May 2018

ISDA.

SwapsInfo First Quarter 2018 Review

The ISDA SwapsInfo Quarterly Review provides analysis of interest rate derivatives (IRD) and index credit default swap (CDS) trading activity. The report provides a breakdown of cleared and non-cleared activity and trading volumes executed on swap execution facilities (SEFs) and bilaterally, as well as by product and currency.

IRD 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). This report covers only trades required to be disclosed under US regulatory guidelines.

Safe, Efficient Markets

KEY HIGHLIGHTS FOR THE FIRST QUARTER OF 2018

Interest Rate Derivatives

During the first quarter of 2018, IRD traded notional rose by 29.2% to \$66.2 trillion from \$51.3 trillion in the first quarter of 2017. Trade count grew by 18.9% over the same period, to 364,370 from 306,546. The increase was mainly driven by US dollar- and euro-denominated fixed-for-floating interest rate swaps (IRS), US dollar-denominated forward rate agreements (FRAs) and sterling-denominated overnight index swaps (OIS).

In the first quarter of 2018:

- Cleared IRD transactions represented 88.6% of total traded notional and 81.7% of trade count.
- SEF-traded IRD represented 56.7% of total traded notional and 62.5% of trade count.
- Single currency fixed-for-floating IRS accounted for 63.6% of total IRD trades, but represented only 29.3% of IRD traded notional. FRAs and OIS represented 16.4% and 5.0% of total trade count and 36.16% and 21.3% of traded notional, respectively.
- IRD in US dollars remained the most actively traded instruments, comprising 69.3% of traded notional and 54.4% of trade count. Euro-denominated IRD transactions accounted for a far smaller percentage of notional (13.7%) and trade count (15.1%).

Index Credit Default Swaps

Index CDS traded notional increased by 49.7% to \$2.7 trillion in the first quarter of 2018 from \$1.8 trillion in the first quarter of 2017. Index CDS trade count grew by 19.4% over the same period to 65,625 from 54,985. The increase was mainly driven by 78% growth in CDX IG traded notional and a 58% rise in CDX HY traded notional.

In the first quarter of 2018:

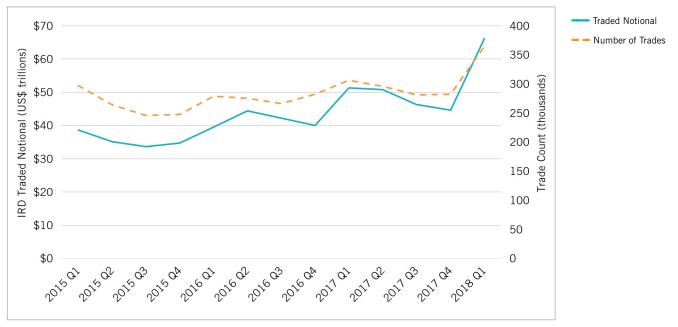
- Cleared index CDS represented 83.6% of total traded notional and 83.2% of trade count.
- SEF-traded index CDS comprised 79.4% of total traded notional and 80.1% of trade count.
- The CDX HY and CDX IG indices represented 16.6% and 35.6% of total index CDS traded notional and 28.4% and 23.5% of trade count, respectively. iTraxx Europe accounted for 28.7% of total traded notional and 26.9% of trade count.
- Index CDS contracts denominated in the US dollars remained the most actively traded instruments and represented 67.3% of total index CDS traded notional and 70.2% of trade count. Euro-denominated index CDS transactions accounted for 32.5% and 29.4% of traded notional and trade count, respectively.

Safe,

INTEREST RATE DERIVATIVES

During the first quarter of 2018, IRD traded notional rose by 29.2% to \$66.2 trillion from \$51.3 trillion in the first quarter of 2017. Trade count grew by 18.9% over the same period, to 364,370 from 306,546.

IRD Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

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

In the first quarter of 2018, average daily traded notional for IRD totaled \$1 trillion, an increase of 29.2% compared with \$788.7 billion in the first quarter of 2017. Average daily trade count totaled 5,606 and average trade size was \$172.6 million during the first quarter of 2018.

