The ISDA Margin Survey analyzes the amount and type of initial margin (IM) and variation margin (VM) posted for non-cleared derivatives. The survey also reviews the amount of IM posted by all market participants to major central counterparties (CCPs) for their cleared interest rate derivatives (IRD) and credit default swap (CDS) transactions.

The latest survey finds that the 20 largest market participants (phase-one firms) collected approximately $207.3 billion of IM for their non-cleared derivatives transactions at year-end 2020. Of this amount, $129.2 billion was collected from counterparties currently in scope of the regulatory IM requirements. A further $78.1 billion of IM (independent amount, or IA) was collected from counterparties and/or for transactions that are not in scope of the non-cleared margin rules, including legacy transactions.

In addition to regulatory IM and IA, phase-one firms collected $1.2 trillion of VM for their non-cleared derivatives transactions at year-end 2020, including $638.5 billion of regulatory VM and $526.1 billion of discretionary VM.

The survey also finds that $330.6 billion of IM was posted by all market participants to major CCPs for their cleared IRD and CDS transactions at the end of 2020.
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SUMMARY

- The amount of regulatory IM has continued to increase as margin rules for non-cleared derivatives have been phased in and more firms and new transactions are subject to the requirements\(^1\).

- The survey finds that 32 firms – including 20 phase-one entities, all six phase-two firms and six of the eight phase-three firms that are subject to the margin rules – collected about $217.8 billion of IM and $1.3 trillion of VM at year-end 2020\(^4\).

- IM collected by phase-one firms for their non-cleared derivatives transactions totaled $207.3 billion at year-end 2020. This represents a 19.7% increase compared with $173.2 billion of IM that phase-one firms collected at year-end 2019\(^3\).
  - $129.2 billion of the IM collected by phase-one firms was required under global margin regulations\(^3\). This represents an increase of 22.8% compared to $105.2 billion of regulatory IM collected at year-end 2019.
  - $78.1 billion of IM collected by phase-one firms was IA received from counterparties not currently in scope and/or for transactions not covered by the margin rules, including legacy transactions\(^6\). This represents a 14.8% increase compared to $68.0 billion of IA collected at year-end 2019.

- Twelve other firms – all six phase-two firms and six of the eight phase-three entities that participated in the survey this year – collected $10.6 billion of IM at year-end 2020, including $7.4 billion of regulatory IM and $3.1 billion of IA.

- VM collected by phase-one firms for non-cleared derivatives increased by 29.8% to $1.2 trillion at year-end 2020 compared to $897.3 billion collected at year-end 2019.
  - $638.5 billion of the VM collected by phase-one firms was required under global margin regulations\(^8\). This represents a 44.6% increase compared to $441.5 billion of regulatory VM collected at year-end 2019.

\(^1\) There are six phases to the margin rules for non-cleared derivatives. Currently, firms in phases one, two, three and four are required to post IM. There are 20 phase-one firms, six phase-two entities, eight phase-three institutions and 18 phase-four firms. Of these, 20 phase-one entities contributed data to this analysis, along with six phase-two and six phase-three firms. See the appendix for a brief summary of the margin regulations

\(^2\) These amounts exclude margin posted for inter-affiliate transactions


\(^4\) All numbers are converted to US dollars based on the exchange rates at the end of each year (https://www.x-rates.com/table/?from=USD&amount=1)

\(^5\) Regulatory IM is the amount of IM collected/posted by counterparties, including phase-one, phase-two, phase-three and phase-four firms, for non-cleared derivatives portfolios subject to regulatory IM agreements. It covers all collateral under those agreements and may include house IA under a greater-of margin approach

\(^6\) Independent amount (IA) is the margin collected/posted by counterparties for legacy transactions executed prior to the implementation of margin rules or trades that are not subject to margin rules for non-cleared derivatives, or is posted in addition to regulatory IM

\(^7\) Legacy transactions are those entered prior to the regulatory IM compliance date. Counterparties, particularly dealers, commonly required IM to be posted to them for non-cleared derivatives trades

\(^8\) Regulatory VM may include house IA under a netted agreement
• $526.1 billion of VM collected by phase-one firms was discretionary and was received from counterparties and/or for transactions not covered by the margin rules, including legacy transactions. This represents an increase of 15.4% compared to $455.8 billion of discretionary VM collected at year-end 2019.

