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 FIRST QUARTER OF 2021

Interest Rate Derivatives
IRD traded notional fell by 18.3% in the first quarter of 2021, while trade count increased by 14.0% compared to the first quarter of 2020. Fixed-for-floating interest rate swaps (IRS) traded notional rose by 41.7%, while forward rate agreements (FRAs) and overnight index swaps (OIS) traded notional decreased by 17.1% and 62.6%, respectively.

Fixed-for-floating IRS trade count rose by 16.1% in the first quarter of 2021 versus the first quarter of 2020. FRA and OIS trade count increased by 13.5% and 2.5%, respectively, over the same period. Average trade size grew for fixed-for-floating IRS transactions but declined for FRAs and OIS.

In the first quarter of 2021:

• IRD traded notional decreased by 18.3% to $71.2 trillion in the first quarter of 2021 from $87.2 trillion in the first quarter of 2020. Trade count grew by 14.0% to 549.6 thousand from 482.1 thousand over the same period.

• Single currency fixed-for-floating IRS traded notional increased to $27.6 trillion from $19.5 trillion. FRA traded notional fell to $24.4 trillion from $29.4 trillion, and OIS traded notional declined to $11.3 trillion from $30.2 trillion in the first quarter of 2020.

• Single currency fixed-for-floating IRS average trade size increased by 21.0%. FRA and OIS average trade size declined by 22.0% and 59.6%, respectively.

• Single currency fixed-for-floating IRS accounted for 63.2% of total IRD trade count but comprised only 38.7% of total IRD traded notional. FRAs and OIS represented 34.2% and 15.8% of total traded notional and 15.2% and 7.6% of total trade count, respectively.

• Cleared IRD transactions comprised 75.1% of total traded notional and 70.9% of total trade count. 79.9% of fixed-for-floating IRS, 94.2% of FRA, 59.3% of OIS and 22.6% of other IRD traded notional was cleared1.

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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.
• SEF-traded IRD represented 68.7% of total traded notional and 66.9% of total trade count. 70.7% of fixed-for-floating IRS, 91.7% of FRA, 37.6% of OIS and 35.4% of other IRD traded notional was executed on SEFs.

• IRD contracts denominated in US dollars contributed 54.7% of total traded notional and 44.7% of total trade count. Euro-denominated transactions accounted for 19.5% of total traded notional and 19.4% of total trade count. Sterling-denominated transactions comprised 14.4% and 10.7% of total IRD traded notional and trade count, respectively.

• Fixed-for-floating IRS traded notional denominated in US dollars increased by 60.1% compared to the first quarter of 2020, while US dollar-denominated FRAs and OIS decreased by 42.6% and 70.6%, respectively. Euro-denominated IRS and FRA traded notional increased by 29.3% and 174.4%, while euro-denominated OIS decreased by 40.3%. Sterling-denominated IRS and FRA traded notional increased by 35.7% and 28.3%, respectively, while sterling-denominated OIS traded notional decreased by 42.6%.
Credit Derivatives

Credit derivatives traded notional and trade count decreased by 32.9% and 32.0%, respectively, in the first quarter of 2021 compared to the first quarter of 2020. There was less trading activity across all major indices, including CDX HY, CDX IG and iTraxx Europe.

In the first quarter of 2021:

- Credit derivatives traded notional decreased to $2.6 trillion in the first quarter of 2021 from $3.9 trillion in the first quarter of 2020. Trade count fell to 69.7 thousand from 102.4 thousand over the same period.

- CDX HY traded notional decreased by 34.6% to $416.4 billion from $636.3 billion. CDX IG traded notional fell by 39.6% to $1.0 trillion from $1.6 trillion. iTraxx Europe traded notional declined by 20.8% to $570.7 billion in the first quarter of 2021 from $720.4 billion in the first quarter of 2020.

- CDX HY and CDX IG represented 15.7% and 37.2% of total traded notional and 27.2% and 25.8% of total trade count, respectively. iTraxx Europe accounted for 21.5% of total credit derivatives traded notional and 15.6% of total trade count.

