

KEY TRENDS IN THE SIZE AND COMPOSITION OF OTC DERIVATIVES MARKETS IN THE FIRST HALF OF 2024

The latest data from the Bank for International Settlements (BIS) over-the-counter (OTC) derivatives statistics shows a modest increase in notional outstanding of OTC derivatives during the first half of 2024 compared to the same period in 2023. While interest rate derivatives (IRD) notional outstanding remained relatively flat year-over-year, foreign exchange (FX), equity and commodity derivatives notional outstanding rose.

The gross market value of IRD derivatives declined amid a shift in central bank interest rate policy. Gross credit exposure also fell during the period.

By mid-year 2024, the notional outstanding of global OTC derivatives rose by 2.4% compared to mid-year 2023. In contrast, OTC derivatives gross market value fell by 14.0% and gross credit exposure, representing gross market value after netting, declined by 20.2%.

Total mark-to-market exposure dropped by 83.5% due to close-out netting. Credit exposure was further reduced by the collateral market participants posted for cleared and non-cleared derivatives.

Market participants posted \$364.4 billion of required initial margin (IM) for cleared IRD and credit default swap (CDS) transactions at all major central counterparties (CCPs) at mid-year 2024 compared to \$389.0 billion at mid-year 2023.

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KEY TRENDS

Global OTC derivatives notional outstanding rose to \$729.8 trillion at the end of June 2024, a 2.4% increase from mid-year 2023 and a 9.4% jump from year-end 2023¹. This growth partly reflects a seasonal pattern, where notional outstanding typically rises in the first half of the year and declines in the second half.

While IRD notional outstanding remained relatively flat year-over-year, FX derivatives expanded, particularly those denominated in Japanese yen. Equity and commodity derivatives notional outstanding also grew year-over-year.

IRD notional outstanding increased by 0.9% to \$578.8 trillion at mid-year 2024 from \$573.6 trillion a year earlier, while FX derivatives notional outstanding grew by 9.6% to \$129.9 trillion from \$118.5 trillion. Equity and commodity derivatives notional outstanding rose by 10.8% and 20.7%, totaling \$8.7 trillion and \$2.7 trillion, respectively. Credit derivatives notional outstanding declined by 9.1% from \$10.1 trillion to \$9.2 trillion (see Chart 1).

\$800 729.8 712.9 667.1 632 1 618.0 \$600 \$400 578.8 573.6 529.8 490.6 \$200 \$0 06/30/2022 12/31/2022 06/30/2023 12/31/2023 06/30/2024 Commodities ■ Credit derivatives Other derivatives Interest rate derivatives Foreign exchange ■ Equity

Chart 1: Global OTC Derivatives Notional Outstanding (US\$ trillions)

Source: BIS OTC Derivatives Statistics

The gross market value of OTC derivatives fell by 14.0% to \$17.1 trillion at the end of June 2024 versus mid-year 2023², driven by a change in US interest rates policy. Gross market value totaled 2.3% of notional outstanding versus 2.8% a year before (see Chart 2).

IRD gross market value dropped by 16.7% to \$12.0 trillion from \$14.4 trillion, while FX derivatives gross market value declined by 14.9% to \$3.7 trillion from \$4.3 trillion.

¹Bank for International Settlements (BIS) Over-the-counter (OTC) Derivatives Statistics https://data.bis.org/topics/OTC_DER/tables-and-dashboards

² Gross market value is the sum of the absolute values of all outstanding derivatives contracts with either positive or negative replacement values evaluated at market prices prevailing on the reporting date. See BIS Glossary

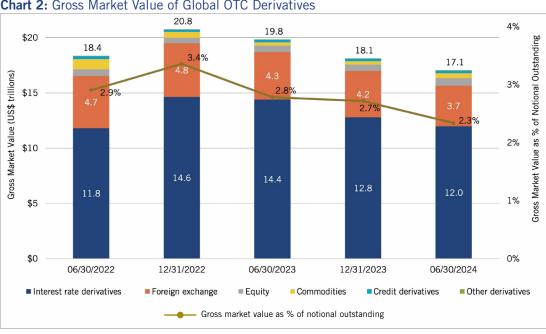


Chart 2: Gross Market Value of Global OTC Derivatives

OTC derivatives gross credit exposure, which is a more accurate measure of counterparty credit risk, declined by 20.2%, totaling \$2.8 trillion and accounting for 0.4% of notional outstanding³ (see Chart 3).

