

KEY TRENDS IN THE SIZE AND COMPOSITION OF OTC DERIVATIVES MARKETS IN THE FIRST HALF OF 2019

The latest data from the Bank for International Settlements (BIS) over-the-counter (OTC) derivatives statistics shows that OTC derivatives notional outstanding increased in the first half of 2019 compared with the second half of 2018 and year-over-year. Some of this increase reflects a seasonal pattern, under which notional outstanding tends to increase in the first six months of the year and decrease in the second half.

Both US dollar- and euro-denominated interest rate derivatives (IRD) contracts contributed to the growth. The increase was driven by shorter-term contracts. There was a noticeable boost in the share of cleared IRD contracts, as demonstrated by higher IRD notional outstanding with central counterparties (CCPs).

This trend in notional outstanding can also be seen in swap trading volumes in the US. ISDA SwapsInfo data shows that trading in both US dollar- and euro-denominated IRD products increased during the first half of 2019 compared to the second half of 2018 and year-over-year.

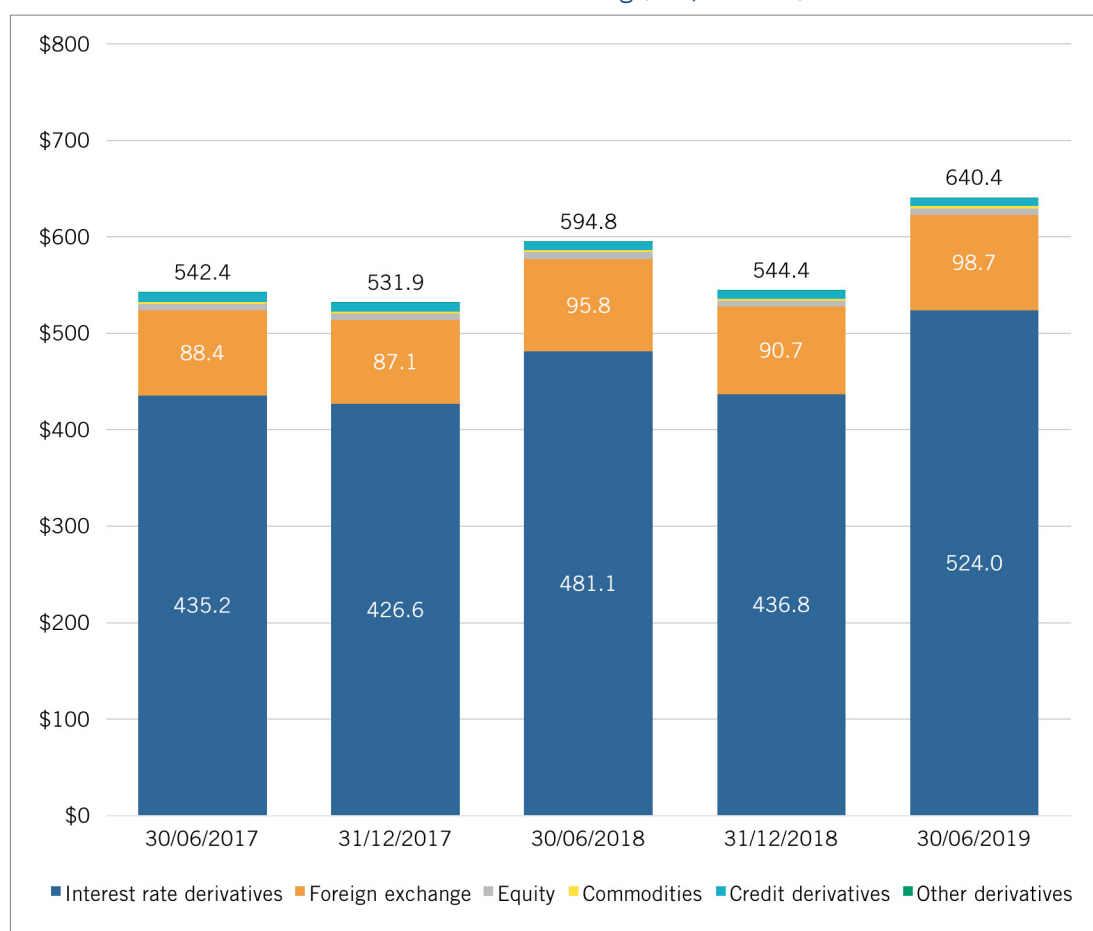
BIS data shows that the gross market value of OTC derivatives contracts increased in the first half of 2019. Gross credit exposure – gross market value after netting – also increased. Market participants reduced their mark-to-market exposure by about 77.9% as a result of close-out netting. This credit exposure is further reduced by the collateral that market participants post for cleared and non-cleared transactions.

