

# Global IM Collected for Derivatives in the First Quarter of 2020

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During the first quarter of 2020, there was a significant increase in initial margin (IM) collected by global central counterparties (CCPs) for over-the-counter (OTC) derivatives and exchange-traded derivatives (ETD).

The increase in margin was the result of sizeable asset price movements that caused large variation margin (VM) and IM calls from CCPs. At the same time, traded and cleared derivatives volumes increased in the first quarter of 2020, driven by coronavirus-related market volatility.

Based on public quantitative disclosures for CCPs set out by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO), total IM for interest rate derivatives (IRD) and credit default swaps (CDS) reached \$342.8 billion at the end of the first quarter of 2020, up by 51.9% compared with the end of the first quarter of 2019 and 27.4% versus the end of the fourth quarter of 2019.

Total IM collected by CCPs for ETD jumped by 81.7% to \$488.6 billion at the end of the first quarter of 2020 from \$268.8 billion at the end of the first quarter of 2019. It increased by 66.9% compared with \$292.7 billion at the end of the fourth quarter of 2019.

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## INTRODUCTION

There was a significant increase in margin collected by global CCPs for both OTC derivatives and ETD in the first quarter of 2020. The surge can also be seen in the amount of customer funds held by futures commission merchants (FCMs) in the US<sup>1,2</sup>.

The increase in margin was a function of significant shifts in asset prices, which resulted in large VM and IM calls from CCPs. Market volatility caused by the coronavirus pandemic also led to increases in traded and cleared derivatives volumes in the first quarter of 2020<sup>3</sup>.

Based on the CPMI-IOSCO public quantitative disclosures for CCPs, total IM for IRD and CDS reached \$342.8 billion at the end of the first quarter of 2020, an increase of 51.9% versus the same period last year and 27.4% compared with the end of the fourth quarter of 2019.

Total IM collected by CCPs for ETD totaled \$488.6 billion at the end of the first quarter of 2020, up by 81.7% from \$268.8 billion at the end of the first quarter of 2019 and 66.9% from \$292.7 billion at the end of the fourth quarter of 2019.

IM in client accounts collected by CCPs increased by more than IM posted by clearing members for their own positions. Client IM posted for IRD and CDS positions rose by 69.0% at the end of the first quarter of 2020 versus the end of the first quarter of 2019, while IM posted by clearing members for their own positions increased by 30.6% over the same period.

Client IM collected by CCPs for ETD increased by 83.0% at the end of the first quarter of 2020 compared with the end of the first quarter of 2019, while IM posted by clearing members for their own positions increased by 77.1% over the same period.

According to data reported by FCMs to the Commodity Futures Trading Commission (CFTC), total segregated funds held in cleared swap customer accounts jumped to \$161.3 billion as of March 31, 2020. That represents an increase of 55.3% compared to \$103.8 billion at the end of March 31, 2019 and 30.2% versus \$123.9 billion at the end of December 2019<sup>4</sup>.

<sup>1</sup> A futures commission merchant (FCM) is an entity that solicits or accepts orders to buy or sell futures contracts, options on futures, retail off-exchange forex contracts or swaps, and accepts money or other assets from customers to support such orders <https://www.nfa.futures.org/registration-membership/who-has-to-register/fcm.html>. FCMs must file monthly financial reports with the CFTC's division of swap dealer and intermediary oversight (DSIO) within 17 business days after the end of the month

<sup>2</sup> IM collected by CCPs represents global data, while FCM data reflects the amount of customer funds held by FCMs in the US

<sup>3</sup> This part of the analysis is based on the data from the Depository Trust & Clearing Corporation swap data repository (DTCC SDR). It therefore only covers trades that are required to be disclosed under US regulations

<sup>4</sup> This represents the total amount of money, securities and property held in cleared swap customer accounts for cleared swap customers in compliance with Section 4d(f) of the Commodity Exchange Act

Total funds held by FCMs in segregated accounts for futures and options customers increased to \$340.1 billion as of March 31, 2020, up by 59.9% compared to \$212.6 billion at the same time last year and 47.5% versus \$230.6 billion at the end of December 2019<sup>5</sup>.

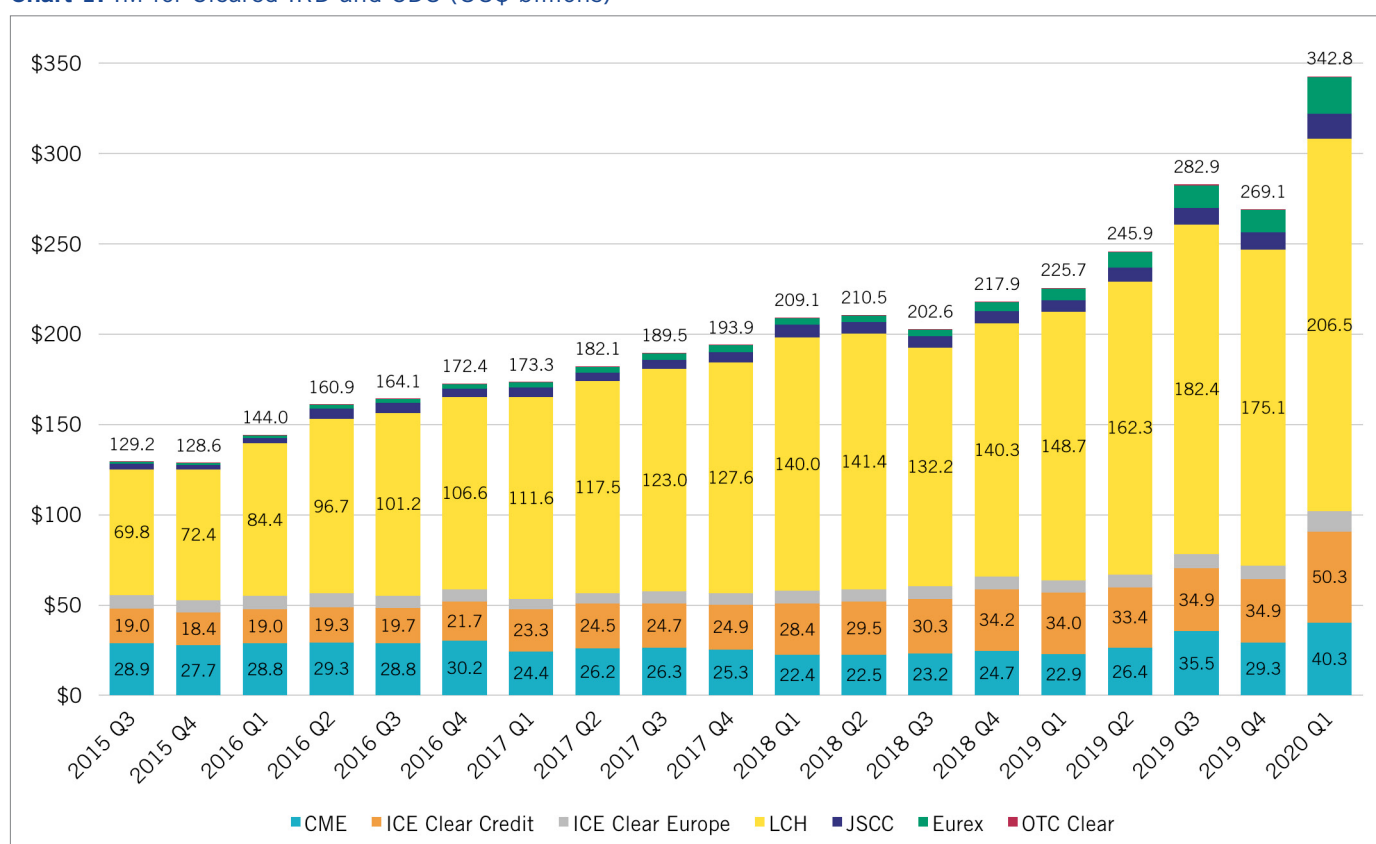
<sup>5</sup> This includes the total amount of money, securities and property held in segregated accounts for futures and options customers in compliance with Section 4d of the Commodity Exchange Act and the total amount of money, securities and property held in secured accounts for futures and options customers that trade on commodity exchanges located outside the US in compliance with Part 30 of the Commodity Exchange Act