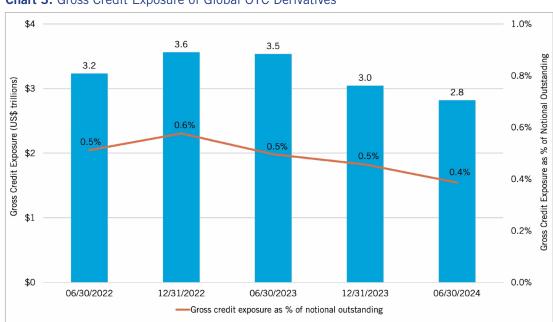


Chart 3: Gross Credit Exposure of Global OTC Derivatives

Source: BIS OTC Derivatives Statistics

Market participants reduced their mark-to-market exposure by 83.5% at mid-year 2024 as a result of close-out netting (see Chart 4). This credit exposure is further reduced by the collateral firms post for cleared and non-cleared derivatives transactions.

³ Gross credit exposure adjusts gross market value for legally enforceable netting agreements, but not for collateral See BIS Glossary

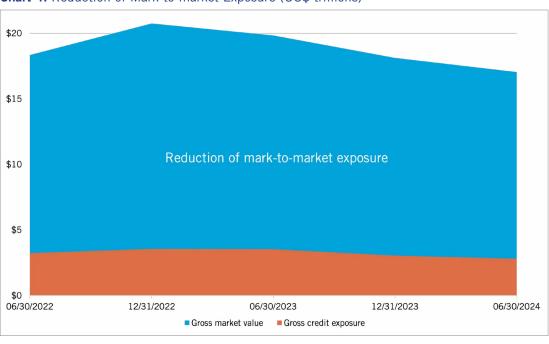
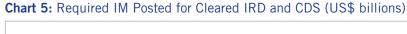
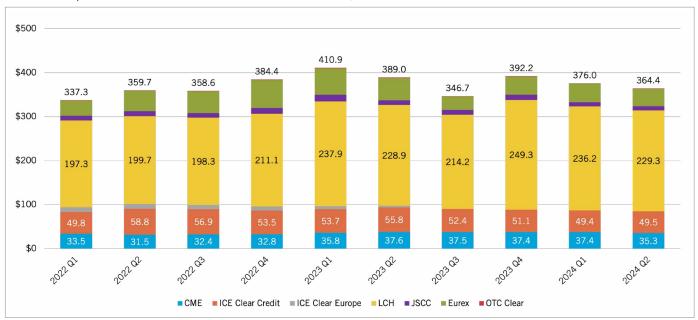


Chart 4: Reduction of Mark-to-market Exposure (US\$ trillions)

Market participants posted \$364.4 billion of required IM for cleared IRD and CDS at all major CCPs in the second quarter of 2024^{4,5}. This represents a 6.3% drop compared to \$389.0 billion in the second quarter of 2023 (see Chart 5).





Source: CCP Quantitative Disclosures

⁴ This amount reflects the initial margin (IM) required by central counterparties (CCPs) as reported in their quantitative disclosures under standards set by the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions. Market participants typically post IM amounts that exceed the minimum requirements, so the actual IM posted is likely to be higher than the reported figures. All numbers are converted to US dollars based on the exchange rates at the end of each quarter: www.x-rates.com/historical

⁵ LCH includes LCH Ltd and LCH SA



INTEREST RATE DERIVATIVES

IRD notional outstanding totaled \$578.8 trillion and accounted for 79.3% of global OTC derivatives notional outstanding at mid-year 2024. IRD notional outstanding increased by 0.9% compared to end-June 2023 and 9.2% versus the end of 2023 (see Chart 1).

Interest rate swaps (IRS) notional outstanding rose by 0.7% to \$469.2 trillion and accounted for 81.1% of total IRD notional outstanding at mid-year 2024, while forward rate agreement (FRA) notional outstanding grew by 1.7%. FRA and options notional outstanding was \$62.8 trillion and \$46.6 trillion, respectively (see Chart 6).

\$600 578.8 573.6 529 8 502.5 490.6 \$500 \$400 \$300 425.3 \$200 \$100 \$0 06/30/2022 06/30/2024 12/31/2022 12/31/2023 Options Other Instruments Swaps FRAs

Chart 6: Global IRD Notional Outstanding by Product (US\$ trillions)

Source: BIS OTC Derivatives Statistics

Euro-denominated IRD notional outstanding rose by 8.2% to \$206.1 trillion, representing 35.6% of total IRD notional outstanding at end-June 2024 versus 33.2% a year earlier.