- Cleared credit derivatives transactions represented 81.8% of total traded notional and 84.5% of total trade count. 96.5% of CDX HY, 96.4% of CDX IG, 92.0% of iTraxx Europe and 43.1% of other credit derivatives traded notional was cleared.

- SEF-traded credit derivatives represented 81.5% of total traded notional and 84.3% of total trade count. 96.6% of CDX HY, 96.3% of CDX IG, 91.9% of iTraxx Europe and 42.0% of other credit derivatives traded notional was executed on SEFs.

- Credit derivatives contracts denominated in US dollars represented 64.2% of total traded notional and 64.8% of total trade count. Euro-denominated transactions accounted for 35.5% and 34.8% of total traded notional and trade count, respectively.

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2 Credit derivatives mostly comprise credit default swap (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 declined by 18.3% to $71.2 trillion in the first quarter of 2021 from $87.2 trillion in the first quarter of 2020. Trade count grew by 14.0% over the same period to 549.6 thousand from 482.1 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 63.2% of total IRD trade count, but represented only 38.7% of total IRD traded notional in the first quarter of 2021. FRAs and OIS represented 34.2% and 15.8% of total traded notional and 15.2% and 7.6% 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 increased by 41.7% from $19.5 trillion in the first quarter of 2020 to $27.6 trillion in the first quarter of 2021. IRS trade count grew by 16.1% from 299.5 thousand to 347.6 thousand over the same period (see Chart 3 and Chart 4).

FRA traded notional decreased by 17.1% from $29.4 trillion in the first quarter of 2020 to $24.4 trillion in the first quarter of 2021. Trade count increased by 13.5% from 73.8 thousand to 83.8 thousand over the same period.

OIS traded notional fell by 62.6% from $30.2 trillion in the first quarter of 2020 to $11.3 trillion in the first quarter of 2021. OIS trade count increased by 2.5% to 42.0 thousand in the first quarter of 2021 compared to 41.0 thousand in the first quarter of last year.

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

![Chart 3: IRD Traded Notional by Product (US$ trillions)](source: DTCC and Bloomberg SDRs)

**Chart 4: IRD Trade Count by Product (thousands)**

![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 increased by 43.9% in the first quarter of 2021 versus the first quarter of 2020, totaling $430.7 billion. Fixed-for-floating IRS average daily trade count and average trade size increased by 17.9% and 21.0%, respectively (see Table 1).

FRA average daily traded notional totaled $386.7 billion in the first quarter of 2021, 15.8% lower than the first quarter of 2020. FRA average daily trade count increased by 15.3%, while average trade size decreased by 22.0% over the same period.

OIS average daily traded notional was $178.9 billion in the first quarter of 2021, a 61.4% decrease compared to the first quarter of 2020. OIS average daily trade count increased by 5.8%, while average trade size fell by 59.6%.

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

<table>
<thead>
<tr>
<th></th>
<th>Average Daily Traded Notional (US$ billions)</th>
<th>Average Daily Trade Count</th>
<th>Average Trade Size (US$ millions)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>IRS</td>
<td>FRAs</td>
<td>OIS</td>
</tr>
<tr>
<td>2021 Q1</td>
<td>430.7</td>
<td>386.7</td>
<td>178.9</td>
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<tr>
<td>2020 Q1</td>
<td>299.3</td>
<td>459.4</td>
<td>464.0</td>
</tr>
<tr>
<td>2021 Q1 vs. 2020 Q1</td>
<td>43.9%</td>
<td>-15.8%</td>
<td>-61.4%</td>
</tr>
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</table>

Source: DTCC and Bloomberg SDRs

IRD Central Clearing

Cleared IRD transactions represented 75.1% of total IRD traded notional and 70.9% of total trade count during the first quarter of 2021 (see Chart 5). IRD cleared notional and trade count equaled $53.5 trillion and 389.7 thousand, respectively.