KEY TRENDS

OTC derivatives notional outstanding was \$640.4 trillion at the end of June 2019, 7.7% higher compared with mid-year 2018 and 17.6% higher compared with year-end 2018^{1,2} (see Chart 1).

IRD notional outstanding totaled \$524.0 trillion at mid-year 2019, and accounted for 81.8% of total notional outstanding. IRD notional outstanding increased by 8.9% from mid-year 2018 and 19.9% versus year-end 2018, essentially mirroring the growth of the overall market.

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

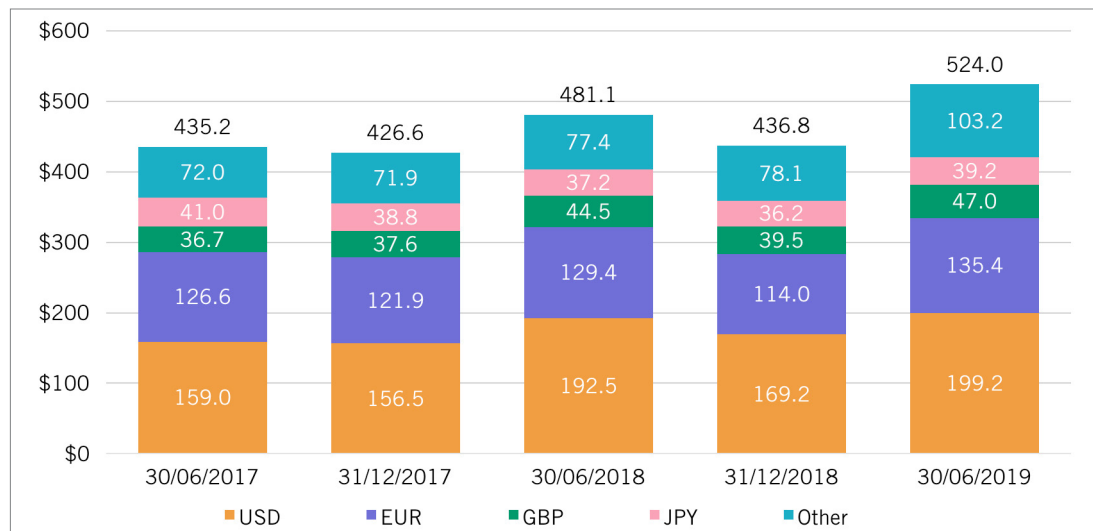


Source: BIS OTC Derivatives Statistics

As shown in Chart 2, US dollar-denominated IRD notional outstanding totaled \$199.2 trillion at mid-year 2019, up by 3.5% compared to mid-year 2018 and 17.8% versus year-end 2018. Euro-denominated IRD notional outstanding totaled \$135.4 trillion at the end of June 2019, up by 4.6% from mid-year 2018 and 18.8% versus year-end 2018.

¹ BIS OTC Derivatives Statistics <https://www.bis.org/statistics/derstats.htm>

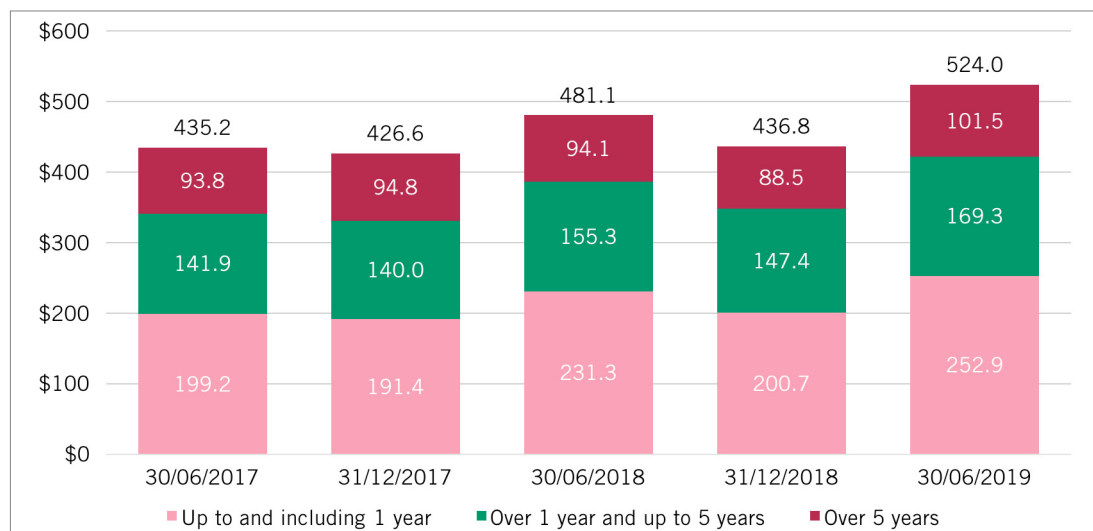
² As noted in the BIS commentary, part of this increase reflects a seasonal pattern evident in the data since 2016. Notional amounts outstanding have tended to decrease in the second half of a year, followed by a rebound in the first https://www.bis.org/publ/otc_hy1911.pdf