US-dollar-denominated IRD notional outstanding fell by 17.3% to \$169.3 trillion, equating to 29.3% of total IRD notional outstanding at mid-year 2024 versus 35.7% at the end of June 2023.

Sterling-denominated IRD notional outstanding grew by 9.6% to \$44.6 trillion, accounting for 7.7% of total notional outstanding at mid-year 2024 compared to 7.1% at mid-year 2023 (see Chart 7).

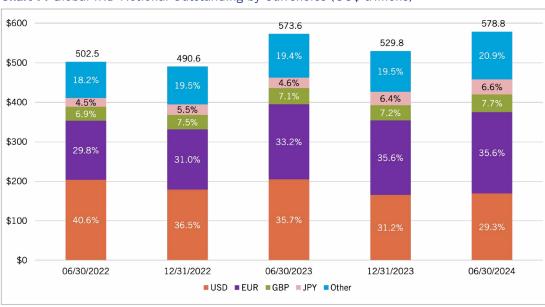


Chart 7: Global IRD Notional Outstanding by Currencies (US\$ trillions)

IRD gross market value fell by 16.7% to \$12.0 trillion at the end of June 2024 from \$14.4 trillion a year earlier. IRS gross market value declined by 16.5% to \$11.0 trillion from \$13.2 trillion, FRA gross market value dropped by 18.8% and options gross market value fell by 19.5% (see Chart 8).

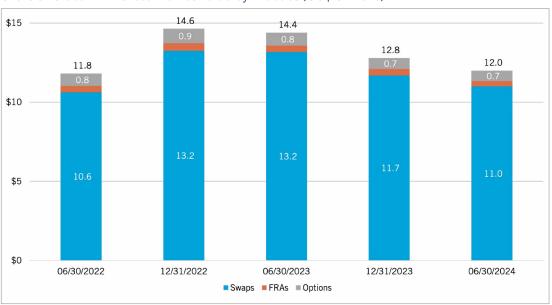


Chart 8: Global IRD Gross Market Value by Product (US\$ trillions)

Source: BIS OTC Derivatives Statistics

Euro-denominated IRD gross market value dropped by 20.6% to \$5.3 trillion from \$6.7 trillion, accounting for 44.1% of total gross market value.

US-dollar-denominated IRD gross market value declined by 9.3% to \$3.3 trillion from \$3.7 trillion, representing 27.9% of total IRD gross market value at mid-year 2024 compared to 25.6% a year earlier.

Sterling-denominated IRD gross market value fell by 24.5% to \$1.3 trillion, accounting for 11.2% of total gross market value at the end of June 2024 versus 12.3% at mid-year 2023 (see Chart 9).



Chart 9: Global IRD Gross Market Value by Currency (US\$ trillions)

IRD contracts with a remaining maturity up to and including one year totaled \$252.7 trillion, accounting for 43.7% of global IRD notional outstanding. IRD notional outstanding with a remaining maturity over one year and up to five years was \$199.7 trillion (34.5% of total IRD notional outstanding) and contracts with a remaining maturity over five years totaled \$126.2 trillion (21.8% of total IRD notional outstanding) (see Chart 10).

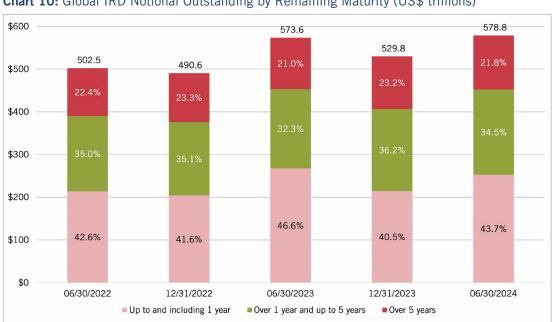


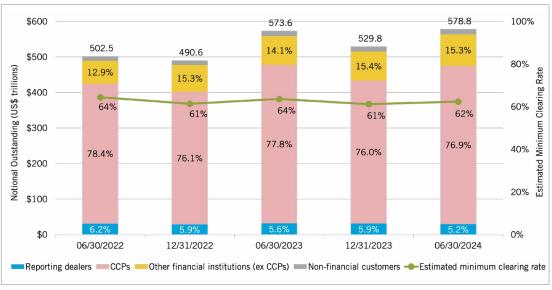
Chart 10: Global IRD Notional Outstanding by Remaining Maturity (US\$ trillions)

Source: BIS OTC Derivatives Statistics



The share of IRD notional cleared by CCPs was 76.9% totaling \$445.0 trillion in the first half of 2024. The estimated minimum clearing rate for IRD was 62.5% compared to 63.6% a year earlier⁶ (see Chart 11).