Chart 5: IRD Cleared Traded Notional and Trade Count

Source: DTCC and Bloomberg SDRs

The DTCC SDR completed a planned system upgrade on November 21, 2020 that changed the reporting logic for the status of cleared trades. Following the upgrade, the percentage of IRD cleared trades appears lower in 2021 compared to historical averages as firms switched to the new reporting logic (see Chart 6).
In the first quarter of 2021, $22.0 trillion (79.9%) of fixed-for-floating IRS traded notional was cleared and $5.5 trillion was non-cleared. Traded notional of cleared FRAs and OIS totaled $23.0 trillion (94.2%) and $6.7 trillion (59.3%), respectively. $1.8 trillion (22.6%) of other IRD products notional was cleared and $6.2 trillion was non-cleared (see Chart 7).

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

SEF-traded IRD represented 68.7% of total IRD traded notional and 66.9% of total trade count in the first quarter of 2021 (see Chart 8). Total IRD traded notional executed on SEFs was $48.9 trillion, while $22.3 trillion was executed off-SEF. In terms of trade count, 367.7 thousand transactions were executed on SEFs and 181.9 thousand occurred off-SEF.

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

IRD traded notional executed on SEFs grew by 6.2% from $46.0 trillion in the first quarter of 2020 to $48.9 trillion in the first quarter of 2021. The number of trades executed on SEFs increased by 25.3% from 293.6 thousand to 367.7 thousand over the same period (see Chart 9).

IRD traded notional executed off-SEF decreased by 45.8% from $41.2 trillion in the first quarter of 2020 to $22.3 trillion in the first quarter of 2021. The number of transactions fell by 3.5% from 188.5 thousand to 181.9 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 2021, $19.5 trillion (70.7%) of fixed-for-floating IRS was traded on SEFs and $8.1 trillion was executed off-SEF. $22.3 trillion (91.7%) of FRAs was executed on SEFs and $2.0 trillion was traded off-SEF. $4.2 trillion (37.6%) of OIS was executed on SEFs and $7.0 trillion occurred off-SEF (see Chart 10).

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

**IRD by Currency**

IRD contracts denominated in US dollars were the most actively traded over the quarter. US dollar-denominated IRD contributed 54.7% of total IRD traded notional and 44.7% of total trade count in the first quarter of 2021. Euro-denominated transactions accounted for 19.5% of total IRD traded notional and 19.4% of trade count. Sterling-denominated transactions totaled 14.4% and 10.7% of total IRD traded notional and trade count, respectively (see Chart 11).

**Chart 11: IRD Traded Notional and Trade Count by Currency**
US dollar- and sterling-denominated IRD traded notional decreased by 27.3% and 18.3%, respectively, while euro- and yen-denominated IRD traded notional rose by 44.3% and 20.1%, respectively, in the first quarter of 2021 compared to the first quarter of 2020.

US dollar-denominated IRD traded notional totaled $38.9 trillion in the first quarter of 2021 versus $53.6 trillion in the first quarter of last year. Euro-denominated traded notional grew to $13.9 trillion in the first quarter of 2021 versus $9.6 trillion in the first quarter of 2020. Traded notional for sterling- and yen-denominated trades totaled $10.2 trillion and $1.4 trillion, respectively, in the first quarter of 2021 (see Chart 12).

Trade count for US dollar-denominated IRD trades decreased by 3.3% to 245.4 thousand. Trade count for euro-denominated transactions grew by 56.5% to 106.9 thousand, and increased by 32.3% to 58.9 thousand for sterling-denominated trades. Yen-denominated IRD trade count rose by 24.3% to 14.0 thousand (see Chart 13).

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

**Chart 13: IRD Trade Count by Currency (thousands)**
US dollar-denominated fixed-for-floating IRS traded notional rose by 60.1% to $14.9 trillion in the first quarter of 2021 versus $9.3 trillion in the first quarter of 2020. Euro-denominated fixed-for-floating IRS grew by 29.3% from $3.1 trillion to $4.0 trillion over the same period. Sterling- and yen-denominated IRS traded notional totaled $2.2 trillion and $1.2 trillion, respectively, in the first quarter of 2021 compared to $1.6 trillion and $926.4 billion in the first quarter of last year (see Chart 14).