• Twelve other firms – six phase-two firms and six phase-three entities – collected $109.3 billion of VM at year-end 2020, including $75.2 billion of regulatory VM and $34.1 billion of discretionary VM.

• For cleared IRD and single-name and index CDS, IM posted at major CCPs by all market participants totaled $330.6 billion at the end of 2020. This represents an increase of 22.8% from $269.2 billion at the end of 2019\(^9\).

• $270.4 billion of this amount represents IM posted for IRD products. Open interest in IRD products across five major CCPs totaled $378.2 trillion at year-end 2020.

• $60.2 billion of IM was posted by market participants for CDS transactions. Open interest in CDS products at four major CCPs was $2.7 trillion at year-end 2020.

\(^9\) All numbers are converted to US dollars based on the exchange rates at the end of each quarter.
METHODOLOGY AND PARTICIPANTS

ISDA’s Margin Survey analyzes the amount and type of collateral posted for non-cleared and cleared derivatives transactions.

- Margin regulations in many jurisdictions require or will require firms over certain thresholds to post and collect IM and to exchange VM.
- Margining practices prior to these regulations varied among derivatives users, with many adhering to ISDA best practices for collateral processes\(^\text{10}\). The exchange of VM for derivatives transactions was common, and some firms also posted IM under bilaterally negotiated collateral arrangements.
- ISDA’s Margin Survey assesses the amount and type of collateral that is being posted for non-cleared and cleared derivatives transactions.
- For non-cleared derivatives, ISDA surveyed 20 firms with the largest derivatives exposures. These firms were subject to the first phase of the new margining regulations for non-cleared derivatives in the US, Canada and Japan from September 2016, and in Europe from February 2017 (known as phase-one firms).
- ISDA also surveyed phase-two and phase-three firms that were subject to the IM requirements from September 2017 and September 2018, respectively\(^\text{11}\). Responses were received from all six phase-two entities and six of the eight phase-three firms subject to the margin rules\(^\text{12}\). In the prior survey, ISDA received responses from four phase-two firms and three phase-three entities.
- For cleared derivatives, the survey uses publicly available margin data from two US CCPs (CME and ICE Clear Credit), four European CCPs (Eurex Clearing, ICE Clear Europe, LCH Ltd and LCH SA) and two Asian CCPs (Japan Securities Clearing Corporation (JSCC) and OTC Clearing Hong Kong Limited (OTC Clear)). The collected data only reflects IM for IRD and CDS. This data is published by CCPs under public quantitative disclosure standards set out by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO).


\(^{11}\) Phase-two and phase-three firms became subject to regulatory VM requirements as of March 1, 2017

\(^{12}\) Phase-four firms became subject to the margin regulations in September 2019, but were not directly included in this survey
IM AND VM FOR NON-CLEARED DERIVATIVES

The survey finds that 32 firms, including 20 phase-one, six phase-two and six phase-three entities, collected about $217.8 billion of IM and $1.3 trillion of VM at year-end 2020.

Phase-one Firms Regulatory IM and IA

Phase-one firms received $129.2 billion and posted about $130.2 billion of regulatory IM for non-cleared derivatives transactions at year-end 2020 (see Table 1). Given the margin rules for non-cleared derivatives require two-way IM exchange between in-scope counterparties (each firm is required to post IM to and collect IM from its counterparty), the amount of IM received and the amount of IM delivered is approximately the same.