## IM FOR CLEARED IRD AND CDS

Based on the CPMI-IOSCO public quantitative disclosures for CCPs, the amount of IM for cleared OTC derivatives, including IRD and CDS, increased significantly in the first quarter of 2020.

Total IM for cleared IRD and CDS reached \$342.8 billion at the end of the first quarter of 2020, up by 51.9% compared with \$225.7 billion at the end of the first quarter of 2019 and 27.4% versus \$269.1 billion at the end of the fourth quarter of 2019 (see Chart 1)<sup>6</sup>.

**Chart 1: IM for Cleared IRD and CDS (US\$ billions)<sup>7</sup>**

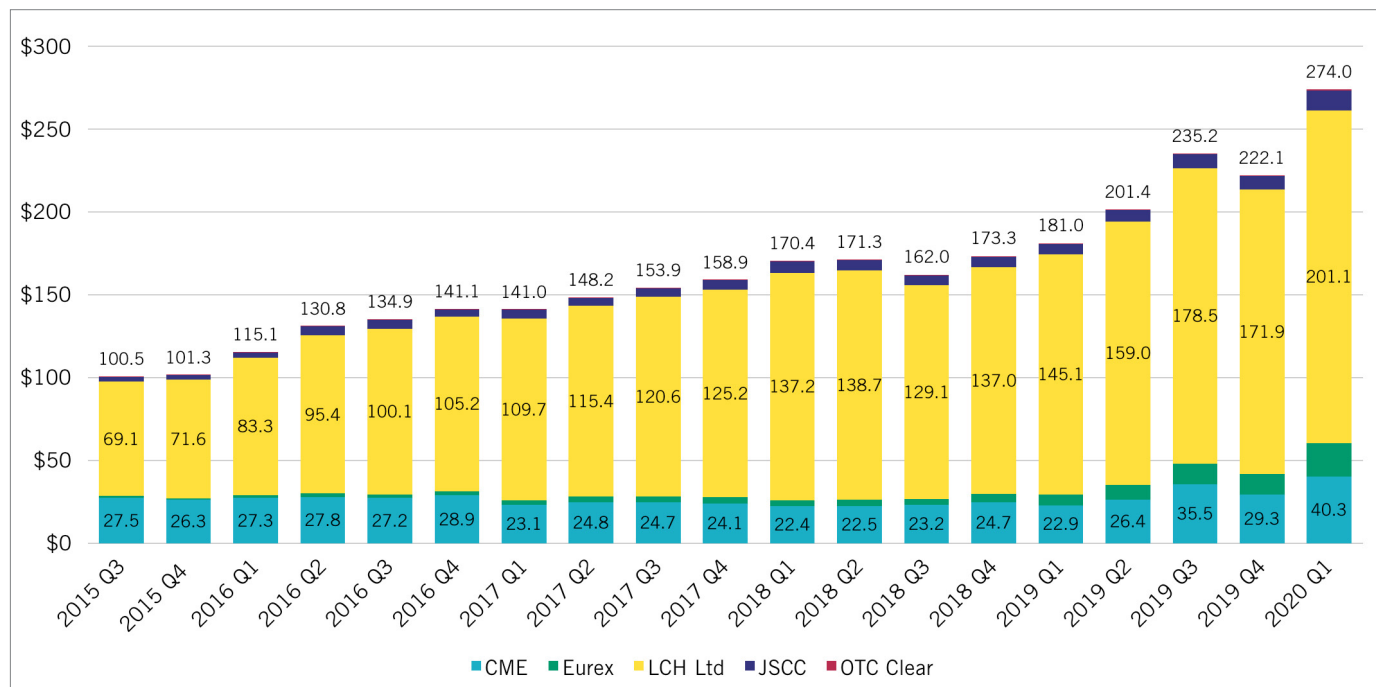


Source: CCP disclosures

IM for cleared IRD totaled \$274.0 billion at the end of the first quarter of 2020, an increase of 51.4% from \$181.0 billion at the same point last year and 23.4% from \$222.1 billion at the end of the fourth quarter of 2019 (see Chart 2). While there was a big jump in IM in the first quarter of 2020, there has been an upward trend since the first quarter of 2019. IM at LCH Ltd increased by 38.6% year-over-year, while IM at CME grew by 75.7%.