	Average Daily Traded Notional (US\$ billions)	Average Daily Trade Count	Average Trade Size (US\$ millions)
Q1 2018	1,018.7	5,606	172.6
Q1 2017	788.7	4,716	159.5
Q1 2018 vs. Q1 2017	29.2%	18.9%	8.2%

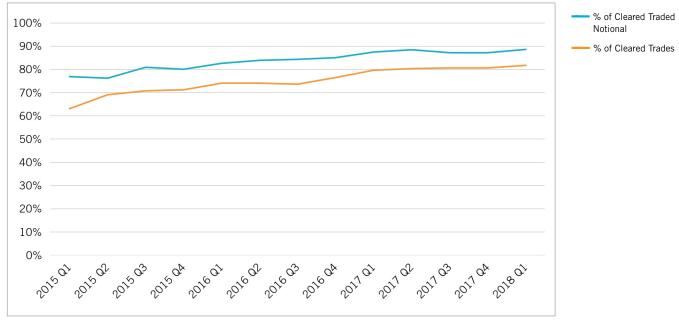
Safe, Efficient

IRD Statistics: Central Clearing

Cleared IRD transactions represented 88.6% of total traded notional and 81.7% of trade count during the first quarter of 2018.



The percentage of both cleared traded notional and cleared trade count has been gradually increasing over the past three years.



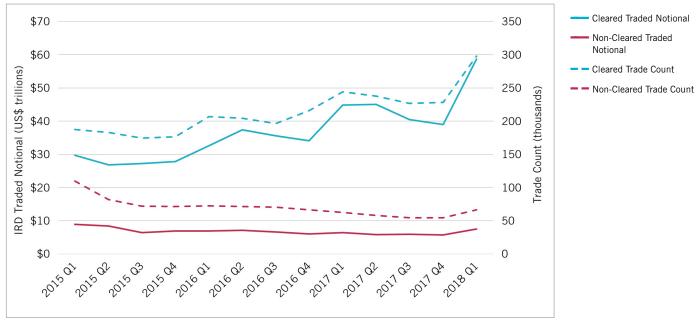
Percentage of IRD Cleared Traded Notional and Trade Count

Source: DTCC and Bloomberg SDRs

Cleared IRD traded notional totaled \$58.7 trillion in the first quarter of 2018, a 30.7% increase from \$44.9 trillion in the first quarter of 2017. Cleared trade count grew by 22.0% over the same period, to 297,781 from 244,120.

Non-cleared IRD traded notional grew by 18.1% in the first quarter of 2018 versus the first quarter of 2017, to \$7.5 trillion from \$6.4 trillion. Non-cleared IRD trade count increased by 6.7% over the same period, to 66,589 from 62,426.

Safe,

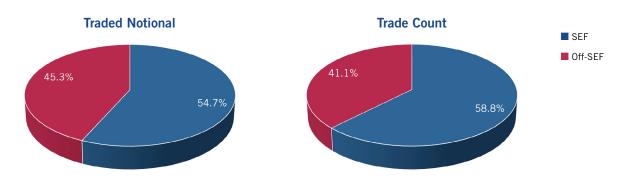


Central Clearing: IRD Traded Notional and Trade Count

Source: DTCC and Bloomberg SDRs

IRD Statistics: Trading Venue

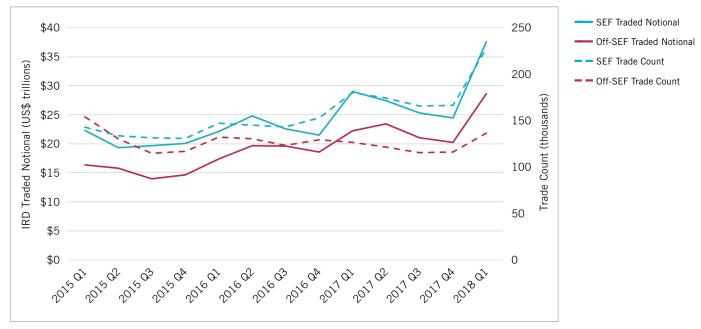
During the first quarter of 2018, SEF-traded IRD represented 56.7% of notional volume and 62.5% of trade count. Total IRD traded notional on SEFs was \$37.6 trillion, while \$28.7 trillion was executed off-SEF. The number of transactions executed on a SEF totaled 227,724, while 136,646 trades occurred off-SEF.