Chart 2: Global IRD Notional Outstanding by Currencies (US\$ trillions)

Source: BIS OTC Derivatives Statistics

Chart 3 shows that IRD contracts with a remaining maturity of up to and including one year totaled \$252.9 trillion at mid-year 2019, up by 9.3% from mid-year 2018 and 26.0% versus year-end 2018.

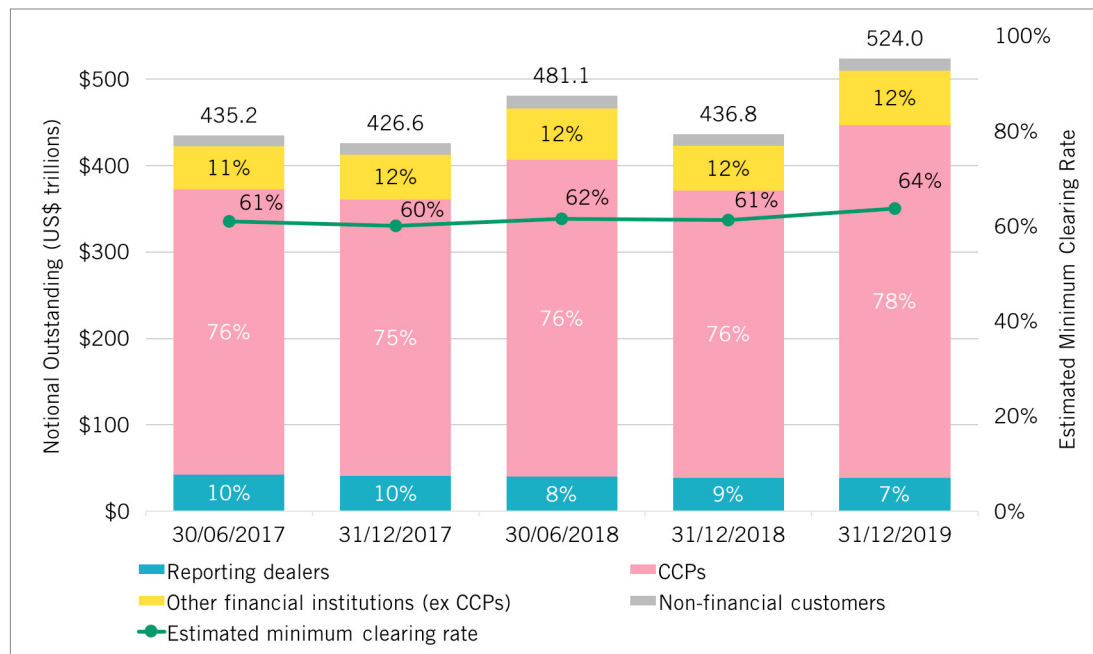
IRD notional outstanding with a remaining maturity of over one year and up to five years was \$169.3 trillion at the end of June 2019, an increase of 9.0% from mid-year 2018 and 14.9% compared to year-end 2018. IRD contracts with maturity of over five years increased by 7.8% from mid-year 2018 and 14.7% versus year-end 2018.