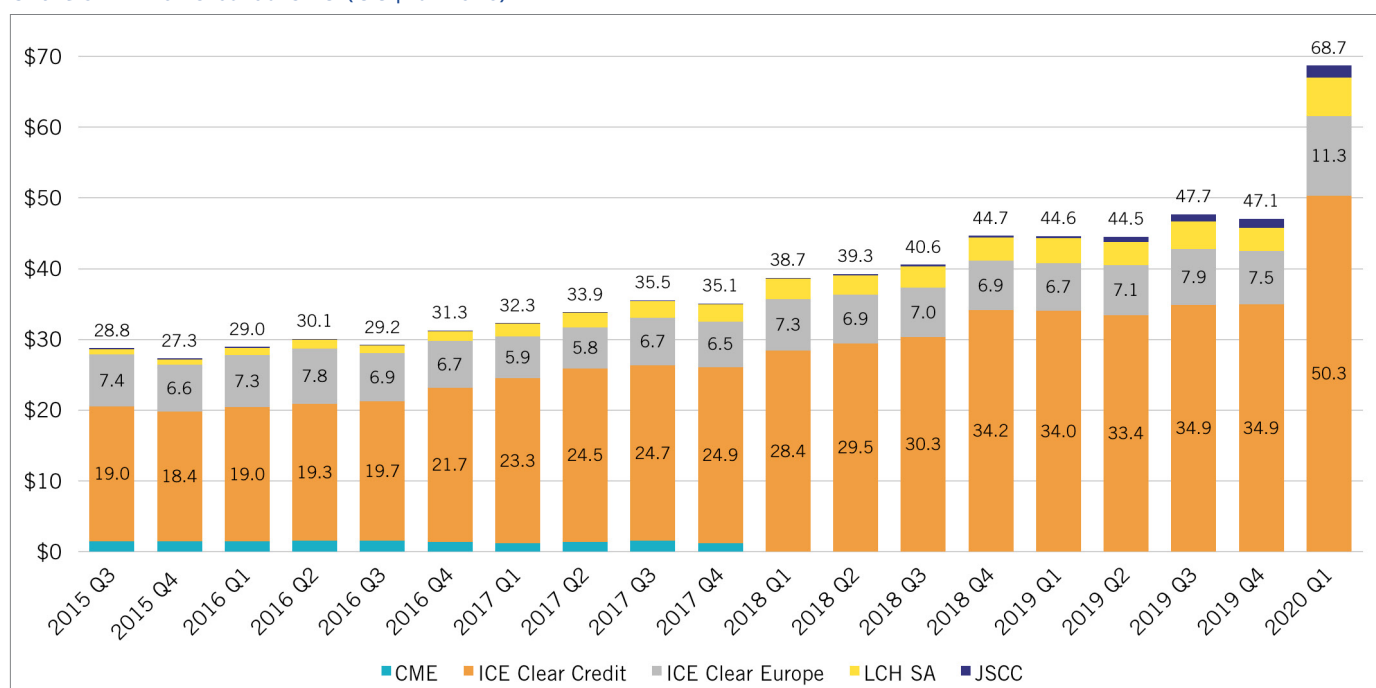
<sup>6</sup> CCPs have been providing quarterly CPMI-IOSCO public quantitative disclosures since the third quarter of 2015. All numbers are converted to US dollar based on the exchange rates at the end of each quarter <https://www.x-rates.com/historical>

<sup>7</sup> LCH includes LCH Ltd and LCH SA

**Chart 2: IM for Cleared IRD (US\$ billions)**

Source: CCP disclosures

IM for cleared CDS grew by 54.0% from \$44.6 billion at the end of the first quarter of 2019 to \$68.7 billion at the end of the first quarter of 2020. It increased by 46.0% compared with \$47.1 billion at the end of the fourth quarter of 2019, largely driven by increased volatility in credit spreads (see Chart 3). IM at ICE Clear Credit increased by 47.9% year-over-year, while IM at ICE Clear Europe grew by 67.8%.

**Chart 3: IM for Cleared CDS (US\$ billions)**

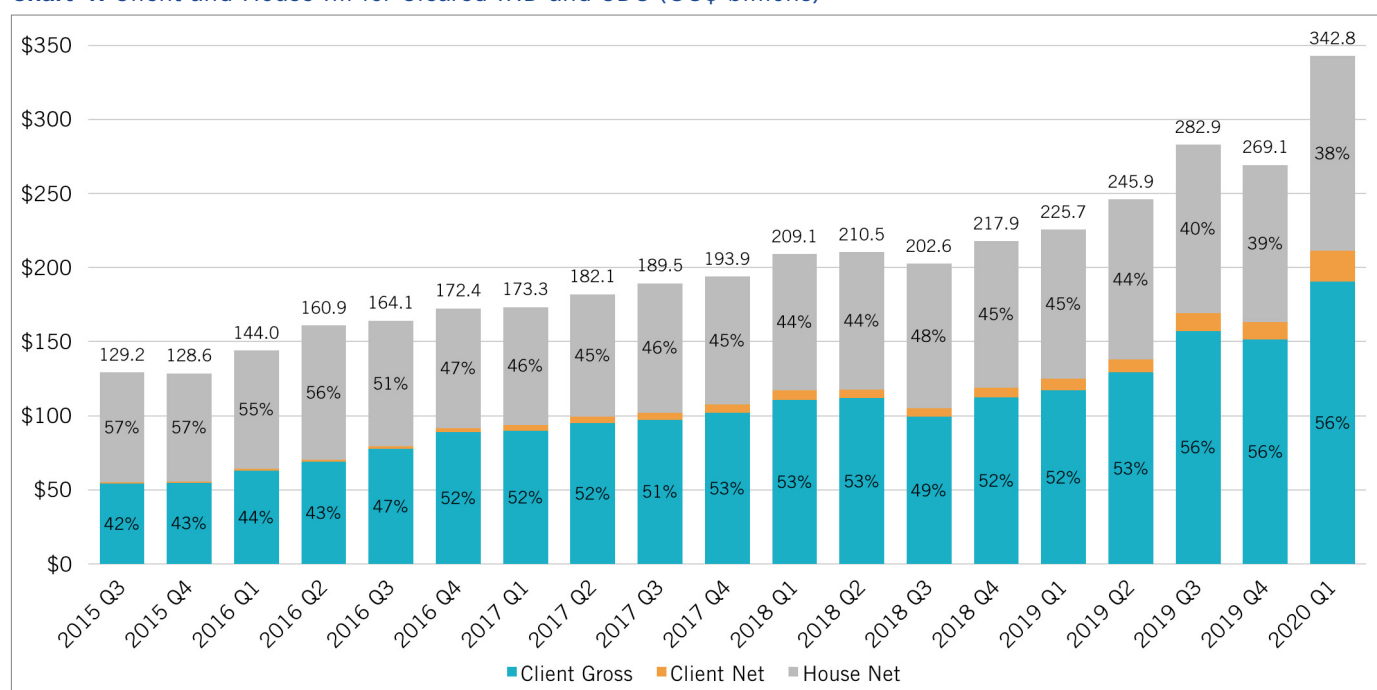
Source: CCP disclosures

At the end of the first quarter of 2020, IM posted for cleared IRD and CDS by clearing members for their own positions (house net) totaled \$131.4 billion. That compares with \$211.4 billion of client IM, out of which \$190.4 billion was margin calculated on a gross basis while \$21.0 billion was calculated on a net basis<sup>8,9</sup>.

IM posted by clearing members for their own positions increased by 30.6% in the first quarter of 2020 compared with the first quarter of 2019, while total client IM collected by CCPs jumped by 69.0% over the same period.

House net margin totaled 38.3% of total IM for cleared IRD and CDS, while client gross margin and client net margin represented 55.5% and 6.1% of total IM, respectively, at the end of the first quarter of 2020 (see Chart 4).