In the first quarter of 2018, IRD traded notional executed on SEFs grew by 29.3% compared with the same period a year before, from \$29.1 trillion to \$37.6 trillion. The number of trades executed on SEFs increased by 26.6% from 179,937 to 227,724 over the same period.

IRD traded notional executed off-SEF increased by 28.9%, from \$22.2 trillion in the first quarter of 2017 to \$28.7 trillion in the first quarter of 2018. The number of off-SEF transactions increased by 7.9% over the same period, from 126,609 to 136,646.

Safe, Efficient

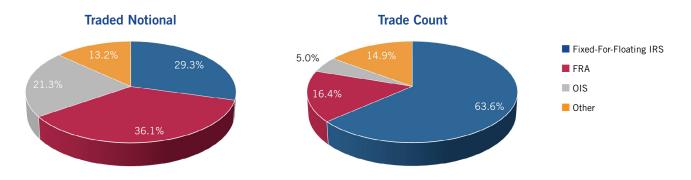


SEF and Off-SEF IRD Traded Notional and Trade Count

Source: DTCC and Bloomberg SDRs

IRD Statistics: Product Taxonomy

Single currency fixed-for-floating IRS accounted for 63.6% of IRD trade count, but represented only 29.3% of IRD traded notional. FRAs and OIS represented 16.4% and 5.0% of IRD trade count and 36.1% and 21.3% of IRD traded notional, respectively, in the first quarter 2018.



Fixed-for-floating IRS traded notional increased by 30.7%, from \$14.8 trillion in the first quarter of 2017 to \$19.4 trillion in the first quarter of 2018. IRS trade count increased by 17.7% quarter-over-quarter to 231,822.

OIS traded notional increased by 12%, from \$12.6 trillion in the first quarter of 2017 to \$14.1 trillion in the first quarter of 2018. OIS trade count increased to 18,369 in the first quarter of 2018, a 15.4% rise compared with the first quarter of 2017.

FRA traded notional increased by 38.1%, from \$17.3 trillion in the first quarter of 2017 to \$23.9 trillion in the first quarter of 2018. FRA trade count increased by 31.2% over the same period to 59,892.

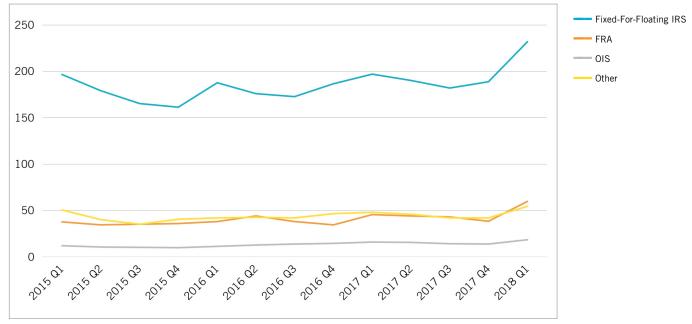
Safe, Efficient

IRD Traded Notional By Product (US\$ trillions)



Source: DTCC and Bloomberg SDRs



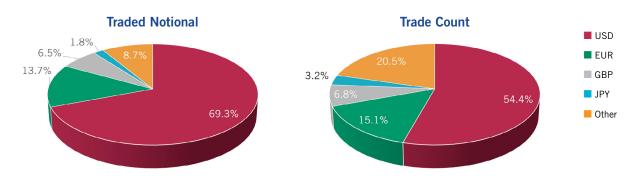


Source: DTCC and Bloomberg SDRs

Safe,

IRD Statistics: Currency

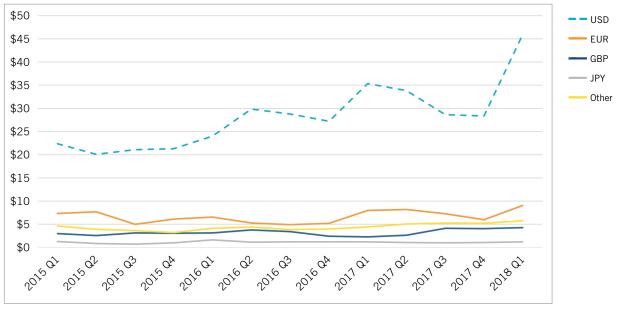
IRD contracts in US dollars remained the most actively traded instruments, with traded notional totaling \$45.9 trillion in the first quarter of 2018. US dollar-denominated IRD contributed 69.3% of traded notional and 54.4% of trade count. Euro-denominated IRD transactions accounted for a far smaller percentage of traded notional (13.7%) and trade count (15.1%).