US dollar-denominated FRA traded notional decreased by 42.6% to $13.9 trillion in the first quarter of 2021 from $24.3 trillion in the first quarter of 2020. Euro-denominated FRAs jumped by 174.4% to $7.1 trillion over the same period. Sterling-denominated FRAs increased by 28.3% to $2.9 trillion in the first quarter of 2021 from $2.3 trillion in the first quarter of 2020.

US dollar-denominated OIS traded notional decreased by 70.6% to $4.1 trillion in the first quarter of 2021 from $13.9 trillion in the first quarter of 2020. Euro-denominated OIS decreased by 40.3% to $1.8 trillion from $3.0 trillion over the same period. Sterling-denominated OIS fell by 42.6% to $4.5 trillion in the first quarter of 2021 from $7.8 trillion in the first quarter of 2020.

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

Source: DTCC and Bloomberg SDRs
CREDIT DERIVATIVES

Credit derivatives traded notional decreased by 32.9% to $2.6 trillion in the first quarter of 2021 from $3.9 trillion in the first quarter of 2020. The number of trades decreased by 32.0% to 69.7 thousand from 102.4 thousand over the same period (see Chart 15).

**Chart 15: Credit Derivatives Traded Notional and Trade Count**

Credit Derivatives Product Taxonomy

In the first quarter of 2021, CDX HY and CDX IG represented 15.7% and 37.2% of total traded notional and 27.2% and 25.8% of total trade count, respectively. iTraxx Europe accounted for 21.5% of total traded notional and 15.6% of trade count (see Chart 16).

**Chart 16: Credit Derivatives Traded Notional and Trade Count by Product**
CDX HY traded notional fell by 34.6% to $416.4 billion in the first quarter of 2021 versus $636.3 billion in the first quarter of last year. CDX IG traded notional dropped by 39.6% over the same period, to $984.5 billion from $1.6 trillion. Trade count fell by 34.1% for CDX HY and 36.1% for CDX IG (see Chart 17 and Chart 18).

iTraxx Europe traded notional decreased by 20.8% to $570.7 billion in the first quarter of 2021 from $720.4 billion in the first quarter of 2020. Trade count fell by 16.6% to 10.9 thousand over the same period.

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

**Chart 18: Credit Derivatives Trade Count By Product (thousands)**
Credit Derivatives Average Daily Traded Notional, Trade Count and Trade Size

CDX HY and CDX IG average daily traded notional decreased by 33.5% and 38.6% between the first quarters of 2020 and 2021 and totaled $6.8 billion and $16.1 billion, respectively. CDX HY average daily trade count fell by 33.0% and totaled 311, while CDX IG declined by 35.0% and totaled 294. CDX HY and CDX IG average trade size was $20.6 million and $53.1 million, respectively (see Table 2).

iTraxx Europe average daily traded notional decreased by 19.5% to $9.1 billion and average daily trade count fell by 15.3% to 173. iTraxx Europe average trade size dropped by 7.6% to $50.5 million in the first quarter of 2021 compared to $54.7 million in the first quarter of 2020.

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

<table>
<thead>
<tr>
<th></th>
<th>Average Daily Traded Notional (US$ billions)</th>
<th>Average Daily Trade Count</th>
<th>Average Trade Size (US$ millions)</th>
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<tbody>
<tr>
<td></td>
<td>CDX HY</td>
<td>CDX IG</td>
<td>iTraxx Europe</td>
</tr>
<tr>
<td>2021 Q1</td>
<td>6.8</td>
<td>16.1</td>
<td>9.1</td>
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<td>2020 Q1</td>
<td>10.3</td>
<td>26.3</td>
<td>11.3</td>
</tr>
<tr>
<td>2021 Q1 vs. 2020 Q1</td>
<td>-33.5%</td>
<td>-38.6%</td>
<td>-19.5%</td>
</tr>
</tbody>
</table>

Source: DTCC and Bloomberg SDRs

Credit Derivatives Central Clearing

Cleared credit derivatives transactions represented 81.8% of traded notional and 84.5% of trade count in the first quarter of 2021 (see Chart 19). Traded notional and trade count of cleared credit derivatives transactions was $2.2 trillion and 58.9 thousand, respectively.