**Chart 4: Client and House IM for Cleared IRD and CDS (US\$ billions)**



Source: CCPs disclosures

<sup>8</sup> Under a net margin structure, a clearing member only passes through to a CCP the net margin across a set of clients, thereby retaining part of the client margin. Under a gross structure, the margin of all clients is posted in full to a CCP

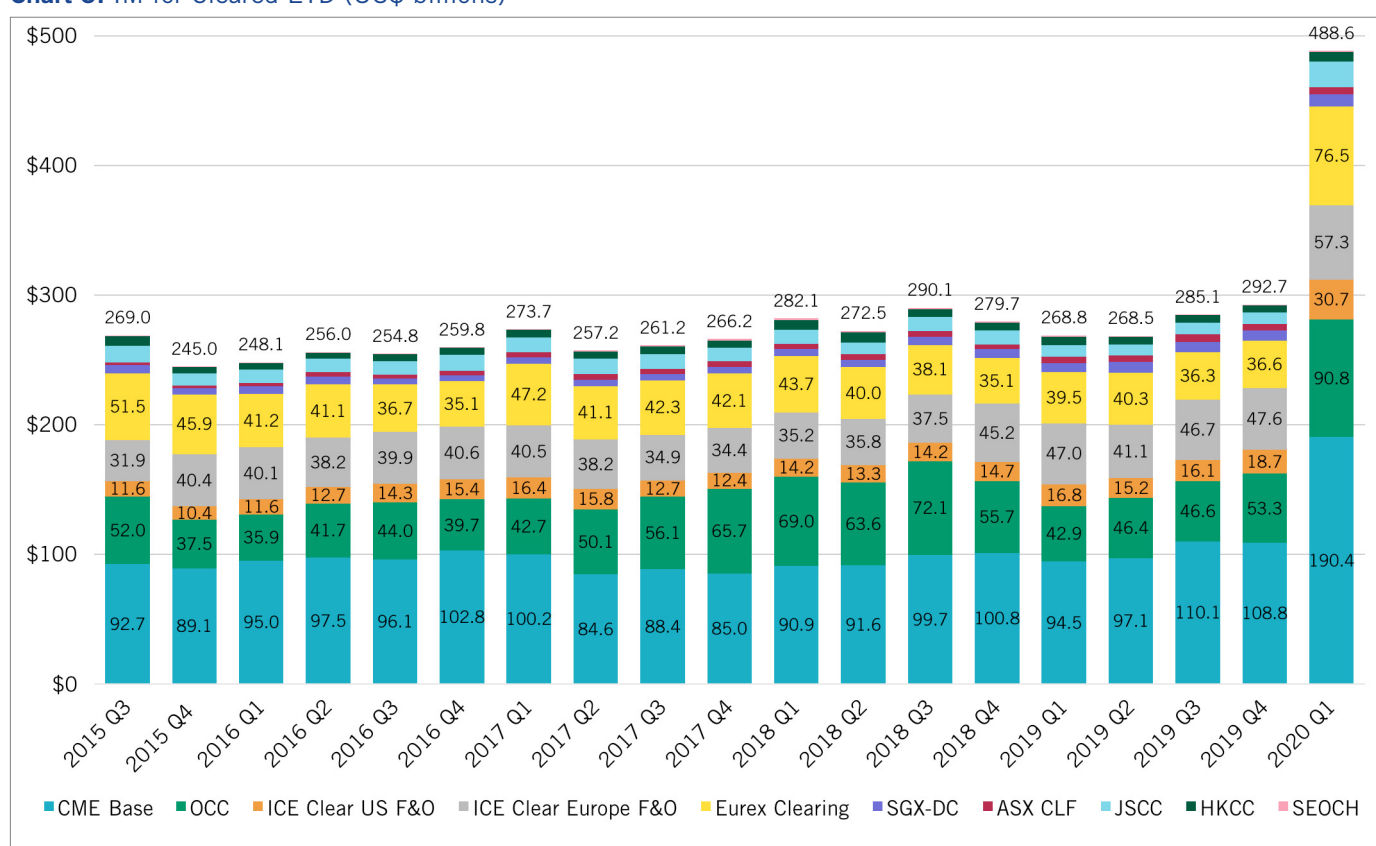
<sup>9</sup> For cleared swaps, US customers are required to use the LSOC model (legal segregation with operational commingling) that is a gross margining model, under which one client is not exposed to losses from any other client's positions. European customers have a choice between 'omnibus client segregation' and 'individual client segregation'

## IM FOR CLEARED EXCHANGE-TRADED DERIVATIVES

The amount of IM collected for cleared ETD increased significantly in the first quarter of 2020 versus the first three months of 2019<sup>10</sup>. This is in line with the huge volatility spikes in equities and commodities seen in the first quarter of 2020.

Total IM for cleared ETD reached \$488.6 billion at the end of the first quarter of 2020, up by 81.7% versus \$268.8 billion at the end of the first quarter of 2019 and 66.9% compared with \$292.7 billion at the end of the fourth quarter of 2019 (see Chart 5).