US dollar-, euro- and sterling-denominated IRD traded notional increased by 29.9%, 13.1% and 89.5%, respectively, in the first quarter of 2018 compared with the first quarter of 2017. Yen-denominated IRD traded notional declined by 2.1% over the same period.

US dollar-denominated IRD traded notional totaled \$45.9 trillion in the first quarter of 2018 compared with \$35.3 trillion in the first quarter of 2017. Euro-denominated IRD traded notional reached \$9.1 trillion in the first quarter of 2018 compared with \$8.0 trillion in the first quarter of 2017. IRD traded notional for sterling- and yen-denominated trades totaled \$4.3 trillion and \$1.2 trillion, respectively, at the end of the first quarter of 2018.

IRD trade count increased by 20.5% for US dollar-denominated trades, 15.8% for euro-denominated trades and 41.2% for sterling-denominated trades. IRD trade count for yen-denominated trades declined by 4.3% in the first quarter of 2018 compared with the first quarter of 2017.



IRD Traded Notional by Currency (US\$ trillions)

Source: DTCC and Bloomberg SDRs

Safe.

SwapsInfo First Quarter 2018 Review

250 - USD - EUR - GBP 200 = JPY - Other 150 100 50 0 201503 201504 201502 2017 02 201501 · 2016 02 2016 02 2016 03 2016 04 2017 02 20103 20104 201801

IRD Trade Count by Currency (thousands)

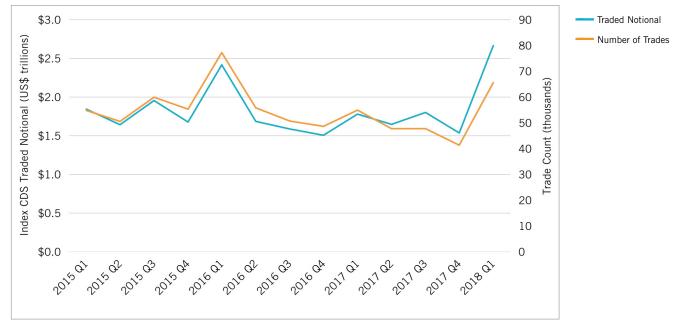
Source: DTCC and Bloomberg SDRs

Safe, Efficient Markets

INDEX CREDIT DEFAULT SWAPS

Index CDS traded notional increased by 49.7% to \$2.7 trillion in the first quarter of 2018 from \$1.8 trillion in the first quarter of 2017. The number of index CDS trades rose by 19.4% to 65,625 from 54,985 over the same period.

Index CDS Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

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

In the first quarter of 2018, average daily notional for index CDS totaled \$41.6 billion, 52% higher compared with \$27.4 billion in the first quarter of 2017. Average daily trade count was 1,025 and average trade size was \$39.6 million in the first quarter of 2018.

	Average Daily Traded Notional (US\$ billions)	Average Daily Trade Count	Average Trade Size (US\$ millions)
Q1 2018	41.6	1,025	39.6
Q1 2017	27.4	846	31.0
Q1 2018 vs. Q1 2017	52%	21%	28%

Safe,

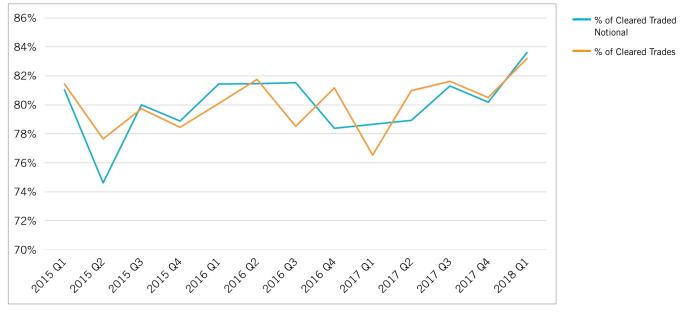
Index CDS Statistics: Central Clearing

During the first quarter of 2018, cleared index CDS transactions represented 83.6% of total traded notional and 83.2% of trade count. Cleared index CDS traded notional was \$2.2 trillion and total trade count was 54,597.