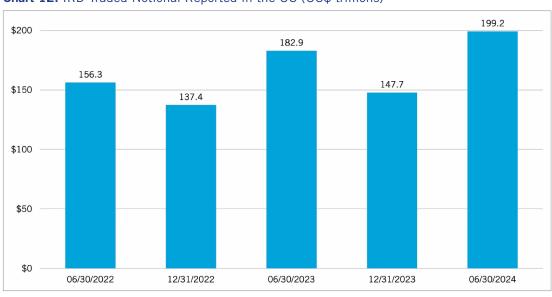
Chart 11: Global IRD Notional Outstanding by Counterparties (US\$ trillions)



Source: BIS OTC Derivatives Statistics

ISDA SwapsInfo data shows that trading in IRD products reported in the US increased by 8.9% to \$199.2 trillion in the first half of 2024 versus \$182.9 trillion in the same period in 2023⁷ (see Chart 12).

Chart 12: IRD Traded Notional Reported in the US (US\$ trillions)



Source: DTCC SDR

US-dollar-denominated IRD traded notional fell by 8.7% to \$69.6 trillion in the first half of 2024, accounting for 34.9% of total IRD traded notional versus 41.6% in the first half of 2023.

⁶ The estimated minimum clearing rate adjusts for potential double-counting of interdealer trades novated to CCPs. It is calculated as (CCP / 2) / (1 – (CCP / 2)), where CCP represents the share of notional amounts outstanding that dealers report against CCPs. The true clearing rate is likely to be higher as many trades will be initiated with CCPs

⁷ Based on the data from the Depository Trust and Clearing Corporation (DTCC) swap data repository (SDR). This data covers only transactions required to be disclosed under US Commodity Futures Trading Commission (CFTC) regulations. See ISDA SwapsInfo website www.swapsinfo.org/



Euro-denominated IRD traded notional rose by 8.4% to \$66.9 trillion in the first six months of 2024, representing 33.6% of total IRD traded notional versus 33.7% in the first half of 2023.

Sterling-denominated IRD traded notional rose by 27.2% to \$21.7 trillion, accounting for 10.9% of total IRD traded notional versus 9.3% a year earlier (see Chart 13).

199.2 \$200 182.9 156.3 147.7 \$150 137.4 33.7% 33.6% \$100 31.4% 32.4% 31.3% \$50 \$0 06/30/2022 12/31/2022 06/30/2023 12/31/2023 06/30/2024 ■USD ■EUR ■GBP ■JPY ■Other

Chart 13: IRD Traded Notional Reported in the US by Currency (US\$ trillions)

Source: DTCC SDR

US-dollar-denominated overnight index swaps (OIS) traded notional fell by 1.8% to \$54.4 trillion in the first half of 2024 from \$55.3 trillion in the first half of 2023. Euro-denominated OIS traded notional rose by 28.5% to \$34.1 trillion from \$26.5 trillion and sterling-denominated OIS traded notional increased by 17.9% to \$18.7 trillion from \$15.8 trillion.

Euro-denominated fixed-for-floating IRS traded notional climbed by 69.9% to \$16.9 trillion from \$9.9 trillion, while US-dollar-denominated fixed-for-floating IRS traded notional declined by 44.2% to \$4.2 trillion (see Chart 14).

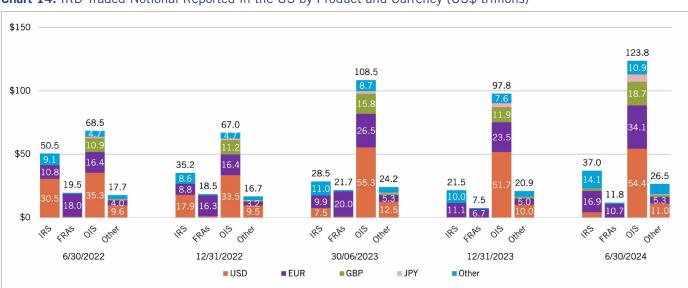


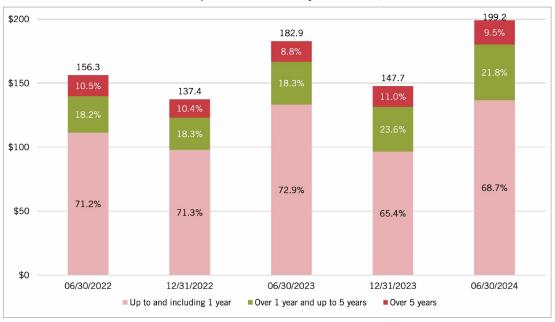
Chart 14: IRD Traded Notional Reported in the US by Product and Currency (US\$ trillions)

Source: DTCC SDR



In the first half of 2024, 68.7% of total IRD trading was in contracts with a tenor up to and including one year compared to 72.9% in the first half of 20238. Contracts with a tenor over one year and up to five years accounted for 21.8% of total IRD traded notional, while contracts with a tenor over five years totaled 9.5% (see Chart 15).