**Chart 5: IM for Cleared ETD (US\$ billions)**



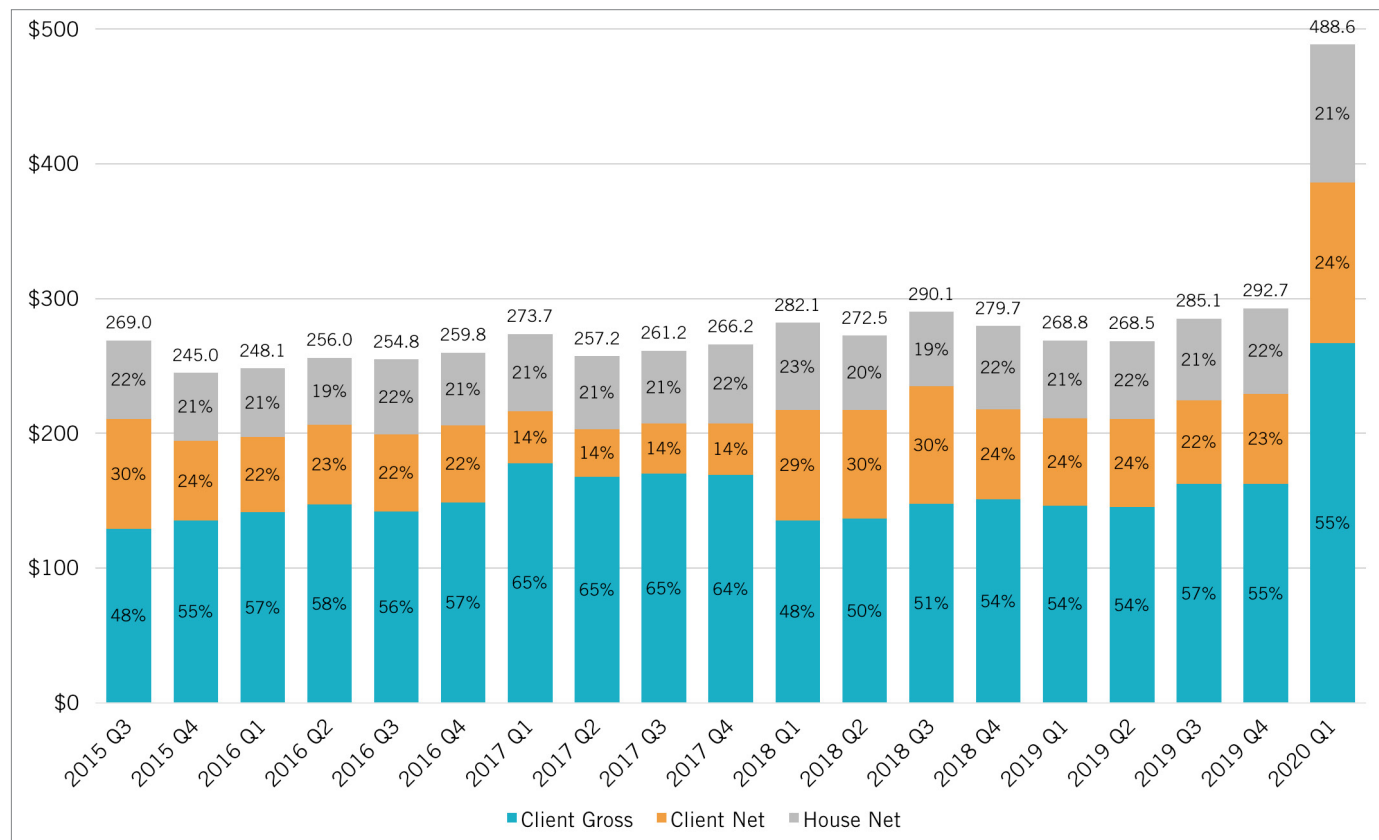
Source: CCP disclosures

IM posted for cleared ETD by clearing members for their own positions totaled \$102.3 billion at the end of the first quarter of 2020. That compares with \$386.3 billion of client IM, out of which \$266.8 billion was margin calculated on a gross basis while \$119.4 billion was calculated on a net basis.

IM posted for cleared ETD by clearing members for their own positions increased by 77.1% in the first quarter of 2020 compared with the first quarter of 2019, while total client IM collected by CCPs increased by 83.0% over the same period.

House net margin totaled 20.9% of total IM, while client gross margin and client net margin represented 54.6% and 24.4% of total IM, respectively, at the end of the first quarter of 2020 (see Chart 6).

<sup>10</sup> IM for ETD represents the sum of IM for various ETD products across different asset classes. All numbers are converted to US dollar based on the exchange rates at the end of each quarter <https://www.x-rates.com/historical>

**Chart 6:** Client and House IM for Cleared ETD (US\$ billions)

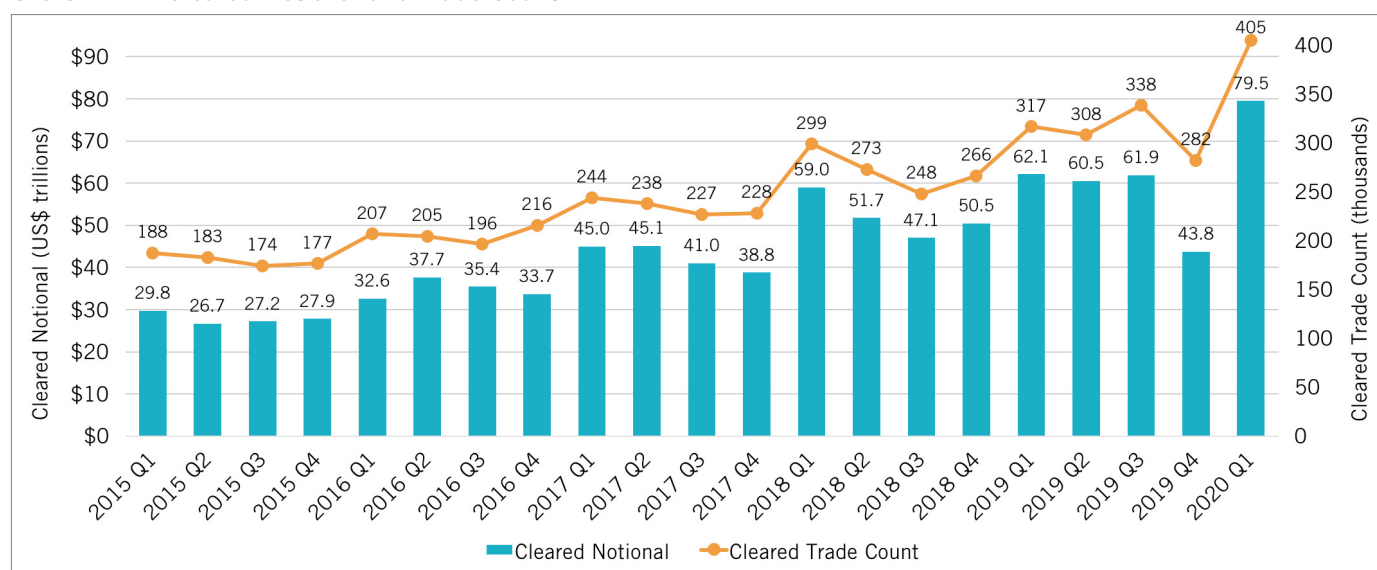
Source: CCP disclosures



## CLEARED IRD AND CREDIT DERIVATIVES IN THE US

IRD cleared notional in the US totaled \$79.5 trillion in the first quarter of 2020, an increase of 28.0% from \$62.1 trillion in the first quarter of 2019<sup>11,12</sup>. Cleared trade count also grew by 28.0% to 405.2 thousand from 316.7 thousand over the same period (see Chart 7).

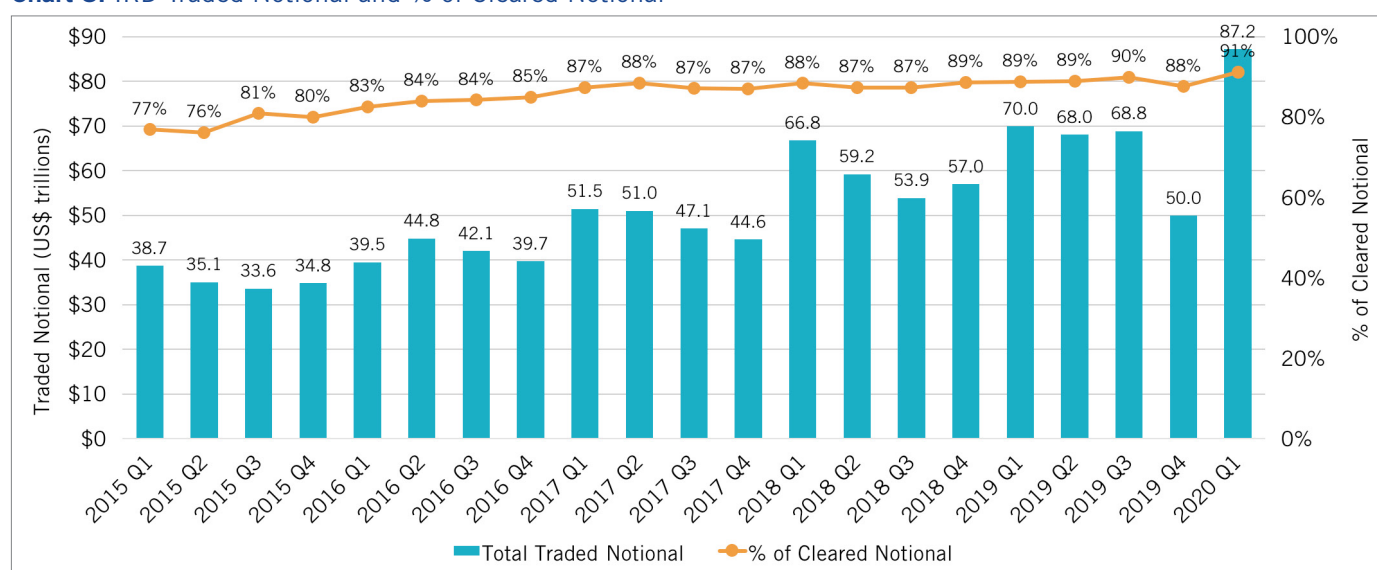
**Chart 7: IRD Cleared Notional and Trade Count**



Source: DTCC and Bloomberg SDRs

Cleared IRD transactions represented 91.2% of total IRD traded notional in the first quarter of 2020 compared to 88.8% in the first quarter of 2019 (see Chart 8).