Table 1: Phase-one Firms Regulatory IM and IA (US$ billions)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory IM Received</td>
<td>129.2</td>
<td>105.2</td>
<td>83.8</td>
<td>73.7</td>
<td>22.8%</td>
<td>25.5%</td>
<td>13.7%</td>
</tr>
<tr>
<td>IA Received</td>
<td>78.1</td>
<td>68.0</td>
<td>74.1</td>
<td>56.9</td>
<td>14.8%</td>
<td>-8.2%</td>
<td>30.2%</td>
</tr>
<tr>
<td>Total IM Received</td>
<td>207.3</td>
<td>173.2</td>
<td>157.9</td>
<td>130.6</td>
<td>19.7%</td>
<td>9.7%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Regulatory IM Posted</td>
<td>130.2</td>
<td>105.6</td>
<td>83.2</td>
<td>75.2</td>
<td>23.3%</td>
<td>26.9%</td>
<td>10.6%</td>
</tr>
<tr>
<td>IA Posted</td>
<td>9.4</td>
<td>9.5</td>
<td>9.5</td>
<td>6.4</td>
<td>-0.9%</td>
<td>-6.7%</td>
<td>57.5%</td>
</tr>
<tr>
<td>Total IM Posted</td>
<td>139.5</td>
<td>115.0</td>
<td>93.3</td>
<td>81.7</td>
<td>21.3%</td>
<td>23.2%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>

The amount of regulatory IM received at year-end 2020 grew by 22.8% compared with year-end 2019. The amount of regulatory IM posted increased by 23.3% over the same period.

In ISDA’s view, the increase in regulatory IM was mainly driven by new non-cleared derivatives transactions executed by phase-one, phase-two, phase-three and phase-four entities. ISDA expects regulatory IM to continue increasing as phase-five and phase-six firms become subject to the IM requirements starting in September 2021 and September 2022, respectively.

In addition to regulatory IM, phase-one firms collected $78.1 billion of IA for non-cleared derivatives transactions at year-end 2020 and posted $9.4 billion of IA. The amount of IA received grew by 14.8% compared to $68.0 billion at year-end 2019, while IA posted decreased by 0.9% from $9.5 billion at the end of 2019.

IA reflects IM posted and collected under collateral agreements with counterparties not currently in scope of the margin rules. It also captures IM posted for transactions that are not covered by the margin rules, including legacy transactions.

---

13 Regulatory IM is the amount of IM collected/posted by counterparties, including phase-one, phase-two, phase-three and phase-four firms, for non-cleared derivatives portfolios subject to regulatory IM agreements. It covers all collateral under the agreement and may include house IA under a greater-of margin approach.

14 These amounts exclude collateral received or delivered in connection with spot foreign exchange (FX) transactions. However, some firms indicated that collateral posted or received in connection with spot FX transactions may be included if the credit support annex (CSA) determines these should be collateralized.

15 Difference in the amounts of regulatory IM delivered and received are assumed to be attributed in part to differences in the scope of derivatives subject to regulatory IM in different jurisdictions. It could also be due to asymmetric margin requirements.

16 All numbers are converted to US dollars based on the exchange rates at the end of each year.
Phase-two and Phase-three Firms Regulatory IM and IA

Six phase-two firms and six phase-three entities (out of the eight phase-three firms that are subject to the margin rules) collected $10.6 billion of IM at year-end 2020, including $7.4 billion of regulatory IM and $3.1 billion of IA.

These firms posted $9.5 billion of IM at year-end 2020, including $8.3 billion of regulatory IM and $1.2 billion of IA (see Table 2).

In comparison, four phase-two and three phase-three entities that participated in the ISDA Margin Survey last year received $10.5 billion of IM and posted $8.2 billion of IM at year-end 2019\(^{17}\).

Table 2: Phase-two and Phase-three Firms Regulatory IM and IA (US$ billions)\(^{18}\)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory IM Received</td>
<td>7.4</td>
<td>6.0</td>
<td>2.2</td>
</tr>
<tr>
<td>IA Received</td>
<td>3.1</td>
<td>4.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Total IM Received</td>
<td>10.6</td>
<td>10.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Regulatory IM Posted</td>
<td>8.3</td>
<td>6.7</td>
<td>2.4</td>
</tr>
<tr>
<td>IA Posted</td>
<td>1.2</td>
<td>1.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Total IM Posted</td>
<td>9.5</td>
<td>8.2</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Phase-one Firms Regulatory and Discretionary VM

Phase-one firms collected $1.2 trillion of VM for non-cleared derivatives at year-end 2020, a 29.8% increase compared with $897.3 billion collected at year-end 2019 (see Table 3).

