended June 30, 2017, CDX HY traded notional decreased by 17.6% to \$1 trillion from \$1.2 trillion in the 12 months ended June 30, 2016. CDX IG traded notional declined by 19.2% over the same period, to \$2 trillion from \$2.5 trillion. Trade count for CDX HY and CDX IG declined by 18.9% and 16.4% year-over-year to 54,086 and 40,845, respectively.

Index CDS Traded Notional (US\$ trillions)



Source: DTCC and Bloomberg SDRs

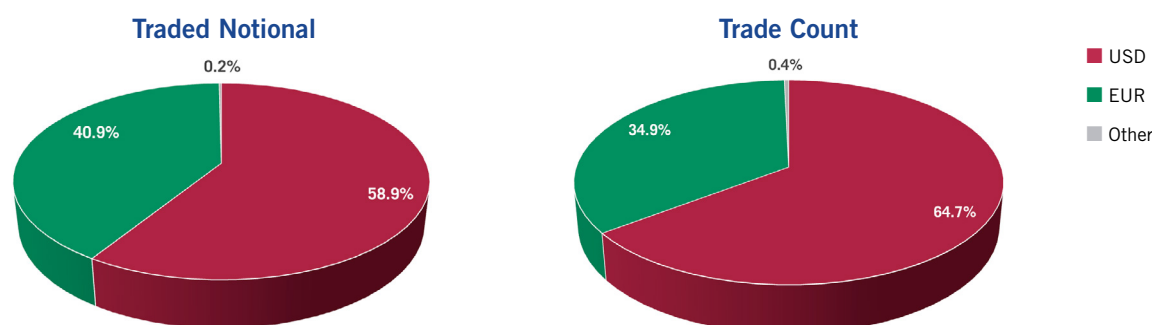
Index CDS Trade Count (thousands)



Source: DTCC and Bloomberg SDRs

Index CDS Statistics: Currency

Index CDS contracts denominated in the US dollars continued to decline in the second quarter of 2017, but remained the most actively traded instruments. US dollar-denominated index CDS represented 58.9% of traded notional and 64.7% of trade count. Euro-denominated transactions accounted for 40.9% and 34.9% of traded notional and trade count, respectively.

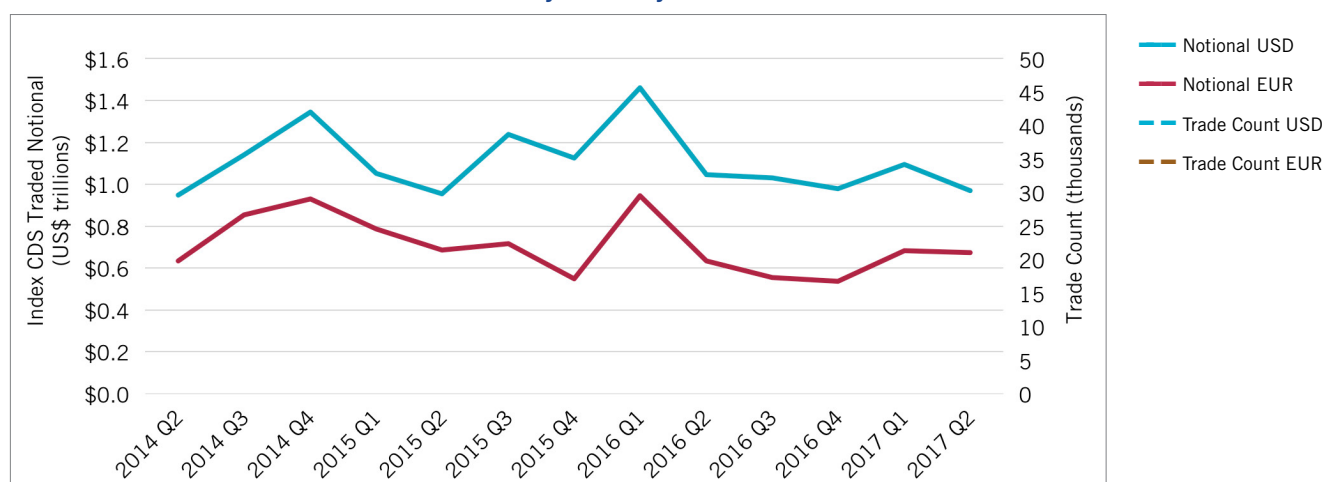


US dollar-denominated index CDS traded notional declined by 7.2% in the second quarter of 2017 compared with the second quarter of 2016, while euro-denominated traded notional increased by 6% over the same period. US dollar-denominated index CDS traded notional totaled \$970 billion in the second quarter of 2017 compared with \$1.1 trillion in the second quarter of 2016. Euro-denominated traded notional was \$672.6 billion in the second quarter of 2017 compared with \$634.5 billion in the second quarter of 2016. Trade count declined by 15.1% for US dollar trades and by 12.3% for euro trades to 30,924 and 16,672, respectively.

In the first half of 2017, US dollar-denominated index CDS traded notional totaled \$2.1 trillion, a 17.6% decline compared with \$2.5 trillion in the first half of 2016. Euro-denominated index CDS traded notional declined by 14.2% over the same period, from \$1.6 trillion to \$1.4 trillion. Trade count declined by 18.3% for US dollar trades and by 29.4% for euro trades, to 67,923 and 34,489, respectively.

During the 12 months ended June 30, 2017, US dollar-denominated index CDS traded notional declined by 16.4% to \$4.1 trillion from \$4.9 trillion in the 12 months ended June 30, 2016. Euro-denominated index CDS traded notional also decreased by 14% from \$2.8 trillion to \$2.5 trillion over the same period. Trade count declined by 13.1% and 27.6% for US dollar- and euro-denominated transactions, respectively, year-over-year. For other currencies, notional and trade count declined by 49.3% and 55.2%, respectively, year-over-year.

Index CDS Traded Notional and Trade Count by Currency



Source: DTCC and Bloomberg SDRs

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ABOUT ISDA

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has more than 875 member institutions from 68 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities

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