Chart 19: Credit Derivatives Cleared Traded Notional and Trade Count

Credit derivatives cleared notional decreased by 34.0% to $2.2 trillion in the first quarter of 2021 from $3.3 trillion in the first quarter of 2020. Cleared trade count decreased by 29.8% to 58.9 thousand from 83.9 thousand over the same period (see Chart 20).

Non-cleared notional decreased by 27.9% to $481.7 billion in the first quarter of 2021 from $667.8 billion in the first quarter of 2020. Non-cleared trade count fell by 41.6% over the same period.
In the first quarter of 2021, $401.7 billion (96.5%) of CDX HY and $948.6 billion (96.4%) of CDX IG traded notional was cleared, while $14.7 billion and $35.9 billion was non-cleared.

Cleared notional of iTraxx Europe totaled $525.0 billion (92.0%) in the first quarter of 2021, while non-cleared notional was $45.8 billion. $292.0 billion (43.1%) of other credit derivatives traded notional was cleared and $385.3 billion was non-cleared (see Chart 21).

Chart 20: Credit Derivatives Cleared Traded Notional and Trade Count

Source: DTCC and Bloomberg SDRs
Credit Derivatives Trading Venue

SEF-traded credit derivatives represented 81.5% of total traded notional and 84.3% of total trade count in the first quarter of 2021 (see Chart 22). Total credit derivatives traded notional executed on SEFs was $2.2 trillion, while $0.4 trillion was traded off-SEF. 58.7 thousand transactions were executed on SEFs and 11.0 thousand transactions occurred off-SEF.

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

Credit derivatives traded notional executed on SEFs fell by 31.4% to $2.2 trillion in the first quarter of 2021 from $3.1 trillion in the first quarter of 2020. The number of trades executed on SEFs decreased by 27.2% over the same period (see Chart 23).

Credit derivatives traded notional executed off-SEF decreased by 38.9% to $489.4 billion in the first quarter of 2021 from $801.6 billion in the first quarter of 2020. The number of off-SEF transactions fell by 49.4% over the same period.

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

Source: DTCC and Bloomberg SDRs

Source: DTCC and Bloomberg SDRs
In the first quarter of 2021, $402.2 billion (96.6%) of CDX HY and $948.0 billion (96.3%) of CDX IG notional was traded on SEFs, and $14.2 billion and $36.5 billion, respectively, was executed off-SEF.

$524.5 billion (91.9%) of iTraxx Europe traded notional was executed on SEFs and $46.2 billion occurred off-SEF. Only $284.8 billion (42.0%) of traded notional for other credit derivatives was executed on SEFs and $392.5 billion was traded off-SEF (see Chart 24).

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

Credit derivatives contracts denominated in US dollars represented 64.2% and 64.8% of total traded notional and trade count, respectively, in the first quarter of 2021. Euro-denominated transactions accounted for 35.5% and 34.8% of total traded notional and trade count (see Chart 25).

**Chart 25: Credit Derivatives Traded Notional and Trade Count by Currency**
US dollar-denominated traded notional decreased by 39.7% to $1.7 trillion in the first quarter of 2021 from $2.8 trillion in the first quarter of 2020. Euro-denominated traded notional declined by 16.2% to $941.4 billion in the first quarter of 2021 compared to the first quarter of last year. Trade count fell by 39.1% for US dollar-denominated trades and 12.7% 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
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ISDA has published other recent research papers:

- **ISDA Margin Survey Year-end 2020, April 2021**

- **Adoption of RFRs: Major Developments in 2021, April 2021**

- **ISDA-Clarus RFR Adoption Indicator: March 2021, April 2021**

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