Regulatory VM received at year-end 2020 grew by 44.6% to $638.5 billion versus $441.5 billion at year-end 2019\(^{19}\). The amount of discretionary VM collected from counterparties and/or for transactions that are not covered by the margin rules, including legacy transactions, increased by 15.4% to $526.1 billion over the same period\(^{20}\).

VM posted by phase-one firms for non-cleared derivatives totaled $983.8 billion at year-end 2020, a 42.5% increase compared with $690.2 billion of VM posted at year-end 2019. The amount posted at year-end 2020 included $616.4 billion of regulatory VM and $367.4 billion of discretionary VM.

The increase in VM year-over-year is likely the result of sizeable asset price movements driven by coronavirus-related market volatility.

\(^{17}\) The phase-two and phase-three firms that provided responses for year-end 2018, 2019 and 2020 were not the same

\(^{18}\) All numbers are converted to US dollars based on the exchange rates at the end of each year

\(^{19}\) Regulatory VM may include house IA under a netted agreement

\(^{20}\) The split between regulatory and discretionary VM was not available for year-end 2017 and 2018
Table 3: Phase-one Firms Regulatory and Discretionary VM (US$ billions)\textsuperscript{21}

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory VM Received</td>
<td>638.5</td>
<td>441.5</td>
<td>N/A</td>
<td>N/A</td>
<td>44.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discretionary VM Received</td>
<td>526.1</td>
<td>455.8</td>
<td>N/A</td>
<td>N/A</td>
<td>15.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total VM Received</td>
<td>1,164.5</td>
<td>897.3</td>
<td>858.6</td>
<td>893.7</td>
<td>29.8%</td>
<td>4.5%</td>
<td>-3.9%</td>
</tr>
<tr>
<td>Regulatory VM Posted</td>
<td>616.4</td>
<td>348.7</td>
<td>N/A</td>
<td>N/A</td>
<td>76.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discretionary VM Posted</td>
<td>367.4</td>
<td>341.5</td>
<td>N/A</td>
<td>N/A</td>
<td>7.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total VM Posted</td>
<td>983.8</td>
<td>690.2</td>
<td>583.9</td>
<td>631.7</td>
<td>42.5%</td>
<td>18.2%</td>
<td>-7.6%</td>
</tr>
</tbody>
</table>

Phase-two and Phase-three Firms Regulatory and Discretionary VM

Six phase-two and six phase-three entities collected $109.3 billion of VM at year-end 2020, including $75.2 billion of regulatory VM and $34.1 billion of discretionary VM. These firms posted $165.4 billion of VM at year-end 2020, including $100.2 billion of regulatory VM and $65.2 billion of discretionary VM (see Table 4).\textsuperscript{22}

In comparison, four phase-two firms and three phase-three firms that participated in the Margin Survey last year received $47.4 billion of VM and posted $64.5 billion of VM at year-end 2019.\textsuperscript{23}

Table 4: Phase-two and Phase-three Firms Regulatory and Discretionary VM (US$ billions)\textsuperscript{24}

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory VM Received</td>
<td>75.2</td>
<td>23.8</td>
</tr>
<tr>
<td>Discretionary VM Received</td>
<td>34.1</td>
<td>23.6</td>
</tr>
<tr>
<td>Total VM Received</td>
<td>109.3</td>
<td>47.4</td>
</tr>
<tr>
<td>Regulatory VM Posted</td>
<td>100.2</td>
<td>34.5</td>
</tr>
<tr>
<td>Discretionary VM Posted</td>
<td>65.2</td>
<td>30.0</td>
</tr>
<tr>
<td>Total VM Posted</td>
<td>165.4</td>
<td>64.5</td>
</tr>
</tbody>
</table>

\textsuperscript{21} All numbers are converted to US dollars based on the exchange rates at the end of each year

\textsuperscript{22} Regulatory and discretionary VM data for phase-two and phase-three firms was not available for year-end 2018

\textsuperscript{23} Phase-two and phase-three firms that provided responses for year-end 2018, 2019 and 2020 were not the same

\textsuperscript{24} All numbers are converted to US dollars based on the exchange rates at the end of each year
Composition of Collateral for IM and VM

Based on the survey results, phase-one entities mostly use government securities for meeting regulatory IM requirements. That is because the margin regulations stipulate that IM has to be bankruptcy remote, which is much easier to implement using securities²⁵.