**Chart 8: IRD Traded Notional and % of Cleared Notional**



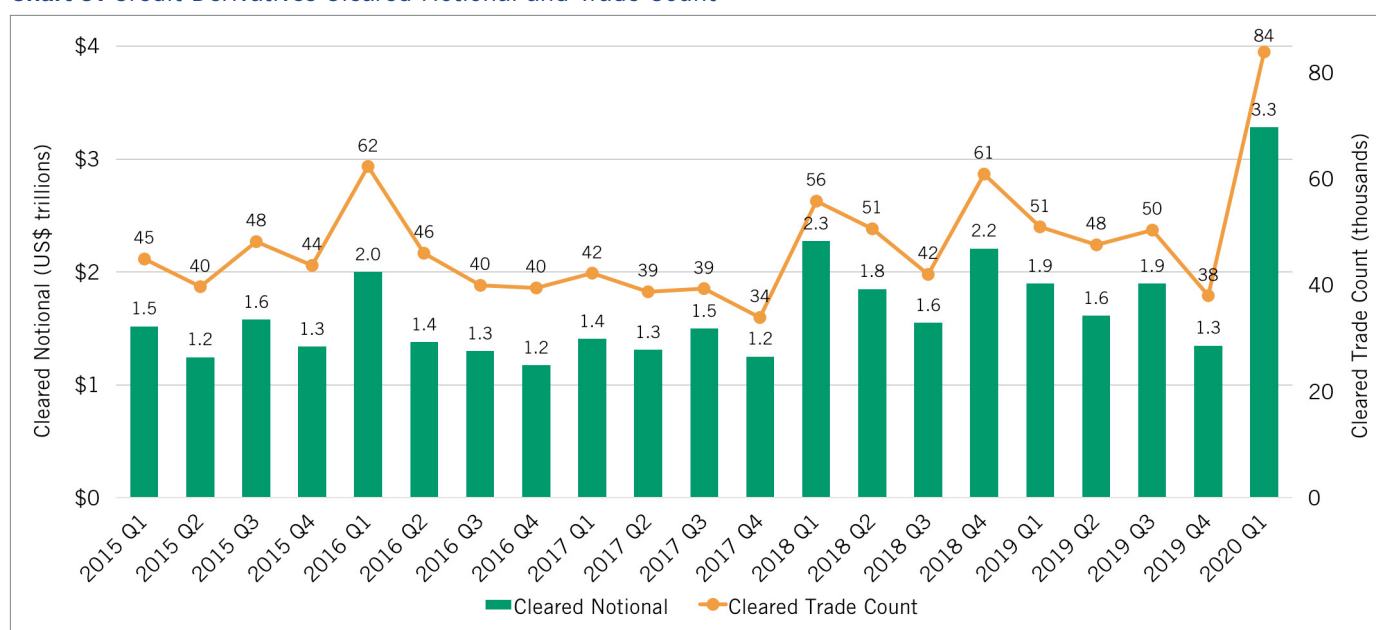
Source: DTCC and Bloomberg SDRs

<sup>11</sup> This report uses historical data from Bloomberg and DTCC SDRs. It therefore only covers trades that are required to be disclosed under US regulations. Bloomberg SDR closed in August 2018

<sup>12</sup> Cleared trades are reported pre-novation to CCPs so a single trade is counted only once

Credit derivatives cleared notional increased by 72.8% to \$3.3 trillion in the first quarter of 2020 from \$1.9 trillion in the first quarter of 2019. Cleared trade count increased by 64.5% to 83.8 thousand from 51.0 thousand over the same period (see Chart 9)<sup>13</sup>.

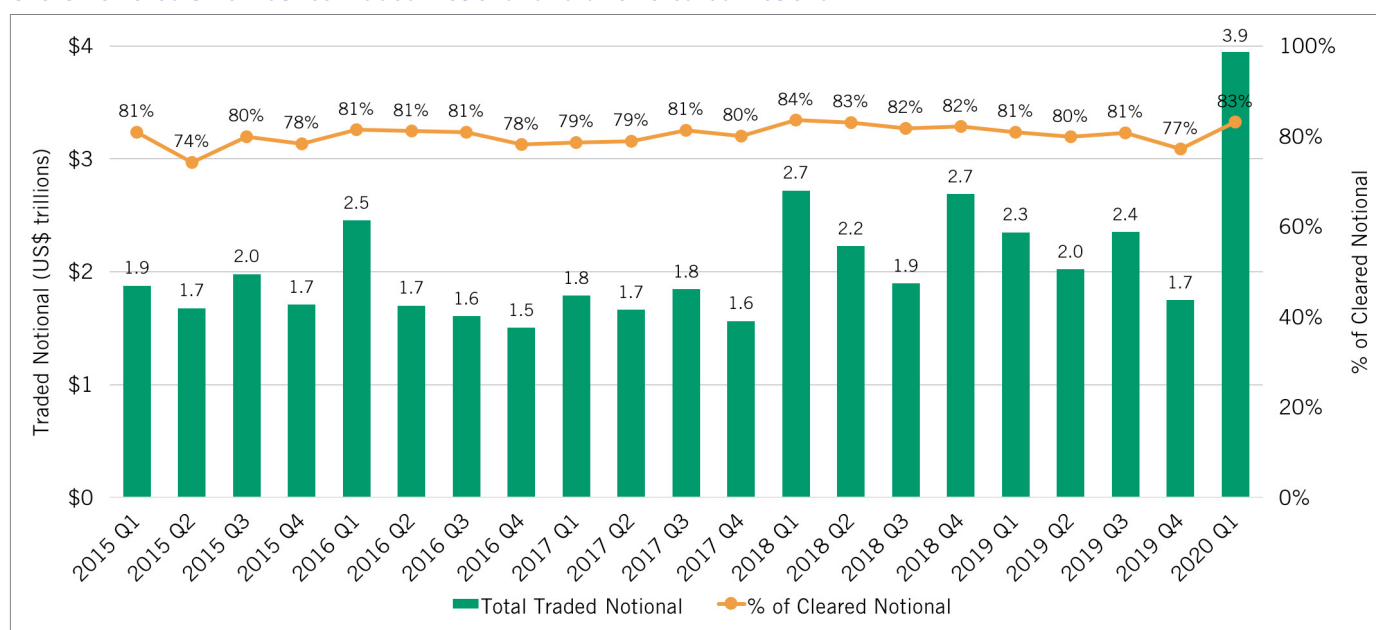
**Chart 9: Credit Derivatives Cleared Notional and Trade Count**



Source: DTCC and Bloomberg SDRs

Cleared credit derivatives transactions represented 83.1% of total traded notional in the first quarter of 2020 compared to 80.9% in the first quarter of 2019 (see Chart 10).