Over the past three years, the percentage of cleared index CDS traded notional and trade count has fluctuated between 74% and 84%.



Percentage of Index CDS Cleared Traded Notional and Trade Count



Source: DTCC and Bloomberg SDRs

Cleared index CDS traded notional increased by 59.1% to \$2.2 trillion in the first quarter of 2018 from \$1.40 trillion in the first quarter of 2017. Cleared index CDS trade count increased by 29.7% over the same period to 54,597 from 42,090.

Non-cleared index CDS traded notional increased by 15.0% in the first quarter of 2018 versus the first quarter of 2017, to \$436.8 billion from \$379.9 billion. Non-cleared index CDS trade count decreased by 14.5% over the same period, to 11,028 from 12,895.

Safe,

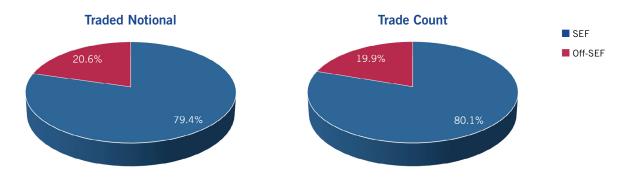
\$2.5 70 Cleared Traded Notional Index CDS Traded Notional (US\$ trillions) Non-Cleared Traded 60 Notional \$2.0 Cleared Trade Count **Frade Count (thousands)** 50 Non-Cleared Trade Count \$1.5 40 30 \$1.0 20 \$0.5 10 \$0.0 0 201504 201601 201602 201603 201604 2017 04 201703 201801 201701 9 ê Ô 2017

Index CDS Traded Notional and Trade Count

Source: DTCC and Bloomberg SDRs

Index CDS Statistics: Trading Venue

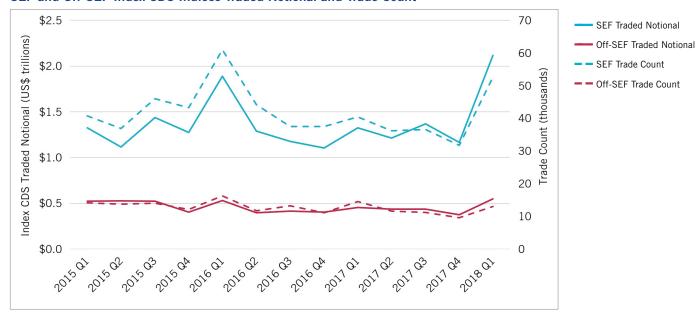
During the first quarter of 2018, both SEF and off-SEF traded notional increased. SEF-traded index CDS transactions represented 79.4% of traded notional and 80.1% of trade count. Total notional executed on SEFs was \$2.1 trillion, while \$0.5 trillion was executed off-SEF. The number of transactions executed on a SEF totaled 52,583, while 13,042 occurred off-SEF.



In the first quarter of 2018, index CDS traded notional executed on SEFs increased by 59.6% compared with the first quarter of 2017. The number of trades executed on SEFs grew by 29.9% over the same period. Index CDS traded notional executed off-SEF increased by 20.8% in the first quarter of 2018 compared with the first quarter of 2017, but the number of transactions declined by 10.1% over the same period.

13

Safe, Efficient

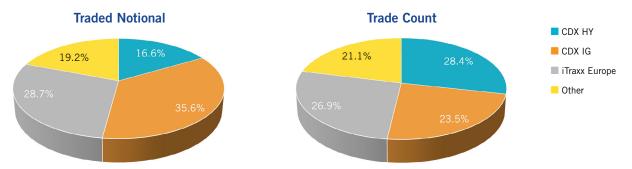


SEF and Off-SEF Index CDS Indices Traded Notional and Trade Count

Source: DTCC and Bloomberg SDRs

Index CDS: Product Taxonomy

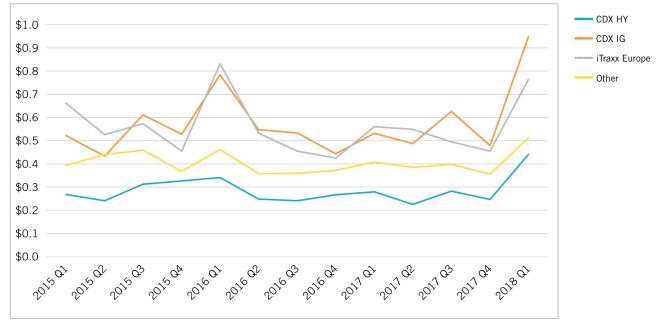
In the first quarter of 2018, the CDX HY and CDX IG indices represented 16.6% and 35.6% of total index CDS traded notional and 28.4% and 23.5% of trade count, respectively. iTraxx Europe accounted for 28.7% of index CDS traded notional and 26.9% of trade count.