Regulatory IM collected by phase-one firms included 85.1% of government securities and 14.8% of other securities at year-end 2020 (see Chart 1).

Chart 1: Composition of Regulatory IM Received by Phase-one Firms

Cash is more widely used for IA and VM. IA received by phase-one firms comprised 46.7% cash, 19.1% government securities and 34.2% other securities (see Chart 2).

Chart 2: Composition of IA Received by Phase-one Firms

VM covers mark-to-market movements and can change daily. The VM a firm receives for a non-cleared derivatives exposure might be used to cover the VM of a cleared hedge position, and these flows can be implemented more easily with cash.

²⁵ If cash was held with a third-party custodian, it could be bankruptcy remote from the counterparty receiving the collateral, but it would not be bankruptcy remote from the custodian (with certain exceptions possible in a few jurisdictions)
Cash contributed 85.3% of regulatory VM margin received, while government securities and other securities totaled 11.7% and 3.0%, respectively. Discretionary VM received by phase-one firms comprised 72.7% cash, 13.9% government securities and 13.4% other securities (see Charts 3 and 4).

Phase-one firms collected $1.4 trillion of total collateral (including IM and VM) at year-end 2020. This amount comprised $964.0 billion cash, $272.9 billion government securities and $134.9 billion other securities. Phase-one firms posted a total of $1.1 trillion of collateral at year-end 2020 (see Table 5).

Cash made up 70.3% of total margin received compared to 75.0% of total margin posted (including IM and VM) at the end of 2020. Government securities and other securities contributed 19.9% and 9.8% of total margin received and 21.0% and 4.0%, respectively, of total margin posted at the end of 2020.

### Table 5: Composition of Collateral Received and Posted by Phase-one Firms (US$ billions)

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Government Securities</th>
<th>Other Securities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory IM Received</td>
<td>0.1</td>
<td>110.0</td>
<td>19.2</td>
<td>129.2</td>
</tr>
<tr>
<td>Regulatory IM Posted</td>
<td>0.0</td>
<td>111.3</td>
<td>18.8</td>
<td>130.2</td>
</tr>
<tr>
<td>IA Received</td>
<td>36.5</td>
<td>14.9</td>
<td>26.7</td>
<td>78.1</td>
</tr>
<tr>
<td>IA Posted</td>
<td>5.0</td>
<td>2.6</td>
<td>1.8</td>
<td>9.4</td>
</tr>
<tr>
<td>Regulatory VM Received</td>
<td>544.9</td>
<td>74.7</td>
<td>18.8</td>
<td>638.5</td>
</tr>
<tr>
<td>Regulatory VM Posted</td>
<td>537.8</td>
<td>71.4</td>
<td>7.2</td>
<td>616.4</td>
</tr>
<tr>
<td>Discretionary VM Received</td>
<td>382.5</td>
<td>73.3</td>
<td>70.2</td>
<td>526.1</td>
</tr>
<tr>
<td>Discretionary VM Posted</td>
<td>299.2</td>
<td>50.9</td>
<td>17.2</td>
<td>367.4</td>
</tr>
<tr>
<td>Total Collateral Received</td>
<td>964.0</td>
<td>272.9</td>
<td>134.9</td>
<td>1,371.8</td>
</tr>
<tr>
<td>Total Collateral Posted</td>
<td>842.0</td>
<td>236.2</td>
<td>45.1</td>
<td>1,123.3</td>
</tr>
</tbody>
</table>
IM FOR CLEARED DERIVATIVES

Based on the CPMI-IOSCO public quantitative disclosures for CCPs, the amount of IM for cleared derivatives, including IRD and CDS, significantly increased in 2020. This increase was driven by coronavirus-related market volatility that caused large IM calls from CCPs.

Total IM for IRD and CDS products reached $330.6 billion at the end of the fourth quarter of 2020, compared with $269.1 billion at the end of the fourth quarter of 2019.26 (see Chart 5).