**Chart 10: Credit Derivatives Traded Notional and % of Cleared Notional**



Source: DTCC and Bloomberg SDRs

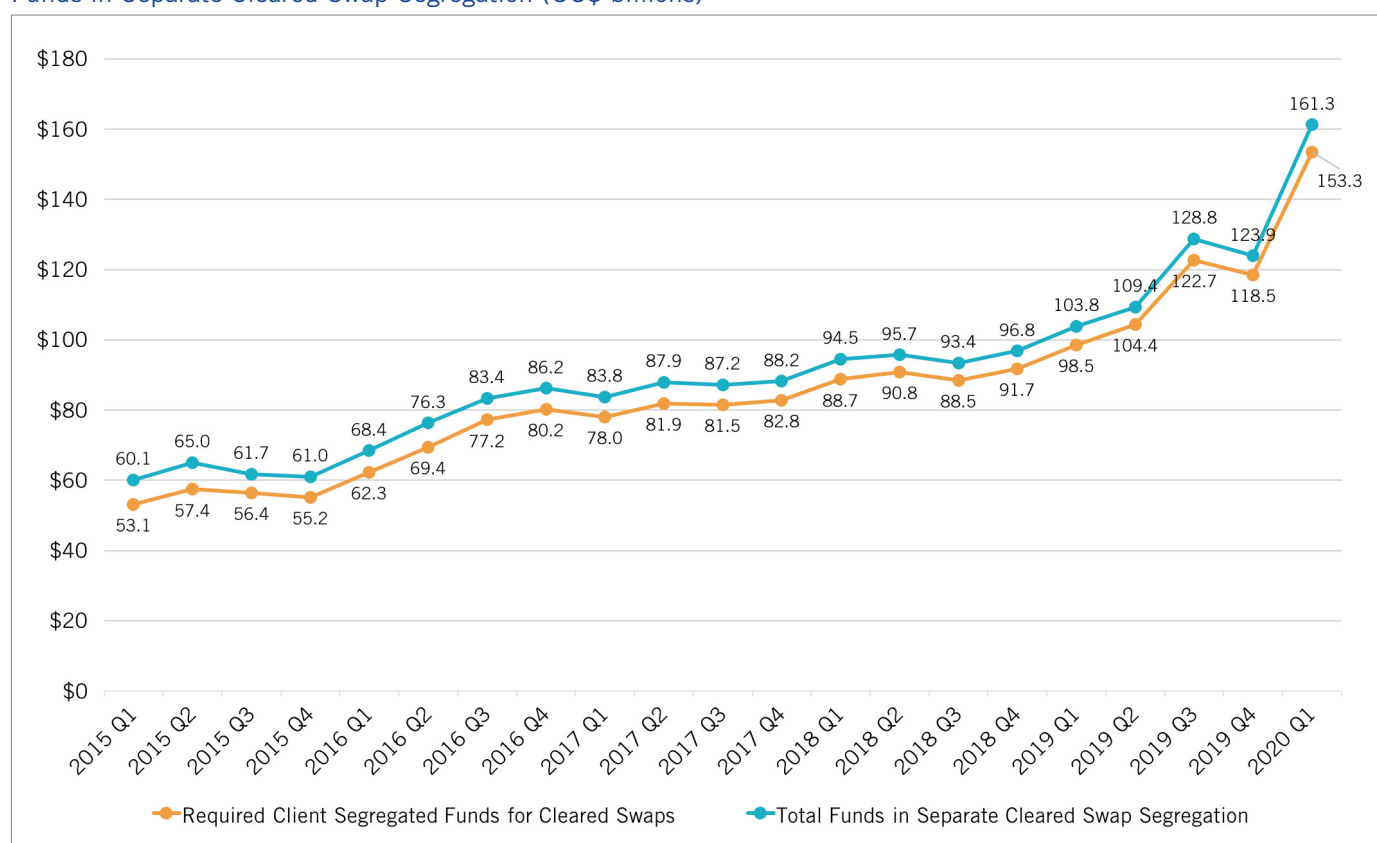
<sup>13</sup> Credit derivatives mostly comprise CDS indices, but also include CDS index tranches, credit swaptions, exotic products, total return swaps and insignificant amount of single-name CDS

## CUSTOMER FUNDS HELD BY FCMS

According to data reported by US FCMs to the CFTC<sup>14</sup>, total segregated funds held in cleared swap customer accounts jumped to \$161.3 billion as of March 31, 2020. That represents an increase of 55.3% from \$103.8 billion at the end of March 31, 2019 and 30.2% from \$123.9 billion at the end of December 2019<sup>15</sup>.

Required segregated funds held by FCMs for cleared swap transactions reached \$153.3 billion as of March 31, 2020, up by 55.6% compared with March 31, 2019 and 29.4% compared to \$118.5 billion at the end of December 2019<sup>16</sup> (see Chart 11).

**Chart 11:** Required Client Segregated Funds Held by FCMs for Cleared Swaps and Total Funds in Separate Cleared Swap Segregation (US\$ billions)



Source: CFTC Financial Data for FCMs

Total funds held by FCMs in segregated accounts for futures and options customers increased to \$340.1 billion as of March 31, 2020, up by 59.9% compared to \$212.6 billion at the end of March 31, 2019 and 47.5% compared to \$230.6 billion at the end of December 2019<sup>17</sup>.

<sup>14</sup> FCMs and retail foreign exchange dealers in the US must file monthly financial reports with the CFTC's DSIO within 17 business days after the end of the month