In the first quarter of 2018, CDX HY, CDX IG and iTraxx Europe traded notional increased by 57.6%, 78% and 36.5%, respectively, compared with the first quarter of 2017. CDX HY totaled \$441.5 billion, CDX IG was \$947.7 billion and iTraxx Europe was \$764.6 billion in the first quarter of 2018. Trade count increased quarter-over-quarter by 31.5% for CDX HY, 45.6% for CDX IG and 11.6% for iTraxx Europe, and totaled 18,654, 15,421 and 17,672, respectively.

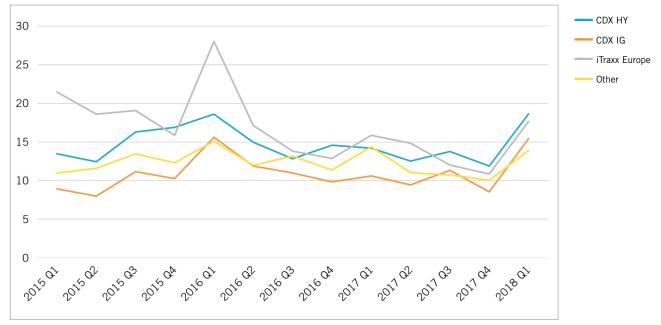
Safe, Efficient

Index CDS Traded Notional (US\$ trillions)



Source: DTCC and Bloomberg SDRs

Index CDS Trade Count (thousands)

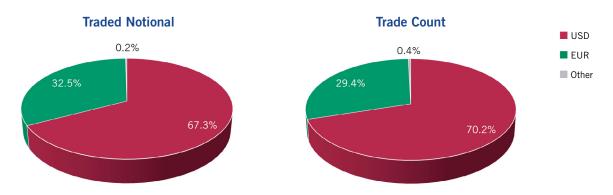


Source: DTCC and Bloomberg SDRs

Safe,

Index CDS Statistics: Currency

In the first quarter of 2018, index CDS contracts denominated in US dollars remained the most actively traded instruments. US dollar-denominated index CDS represented 67.3% of traded notional and 70.2% of trade count. Euro-denominated index CDS transactions accounted for 32.5% and 29.4% of traded notional and trade count, respectively.



US dollar-denominated index CDS traded notional jumped by 63.9% to \$1.8 trillion in the first quarter of 2018 from \$1.1 trillion in the first quarter of 2017. Euro-denominated index CDS traded notional also increased by 26.8% to \$0.9 trillion over the same period. Index CDS trade count increased by 24.4% for US dollar-denominated trades and by 8.4% for euro-denominated trades, to 46,054 and 19,295, respectively, over the same period.



Index CDS Traded Notional and Trade Count by Currency

Source: DTCC and Bloomberg SDRs

Safe,

ISDA

ISDA has published other recent research papers:

- ISDA Margin Survey Full Year 2017, April 2018 https://www.isda.org/a/oQmEE/ISDA-Margin-Survey-Full-Year-2017.pdf
- SwapsInfo Full Year 2017 and Fourth Quarter 2017 Review, February 2018 https://www.isda.org/a/IhhEE/SwapsInfo-Full-Year-and-Q4-2017-Review.pdf
- Asia-Pacific OTC Derivatives Study, November 2017
 https://www.isda.org/a/jRTEE/Asia-Pacific-Derivatives-Study-November-2017.pdf

For questions on ISDA Research, please contact:

Olga Roman Director of Research International Swaps and Derivatives Association, Inc. (ISDA) Office: 212-901-6017 oroman@isda.org

ABOUT ISDA

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has more than 900 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 firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, 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. Safe, Efficient Markets