Chart 3: Global IRD Notional Outstanding by Remaining Maturity (US\$ trillions)

Source: BIS OTC Derivatives Statistics

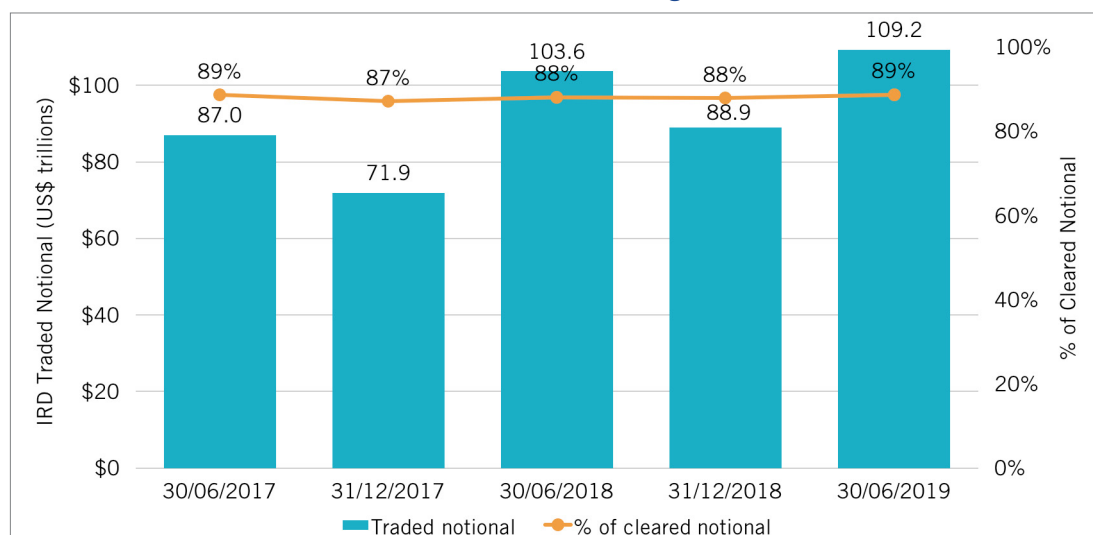
The share of IRD notional outstanding with CCPs increased to 77.8% in the first half of 2019 and totaled \$407.4 trillion (see Chart 4). The estimated minimum clearing rate for IRD rose to its highest level of 63.7%³.

³ 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

Chart 4: Global IRD Notional Outstanding by Counterparties

Source: BIS OTC Derivatives Statistics

ISDA SwapsInfo data shows that the clearing rate in the US has been fluctuating between 87% and 89% since mid-year 2017, as illustrated in Chart 5⁴. About 89% of US dollar- and euro-denominated IRS traded notional was cleared in the first half of 2019.

Chart 5: US Dollar- and Euro-denominated IRD Percentage of Cleared Notional in the US

Source: DTCC and Bloomberg SDRs

Trading of US dollar- and euro-denominated contracts in the US mirrored the trend in global IRD notional outstanding⁵ (see Charts 6 and 7). Trading in US dollar-denominated IRD products – particularly shorter-term forward rate agreements (FRAs) and overnight index swaps (OIS) – increased in the first half of 2019 compared to the first half of 2018 and second half of 2018.

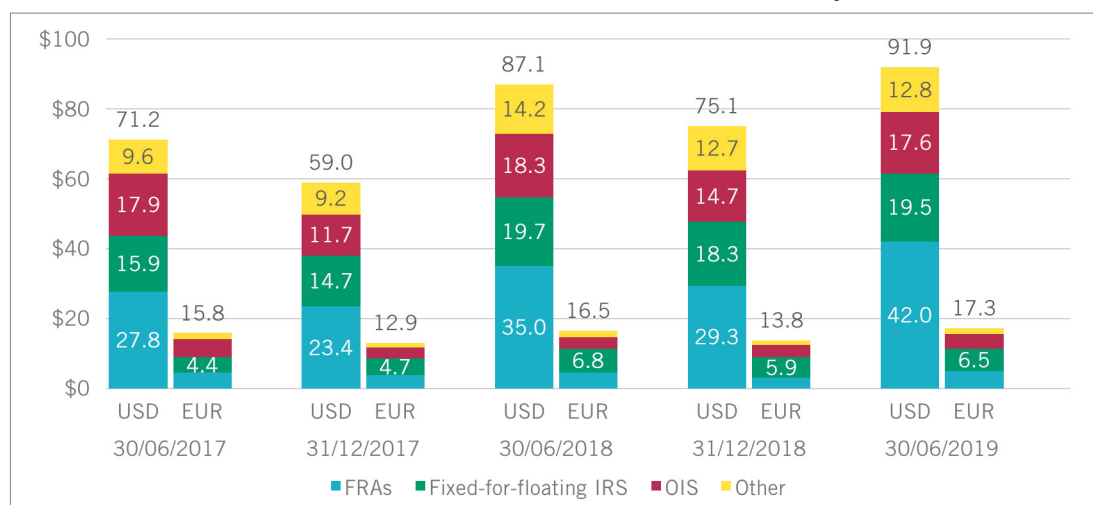
⁴ Based on data from the Depository Trust and Clearing Corporation (DTCC) and Bloomberg swap data repositories (SDRs). See ISDA SwapsInfo website www.swapsinfo.org/