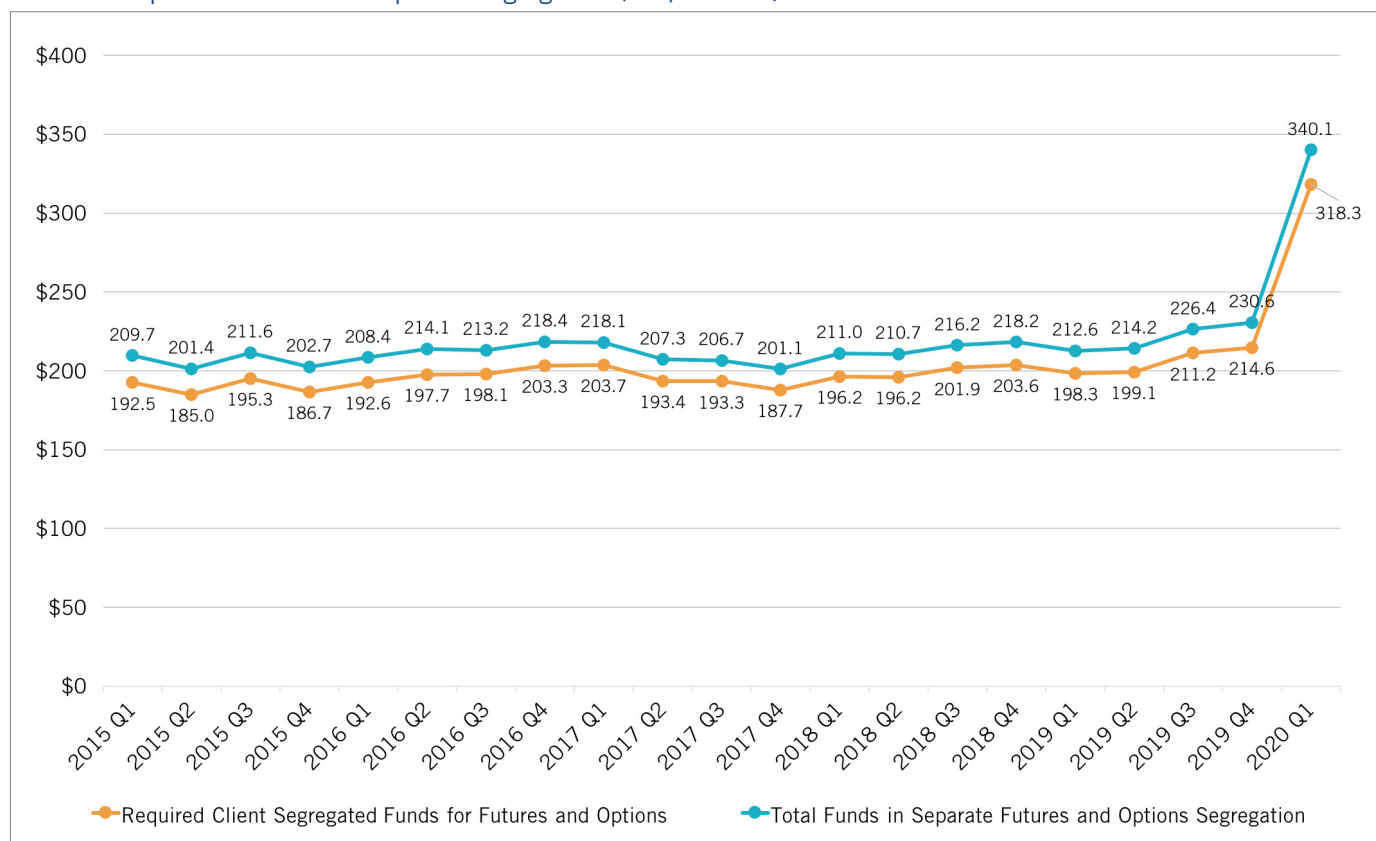
<sup>15</sup> This represents the total amount of money, securities and property held in cleared swap customer accounts for cleared swap customers in compliance with Section 4d(f) of the Commodity Exchange Act

<sup>16</sup> This represents the amount of funds FCMs are required to segregate for customers that trade cleared swaps

<sup>17</sup> This includes the total amount of money, securities and property held in segregated accounts for futures and options customers in compliance with Section 4d of the Commodity Exchange Act and the total amount of money, securities and property held in secured accounts for futures and options customers that trade on commodity exchanges located outside the US in compliance with Part 30 of the Commodity Exchange Act

Required segregated funds held by FCMs for futures and options reached \$318.3 billion as of March 31, 2020, a rise of 60.5% versus March 31, 2019 and 48.3% compared to \$214.6 billion at the end of December 2019<sup>18</sup> (see Chart 12).

**Chart 12:** Required Client Segregated Funds Held by FCMs for Futures and Options and Total Funds in Separate Futures and Options Segregation (US\$ billions)



Source: CFTC Financial Data for FCMs

<sup>18</sup> This represents the total amount of funds that FCMs are required to segregate on behalf of customers that are trading on a designated contract market or derivatives transaction execution facility and the amount of funds FCMs are required to set aside for customers that trade on commodity exchanges located outside of the US

## IM FOR NON-CLEARED DERIVATIVES<sup>19</sup>

The latest ISDA Margin Survey found that the 20 largest market participants (phase-one firms) collected approximately \$173.2 billion of IM for their non-cleared derivatives transactions at year-end 2019<sup>20</sup> (see Table 1).

Of this amount, \$105.2 billion was collected from counterparties currently in scope of the margin regulatory requirements. \$68.0 billion represented margin received from counterparties and/or for transactions that are not covered by the margin rules (independent amount (IA)), including legacy transactions.

In addition to the regulatory IM and IA, phase-one firms also reported that they collected \$44.0 billion of IM for their inter-affiliate derivatives transactions at year-end 2019.

**Table 1: Phase-One Firms Regulatory IM and IA (US\$ billions)<sup>21</sup>**

	2019	2018	2017	2019 vs. 2018	2018 vs. 2017
<b>Regulatory IM Received</b>	105.2	83.8	73.7	25%	14%
<b>IA Received</b>	68.0	74.1	56.9	-8%	30%
<b>Total IM Received</b>	173.2	157.9	130.6	10%	21%
<b>Regulatory IM Posted</b>	105.6	83.2	75.2	27%	11%
<b>IA Posted</b>	9.5	10.1	6.4	-7%	57%
<b>Total IM Posted</b>	115.0	93.3	81.7	23%	14%

Source: ISDA Margin Survey Year-End 2019

<sup>19</sup> The latest data available is as of year-end 2019

<sup>20</sup> ISDA Margin Survey Year-End 2019 <https://www.isda.org/a/1F7TE/ISDA-Margin-Survey-Year-end-2019.pdf>

<sup>21</sup> 2019, 2018 and 2017 numbers are converted to US dollar based on the exchange rates as of December 31, 2019, December 31, 2018 and December 29, 2017, respectively (<https://www.x-rates.com/table/?from=USD&amount=1>)



ISDA has published other recent research papers:

- ***Key Trends in the Size and Composition of OTC Derivatives Markets in the Second Half of 2019, June 2020***

<https://www.isda.org/a/BAQTE/Key-Trends-in-Size-and-Composition-of-OTC-Derivatives-Markets-in-2H-2019.pdf>

- ***IRD Block Trading Activity in the First Quarter of 2020, June 2020***

<https://www.isda.org/a/qybTE/IRD-Block-Trading-Activity-in-the-First-Quarter-of-2020.pdf>

- ***SwapsInfo First Quarter of 2020 Review, April 2020***

<https://www.isda.org/a/8bOTE/SwapsInfo-Q1-2020-Review-Full-Report.pdf>

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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 900 member institutions from 75 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, 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 website: [www.isda.org](http://www.isda.org). Follow us on [Twitter](#), [LinkedIn](#), [Facebook](#) and [YouTube](#).