Chart 5: IM for IRD and CDS (US$ billions)27

IM for Cleared IRD and CDS

IM for cleared IRD grew by 21.8% from $222.1 billion at the end of the fourth quarter of 2019 to $270.4 billion at the end of the fourth quarter of 2020 (see Chart 6). The growth in IM was mainly driven by a 18.9% IM increase at LCH Ltd.

26 CCPs have been providing quarterly CPMI-IOSCO public quantitative disclosures since the third quarter of 2015. All numbers are converted to US dollars based on the exchange rates at the end of each quarter.

27 LCH includes LCH Ltd and LCH SA
IM for cleared CDS grew by 27.9% from $47.1 billion at the end of the fourth quarter of 2019 to $60.2 billion at the end of the fourth quarter of 2020 (see Chart 7). The growth in IM was mainly driven by a significant increase at ICE Clear Credit.

Client and House IM

At the end of the fourth quarter of 2020, IM posted by clearing members for their own positions (house net) totaled $127.7 billion compared with $202.9 billion of client IM, of which $187.7 billion was calculated on a gross basis and $15.2 billion was on a net basis.28

House net margin totaled 38.6% of total IM, while client gross margin and client net margin represented 56.8% and 4.6% of total IM, respectively, at the end of the fourth quarter of 2020 (see Chart 8).

28 Under a net margin structure, a clearing member only passes through to the 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 the CCP.
At year-end 2020, IRD open interest across five major CCPs totaled $378.2 trillion, while total CDS open interest at four major CCPs was about $2.7 trillion. Against these exposures, CCPs collected $270.4 billion of IM for IRD products and $60.2 billion of IM for CDS products (see Table 6).

In comparison, IRD open interest across five major CCPs totaled $357.1 trillion at year-end 2019, while total CDS open interest at four major CCPs was about $2.1 trillion. Against these exposures, CCPs collected $222.1 billion of IM for IRD products and $47.1 billion of IM for CDS products.

**Table 6: Open Interest (US$ trillions)**

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th></th>
<th>2019</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IRD</td>
<td>CDS</td>
<td>IRD</td>
<td>CDS</td>
</tr>
<tr>
<td>CME Group</td>
<td>12.4</td>
<td>-</td>
<td>14.8</td>
<td>-</td>
</tr>
<tr>
<td>Eurex Clearing</td>
<td>20.3</td>
<td>-</td>
<td>14.5</td>
<td>-</td>
</tr>
<tr>
<td>ICE Clear Credit</td>
<td>-</td>
<td>1.5</td>
<td>-</td>
<td>1.3</td>
</tr>
<tr>
<td>ICE Clear Europe</td>
<td>-</td>
<td>0.6</td>
<td>-</td>
<td>0.5</td>
</tr>
<tr>
<td>Japan Securities Clearing Corporation (JSCC)</td>
<td>12.0</td>
<td>0.04</td>
<td>12.0</td>
<td>0.02</td>
</tr>
<tr>
<td>LCH SA*</td>
<td>-</td>
<td>0.3</td>
<td>-</td>
<td>0.2</td>
</tr>
<tr>
<td>LCH Ltd</td>
<td>333.4</td>
<td>0.3</td>
<td>315.7</td>
<td>-</td>
</tr>
<tr>
<td>OTC Clearing Hong Kong Limited (OTC Clear)</td>
<td>0.1</td>
<td>-</td>
<td>0.1</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>378.2</td>
<td>2.7</td>
<td>357.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

*LCH SA open interest is as of April 1, 2021 and March 31, 2020, respectively, as the company does not disclose historical data.

Source: CCPs websites

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29 Open interest is a common concept in futures and options markets, but is also used for over-the-counter derivatives to indicate notional outstanding. For IRD products, open interest is the total notional outstanding of the aggregated double-counted volume of all active trades. When a derivatives trade is cleared by a CCP, the initial contract between two counterparties is replaced by two new contracts between each counterparty and a CCP. For CDS products, open interest is the sum of all clearing participants’ outstanding net long positions against a CCP, which results in single-sided amount.