⁵ Based on the data from the DTCC and Bloomberg SDRs. See ISDA SwapsInfo website www.swapsinfo.org/

US dollar-denominated IRD trading volume in the US totaled \$91.9 trillion during the first half of 2019, up by 5.5% compared to the first half of 2018 (\$87.1 trillion) and 22.4% compared to the second half of 2018 (\$75.1 trillion). More than three quarters (76.4%) of trading volume in the first half of 2019 was in contracts with a term of one year or less⁶.

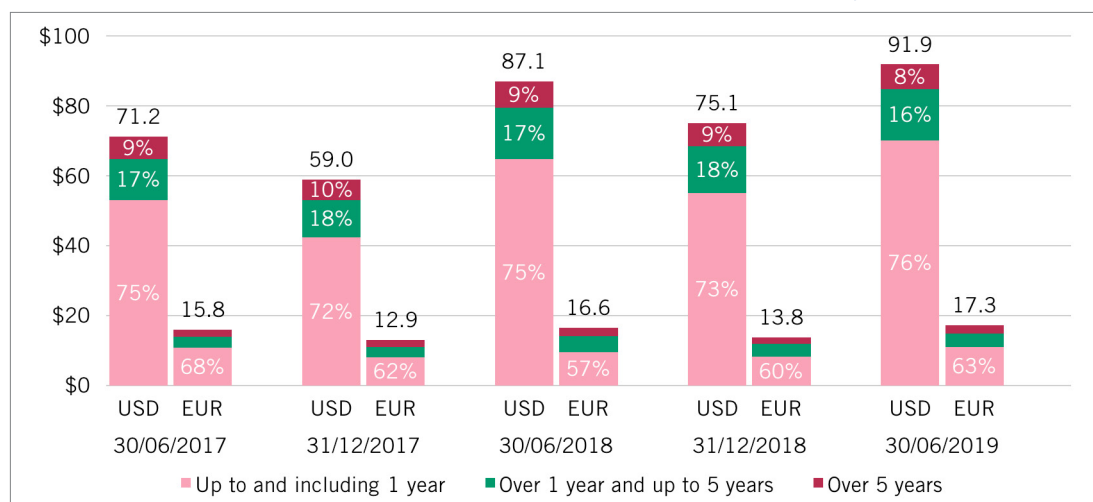
Euro-denominated IRD trading volume in the US totaled \$17.3 trillion during the first half of 2019, up by 4.5% compared to the first half of 2018 (\$16.5 trillion) and 25.3% compared to the second half of 2018 (\$13.8 trillion). Nearly two thirds (63.4%) of trading volume in the first half of 2019 was in contracts with a term of one year or less.

Chart 6: US Dollar- and Euro-denominated IRD Traded Notional in the US by Product (US\$ trillions)



Source: DTCC and Bloomberg SDRs

Chart 7: US Dollar- and Euro-denominated IRD Traded Notional in the US by Tenor (US\$ trillions)