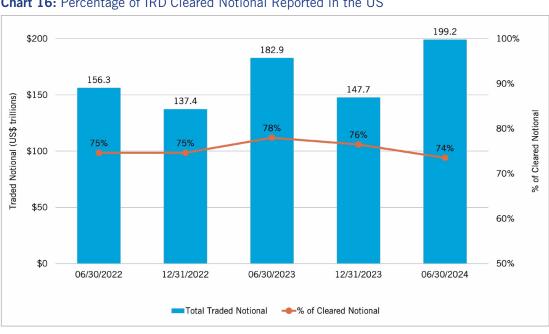
Chart 15: IRD Traded Notional Reported in the US by Tenor (US\$ trillions)



Source: DTCC SDR

Cleared IRD transactions comprised 73.5% of total IRD traded notional in the first half of 2024 (see Chart 16).

Chart 16: Percentage of IRD Cleared Notional Reported in the US



Source: DTCC SDR

⁸ Tenor is calculated as the difference between the effective date and the end date



CREDIT DERIVATIVES

According to the BIS data, CDS notional outstanding (including single- and multiple-name CDS) fell by 9.0% to \$9.0 trillion at mid-year 2024 versus mid-year 2023 and was higher by 5.4% compared to year-end 2023. Single-name CDS notional increased by 0.4% to \$4.0 trillion, while multiple-name CDS notional fell by 15.3% to \$5.0 trillion (see Chart 17).

9.9 9.7 \$10 9.3 9.0 8.5 \$8 4.0 4.1 3.9 4.0 3.9 \$6 \$4 \$2 \$0 06/30/2022 12/31/2022 06/30/2023 12/31/2023 06/30/2024 ■ Multi-name CDS ■ Single-name CDS

Chart 17: Global CDS Notional Outstanding (US\$ trillions)

Source: BIS OTC Derivatives Statistics

CDS gross market value rose by 1.8% to \$171.4 billion at mid-year 2024 from \$168.4 billion at mid-year 2023. Single-name CDS gross market value increased by 1.1% to \$77.0 billion from \$76.2 billion and multiple-name CDS gross market value grew by 2.4% to \$94.4 billion from \$92.2 billion (see Chart 18).

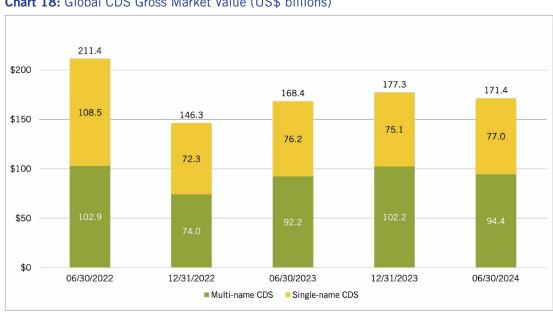


Chart 18: Global CDS Gross Market Value (US\$ billions)

Source: BIS OTC Derivatives Statistics

The share of CDS notional outstanding cleared by CCPs was 67.9% totaling \$6.1 trillion in the first half of 2024. The estimated minimum clearing rate for CDS contracts fell to 51.3% from 54.1% a year earlier (Chart 19).

9.9 9.7 60% 9.3 54% 9.0 53% \$9 8.5 49% 51% 17.4% 17.9% 20.4% Notional Outstanding (US\$ trillions) 20.2% Rate 20.3% Estimated Minimum Clearing 40% \$6 70.2% 69.0% 65.8% 67.9% 65.4% \$3 0% \$0 06/30/2022 12/31/2022 06/30/2023 12/31/2023 06/30/2024 Reporting dealers CCPs Other financial institutions (ex CCPs) = Non-financial customers - Estimated minimum clearing rate

Chart 19: Global CDS Notional Outstanding by Counterparties (US\$ trillions)

Source: BIS OTC Derivatives Statistics

According to ISDA SwapsInfo data, US-reported index CDS traded notional dropped by 1.3% to \$5.8 trillion in the first half of 2024 compared to \$5.9 trillion in the first half of 2023¹⁰. Cleared index CDS transactions comprised 81.6% of total credit derivatives traded notional in the first half of 2024 (see Chart 20).