30 Data on open interest was collected from CCPs websites. All numbers are converted to US dollars based on the exchange rates at the end of each year.
OVERVIEW OF MARGIN RULES FOR NON-CLEARED DERIVATIVES

The margin rules for non-cleared derivatives, which require the mandatory posting of IM and VM for over-the-counter (OTC) derivatives that are not cleared through CCPs, originate from a global policy framework and schedule established by the Basel Committee on Banking Supervision (BCBS) and IOSCO.

The IM and VM requirements for phase-one entities took effect on September 1, 2016 in the US, Canada and Japan, and on February 4, 2017 in Europe. VM requirements came into effect for a wider universe of entities from March 1, 2017.

Phase-two firms became subject to the IM rules on September 1, 2017. Phase-three and phase-four implementation of IM requirements went into effect on September 1, 2018 and September 1, 2019, respectively. The IM requirements for other entities subject to the rules will be phased-in through September 1, 2022, in line with the updated BCBS-IOSCO schedule (see Table 7).

Table 7: Compliance Dates and Average Aggregate Notional Amount (AANA) Thresholds for Non-cleared Margin Requirements

<table>
<thead>
<tr>
<th>Effective Date*</th>
<th>USA</th>
<th>Japan</th>
<th>Canada</th>
<th>Europe</th>
<th>Australia</th>
<th>Hong Kong</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1, 2016</td>
<td>$3.0 trillion</td>
<td>¥420 trillion</td>
<td>¥5.0 trillion</td>
<td>€3.0 trillion</td>
<td>A$4.5 trillion</td>
<td>HK$24 trillion</td>
<td>$4.8 trillion</td>
</tr>
<tr>
<td>September 1, 2017</td>
<td>$2.25 trillion</td>
<td>¥315 trillion</td>
<td>¥3.75 trillion</td>
<td>€2.25 trillion</td>
<td>A$3.375 trillion</td>
<td>HK$18 trillion</td>
<td>$3.6 trillion</td>
</tr>
<tr>
<td>September 1, 2018</td>
<td>$1.5 trillion</td>
<td>¥210 trillion</td>
<td>¥2.5 trillion</td>
<td>€1.5 trillion</td>
<td>A$2.25 trillion</td>
<td>HK$12 trillion</td>
<td>$2.4 trillion</td>
</tr>
<tr>
<td>September 1, 2019</td>
<td>$0.75 trillion</td>
<td>¥105 trillion</td>
<td>¥1.25 trillion</td>
<td>€0.75 trillion</td>
<td>A$1.125 trillion</td>
<td>HK$6 trillion</td>
<td>$1.2 trillion</td>
</tr>
<tr>
<td>September 1, 2021</td>
<td>$50 billion</td>
<td>¥7 trillion</td>
<td>¥75 billion</td>
<td>€50 billion</td>
<td>A$75 billion</td>
<td>HK$375 billion</td>
<td>$80 billion</td>
</tr>
<tr>
<td>September 1, 2022</td>
<td>$8 billion</td>
<td>¥1.1 trillion</td>
<td>¥12 billion</td>
<td>€8 billion</td>
<td>A$12 billion</td>
<td>HK$60 billion</td>
<td>$13 billion</td>
</tr>
</tbody>
</table>

* These effective dates are for USA and Japan. The initial effective date for Europe was February 4, 2017 and for Australia, Hong Kong and Singapore was March 1, 2017. The remaining dates are aligned across these regions.
Margin rules apply to covered swap entities and financial end users under the US rules, and financial counterparties and systemically important non-financial entities above the clearing threshold under the EU rules. The margin requirements cover non-cleared OTC derivatives and apply only to new transactions that took place after the rule implementation date.

The average aggregate notional amount of non-cleared derivatives (on a consolidated basis with affiliates) determines the relevant compliance date for IM. The rules provide exemptions for certain products (eg, physically settled foreign exchange (FX) swaps and FX forwards) and certain entities (eg, sovereigns, and central banks).32,33

32 Additional exemptions vary between jurisdictions, but may include:
- Intra-group transactions;
- Exemption for IM (referred to as a ‘threshold amount’ under a credit support annex) between two firms, up to a maximum of €50 million (or a similar figure in the currency of the national rules), calculated at a group level;
- Hedging in covered bond issues; and
- In some jurisdictions, a counterparty will not be required to post any VM or IM for OTC derivatives with counterparties domiciled in non-netting jurisdictions, but may still be required to collect margin from those counterparties. Under EU regulations, there is no requirement for a counterparty to collect or post VM or IM when certain conditions are met and the counterparty is in a non-netting jurisdiction, subject to a cap of 2.5% of the regulated party’s OTC derivatives by notional amount.