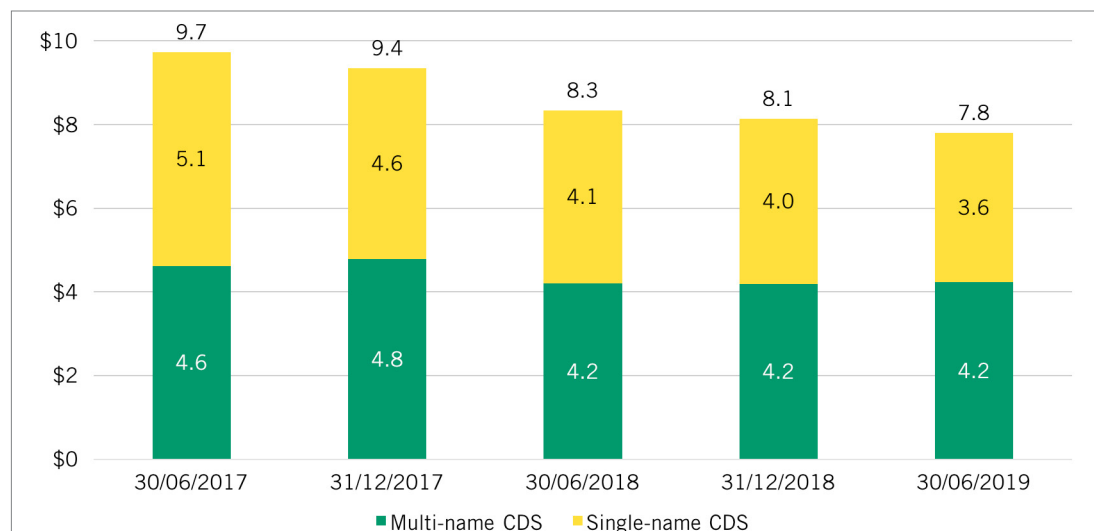


Source: DTCC and Bloomberg SDRs

According to BIS data, credit default swaps (CDS) notional outstanding (including single-name and index CDS) declined to \$7.8 trillion at mid-year 2019, down by 4.1% from \$8.3 trillion at mid-year 2018 and 6.4% from \$8.1 trillion at year-end 2018, as shown in Chart 8.

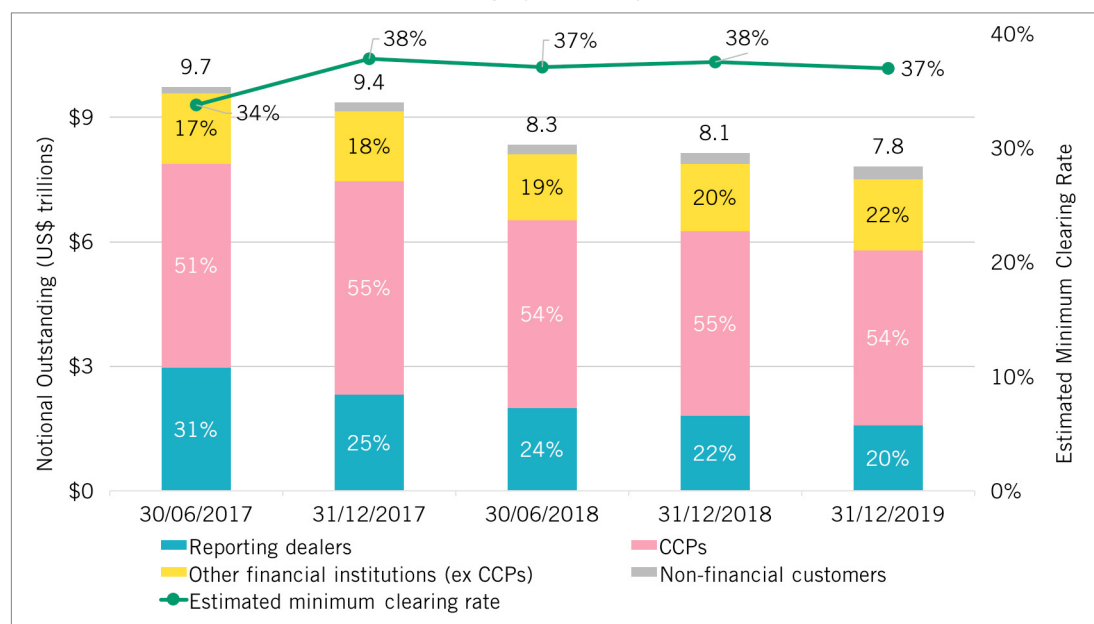
Single-name CDS notional declined by 9.4% to \$3.6 trillion at mid-year 2019 from \$4.1 trillion at mid-year 2018, while multiple-name CDS notional rose by 1.0% to \$4.2 trillion over the same period.

⁶ Term is calculated as the difference between the effective date and the end date

Chart 8: Global CDS Notional Outstanding (US\$ trillions)

Source: BIS OTC Derivatives Statistics

The share of CDS notional outstanding with CCPs was at 54.0% in the first half of 2019 and totaled \$4.2 trillion (see Chart 9). The estimated minimum clearing rate for CDS contracts was around 37.0%⁷.