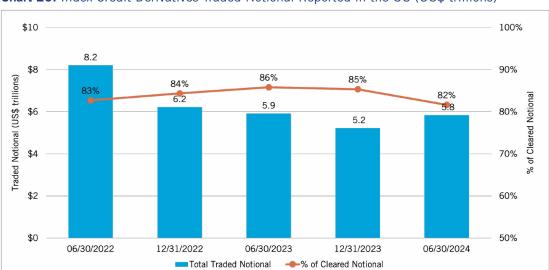


Chart 20: Index Credit Derivatives Traded Notional Reported in the US (US\$ trillions)

Source: DTCC SDR

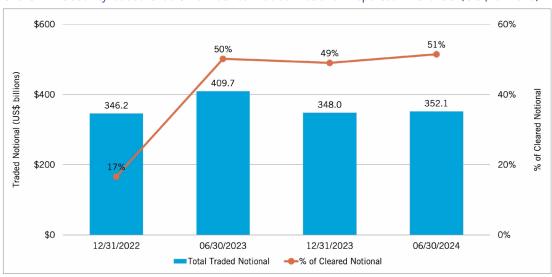
⁹ The estimated minimum clearing rate adjusts for potential double-counting of interdealer trades novated to CCPs. It is calculated as (CCP / 2) / (1 – (CCP / 2)), where CCP represents the share of notional amounts outstanding that dealers report against CCPs. The true clearing rate is likely to be higher as many trades will be initiated with CCPs

¹º Index credit derivatives mostly comprise credit default swap (CDS) indices, but also include CDS index tranches, credit swaptions, exotic products, total return swaps and an insignificant amount of single-name CDS. This data only includes transactions reported to the DTCC SDR under CFTC regulations. Credit derivatives reported to the DTCC security-based swap data repository (SBSDR) under US Securities and Exchange Commission (SEC) regulations are not included in this data



US-reported security-based credit derivatives traded notional dropped to \$352.1 billion in the first half of 2024 from \$409.7 billion in the first half of 2023¹¹. Cleared security-based credit derivatives transactions comprised 51.5% of total credit derivatives traded notional¹² (see Chart 21).

Chart 21: Security-based Credit Derivatives Traded Notional Reported in the US (US\$ billions)



Source: DTCC and ICE Trade Vault SBSDRs

¹¹ Security-based credit derivatives mostly comprise single-name CDS, but also include total return swaps, index, exotic, index tranche, swaptions and other single-name CDS (eg, asset-backed, loan and municipal security-based CDS). This data includes security-based credit derivatives transactions reported to the DTCC SBSDR and ICE Trade Vault from February 2022 under SEC regulations. It does not include any transactions that are required to be reported to the DTCC SDR under CFTC regulations

¹² Cleared includes transactions that have been cleared or are planned to be submitted to clearing. The percentage of cleared transactions increased significantly in the first quarter of 2023 due to the change in reporting logic. Prior to December 2022, only 'Yes' or 'No' was expected to be reported for the cleared status. Following the change, 'Intent to clear' is also expected to be reported for transactions that are planned to be submitted to clearing





ISDA has published other recent research papers:

- Interest Rate Derivatives Trading Activity Reported in EU, UK and US Markets: Third Quarter of 2024 and Year-to-September 30, 2024 www.isda.org/a/lqbgE/Interest-Rate-Derivatives-Trading-Activity-Reported-in-EU-UK-and-US
 - www.isda.org/a/lqbgE/Interest-Rate-Derivatives-Trading-Activity-Reported-in-EU-UK-and-US-Markets-Third-Quarter-of-2024-Year-to-September-30-2024.pdf
- CDS Market Dynamics: Analyzing Trends in Single-name CDS and Index CDS Market Activity

www.isda.org/a/U3bgE/CDS-Market-Dynamics-Analyzing-Trends-in-Single-name-CDS-and-Index-CDS-Market-Activity.pdf

 SwapsInfo Third Quarter of 2024 and Year-to-September 30, 2024 Review www.isda.org/a/pAQgE/SwapsInfo-Third-Quarter-of-2024-and-Year-to-September-30-2024-Review.pdf

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addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's web site: www.isda.org. Follow us on, LinkedIn and YouTube.