33 The summary of derivatives products that are subject to regulatory IM and VM requirements in jurisdictions that have final requirements for regulatory margin can be found at https://www.isda.org/a/zUATE/ISDA-In-Scope-Products-Chart_UnclearedMargin_In-process-3.18.21.pdf
TIMELINE FOR MARGIN RULES FOR NON-CLEARED DERIVATIVES

Year-end 2020
ISDA Margin Survey
Regulatory IM received: $129.2 billion
IA received: $78.1 billion
VM received: $1.2 trillion

Year-end 2019
ISDA Margin Survey
Regulatory IM received: $105.2 billion
IA received: $68.0 billion
VM received: $897.3 billion

Year-end 2018
ISDA Margin Survey
Regulatory IM received: $83.8 billion
IA received: $74.1 billion
VM received: $858.6 billion

Year-end 2017
ISDA Margin Survey
Regulatory IM received: $73.7 billion
IA received: $56.9 billion
VM received: $893.7 billion

Q1 2017
ISDA Margin Survey
Regulatory IM received: $46.6 billion
IA received: $60.5 billion
VM received: $870.4 billion

October 2016
ISDA Margin Survey
Regulatory IM received: $24.5 billion
IA received: $30.0 billion
VM received: $810.0 billion

September 2016
ISDA Margin Survey
Regulatory IM received: $30.3 billion
IA received: $32.0 billion
VM received: $768.0 billion

September 2015
ISDA Margin Survey
Regulatory IM received: $23.3 billion
IA received: $25.0 billion
VM received: $680.0 billion

September 2014
ISDA Margin Survey
Regulatory IM received: $18.5 billion
IA received: $20.0 billion
VM received: $580.0 billion

September 2013
ISDA Margin Survey
Regulatory IM received: $14.7 billion
IA received: $15.0 billion
VM received: $510.0 billion

September 2012
ISDA Margin Survey
Regulatory IM received: $11.9 billion
IA received: $12.0 billion
VM received: $430.0 billion

September 2011
ISDA Margin Survey
Regulatory IM received: $9.2 billion
IA received: $10.0 billion
VM received: $360.0 billion

September 2010
ISDA Margin Survey
Regulatory IM received: $7.6 billion
IA received: $8.0 billion
VM received: $290.0 billion

September 2009
ISDA Margin Survey
Regulatory IM received: $6.1 billion
IA received: $6.0 billion
VM received: $220.0 billion

September 2008
ISDA Margin Survey
Regulatory IM received: $4.9 billion
IA received: $5.0 billion
VM received: $170.0 billion

September 2007
ISDA Margin Survey
Regulatory IM received: $3.8 billion
IA received: $4.0 billion
VM received: $120.0 billion

September 2006
ISDA Margin Survey
Regulatory IM received: $2.9 billion
IA received: $3.0 billion
VM received: $90.0 billion

September 2005
ISDA Margin Survey
Regulatory IM received: $2.2 billion
IA received: $2.2 billion
VM received: $60.0 billion

September 2004
ISDA Margin Survey
Regulatory IM received: $1.5 billion
IA received: $1.5 billion
VM received: $40.0 billion

September 2003
ISDA Margin Survey
Regulatory IM received: $1.0 billion
IA received: $1.0 billion
VM received: $30.0 billion
ISDA has published other recent research papers:

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

- **SwapsInfo Full Year 2020 and the Fourth Quarter of 2020, January 2021**

- **Transition to RFRs Review: Full Year 2020 and the Fourth Quarter of 2020, January 2021**

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International Swaps and Derivatives Association, Inc. (ISDA)  
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oroman@isda.org

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Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 925 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 web site: www.isda.org. Follow us on Twitter, LinkedIn, Facebook and YouTube.