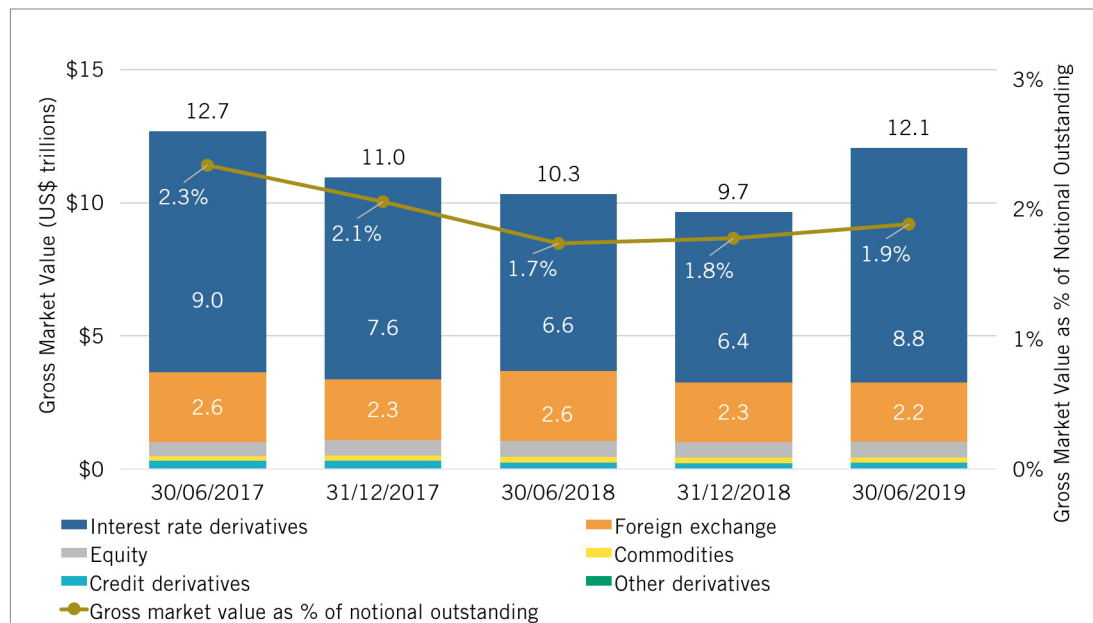
Chart 9: Global CDS Notional Outstanding by Counterparties

Source: BIS OTC Derivatives Statistics

Chart 10 illustrates that the gross market value of OTC derivatives jumped from its lowest level of \$9.7 trillion at year-end 2018 to \$12.1 trillion at mid-year 2019. It was up by 17% from \$10.3 trillion at mid-year 2018 and 25% versus year-end 2018⁸. Gross market value totaled 1.9% of notional outstanding at mid-year 2019 compared with 1.7% at mid-year 2018.

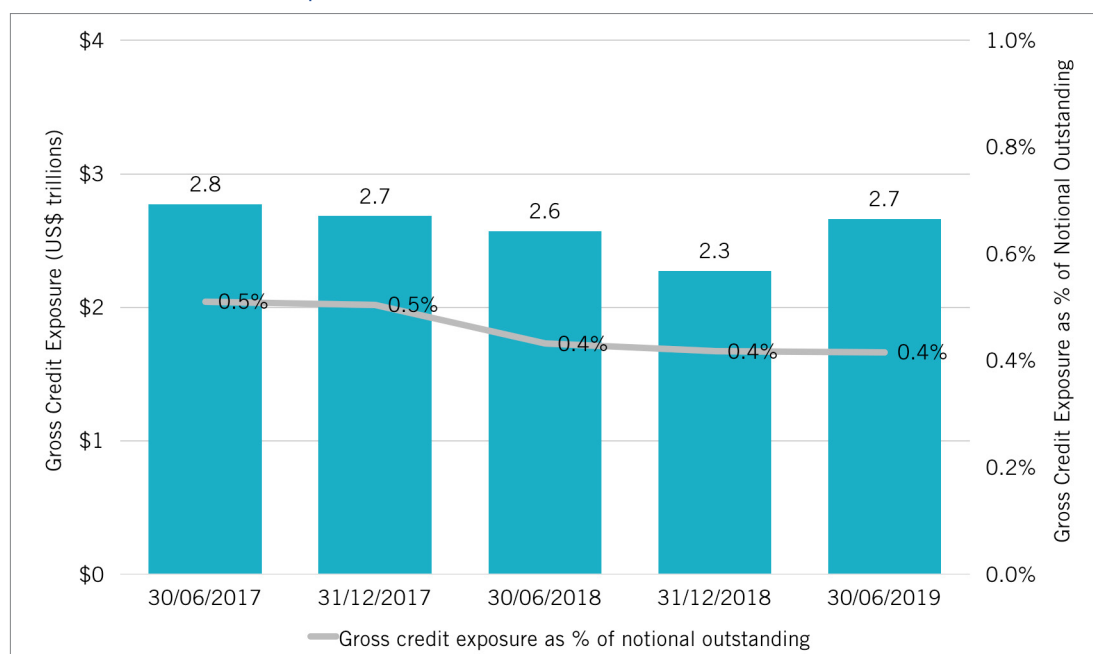
⁷ The estimated minimum clearing rate adjusts for potential double-counting of interdealer trades novated to CCPs. It is calculated as $(CCP / 2) / (1 - (CCP / 2))$, where 'CCP' represents the share of notional amounts outstanding that dealers report against CCPs. The true clearing rate is likely to be higher as many trades will be initiated with CCPs

⁸ 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 10: Gross Market Value of Global OTC Derivatives

Source: BIS OTC Derivatives Statistics

The gross credit exposure of OTC derivatives, which is a more accurate measure of counterparty credit risk, also increased (see Chart 11). It totaled \$2.7 trillion and accounted for 0.4% of notional outstanding at mid-year 2019⁹.

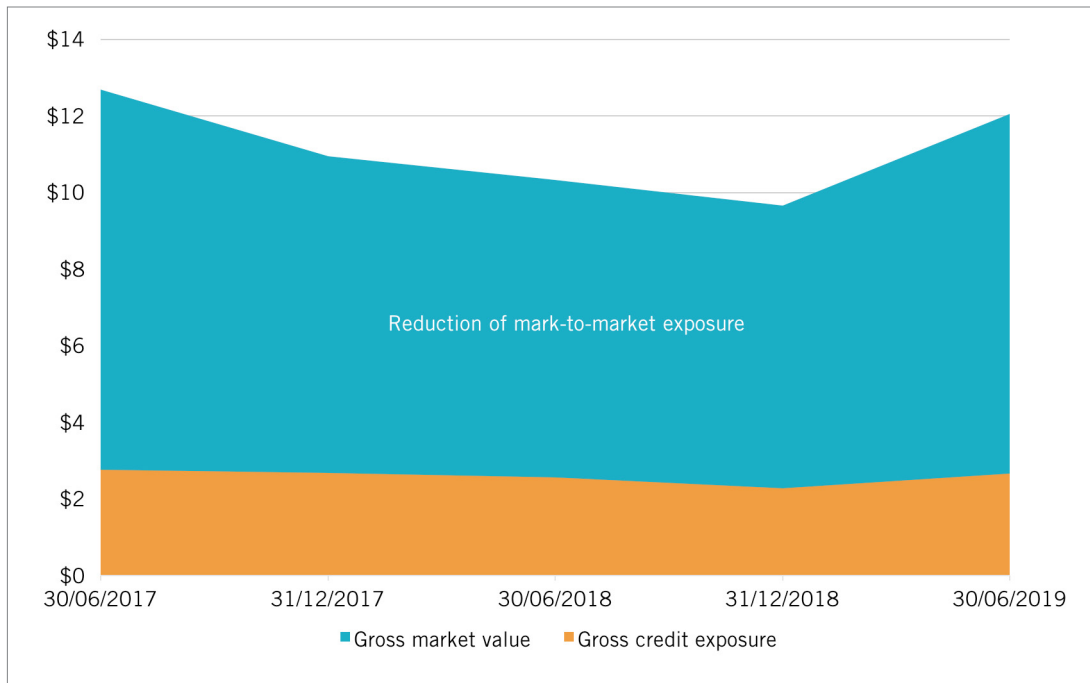
Chart 11: Gross Credit Exposure of Global OTC Derivatives

Source: BIS OTC Derivatives Statistics

Chart 12 shows that market participants reduced their mark-to-market exposure by about 77.9% at mid-year 2019 as a result of close-out netting. Credit exposure is further reduced by the collateral that market participants post for cleared and non-cleared transactions.

⁹ Gross credit exposure adjusts gross market value for legally enforceable netting agreements, but not for collateral. See BIS Glossary

Chart 12: Reduction of Mark-to-market Exposure (US\$ trillions)



Source: BIS OTC Derivatives Statistics



ISDA has published other recent research papers:

- ***Interest Rate Benchmarks Review: Third Quarter of 2019 and Year-to-September 30, 2019, October 2019***

<https://www.isda.org/a/OmaTE/Interest-Rate-Benchmarks-Review-Q3-2019.pdf>

- ***SwapsInfo Third Quarter of 2019 and Year-to-September 30, 2019 Review, October 2019***

<https://www.isda.org/a/m4aTE/SwapsInfo-Q3-2019-and-Year-to-Sept.-30-2019-Review-Full-Report.pdf>

- ***Global Credit Default Swaps Market Study, September 2019***

<https://www.isda.org/a/JUPT/Global-CDS-Market-Study.pdf>

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international and regional banks. In 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 Twitter @ISDA.